

EDP ENERGIAS DE PORTUGAL SA

Form 20-F

September 30, 2005

Table of Contents

As filed with the Securities and Exchange Commission on September 30, 2005

---

# SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

---

## Form 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OF THE

SECURITIES EXCHANGE ACT OF 1934,

for the fiscal year ended December 31, 2004

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE

SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

Commission File Number: 1-14648

## EDP Energias de Portugal, S.A.

(Exact name of registrant as specified in its charter)

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

**EDP Energias of Portugal**  
(Translation of registrant's name into English)

**Portuguese Republic**  
(Jurisdiction of incorporation or organization)

**Praça Marquês de Pombal, 12**  
**1250-162 Lisbon, Portugal**  
(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Ordinary Shares, with nominal value 1 per share*	New York Stock Exchange
American Depositary Shares (as evidenced by American Depositary Receipts), each representing 10 Ordinary Shares	New York Stock Exchange

\* Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the last full fiscal year covered by this Annual Report:

At December 31, 2004, there were outstanding:

3,656,537,715 Ordinary Shares, with nominal value of 1 per share

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days:

Yes  No

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.):

Yes  No

---

**Table of Contents****TABLE OF CONTENTS**

<b><u>PART I</u></b>		6
Item 1.	<i><u>Identity of Directors, Senior Management and Advisers</u></i>	6
Item 2.	<i><u>Offer Statistics and Expected Timetable</u></i>	6
Item 3.	<i><u>Key Information</u></i>	6
	<u>SELECTED FINANCIAL DATA</u>	6
	<u>EXCHANGE RATES</u>	9
	<u>CAPITALIZATION AND INDEBTEDNESS</u>	10
	<u>REASONS FOR THE OFFER AND USE OF PROCEEDS</u>	10
	<u>RISK FACTORS</u>	10
Item 4.	<i><u>Information on the Company</u></i>	17
	<u>HISTORY AND BUSINESS OVERVIEW</u>	17
	<u>Energy</u>	19
	<u>Telecommunications</u>	21
	<u>Information technology</u>	21
	<u>International investments</u>	21
	<u>Group capital expenditures and investments</u>	21
	<u>STRATEGY</u>	25
	<u>THE IBERIAN ELECTRICITY MARKET</u>	29
	<u>PORTUGAL</u>	30
	<u>Electricity System Overview</u>	30
	<u>Generation</u>	34
	<u>Distribution</u>	47
	<u>Tariffs</u>	52
	<u>Gas</u>	54
	<u>Regulation</u>	55
	<u>SPAIN</u>	65
	<u>History and Overview</u>	65
	<u>Electricity</u>	65
	<u>Generation</u>	66
	<u>Distribution and Supply</u>	70
	<u>Gas</u>	72
	<u>Other Activities</u>	72
	<u>Regulation</u>	73
	<u>BRAZIL</u>	76
	<u>Overview</u>	76
	<u>Corporate Reorganization</u>	78
	<u>Generation</u>	80
	<u>Distribution</u>	82
	<u>Trading</u>	86
	<u>Related Activities</u>	87
	<u>Regulation</u>	88
	<u>TELECOMMUNICATIONS</u>	91
	<u>OTHER INVESTMENTS AND INTERNATIONAL ACTIVITIES</u>	97
	<u>SUBSIDIARIES, AFFILIATES AND ASSOCIATED COMPANIES</u>	98
Item 5.	<i><u>Operating and Financial Review and Prospects</u></i>	98
	<u>OVERVIEW</u>	98
	<u>CRITICAL ACCOUNTING POLICIES</u>	103
	<u>RESULTS OF OPERATIONS</u>	108
	<u>2004 COMPARED WITH 2003</u>	109
	<u>2003 COMPARED WITH 2002</u>	118
	<u>LIQUIDITY AND CAPITAL RESOURCES</u>	126
	<u>TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS</u>	128
	<u>PENSIONS AND BENEFITS</u>	128
	<u>INFLATION</u>	128



**Table of Contents**

	<u>PORTUGUESE GAAP COMPARED WITH U.S. GAAP</u>	129
	<u>IMPACT OF RECENTLY ISSUED U.S. ACCOUNTING STANDARDS</u>	132
	<u>TRANSITION AND IMPLEMENTATION OF IFRS</u>	135
Item 6.	<u>Directors, Senior Management and Employees</u>	135
	<u>BOARD OF DIRECTORS</u>	135
	<u>SENIOR MANAGEMENT</u>	140
	<u>COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT</u>	145
	<u>SHARE OWNERSHIP</u>	145
	<u>EMPLOYEES</u>	146
	<u>EMPLOYEE BENEFITS</u>	147
Item 7.	<u>Major Shareholders and Related Party Transactions</u>	148
	<u>MAJOR SHAREHOLDERS</u>	148
	<u>RELATED PARTY TRANSACTIONS</u>	148
	<u>INTERESTS OF EXPERTS AND COUNSEL</u>	149
Item 8.	<u>Financial Information</u>	149
	<u>CONSOLIDATED STATEMENTS</u>	149
	<u>OTHER FINANCIAL INFORMATION</u>	149
	<u>Legal Proceedings</u>	149
	<u>Dividends and Dividend Policy</u>	149
	<u>SIGNIFICANT CHANGES</u>	150
Item 9.	<u>The Offer and Listing</u>	150
	<u>TRADING MARKETS</u>	150
	<u>MARKET PRICE INFORMATION</u>	150
	<u>THE PORTUGUESE SECURITIES MARKET</u>	151
	<u>TRADING BY US IN OUR SECURITIES</u>	153
	<u>PLAN OF DISTRIBUTION</u>	154
	<u>SELLING SHAREHOLDERS</u>	154
	<u>DILUTION</u>	154
	<u>EXPENSES OF THE ISSUE</u>	154
Item 10.	<u>Additional Information</u>	154
	<u>SHARE CAPITAL</u>	154
	<u>ARTICLES OF ASSOCIATION</u>	154
	<u>NYSE CORPORATE GOVERNANCE STANDARDS</u>	161
	<u>MATERIAL CONTRACTS</u>	163
	<u>EXCHANGE CONTROLS</u>	164
	<u>TAXATION</u>	164
	<u>PORTUGUESE TAXATION</u>	165
	<u>UNITED STATES TAXATION</u>	167
	<u>DIVIDENDS AND PAYING AGENTS</u>	169
	<u>STATEMENT BY EXPERTS</u>	169
	<u>DOCUMENTS ON DISPLAY</u>	169
	<u>SUBSIDIARY INFORMATION</u>	169
Item 11.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	169
Item 12.	<u>Description of Securities Other Than Equity Securities</u>	173
	<u>GLOSSARY OF TERMS</u>	174
	<b>PART II</b>	176
Item 13.	<u>Defaults, Dividend Arrearages and Delinquencies</u>	176
Item 14.	<u>Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	176
Item 15.	<u>Controls and Procedures</u>	176
Item 16.	<u>[Reserved]</u>	176
Item 16A.	<u>Audit Committee Financial Expert</u>	176
Item 16B.	<u>Code of Ethics</u>	176
Item 16C.	<u>Principal Accountant Fees and Services</u>	177
Item 16D.	<u>Exemptions from the Listing Standards for Audit Committees</u>	178
Item 16E.	<u>Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	178
	<b>PART III</b>	179
Item 17.	<u>Financial Statements</u>	179
Item 18.	<u>Financial Statements</u>	179



## **Table of Contents**

### **Defined terms**

In this annual report, unless the context otherwise requires, the terms EDP, S.A., EDP, we, us and our refer to EDP Energias de Portugal, S.A. (formerly known as EDP Electricidade de Portugal, S.A.), and, as applicable, its consolidated subsidiaries. Unless we specify otherwise or the context otherwise requires, references to U.S.\$, \$ and U.S. dollars are to United States dollars, references to €, euro or EUR are to the euro, the single European currency established pursuant to the European Economic and Monetary Union, references to escudo(s) or PTE are to Portuguese escudos, and references to real or reais are to Brazilian reais. We have explained a number of terms related to the electricity industry in the Glossary of Terms included in this annual report.

### **Forward-looking statements**

This annual report and the documents incorporated by reference in this annual report contain forward-looking statements. We may from time to time make forward-looking statements in our reports to the Securities and Exchange Commission, or SEC, on Form 6-K, in our annual reports to shareholders, in offering circulars and prospectuses, in press releases and other written materials, and in oral statements made by our officers, directors or employees to analysts, institutional investors, representatives of the media and others.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues and income, wherever they may occur in this annual report, the documents incorporated by reference in this annual report and the exhibits to this annual report, are necessarily estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, you should consider these forward-looking statements in light of various important factors, including those set forth in this annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

the effect of, and changes in, regulation and government policy in countries in which we operate, including, in particular, Portuguese, Spanish and Brazilian regulation and government policy, government and municipal concessions in Portugal and environmental regulations;

the effect of, and changes in, macroeconomic, social and political conditions in countries in which we operate;

the effects of competition, including competition that may arise in connection with the development of an Iberian electricity market;

our ability to reduce costs;

hydrological conditions and the variability of fuel costs;

anticipated trends in our business, including trends in demand for electricity;

our success in developing our telecommunications business;



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

our success in new businesses, such as gas;

future capital expenditures and investments;

the timely development and acceptance of our new services;

the effect of technological changes in electricity and telecommunications; and

---

**Table of Contents**

our success at managing the risks of the foregoing.

Forward-looking statements speak only as of the date they are made. We do not undertake to update such statements in light of new information or future developments.

**Presentation of financial information**

Unless we specify otherwise, we have prepared the financial information contained in this annual report in accordance with generally accepted accounting principles in Portugal, or Portuguese GAAP, which differs in significant respects from generally accepted accounting principles in the United States, or U.S. GAAP. We describe these differences in Item 5. Operating and Financial Review and Prospects Portuguese GAAP Compared with U.S. GAAP and in note 42.i to our consolidated financial statements. Unless we specify otherwise, references in this annual report to our consolidated financial statements are to the audited consolidated financial statements, including the related notes, included in this annual report.

Beginning in 2002 (for fiscal year 2001 and thereafter), we published our consolidated financial statements in euros. Unless we specify otherwise, we have translated amounts stated in U.S. dollars from euros at an assumed rate solely for convenience. By including these currency translations in this annual report, we are not representing that the euro amounts actually represent the U.S. dollar amounts shown or could be converted into U.S. dollars at the rate indicated. Unless we specify otherwise, we have translated the U.S. dollar amounts from euros at the noon buying rate in The City of New York for cable transfers in foreign currencies as announced by the Federal Reserve Bank of New York for customs purposes (the Noon Buying Rate) on September 26, 2005 of U.S.\$1.2036 per 1.00. That rate may differ from the actual rates used in the preparation of our consolidated financial statements included in Item 18 and U.S. dollar amounts used in this annual report may differ from the actual U.S. dollar amounts that were translated into euros in the preparation of our consolidated financial statements. For information regarding recent rates of exchange between euros and U.S. dollars, see Item 3. Key Information Exchange Rates.

In addition, for convenience only and except where we specify otherwise, we have translated certain reais figures into euro at the fixed rate of exchange between the real and euro of 2.7235 reais = 1.00. The rate of exchange between reais and euros represents the euro equivalent of the U.S. dollar/real fixed rate of exchange, calculated by translating reais into U.S. dollars using the Noon Buying Rate on September 26, 2005 of 2.2628 reais = U.S.\$1.00 and then translating U.S. dollars into euros using the rate of exchange between U.S. dollars and euros of U.S.\$1.2036 = 1.00, which was the applicable Noon Buying Rate on September 26, 2005. By including convenience currency translations in this annual report, we are not representing that the reais amounts actually represent the euro amounts shown or could be converted into euros at the rates indicated.

Prior to January 1, 2001, our reporting currency was Portuguese escudos. For convenience and to facilitate a comparison, all escudo-denominated financial data for periods prior to January 1, 2001 included in this annual report have been restated from escudos to euros at the fixed rate of exchange as of January 1, 1999 of PTE 200.482 = 1.00. Where escudo-denominated amounts for periods prior to January 1, 2001 have been rounded, the restated euro amounts have been calculated by converting the rounded escudo-denominated amounts into euros. The comparative balances for prior years now reported in euros depict the same trends as would have been presented had we continued to report such amounts in Portuguese escudos.

Pursuant to articles 11 and 12 of Decree law no. 35/2005, of February 17, 2005, and article 4 of Regulation (EC) no. 1606/2002, of the European Parliament and Council, of July 17, 2002, commencing January 2005, our consolidated financial statements are prepared and reported in accordance with the International Accounting Standards approved pursuant to the foregoing July 17, 2002 EC regulation.



---

**Table of Contents**

**PART I**

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information**

**S ELECTED FINANCIAL DATA**

*You should read the following in conjunction with Item 5. Operating and Financial Review and Prospects and our consolidated financial statements and other financial data, including the related notes, found elsewhere in this annual report.*

The summary financial data below has been extracted from our consolidated financial statements for each of the five years ended December 31, 2004 and as of December 31, 2000, 2001, 2002, 2003 and 2004 and the related notes, which appear elsewhere in this annual report. The consolidated financial statements have been prepared in accordance with Portuguese GAAP, which differ in certain significant respects from U.S. GAAP. See Item 5. Operating and Financial Review and Prospects Portuguese GAAP compared with U.S. GAAP and note 42.i to our consolidated financial statements for a discussion of the principal differences between Portuguese GAAP and U.S. GAAP with respect to our consolidated financial statements.

Management has identified errors in the previous application of U.S. GAAP to certain Portuguese GAAP financial information. Accordingly, the reconciliation to U.S. GAAP for each of the two years ended December 31, 2003 and as of December 31, 2002 and 2003 has been restated to reflect the following:

- i) **Minority Interests.** Under both Portuguese GAAP and U.S. GAAP, in prior years, the losses attributable to minority interests that exceeded the equity capital attributable to minority interests in subsidiaries had been recorded as negative minority interests in the balance sheet. In the income statement, the referred losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Under Portuguese GAAP, and beginning January 1, 2004, we adopted a new accounting policy, by which the negative minority interest in the balance sheet resulting from the accumulated losses attributable to minority interests which exceed the equity capital attributable to minority interests in subsidiaries are debited against equity when there is no binding obligation of the minority interests to cover such losses. In the income statement, under Portuguese GAAP, losses continue to be attributed to minority interest in the proportion of their shareholding. Under U.S. GAAP, as there is no binding obligation of the minority interest to cover such losses, such losses which exceed the equity attributable to the minority interest are charged to the majority interest, therefore the net income of the prior years has been restated to allocate the losses attributable to minority interests in 2002 and 2003 to the majority interest (EDP). If future earnings do materialize, the majority interest will be credited to the extent

of such losses previously absorbed.

- ii) **Concession Subsidies.** Under Portuguese GAAP, the amount classified as deferred income related to assets under concession in Brazil is not amortized. However, the assets under concession are amortized on a straight-line basis over the concession period. Under U.S. GAAP, the amortization of the accrued income should be recorded using the same period as the assets amortization. As this amount was not amortized in prior years under U.S. GAAP, we made a restatement to correct this issue in the income statement and in shareholders' equity of each reported period.
- iii) **Guarantees.** Under U.S. GAAP, a guarantor is required to recognize, at the inception of certain guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantees. In 2003, we made a provision with a charge against equity, even though it is unlikely that any disbursement related to those guarantees will have to be made. An adjustment is made under U.S. GAAP as a restatement at December 31, 2003 to reverse the provision that was made in the prior year.
- iv) **Other Comprehensive Income.** In relation to other comprehensive income, in prior years, a reconciliation between the opening and closing balance of other comprehensive income was not presented in the notes to our consolidated financial statements in accordance with SFAS 130, which requires that the total of other comprehensive income be disclosed separately from retained earnings. We have included the information required for the total of other comprehensive income for each of the reported periods and have restated the balances to comply with the requirements of SFAS 130. While this restatement had an impact on the total value of other comprehensive income, it had no impact on the total value of shareholders' equity.

For more information on our restatement of certain U.S. GAAP financial information for each of the two years ended December 31, 2003 and as of December 31, 2002 and 2003, please see note 42.ii to our consolidated financial statements. In addition, all financial information under U.S. GAAP in this annual report presented for years prior to 2004 has also been restated.

In 2004, we selected a new firm of independent public accountants to audit our consolidated financial statements based on a solicitation of bids to a number of firms, including our previous firm of independent public accountants. Our fiscal year 2004 consolidated financial statements were audited by KPMG. Fiscal years from 2000 through 2003 were audited by PricewaterhouseCoopers.

**Table of Contents**

	Year ended December 31,					
	2000 Euro	2001 Euro	2002 Euro	2003 Euro	2004 Euro <sup>(1)</sup>	2004 U.S.\$ <sup>(1)</sup>
	(in millions, except per ordinary share and per ADS data)					
<b>Statement of income:</b>						
<b>Amounts in accordance with Portuguese GAAP</b>						
Electricity sales	3,676	5,201	5,876	6,296	6,450	7,764
Other sales <sup>(2)</sup>	61	98	112	160	249	300
Services <sup>(3)</sup>	110	351	398	521	522	629
Total revenues	3,846	5,650	6,387	6,978	7,222	8,692
Raw materials and consumables	1,731	3,080	3,687	3,921	4,017	4,835
Personnel costs	439	592	625	647	643	773
Depreciation and amortization	614	665	740	846	796	957
Supplies and services	369	651	675	633	650	782
Own work capitalized <sup>(4)</sup>	(229)	(233)	(242)	(236)	(259)	(311)
Concession and power-generation rental costs <sup>(5)</sup>	133	149	158	176	190	229
Hydrological correction <sup>(6)</sup>	(35)	0	0	0	0	0
Other operating expenses, net	102	73	95	86	127	153
Total operating costs and expenses	3,122	4,977	5,738	6,072	6,163	7,418
Operating income	724	674	649	906	1,058	1,274
Net interest expense <sup>(7)</sup>	175	205	223	359	335	404
Other non-operating income (expenses), net	289	126	(139)	(14)	(165)	(198)
Income before income taxes	838	594	287	532	558	672
Provision for income taxes (net of deferred taxes)	(313)	(203)	(172)	(196)	(160)	(192)
Minority interest	23	60	220	44	41	50
Net income	549	451	335	381	440	530
Net income from operations per ordinary share <sup>(8)</sup>	0.24	0.23	0.22	0.30	0.35	0.42
Net income from operations per ADS <sup>(8)</sup>	2.42	2.26	2.18	3.04	3.48	4.19
Basic and diluted net income per ordinary share <sup>(8)</sup>	0.18	0.15	0.11	0.13	0.14	0.17
Basic and diluted net income per ADS <sup>(8)</sup>	1.83	1.51	1.12	1.28	1.45	1.74
Dividends per ordinary share <sup>(9)(10)(11)</sup>	0.14	0.11	0.09	0.09	0.09	0.11
Dividends per ADS <sup>(9)(10)</sup>	1.40	1.13	0.90	0.90	0.92	1.11
<b>Amounts in accordance with U.S. GAAP<sup>(13)(14)</sup></b>						
Net income	407	521	264	451	239	287
Basic and diluted net income per ordinary share <sup>(8)</sup>	0.14	0.17	0.09	0.15	0.08	0.09
Basic and diluted net income per ADS <sup>(8)</sup>	1.36	1.74	0.89	1.51	0.78	0.94
<b>Cash flow data:</b>						
<b>Amounts in accordance with Portuguese GAAP</b>						
Net cash from operating activities	1,122	1,221	898	1,774	1,643	1,978
Net cash used in investing activities	914	1,243	1,141	529	2,272	2,734
Net cash used in (from) financing activities	482	96	415	(1,144)	644	775

**Table of Contents**

	Year ended December 31,					
	2000 Euro	2001 Euro	2002 Euro	2003 Euro	2004 Euro <sup>(1)</sup>	2004 U.S.\$ <sup>(1)</sup>
(in millions, except per ordinary share and per ADS data)						
<b>Balance sheet data (at period end):</b>						
<b>Amounts in accordance with Portuguese GAAP</b>						
Cash and cash equivalents	58	34	214	287	278	335
Other current assets	1,162	1,496	1,863	1,959	2,504	3,013
Total current assets	1,220	1,530	2,077	2,246	2,782	3,348
Fixed assets, net <sup>(2)</sup>	9,540	9,844	11,204	11,652	13,559	16,320
Other assets	4,128	4,860	4,844	4,753	6,248	7,521
Total assets	14,887	16,233	18,125	18,651	22,589	27,189
Short-term debt and current portion of long-term debt	1,807	1,744	1,887	1,579	1,858	2,236
Other current liabilities	890	1,286	1,631	1,711	2,392	2,879
Total current liabilities	2,697	3,030	3,518	3,290	4,250	5,115
Long-term debt, less current portion	3,205	4,055	6,107	5,914	6,741	8,113
Hydro account	366	388	324	388	364	438
Other long-term liabilities	2,377	2,423	2,616	3,525	4,032	4,853
Total liabilities (including Hydro account)	8,645	9,896	12,566	13,116	15,387	18,519
Minority interest	37	241	65	236	801	964
Shareholders' equity	6,205	6,097	5,494	5,298	6,402	7,705
<b>Amounts in accordance with U.S. GAAP<sup>(13)(14)</sup></b>						
Fixed assets, net <sup>(2)</sup>	5,316	5,929	6,602	7,172	9,722	11,701
Total assets	14,010	15,455	16,922	17,730	23,525	28,315
Total current liabilities	2,714	3,052	2,551	3,270	6,920	8,328
Total long-term liabilities	6,763	7,706	10,403	10,873	11,230	13,517
Total liabilities	9,477	10,758	12,954	14,143	18,150	21,845
Shareholders' equity	4,496	4,456	3,865	3,440	4,583	5,516

<sup>(1)</sup> For 2000, escudos are translated into euro at the fixed rate of exchange established at the commencement of the third stage of European Monetary Union on January 1, 1999 by the European Council of Ministers between the euro and escudo of PTE 200.482 = 1.00. For 2004, euros are translated into U.S. dollars at the rate of exchange of U.S.\$1.2036 = 1.00, which was the U.S. Federal Reserve Bank of New York noon buying rate on September 26, 2005.

<sup>(2)</sup> Consists of sales of natural gas, steam, ash, information technology products, telecommunications equipment and sundry materials.

<sup>(3)</sup> Consists of electricity-related services, services to information technology systems, telecommunications, engineering, laboratory services, training, medical assistance, consulting, multi-utility services and other services.

<sup>(4)</sup> Our consolidated income statements present expenses in accordance with their nature rather than their function. Therefore, costs incurred by us for self-constructed assets are capitalized as part of fixed assets and included as a reduction of total expenses under "Own work capitalized" when the related costs have been included in the relevant expense items.

<sup>(5)</sup> Substantially all of these amounts relate to rent expenses paid to municipalities for the right to distribute electricity in the relevant municipal areas.

<sup>(6)</sup> Until the year 2000 and as required by government regulation, we recorded charges and credits to operating income, against the hydro account in the balance sheet, depending on hydrological conditions in a given year, to correct the effect on our earnings and customer prices that result from changes in hydrological conditions and observed fuel prices. The difference between the economic costs of generating electricity in the Public Electricity System, or PES, and the economic reference costs based on an average hydrological year

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

were included in this item through 2000. Since 2001 and following the sale of REN in 2000, we ceased recording such charges and credits on our income statement and began recording charges and credits to Cash and cash equivalents, against the Hydro account, on our balance sheet. The imputed interest on the accumulated balance of the hydro account is included in Net interest expense. Net gains and losses arising from the hydro account are being charged to Other non-operating income (expenses). In this respect, we booked income items of 47.5 million and 19.4 million in 2001 and 2003, respectively. We did not record such an item in 2002 and 2004.

- (7) Includes interest and related expenses and interest and related income. See Item 5. Operating and Financial Review and Prospects 2004 compared with 2003 Interest and related income/(expenses), net.
- (8) Basic earnings per share are based on the weighted average number of ordinary shares outstanding during the year. Diluted earnings per share are computed on the basis of the weighted average number of ordinary shares outstanding during the year plus the effect of ordinary shares issuable upon the exercise of employee stock options using the treasury stock method. During 1999, we established two employee stock option plans. Basic and diluted earnings per ADS are based upon basic and diluted earnings per ordinary share multiplied by 10 as each ADS is equivalent to 10 ordinary shares on a post-split basis.
- (9) Based on 3,000,000,000 ordinary shares issued and outstanding in 2000, 2001, 2002 and 2003 and 3,656,537,715 ordinary shares issued and outstanding in 2004.
- (10) Dividends per ordinary share in U.S.\$, translated at the prevailing rate of exchange at the date of payment between the U.S. dollar and the escudo amount to U.S.\$ 0.12 in 2000. Dividends per ordinary share in U.S.\$, translated at the prevailing rate of exchange at the date of payment between the U.S. dollar and the euro amount to U.S.\$ 0.10 in 2001, U.S.\$ 0.11 in 2002, U.S.\$ 0.11 in 2003 and U.S.\$ 0.12 in 2004. The dividend per ordinary share in 2000 is translated at the fixed rate of exchange between the euro and the escudo.
- (11) Stated figure is rounded as actual dividend paid in 2004 was 0.09243.
- (12) Substantially all of these assets are subject to reversion to the Republic or the municipalities. See Item 4. Information on the Company Portugal Regulation Reversionary assets.
- (13) U.S. GAAP amounts for 2000 and 2001 are not comparable to 2002, 2003 and 2004 due to the implementation of SFAS 142.
- (14) The U.S. GAAP amounts for 2002 and 2003 were restated resulting from adjustments that were identified in 2004 relating to prior years (see note 42.ii of the consolidated financial statements).



**Table of Contents****EXCHANGE RATES**

Effective January 1, 1999, Portugal and 11 other member countries of the European Union, or EU, adopted the euro as their common currency. The euro was traded on currency exchanges and was available for non-cash transactions during the transition period between January 1, 1999 and December 31, 2001. During this transition period, the national currencies remained legal tender in the participating countries as denominations of the euro, and public and private parties paid for goods and services using either the euro or the participating countries' existing currencies. On January 1, 2002, the euro entered into cash circulation. Between January 1, 2002 and February 28, 2002 both the euro and the escudo were in circulation in Portugal. From March 1, 2002, the euro became the sole circulating currency in Portugal. As of January 1, 2002, we ceased to use the escudo.

The vast majority of our revenues, assets, expenses and liabilities have historically been denominated in escudos, and we prepared and published our consolidated financial statements in escudos through the 2000 fiscal year. Beginning in 2002 (for fiscal year 2001 and thereafter), our consolidated financial statements have been published in euros. A portion of our revenues and expenses and certain liabilities are nonetheless denominated in non-euro currencies outside the euro zone and fluctuations in the exchange rates of those currencies in relation to the euro will therefore affect our results of operations. To learn more about the effect of exchange rates on our results of operations, you should read Item 5. Operating and Financial Review and Prospects. Exchange rate fluctuations will also affect the U.S. dollar price of the ADSs and the U.S. dollar equivalent of the euro price of our ordinary shares, the principal market of which is the Euronext Lisbon Stock Exchange. In addition, any cash dividends are paid by us in euro, and, as a result, exchange rate fluctuations will affect the U.S. dollar amounts received by holders of ADSs on conversion of those dividends by the depository.

The following table shows, for the periods and dates indicated, information concerning the exchange rate between the U.S. dollar and the euro. These rates are provided solely for your convenience. We do not represent that the escudo could have been, or that the euro could be, converted into U.S. dollars at these rates or at any other rate.

The column of averages in the table below shows the averages of the relevant exchange rates on the last business day of each month during the relevant period. The high and low columns show the highest and lowest exchange rates, respectively, on any business day during the relevant period.

**U.S. dollar per euro<sup>(1)</sup>**

<b>Year ended December 31,</b>	<b>End of Period</b>	<b>Average</b>
2000	0.94	0.92
2001	0.89	0.89
2002	1.05	0.95
2003	1.26	1.13
2004	1.35	1.24

**U.S. dollar per euro<sup>(1)</sup>**

<b>Period</b>	<b>High</b>	<b>Low</b>
2005		
March	1.29	1.35
April	1.28	1.31
May	1.23	1.29

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

June	1.20	1.23
July	1.19	1.22
August	1.21	1.24

---

<sup>(1)</sup> Euro amounts are based on the U.S. Federal Reserve Bank of New York noon buying rate.

## **Table of Contents**

Our ordinary shares are quoted in euro on the Euronext Lisbon Stock Exchange. Our ADSs are quoted in U.S. dollars and traded on the New York Stock Exchange. On September 26, 2005, the exchange rate between the euro and the U.S. dollar was U.S.\$1.2036 = 1.00.

### **CAPITALIZATION AND INDEBTEDNESS**

Not applicable.

### **REASONS FOR THE OFFER AND USE OF PROCEEDS**

Not applicable.

### **RISK FACTORS**

*In addition to the other information included and incorporated by reference in this annual report, you should carefully consider the following factors. There may be additional risks that we do not currently know of or that we currently deem immaterial based on information currently available to us. Our business, financial condition or results of operations could be materially adversely affected by any of these risks, resulting in a decline in the trading price of our ordinary shares or ADSs.*

### **RISKS RELATED TO OUR CORE ELECTRICITY BUSINESS**

**The competition we face in the generation and supply of electricity is increasing, which may affect our electricity sales and operating margins.**

The increase in competition from the Portuguese and Spanish implementation of EU directives intended to create a competitive electricity market may materially and adversely affect our business, results of operations and financial condition.

In Portugal, while we currently face limited competition from independent power producers in generation, we expect that this competition will increase as the industry further liberalizes. Portuguese law requires that contracts for the construction of future power plants in Portugal in the Public Electricity System, herein referred to as the PES or the Binding Sector, be awarded through competitive tender processes, in which we expect to participate. In a competitive tender process, we may lose opportunities to generate electricity in the Binding Sector in Portugal. For further information on the Binding Sector and the structure of the Portuguese electricity market, see Item 4. Information on the Company Portugal Electricity System Overview.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In addition, the Portuguese government has implemented selected measures to encourage the development of various forms of electricity production, including auto production (entities generating electricity for their own use that may sell surplus electricity to the national transmission grid), cogeneration, small hydroelectric production (under 10 MVA installed capacity) and production using renewable sources. As an incentive from the Portuguese government, the electricity generated by these producers has been granted priority of sale in the PES. In 2004, the installed capacity of these producers was 1,862 MW, which represents 15.9% of the total installed capacity in Portugal. Through our subsidiaries, we participate in this generation area with an installed capacity of 322 MW.

The Portuguese regulatory structure now allows for competition in the supply of electricity, which could adversely affect our sales of electricity. In particular, as more electricity consumers elect to participate in the market-based Non-Binding Sector in Portugal, more electricity will be sold in the competitive markets, where prices may be lower than existing tariffs. The minimum annual consumption thresholds set by regulation have declined over time (from 20 GWh in 2000 to zero in 2004), resulting in an increase in the number of Qualifying Consumers. The effects of this increased competition have not yet been fully determined, as full liberalization in the supply of electricity only entered into effect on August 18, 2004.

Despite the complete liberalization of the Spanish generation and wholesale market since January 1, 2003, the majority of consumers have not changed their electricity supplier. Until now, this liberalization has mainly produced effects among medium- and

## **Table of Contents**

high-voltage consumers. Although fixed rate tariffs are expected to predominate, at least in the short and medium term, among Spanish electricity consumers, especially low voltage consumers, there could be a more pronounced move to contractually-agreed prices in the future and these prices could be lower than regulated tariffs.

In the context of liberalization of the electricity market within the European Union, since the end of 2001 the Portuguese and Spanish governments have entered into several agreements for the creation of an Iberian electricity market, referred to as MIBEL, the main principles of which are free competition, transparency, objectiveness and efficiency. The stated intent of MIBEL is to guarantee Portuguese and Spanish consumers access to electricity distribution and to create interconnections with third countries on equal conditions applicable to Portugal and Spain. In addition, it is intended that the production of electricity by producers in Portugal and Spain be subject to similar regulation, thereby allowing producers in one country to execute bilateral agreements for electricity distribution to consumers in the other country and facilitating the creation of an Iberian common electricity pool.

The scope of increased competition and any adverse effects on our operating results and market share resulting from the full liberalization of the European electricity markets, and in particular the Portuguese and Spanish electricity markets, combined with the opening of MIBEL, will depend on a variety of factors that cannot be assessed with precision and that are beyond our control. Accordingly, we cannot anticipate the risks and advantages that may arise from this market liberalization. When further implemented, the organizational model and resulting competition may materially and adversely affect our business, results of operations and financial condition.

### **Our core electricity operating results are affected by laws and regulations, including regulations regarding the prices we may charge for electricity.**

Through its laws and regulations, the Portuguese government has created the current legal and regulatory framework governing the Portuguese electricity sector in which we operate. We understand that the Portuguese government is currently considering regulatory changes that would affect this framework. We cannot predict whether any such regulatory changes will be made, nor, if any such regulatory changes are made, the effects these changes would have on our business, financial condition and results of operations.

As an electricity public service, we operate in a highly regulated environment. An independent regulator appointed by the Portuguese government, the *Entidade Reguladora dos Serviços Energéticos*, referred to as ERSE, or the regulator, regulates the electricity industry through, among other things, a tariff code that defines the prices we may charge for electricity services in the Binding Sector. In attempting to achieve an appropriate balance between, on the one hand, the interests of electricity customers in affordable electricity and, on the other hand, our need and the needs of other participants in the electricity sector to generate adequate profit, the regulator may take actions that adversely impact our profitability.

In real terms, adjusted for inflation, very high, high and medium voltage tariffs, generally applied to industrial customers, have declined by an average of 3.9% per year over the period 1998 to 2005. The tariffs for low voltage customers have also declined in real terms by an average of approximately 2.7% per year over the same period. For 2005, in nominal terms, tariffs for all voltage levels increased, on average, by 2.3% from the 2004 levels.

The component of the final tariff collected by EDP Distribuição Energia, S.A., or EDPD, our distribution company in Portugal, is calculated on the basis of a unitary tariff by voltage levels defined by ERSE, subject to a yearly adjustment on the basis of the Portuguese consumer price index, or CPI, less an efficiency factor. During the previous regulatory period (2002-2004), the efficiency factor increased from 5% (applicable during the 1999-2001 regulatory period) to approximately 7%. In light of the expected beginning of operations of MIBEL, a new regulatory

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

period has been established with a duration of only one year (2005). Tariffs for this new regulatory period continue to be set according to a price cap mechanism, but there is no efficiency factor as this one-year period does not have additional years for purposes of comparison. Although the nominal final tariff charged to consumers increased, on average, across all voltage levels in 2005, the component of the final tariff collected by EDPD decreased from 2004 to 2005, and had already decreased from 2003 to 2004, which adversely affected our profitability. The tariffs set for periods after 2005 or any new regulations promulgated in respect of these periods may adversely affect our business, results of operations and financial condition.

## **Table of Contents**

**Due to uncertainty as to the timing of our receipt of compensation relating to the early termination of the PPAs, which is conditioned on the start of operations of MIBEL, we may not receive such compensation in the same amount as is currently contemplated.**

Following the Resolution of the Council of Ministers no. 63/2003, of April 28, 2003, relating to the promotion of liberalization of the electricity and gas markets in furtherance of the organizational structure of MIBEL, the Portuguese government enacted Decree law no. 185/2003, of August 20, 2003, which contemplates the early termination of existing power purchase agreements, or PPAs. Pursuant to Law no. 52/2004, of October 29, 2004, which was enacted by the Portuguese parliament, the terms and conditions of such termination have been set out in Decree law no. 240/2004, of December 27, 2004, or Decree law no. 240/2004, which provides for the creation of compensation measures designed to ensure electricity generating companies an economic benefit equivalent to that of the PPAs, and the EU Commission announced on September 22, 2004 that the stranded cost compensation mechanism notified by the Portuguese government is not contrary to the state aid rules of the European Union. However, the early termination of the PPAs, and the resulting implementation of related compensation mechanisms, is subject to the existence of various requirements and the satisfaction of various conditions precedent, the chief among these being the commencement of MIBEL operations. Until the requirements and conditions for the early termination of the PPAs exist, our generation facilities in the PES will continue to be operated under the existing PPAs.

The estimated amount of the compensation relating to the early termination of the PPAs contemplate, among other things, the commencement of MIBEL operations by June 30, 2005, which did not occur. Currently, the timing for commencement of MIBEL is uncertain. To the extent that the timing of our receipt of compensation for the early termination of the PPAs is delayed, the amount of such compensation could be different from that which is currently contemplated. As a result, perceptions of our value in the market that are based on the currently contemplated compensation amount could change.

In addition, the compensation mechanisms relating to the early termination of PPAs were devised in the context of the existing legal and regulatory framework for the Portuguese electricity, changes to which could result in changes to the assumptions or other factors underlying the existing compensation mechanisms and eventually adversely affect the compensation we receive. However, considering the current liberalization environment and market integration process, as well as the rules, parameters and procedures set out in Decree law no. 240/2004, which have been approved by the European Commission, the compensation mechanisms and the respective terms provided in such decree law should and are expected to be applied in case of early termination of our PPAs.

**If our concessions from the Portuguese government and municipalities were terminated, we could lose control over our fixed assets.**

Most of our revenues currently come from the generation and distribution of electricity. We conduct these activities pursuant to concessions and licenses granted by the Portuguese government and various municipalities. These concessions and licenses are granted for fixed periods ranging in most cases from 20 to 75 years, but are subject to early termination under specified circumstances. The expiration or termination of concessions or licenses would have an adverse effect on our operating revenues. Upon expiration of licenses or termination of concessions, the fixed assets associated with licenses or concessions will, in general, revert to the Portuguese government or a municipality, as appropriate. Although specified compensatory amounts would be paid to us with respect to these assets in these circumstances, the loss of these assets may adversely affect our operations.

**Our operational cash flow is affected by variable hydrological conditions.**

Hydroelectric plants operating in the PES in Portugal account for approximately 45% of the installed capacity in the PES. These plants are dependent on the amount and location of rainfall and river flows from Spain, all of which vary widely from year to year. In years of favorable

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

hydrological conditions, there is an increase in hydroelectric generation, while in years of unfavorable hydrological conditions, there is a decrease in hydroelectric generation and a greater dependence on thermal generation. Thermal generation, which is fired by coal, fuel oil, natural gas or a combination of fuels, is more expensive in terms of variable costs than hydroelectric generation.



## **Table of Contents**

To account for the variability of hydrological conditions and their impact on generation costs in the PES, we use the hydrological correction account, or hydro account, which was established in accordance with Portuguese law. Because the tariffs in Portugal are computed based on the assumption of conditions in an average hydrological year, the purpose of this account is to correct the short-term effect of hydro variability on PES generation costs.

The hydro account is reinforced through cash payments by REN Rede Eléctrica Nacional, S.A., or REN, (the system operator of the PES), in years of favorable hydrological conditions, while in years of unfavorable hydrological conditions we draw from the hydro account and make cash payments to REN, in order to compensate for the increased generation costs in the PES. Both the cash reinforcements and draws are based on the economic reference costs calculated on the basis of an average hydrological year and observed fuel prices. The increased PES generation costs in a dry year could have an adverse impact on our operational cash flow but not on our results of operations, due to the effects of the hydro account. For further information on the hydrological correction account, see Item 5. Operating and Financial Review and Prospects Critical Accounting Policies hydrological correction account.

### **Our electricity business is subject to numerous environmental regulations that could affect our results of operations and financial condition.**

Our electricity business is subject to extensive environmental regulations. These include regulations under Portuguese and Spanish law, laws adopted to implement EU regulations and directives and international agreements on the environment. Environmental regulations affecting our business primarily relate to air emissions, water pollution, waste disposal and electromagnetic fields. The principal waste products of fossil-fueled electricity generation are sulfur dioxide, or SO<sub>2</sub>, nitrogen oxides, or NO<sub>x</sub>, carbon dioxide, or CO<sub>2</sub>, and particulate matters such as dust and ash. A primary focus of environmental regulation applicable to our business is to reduce these emissions.

We incur significant costs to comply with environmental regulations requiring us to implement preventive or remediation measures. For example, we expect to make approximately 70 million of capital expenditures in 2005 to comply with applicable environmental laws and regulations to minimize the impact of our operations on the environment. Environmental regulatory measures may take such forms as emission limits, taxes or required remediation measures, and may influence our policies in ways that affect our business decisions and strategy, such as by discouraging our use of certain fuels.

Under the EU Directive relating to the emission of pollutants from Large Combustion Plants, Portuguese environmental authorities created a new National Emissions Reduction Plan (PNRE), to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions. The new PNRE, which replaces the 1996-2003 PNRE, was prepared and discussed with the competent authorities in the first half of 2004 and should be formally approved by the end of 2005. Additionally, with regard to CO<sub>2</sub> emissions, the Emission Trading Scheme (ETS) is almost set to begin in Portugal. Since January 2005, Portugal has prepared itself by setting the allowances for each sector within the National Allocation Plan (NAP). The last step in the process to start emission trading in Portugal is the distribution of allowances to each plant within each sector. It is expected that the government will soon announce this distribution. The total amount of allowances received by the sectors within the NAP accounts for nearly 43% of the total CO<sub>2</sub> accounted for in Portugal. The distribution of these allowances to each sector showed that nearly 21.5 million tons of CO<sub>2</sub> per year (56% of the total amount of allowances distributed) will be distributed to the electricity sector for the 2005-2007 period. In this context, we expect to start emission trading as soon as the government defines the allowances for each power plant, which is expected to occur in 2005. In Spain, the NAP on greenhouse gas trading published in 2004 states the quantity of allowances for each plant for the 2005-2007 period. This allocation was approved by the European Commission in December 2004, and, in January 2005, a final list of allowance allocations for electricity plants was published, which allocated approximately 86.4 million tons of CO<sub>2</sub> per year for the 2005-2007 period to power plants (40% of the total amount of allowances distributed in Spain). Although we expect to be in timely compliance with these new requirements, such requirements could necessitate additional licenses or the acquisition of emission rights and result in higher electricity costs.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

We also have an interest in a nuclear power plant through Hidroantábriko Hidroeléctrica del Cantábriko, S.A., or Hidroantábriko, which holds a 15.5% interest in the Trillo nuclear power plant in Spain. Spanish law and regulations limit, consistent with international treaties ratified by Spain, the liability of nuclear plant operators for nuclear accidents. Current Spanish law provides

## **Table of Contents**

that the operator of each nuclear facility is liable for up to 150.3 million as a result of claims relating to a single nuclear accident. We would be liable for our proportional share of this 150.3 million per accident amount. Trillo currently has insurance to cover potential liabilities related to third parties arising from a nuclear accident in Trillo up to 150.3 million. The 150.3 million per accident limit on liability could be increased pursuant to changes in Spanish law. In the proportion of Hidroantábrico's stake in Trillo, we could be subject to the risks arising from the operation of nuclear facilities and the storage and handling of low-level radioactive materials. These risks include accidents, the breakdown or failure of equipment or processes or human performance, including safety controls, and other events that could result in injury or damage to property or the environment. Liabilities we may incur in connection with these risks could result in negative publicity and reputational damage.

## **RISKS RELATED TO OUR OTHER BUSINESSES**

**Our involvement in international activities subjects us to particular risks that could affect our profitability.**

Our investments in Brazil and in other countries present a different or greater risk profile than that of our electricity business in Portugal and Spain. Risks associated with our investments outside of Portugal and Spain include but are not limited to:

economic volatility;

exchange rate fluctuations and exchange controls;

strong inflationary pressures;

government involvement in the domestic economy;

political uncertainty; and

unanticipated changes in regulatory or legal regimes.

We cannot assure you that we will successfully manage our operations in Brazil and other international operations.

Exchange rate instability and, in particular, fluctuations in the value of the Brazilian real against the value of the U.S. dollar (depreciation of 34% during 2002 and appreciation of 22% and 9% during 2003 and 2004, respectively) may result in uncertainty in the Brazilian economy, which may affect the results of our Brazilian operations. In addition, we are exposed to translation risk when the accounts of our Brazilian businesses, denominated in Brazilian reais, are translated into our consolidated accounts, denominated in euro. We cannot predict movements in Brazil's currency, and, since long-term Brazilian currency hedges are not available, a major devaluation of the Brazilian real might adversely affect our business, results of operations and financial condition.

**Regulatory, hydrological and infrastructure conditions in Brazil may adversely affect our Brazilian operations.**

We hold interests in Brazilian distribution companies and have invested in Brazilian generation projects. In the past, our distribution activities and generation projects in Brazil have been adversely affected by regulatory, hydrological and infrastructure conditions in Brazil. These conditions could have a similar adverse effect on our Brazilian generation and distribution operations in the future.

Delays by the Brazilian energy regulatory authorities in developing a regulatory structure that encourages new generation have led to, and might also in the future contribute to, shortages of electricity to meet demand in some regions of Brazil. As a result, the supply of electricity available for our distribution companies in Brazil has been limited and may be again in the future. In addition, the geographic location of generation plants, combined with transportation constraints, has limited, and might also in the future limit, our

## Table of Contents

ability to transmit electricity generated in abundant rainfall areas to distribution companies operating in areas experiencing drought conditions. Sales by these distribution businesses have been and might in the future be affected by these conditions that limit the supply of electricity available for distribution.

The Brazilian electricity rationing program that started in June 2001 and ended in February 2002 had an adverse effect on electricity consumption and on consumption habits in affected areas. During this rationing program, electricity consumption in our concession area decreased and did not return to pre-rationing levels until 2004. Consequently, in 2002 and 2003, our Brazilian operations could only dispose of surplus electricity at depressed prices. Although total electricity distributed by our subsidiaries in the Brazilian market increased in 2004, reflecting a stronger economic environment in that region and an increase in the number of customers, material reductions in electricity consumption or generation, due to below-average rainfall or otherwise, may adversely affect our future financial results.

In 2004, Law No. 10,848, named the Law of the New Electricity Industry Model (*Lei do Novo Modelo do Setor Elétrico*), or New Electricity Law, for the Brazilian electric utility sector was enacted. As the regulations for the New Electricity Law have not yet been fully implemented, there is a risk that the new regulations may not be favorable for us. In addition, the New Electricity Law contemplates significant control by the Brazilian government, creating uncertainty regarding competition and further investments in the private sector.

Tariffs of distribution companies in Brazil currently consist of two components: non-manageable costs and manageable costs. The main purpose of this split is the maintenance of an adjusted tariff for inflation and the sharing of efficiency gains with consumers. The aim of distribution tariffs is to pass non-manageable costs through and to index manageable costs to inflation. Although it is expected that the New Electricity Law will maintain the pass-through of non-manageable costs, there might be delays in readjustment of the tariffs in the event of large macro-economic fluctuations (e.g., inflation and exchange rates). We cannot assure you that regulations implementing the New Electricity Law will fully mitigate the risk of delayed tariff adjustments.

**If Investco is unable to successfully renegotiate the terms of the redemption of its class R preferred shares, Energias do Brasil may be adversely affected or may lose its investment in Investco.**

Investco, a Brazilian company of which we, through our subsidiary EDP Energias do Brasil (formerly known as EDP Brasil), or Energias do Brasil, own 27.65% of the voting capital and 16.33% of the total capital and that owns the Lajeado hydroelectric plant, is currently renegotiating with Eletrobrás Centrais Elétricas Brasileiras S.A., or Eletrobrás, the terms and conditions of the redemption of its class R shares held by Eletrobrás, as a result of Investco's inability to redeem these shares due the lack of capital reserves required by the Brazilian corporation law. If, as a result of Investco's investment agreement, the shareholders of Investco are required to make capital contributions to Investco to redeem the class R preferred shares, we believe Energias do Brasil will be liable for a portion of the total obligation equivalent to its proportional ownership of Investco's voting shares. However, according to the terms of the investment agreement, we cannot assure you that Energias do Brasil will not be liable for capital contributions in excess of this amount, in which case our financial condition and results of operations may be adversely affected.

If Investco and Eletrobrás do not agree on a new timetable for the redemption of the class R preferred shares or to an alternative solution for this matter and Investco's shareholders do not make the required capital contributions for the redemption or repurchase of the shares, the Brazilian Development Bank, or BNDES, and other financial institutions that are creditors of Investco may accelerate the debts under their relevant contracts and foreclose the corresponding guarantees (including certain guarantees provided by us), including the pledge of the shares Energias do Brasil holds in Investco and EDP Lajeado S.A., or EDP Lajeado. In addition, Investco did not make available to Energias do Brasil certain approvals required by certain financing agreements for the issuance of convertible and non-convertible debentures by Investco. If Investco does not have such approvals or does not obtain them on a timely fashion, and its creditors accelerate Investco's debt, such acceleration could implicate guarantees provided by us.



## **Table of Contents**

### **We face new risks and uncertainties related to our activities in the gas sector.**

We also are developing an Iberian gas business as complimentary to and strategically aligned with our electricity business, as described in more detail in Item 4. Strategy Iberian Energy Developing an Iberian gas business. We may face difficulties integrating this business with our current activities and the development of the business will expose us to new risks, including governmental and environmental industry regulation and economic risks relating to fluctuation in the price of energy, currencies in which gas prices are quoted and time-lags in prices between the times of purchase and sale. We cannot assure you that we will successfully manage the development of our gas business, and a failure to do so could have an adverse effect on our business, results of operations and financial condition.

### **We face various risks in our telecommunications business, including increasing competition from various types of service providers.**

The telecommunications sector is highly competitive within Portugal and Spain and across the EU, and we expect competition to remain vigorous and even increase in the future.

In the fixed line telephone area in Portugal, we compete for market share primarily with Portugal Telecom, or PT, which historically held a monopoly on fixed line services in Portugal and continues to hold a dominant position in this market. We also face competition from other fixed line operators in Portugal.

Our fixed line telephone business also faces strong indirect competition from cellular telephone service providers, particularly those in the voice segment. Mobile subscriptions have already overtaken the number of fixed line connections in Portugal and we expect this growth to continue.

We also face significant competition from numerous existing operators in the Internet and data services areas, both of which we have targeted, and we expect that new competitors will emerge as these markets continue to evolve.

We face managerial, commercial, technological and regulatory risks, as well as other risks, related to our telecommunications activity. Our ability to develop and successfully achieve profitability in this area may be affected if we are not able to manage these risks and this business efficiently in a competitive market. In 2004, our telecommunications activity generated a loss before taxes of 150.8 million.

## **OTHER RISKS**

### **The value of our ordinary shares and ADSs may be adversely affected by future sales of substantial amounts of ordinary shares by the Portuguese government or the perception that such sales could occur.**

The Portuguese government may sell all or a portion of its shareholding in us at any time. Sales of substantial amounts of our ordinary shares by the Portuguese government, or the perception that such sales could occur, could adversely affect the market prices of our ordinary shares and

ADSs and could adversely affect our ability to raise capital through subsequent offerings of equity.

**Restrictions on the exercise of voting rights, as well as special rights granted to the Portuguese government, may impede an unauthorized change in control and may limit our shareholders' ability to influence company policy.**

Under our articles of association, no holder of ordinary shares, except the Portuguese Republic and equivalent entities, may exercise voting rights that represent more than 5% of our voting share capital. In addition, specific notification requirements are triggered under our articles of association when shareholders purchase 5% of our ordinary shares and under the Portuguese Securities Code when purchases or sales of our ordinary shares cause shareholders to own or cease to own specified percentages of our voting rights.

Pursuant to article 10 of Decree law no. 218-A/2004, of October 25, 2004, known as the Reprivatization Decree Law, special rights granted to the Portuguese government by Decree law no. 141/2000, of July 15, 2000, are to be maintained for so long as the Portuguese government or an equivalent entity is an EDP shareholder. These rights provide that, without the favorable vote of the



## **Table of Contents**

government or an equivalent entity, no resolution can be adopted at our general meeting of shareholders relating to:

amendments to our by-laws, including share capital increases, mergers, spin-offs or winding-up;

authorization for us to enter into group/partnership or subordination agreements; or

waivers of, or limitations on, our shareholders' rights of first refusal to subscribe to share capital increases.

The Portuguese government or an equivalent entity may also appoint one member of our board of directors whenever it votes against the list of directors presented for election at our general meeting of shareholders.

### **Item 4. *Information on the Company***

#### **HISTORY AND BUSINESS OVERVIEW**

We are the largest generator and distributor of electricity in Portugal. In addition, we own 30% of REN, the sole transmitter of electricity in Portugal, and we have significant electricity operations in Spain and Brazil. Our principal executive offices are located at Praça Marquês de Pombal, 12, 1250-162 Lisbon, Portugal. Our telephone number at this location is +351-21-001-2500.

We were incorporated in 1976 under the name EDP - Electricidade de Portugal, E.P., as a result of the nationalization and merger of the principal Portuguese companies in the electricity sector in mainland Portugal. In 1991, we changed our name to EDP - Electricidade de Portugal, S.A. and in October 2004, we changed our name to EDP - Energias de Portugal, S.A. Following the rights offering in November 2004, which also resulted in the fifth phase of the privatization process that started in 1997, as of June 30, 2005 we were approximately 15.59% owned indirectly by the Portuguese Republic and an additional 9.80% of our shares are held by Caixa Geral de Depósitos, S.A., a state-owned bank. Other significant shareholders include Iberdrola, S.A. (5.70%), Caja de Ahorros de Asturias, or CajAstur (5.53%), BCP - Banco Comercial Português, S.A., or BCP (2.91%), the BCP Group's Pension Fund (3.08%) and, indirectly, Brisa - Autoestradas de Portugal S.A., or Brisa (2.00%).

**Table of Contents**

The following chart shows our current structure and a list of the primary companies and investments within the EDP Group. For a more detailed listing and description, please see [Subsidiaries, Affiliates and Associated Companies](#) and note 9 to our consolidated financial statements.

**Table of Contents**

Our 2004 operating revenues amounted to 7,221.7 million (U.S.\$8,692.0 million), approximately 89% of which represented electricity sales, yielding operating income of 1,058.4 million (U.S.\$1,273.9 million). As of December 31, 2004, our total assets were 22,589.3 million (U.S.\$27,188.5 million), and shareholders' equity was 6,401.7 million (U.S.\$7,705.1 million).

The following table shows our revenues by activity and geography:

	Year ended December 31,		
	2002	2003	2004
	(millions of EUR)		
<b>Energy<sup>(1)</sup></b>			
Portugal	5,001	5,038	5,413
Spain	324	675	747
Brazil	669	1,008	1,154
<b>Telecommunications</b>			
Portugal	187	161	156
Spain	134	170	169
Information Technology	224	186	175
Adjustments <sup>(2)</sup>	(151)	(261)	(592)
<b>Total</b>	<b>6,387</b>	<b>6,978</b>	<b>7,222</b>

<sup>(1)</sup> Consists of electricity in Portugal and Brazil and electricity and gas in Spain.

<sup>(2)</sup> Revenue figures for each year have been adjusted to include revenues from services and to exclude intercompany transactions.

**Energy***Iberian electricity*

Historically, electricity has been our core business. We underwent a restructuring in 1994, at which time we formed subsidiaries to operate in the areas of electricity generation, transmission and distribution. Following the government's purchase from us of a 70% interest in REN in 2000, our two principal electricity subsidiaries were our electrical generation company, CPPE (Companhia Portuguesa de Produção de Electricidade, S.A., or CPPE), and our distribution company, EDPD, which was formed in early 2000 by the merger of our four wholly-owned distribution companies. These two wholly-owned subsidiaries, together with REN, carried out electricity generation, transmission and distribution activities in Portugal. On March 29, 2001, we announced the creation of EDP Gestão da Produção de Energia, S.A., or EDP Produção, a subsidiary that began operations in July 2001 and now holds most of our Portuguese energy production-related units as part of measures we are implementing to enhance our organizational efficiency.

We are the largest producer and distributor of electricity in Portugal and the third largest utility operator in the Iberian market following our acquisition of an additional 56.2% stake in Hidroantábriico in 2004, increasing our stake to 95.7% of Hidroantábriico. Hidroantábriico operates electricity generation plants and distributes and supplies electricity and gas, mainly in the Asturias and Basque regions in Spain.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In 2004, we accounted for approximately 82% of the installed generation capacity in the PES and 99% of the distribution in the PES. REN, in which we hold a 30% equity interest, accounted for 100% of the transmission in the PES. Hidroantabrico, Spain's fourth largest utility operator, accounted for 4.3% of Spanish mainland installed generation capacity, or 5.1% excluding special regime facilities (which are generally cogeneration and renewable energy facilities), and 5.8% of the Spanish liberalized electricity supply market.

In Portugal, we generate power for consumption in both the PES and the Independent Electricity System, or IES. In 2004, our generation facilities in Portugal had a total installed capacity of 8,401.5 MW. In the transmission function, REN operates the national grid for transmission of electricity throughout mainland Portugal on an exclusive basis pursuant to Portuguese law. REN also manages the system dispatch and the interconnections with Spain. EDPD, our distribution company, carries out Portugal's local electricity distribution almost exclusively.

## Table of Contents

EDPD provided approximately 5.8 million customers with 41,315 GWh of electricity in 2004. In Spain, Hidroantábrico had a total installed capacity in 2004 of 2,941 MW, distributed to regulated customers a total of 9,002 GWh through its own network to approximately 575,000 customers and invoiced 13,618 GWh of electricity supply to regulated and liberalized customers.

We expect regional electricity markets to consolidate in Europe as an initial step toward an integrated and liberalized electricity market within the European Union. For geographical and regulatory reasons, the regional electricity market of the Iberian peninsula is our natural market and will be consubstantiated with the opening of MIBEL. In anticipation of MIBEL, we have acquired full control of Hidroantábrico and have elected the Iberian peninsula electricity market as our core market for our main electricity business. Our main activities in the electricity sector are already conducted in the Iberian peninsula market in an integrated manner. Further to this strategic focus, in 2004, we expanded our energy operations in Spain with an increase of our stake in Hidroantábrico to 95.7%. We expect this acquisition to result in the full integration of Hidroantábrico's operations within ours, which should allow us to enhance management flexibility, realize further synergies from the combination of our operations and improve business performance, thereby reinforcing our position as a leading Iberian energy company in advance of the opening of MIBEL.

### *Iberian Gas*

We also have investments, notably in gas utilities, which we regard as complementary to our core electricity business.

Since July 2000, we have held a 14.27% ownership interest in GALP Energia SGPS, S.A. or GALP, a holding company with interests in GDP Gás de Portugal, SGPS, S.A., or GDP, and Transgás Sociedade Portuguesa de Gás Natural, S.A., or Transgás, companies that transport and supply natural gas throughout Portugal, and Petróleos de Portugal Petrogal, S.A., a company involved in oil refining and distribution and the production of petroleum products.

In December 2004, we acquired a direct stake of 46.625% in Portgás Sociedade de Produção e Distribuição de Gás, S.A., or Portgás, the natural gas distribution company for the northern region of Portugal, pursuant to the exercise of a call option agreement executed on November 14, 2003 with GALP, GDP and GDP Distribuição, SGPS, S.A. At the same time we also acquired additional indirect stakes of 12.9% in Portgás and 10.1% in Setgás Sociedade de Produção e Distribuição de Gás, S.A., or Setgás, the natural gas distribution company for the Setúbal region, pursuant to the exercise by Caixa Geral de Depósitos, S.A. or CGD, of the put option that we had granted to it on November 25, 2003. In the context of the implementation of our strategy for the Iberian gas market, on September 5, 2005 we concluded negotiations with Endesa Gas, S.A. for the acquisition of a 49% shareholding in NQF Gás, S.A., or NQF Gás. NQF Gás directly holds a 25.348% shareholding in Portgás and, indirectly, a 19.8% shareholding in Setgás. Upon completion of this transaction, we will be the sole shareholder of NQF Gás, thus increasing our direct and indirect shareholdings in Portgás and Setgás to 72.0% and of 19.8%, respectively. For more information on our participation in the Portuguese gas sector, please see Portugal Gas.

Our interests in the gas sector in Spain are held through Hidroantábrico, which is the controlling shareholder in Naturcorp Multiservicios, S.A.U. (56.18% ownership stake), or Naturcorp, the leading gas company in the Basque region of Spain. For more information on our participation in the Spanish gas sector, please see Spain Gas.

### *Brazilian electricity*

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our investments in Brazil consist of distribution, generation and related activities in the electricity sector. The following of our Brazilian subsidiaries are engaged in distribution: EBE Empresa Bandeirante de Energia, S.A., or Bandeirante, Escelsa Espírito Santo Centrais Eléctricas S.A., or Escelsa, and Enersul Empresa Energética do Mato Grosso do Sul S.A., or Enersul. In generation, we participate in the following companies: Investco (Lajeado plant), through EDP Lajeado S.A. and Enerpeixe S.A., or Enerpeixe. Our related businesses comprise our trading businesses, which are concentrated in Enertrade S.A., or Enertrade. For more information, see Brazil Overview.

In 2005, we reorganized our corporate holdings in order to comply with new government regulations that impose the unbundling of our generation and distribution activities in Brazil. We have started optimizing the corporate structure of our Brazilian holdings through the roll-up of minority shareholdings in Escelsa, Enersul and Bandeirante into Energias do Brasil. This process was completed with an initial public offering of shares in Energias do Brasil in July 2005. For more information, see Brazil Corporate Reorganization.

**Table of Contents****Telecommunications**

In 2000, taking into consideration our existing resources and expertise, we decided to pursue telecommunications activities. Currently, ONI Operadora Nacional de Interactivos, S.G.P.S., S.A., or ONI, our 56%-owned subsidiary and the holding company for our telecommunications businesses has the overall responsibility for strategic and financial matters relating to our telecommunications business segments. Pursuant to a recent reorganization, ONI's businesses are currently focused on wireline Portugal, discussed in further detail in Telecommunications below.

**Information technology**

We participate in the information technology business through Edinfor Sistemas Informáticos, S.A., or Edinfor, which owns 100% of ACE Holding SGPS, S.A. or ACE. ACE owns 100% of CASE Conceção e Arquitectura de Soluções Informáticas Estruturadas, S.A., or CASE. CASE provides consulting and information systems services to us and to third parties. Following our sale of 60% of Edinfor to LogicaCMG Corporate Holdings Limited, or LogicaCMG, we own 40% of Edinfor. For more information on Edinfor, please see Subsidiaries, Affiliates and Associated Companies.

**International investments**

Apart from Spain and Brazil, we have made a number of international investments in the electricity and water sectors in Cape Verde, Guatemala and Macau. In 2003, 2004 and 2005 to date, we have not initiated any new international investment projects. In accordance with our strategy of shareholder value creation, we have divested in non-strategic holdings in Chile in December 2001 and Morocco in March 2002.

**Group capital expenditures and investments**

The following table sets forth our capital expenditures and investments for the years 2002 through 2004, divided into operating investment and financial investment. Operating investment generally refers to the development and acquisition of fixed assets and financial investment generally refers to the acquisition of equity interests in companies.

	Year ended December 31		
	2002	2003	2004
	(thousands of EUR)		
<b>OPERATING INVESTMENT:</b>			
<b>Energy:</b>			
<b>Portugal:</b>			
Generation:			
Thermal/Hydro	204,979	213,851	178,735
Renewable: wind	11,397	38,533	53,667
Renewable: biomass <sup>(1)</sup>	35,205	922	155

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Cogeneration	9,618	33	161
Engineering and Operations and Maintenance	15,264	7,809	14,181
	<hr/>	<hr/>	<hr/>
Total Generation	276,463	261,147	246,899
Distribution: <sup>(2)</sup>			
Investment, net of subsidies	241,551	263,056	311,513
IT Systems (transfer from Edinfor to EDPD)	80,547	11,974	0
Subsidies in kind (assets)	54,095	61,039	70,405
Subsidies in cash	56,853	59,714	76,592
	<hr/>	<hr/>	<hr/>
Total Distribution	433,046	395,783	458,510
Supply <sup>(3)</sup>	8,337	6,218	6,524
	<hr/>	<hr/>	<hr/>
Total technical costs	717,846	663,148	711,933
Financial costs capitalized	15,361	24,005	24,785
	<hr/>	<hr/>	<hr/>
Total Portugal	733,208	687,152	736,718
<b>Spain:</b>			
Hidrocantábrico <sup>(4)</sup>	84,775	70,528	115,071
	<hr/>	<hr/>	<hr/>



**Table of Contents**

	Year ended December 31		
	2002	2003	2004
	(thousands of EUR)		
Total Spain	84,775	70,528	115,071
Total Energy Portugal and Spain	817,983	757,680	851,789
<b>Brazil:</b>			
Generation	55,600	58,676	195,545
Distribution:			
Bandeirante	25,413	39,392	33,173
Escelsa	16,208	18,639	30,055
Enersul	25,152	16,184	25,932
Energias do Brasil	261	415	222
Total Brazil	122,634	133,307	284,926
<b>Telecommunications<sup>(5)</sup> and Information Technology:</b>			
Telecommunications	311,962	28,564	33,498
Information Technology	41,833	58,784	20,424
Total Telecommunications and Information Technology	353,795	87,348	53,922
<b>Other:</b>			
Other Operating Investment <sup>(6)</sup>	45,362	24,939	31,317
<b>TOTAL OPERATING INVESTMENT</b>	<b>1,339,773</b>	<b>1,003,274</b>	<b>1,221,954</b>
<b>FINANCIAL INVESTMENT:</b>			
<b>Energy:</b>			
<b>Portugal:</b>			
Acquisition of additional 10% shareholding in Turbogás	20,986	0	0
Acquisition of Portgás/Setgás	0	0	124,120
<b>Spain:</b>			
Acquisition of Naturcorp by Hidrocontábrico <sup>(7)</sup>	0	100,235	0
Acquisition of Hidrocontábrico by EDP <sup>(8)</sup>	520,591	0	1,200,763
Total Energy	541,577	100,235	1,324,882
<b>Other:</b>			
Subscription to BCP rights issue and capital increase	30,636	40,599	0
Acquisition of Escelsa notes <sup>(9)</sup>	379,964	0	0
Other financial investments	15,718	40,926	25,240
Total Other	426,318	81,525	25,240
<b>TOTAL FINANCIAL INVESTMENT</b>	<b>967,896</b>	<b>181,760</b>	<b>1,350,123</b>
<b>TOTAL CAPITAL EXPENDITURES AND INVESTMENTS</b>	<b>2,307,669</b>	<b>1,185,034</b>	<b>2,572,077</b>

<sup>(1)</sup> Renewable biomass investment in 2002 includes 35.2 million relating to an internal transfer of the Mortágua biomass power plant, from EDP, S.A. to EDP Produção Bioelétrica. As such, this did not affect our cash flow in 2002.

<sup>(2)</sup> Distribution includes capital expenditures of EDPD.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

- (3) *Supply comprises the capital expenditures of EDP Commercial (formerly known as EDP Energia), our company operating in the liberalized market.*
- (4) *Investment represents 40% of Hidrocontábrico's operational investments.*
- (5) *Investments for telecommunications include primarily infrastructure.*
- (6) *Other Operating Investment includes investments by the EDP Group in installations and equipment at the holding company level, investments by our real estate companies and investments by our support services companies.*
- (7) *Investment represents 40% of Hidrocontábrico's financial investments in the acquisition of Naturcorp.*
- (8) *Total investment in the acquisition of 95.7% of Hidrocontábrico (which we previously proportionally consolidated at the 40% level) amounts to 1,983.7 million, of which 262.4 million was invested in 2001, 520.6 million was invested in 2002 and 1,200.8 was invested in 2004.*
- (9) *In 2002, we acquired certain notes issued by Escelsa. For more information on this transaction, please see Item 11. Quantitative and Qualitative Disclosures About Market Risk.*

Total capital expenditures and investments of 2,572.1 million in 2004 represented a 117% increase from total capital expenditures and investments of 1,185.0 million in 2003. This increase was primarily due to the acquisition of an additional 56.2% shareholding in Hidrocontábrico in 2004 and higher operating investments in Brazil in connection with the construction of the Peixe Angical hydro power station. The increase in total capital expenditures and investments from 2003 to 2004 was also due to a higher level of investments in generation in Portugal, following the near conclusion of Venda Nova II, the completion of construction of the first two units of the Ribatejo CCGT plant and the additional 72 MW of Erenova's wind farm capacity and investments made at the 124 MW Albacete wind farm through Hidrocontábrico. Investment at EDPD was focused on the distribution network in order to continue improving the quality of service. Capital expenditures in Brazil more than doubled following the investment made at the Peixe Angical hydro power station, which we expect will start operations during 2006. We had lower expenditures in

**Table of Contents**

telecommunications in 2004 following a decrease in ONI's investment needs following the completion of most of the major investments required for the expansion of the network. The decrease in total capital expenditures and investments from 2002 to 2003 was also due to a lower level of operational investments in 2003. In Portugal, we made lower operating investments in our distribution business in 2003, reflecting the internal transfer from Edinfor to EDPD of a commercial and administrative information technology system in 2002, and overall investments in generation were lower as a result of the internal transfer in 2002, from EDP to EDP Produção Bioelétrica, of the investment made in 1999 related to the Mortágua biomass power plant, which does not represent a cash outflow, but was included in our 2002 capital expenditures and investments. We had lower expenditures in telecommunications in 2003 as a result of the divestment of our UMTS business. In addition, in 2002 we also acquired part of Escelsa's notes issued in U.S. dollars for the total amount of 380 million. Having reduced the exchange rate risk relating to U.S. dollar debt of our Brazilian subsidiaries, we did not enter into any further debt acquisition programs in 2003.

We expect total operational investments in 2005 to be approximately 1,400 million, concentrated mainly in generation and distribution.

The capital expenditures set forth above have not been adjusted to reflect the fact that certain expenditures represent transfers between businesses within the EDP Group of assets that had previously been accounted for by the transferors as their own capital expenditures. The capital expenditures above have also not been adjusted for divestments of certain financial investments. Adjusting for these transactions would result in the following:

	Year ended December 31,		
	2002	2003	2004
	(thousands of EUR)		
Total Capital Expenditures and Investments:	2,307,669	1,185,034	2,572,077
Internal Transfers:			
IT Systems (from Edinfor to EDPD)	(80,547)	(11,974)	
Mortágua Biomass Power Plant (from EDP, S.A. to EDP Produção Bioelétrica)	(35,180)		
Divestments:			
Redal	(26,905)		
Optep (Optimus)	(315,000)		
Iberdrola, S.A.		(400,102)	
Oni Way			(61,449)
Retecal			(23,004)
Stake in Fafen and Enersul turbine			(37,936)
Total Internal Transfers and Divestments	(457,632)	(412,076)	(122,389)
Adjusted Total Capital Expenditures and Investments	1,850,037	772,958	2,449,688

In recent years, a significant part of our capital expenditures on electricity projects in mainland Portugal has been in distribution. Since EDPD is required by law to connect all customers who wish to be supplied by the PES, a large part of capital expenditures is spent in connecting new customers, improving network efficiency and developing the network (installing new cables and lines) to accommodate the growth in consumption. In addition, we are required to meet government standards for meter control, which requires us to make further investments in new meters. Our investment in distribution in Portugal in 2004 totaled 458.5 million compared with 395.8 million in 2003 and 433.0 million in 2002, and mainly consisted of recurring capital expenditures necessary for the operation, improvement and expansion of our distribution network in Portugal, including expansion to accommodate growth in consumption and maintenance. Between 2000 and 2004, EDPD's capital expenditures increased due to higher investments in the distribution network pursuant to our public commitment to improve the quality of service by reducing the equivalent interruption time in the distribution of electricity. In 2002, the increase in EDPD capital expenditures also reflects the internal transfer from Edinfor to EDPD of 80.5 million worth of assets that relate to non-recurring investments made in a commercial and administrative

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

information technology system based on the SAP platform. In 2003, EDPD capital expenditures also included 12.0 million related to the transfer of this information technology system.

## **Table of Contents**

Under current regulations in Portugal, EDPD receives contributions directly from customers for a portion of its capital expenditures for new connections to the transmission and distribution networks. The total amount of contributions from customers in 2004 was approximately 147.0 million compared with approximately 121 million in 2003.

During 2004, we invested 246.9 million in generation in Portugal, compared with 261.1 million in 2003 and 276.5 million in 2002. Capital expenditures in 2004, 2003 and 2002 were primarily a result of expenses incurred due to the construction of the first two 392 MW units of the Ribatejo CCGT plant, the two 94 MW units of the Venda Nova hydroelectric plant and the 72 MW of wind farms. We expect a higher level of operational investment in generation in Portugal in 2005 due to the investment plan of Enernova, our wind farm development and operation unit in Portugal.

In Portugal, we expect to focus future distribution capital expenditures on connecting new clients and improving the quality of the electricity service through a more efficient network. We expect to concentrate future generation capital expenditures on the development of new hydroelectric projects and in the construction of the Ribatejo CCGT power plant. Future capital expenditures in generation may also include special projects such as co-generation and wind power generation opportunities. While the actual amount of our future investments will depend on factors that cannot be currently foreseen, we expect to incur capital expenditures of approximately 850 million annually through 2007 in the aggregate in our core electricity generation and distribution businesses in Portugal during this period.

In Spain, capital expenditures incurred in 2004 in generation, electricity distribution, special regime generation and gas amounted to 287.7 million (our proportional share of this expenditure being 115.1 million). Hidrocantábrico's operating investments in 2004 increased compared to 2003 due to greater investments in special regime generation and the consolidation of the Basque gas company, Naturcorp, beginning in August 2003. Investments in special regime generation were greater in 2004 due to the completion of the Albacete wind farm (124 MW), which began operations in November 2004. In 2003, apart from the capital expenditure of 250.6 million (our proportional share of this expenditure being 100.2 million) for the acquisition of Hidrocantábrico's 62% stake in Naturcorp, additional capital expenditures of 176.3 million were incurred (our proportional share of these expenditures being 70.5 million). Hidrocantábrico's 2003 operating investments decreased compared to 2002, due to lower investments in generation and electricity distribution activities. Investments in generation decreased due to the completion of the Castejón CCGT plant in September 2002. As for electricity distribution activity, fewer investments were made in expansion outside Asturias (northern region of Spain). Investment in special regime generation increased in 2003 with the construction of Cantábrico (65 MW), Arlanzón (34 MW) and Albacete (124 MW) wind farms.

In line with our strategic objectives of building our fixed line telecommunications and our international activities, we also may incur additional capital expenditures in connection with these activities and other strategic investments as well as non-recurring capital expenditures such as for information technology. With respect to investments in Brazil, we currently expect to fund any future capital expenditures with cash flow generated by local operations and or by reiss-denominated debt.

We made capital expenditures related to environmental matters in 2004 of approximately 18 million, in 2003 of approximately 10 million and in 2002 of approximately 15 million. We expect these capital expenditures to amount to approximately 70 million in 2005, of which 59 million will be related to new investments in emissions abatement equipment in the Sines, Aboño and Soto power plants, in order to adapt the facilities to the new environmental regulations relating to SO<sub>2</sub> and NO<sub>x</sub> emissions.

Over the next three years, we expect to incur capital expenditures of approximately 4,900 million, more than 85% of which will be dedicated to the expansion of electricity generation facilities in Portugal and Spain, including renewable energy facilities, and the improvement of the quality of our electricity distribution network in Portugal.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

We believe that cash generated from operations and existing credit facilities is sufficient to meet present working capital needs. We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium or long term debt financing and equity financing as additional capital expenditure and financial investment requirements develop. To learn more about our sources of funds

## **Table of Contents**

and how the availability of those sources could be affected, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

## **STRATEGY**

Our principal strategic objective is the creation of shareholder value through the achievement of sustained real earnings growth and our primary strategic focus is on consolidating and expanding our position in energy activities in the Iberian Peninsula. Accordingly, we have redefined our concept of our domestic market to include the Iberian Peninsula and are positioning ourselves for the Iberian electricity market that will develop in the future, particularly following the implementation of MIBEL. In this context, we acquired operating control of Hidrocantábrico in 2001, the fourth largest electricity operator in Spain, which, in turn, acquired Naturcorp, the second largest gas operator in Spain, in 2003, and in December 2004 acquired full control of Hidrocantábrico by increasing our stake to 95.7%. See History and Business Overview Energy Iberian electricity.

While expanding into the Spanish gas and electricity sectors, we are also strengthening our core electricity business and our gas business in Portugal. During recent years, we have been making considerable efforts to optimize and restructure our Portuguese generation and distribution activities in preparation for the full liberalization of electricity supply in Portugal and the expected integration of the Portuguese and Spanish electricity markets. In connection with these efforts, we are taking steps to improve the quality of service through cost-conscious investment in technical and commercial infrastructure, particularly in the areas of electricity distribution and sales, and further restructure our human resources, primarily in our distribution business. In this regard, we have had and continue to have programs in place that are aimed at reducing our headcount and we intend to expand our sales and customer service capabilities. We are also increasing our electricity generation capacity through modernization of existing facilities and selective development of new facilities, in each case mindful of environmental requirements and concerns.

Outside of our Iberian energy activities, we have also sought to focus on our core business through divestiture of non-strategic investments, as demonstrated by our sale in 2004 of a 60% stake in our information technology company Edinfor, and to selectively pursue other business activities that are complementary to our energy activities. These other business activities include selectively pursuing international opportunities in electricity, and developing our telecommunications business in Portugal and Spain.

## **IBERIAN ENERGY**

Our primary strategic focus is the Iberian energy market, where we are consolidating our position as a leading energy company. We are the leading electricity company in Portugal. We also are developing our activities in the Portuguese natural gas distribution sector, mainly through Portgás, in which we hold a direct and indirect stake of 59.55%, and through our minority interests of 14.27% in GALP and 10.11% in Setgás. Upon the completion of our acquisition of NQF Gás, we will increase our direct and indirect shareholdings in Portgás and Setgás to 72.0% and 19.8%, respectively. In Spain, we currently own 95.7% of Hidrocantábrico, which holds a 56.18% stake in Naturcorp.

In the Iberian energy market our strategic objectives are:

preserving the value of our business in the Portuguese energy sector in light of the liberalization of the Portuguese electricity market and the creation of an integrated Iberian market;

growing our electricity Iberian platform through Hidrocantábrico; and

developing an Iberian gas business by leveraging our existing assets.

**Preserving the value of our business in the Portuguese energy sector**

In the Portuguese energy sector, we face increasing competition arising from the liberalization of the electricity market in Portugal, in the Iberian Peninsula and throughout the European Union. On August 18, 2004, the electricity market in Portugal was fully liberalized and all customers, including all low-voltage customers, became free to choose their electricity supplier. Competition



## **Table of Contents**

in electricity supply will also increase as the newly created Iberian electricity market comes into operation. Additionally, we face increasing pressure on the operating margins of our electricity distribution business in Portugal due to regulation of electricity tariffs in the PES.

In response to these challenges, we plan to:

continue efforts to enhance earnings and maintain our leading market share of generation and distribution in the liberalized and growing Portuguese electricity market, while also capitalizing on growth opportunities created by increasing liberalization within the EU, particularly in the Iberian electricity market; and

continue our program to increase the efficiency of our operations in the Portuguese energy sector, reduce related costs with the goal of achieving international best practice standards, and minimize the impact of tariff reductions in the current regulatory period on operating margins of our electricity distribution business.

In pursuing these objectives, we intend to:

pursue effective marketing to both new and existing customers, particularly those that benefit, or will benefit, from competitive alternatives in the Non-Binding Sector (where we are present through our subsidiary EDP Comercial, S.A., or EDP Comercial);

continue to provide high quality and cost-effective services to the Binding Sector and the Non-Binding Sector;

further centralize our corporate structure, as we have done with the merger of our four distribution companies into EDPD and the centralization of most of our generation companies in EDP Produção;

continue to centralize and improve the efficiency of our administrative activities, such as accounting, and procurement, with the aim of achieving cost savings in supplies of goods and services and personnel reduction, to which end we created EDP Valor, a company that integrates some of our service companies by consolidating resources and centralizing purchasing activities;

identify opportunities to achieve future reductions in overhead expenses; and

continue to monitor the level of recurring capital expenditures in our Portuguese electricity business.

## **Growing our Iberian electricity platform**

In light of the intended integration of the Spanish and Portuguese electricity sectors, we have expanded the definition of our domestic market to embrace the entire Iberian Peninsula. We are the first Iberian company to have significant generation and distribution assets, as well as a meaningful customer base, in both Portugal and Spain two EU countries with among the highest electricity consumption growth rates in the European Union.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

To grow our Iberian electricity platform, we intend to:

through Hidroantábrico, enhance management flexibility and further synergies between its operations and our existing ones, namely through the operation of a single energy trading unit for Iberia and the centralization of procurement in respect of our investment in wind and CCGT generation;

position ourselves to benefit from the creation of an Iberian electricity market and pursue growth opportunities in Spain by leveraging on our investment in Hidroantábrico;

grow our customer base by capitalizing on the fully liberalized electricity market in Spain;

## **Table of Contents**

take advantage of a combined electricity and gas service offering in Spain through the activities of both Hidrocarburo and Naturcorp and in Portugal through the activities of EDP and Portgás in connection with the expected liberalization of the Portuguese gas sector; and

increase generation capacity through the construction of one or more new CCGT power plants, the development of renewable energy generation projects, primarily through the construction or acquisition of new wind farms, and the increase of capacity in existing plants to cope with strong consumption growth.

### **Developing an Iberian gas business**

We view the gas business as being highly complementary to electricity and of great strategic attractiveness. Both Portugal and Spain have gas and electricity consumption growth rates above the EU average. Each country requires new capacity to be gradually added and CCGT plants, fired by gas, are considered to be an advantageous option to meet the Iberian electricity system expansion requirements because of their lower investment costs required per MW, greater efficiency, lower operating and maintenance costs and lower emission levels compared to other thermal generation plants. Since new gas-fired generation capacity is expected to be added to the Iberian electricity system, power generators, which are already among the largest gas consumers in the Iberian Peninsula, are and will continue to be the facilitators of the development and sustainability of the gas business in the Iberian Peninsula, although their competitive position will increasingly depend on gas prices and the flexibility of gas contracts. The natural gas market is characterized by the existence of long-term contracts. For electricity generators, long-term contracts in the natural gas market are usually indexed to the price of oil, are of a take-or-pay nature and restrict the final destination of contracted gas. Since gas represents a substantial portion of gas-fired power plants' total costs, access to flexible and competitive gas contracts is necessary to increase the efficiency of CCGT power plants.

There are two main reasons for us to develop an integrated Iberian gas business:

to increase the competitiveness and efficiency of our gas-fired power plants. By being involved in both gas distribution and electricity generation we expect to be able to mitigate the risk presented by variable gas prices while increasing the flexibility of gas sourcing and placing; and

to capture synergies from distributing both gas and electricity to final consumers, leveraging on our existing electricity client base and on the sharing of infrastructure and system costs.

After a decision of the European Commission in December 2004 which prevented our planned acquisition of joint control of GDP Gás de Portugal, SGPS, S.A., or GDP, which operates in the Portuguese gas sector and owns assets for the transport and distribution of gas, we are currently appealing to the Court of First Instance of the European Court of Justice from the European Commission's decision. Our ability to determine a detailed strategy for the gas sector in Portugal is limited pending a final decision on the GDP acquisition and the liberalization of the Portuguese gas sector, along with the necessary legal and industry framework.

Our current interest in the gas sector in Portugal consists of our 59.55% holding in Portgás, and our minority interests of 14.27% in GALP and 10.11% in Setgás. Upon the completion of our acquisition of NQF Gás, we will increase our direct and indirect shareholdings in Portgás and Setgás to 72.0% and 19.8%, respectively. Our current interest in the gas sector in Spain is through Hidrocarburo's 56.8% controlling stake in Naturcorp, which has more than 500,000 customers and approximately 10% of Spain's regulated revenues for gas distribution, or 8% of gas distributed in Spain in terms of GWh.

**INTERNATIONAL ACTIVITIES**

Although our core business has historically been electricity in Portugal, it has evolved to include the Iberian energy market. However, international opportunities arise in the electricity business and related businesses through which we believe we can achieve attractive returns. In international investments, we have looked particularly toward Brazil, where we believe we can play an active role in managing the electricity operations in which we are involved and where potential returns may be attractive. During the first half of 2003, we reassessed our Brazil strategy and are undertaking the following initiatives with the goal of rationalizing our

## **Table of Contents**

Brazilian operations by making them more self-sustaining and independently managed:

corporate restructuring: integration of all activities in Brazil under our subsidiary, Energias do Brasil, which will consolidate not only financial results but also planning and strategic control;

capital restructuring: assessment of the capital structure of Energias do Brasil and its subsidiaries;

corporate governance: harmonization and alignment of the corporate governance structures and procedures of Energias do Brasil's subsidiaries, with a view toward improving the efficiency and transparency of governance and the decision-making process;

strategic positioning: introduction of the necessary adjustments to our existing investments with the aim at obtaining greater added value for shareholders and the establishment of strategic platforms for the development of future businesses; and

generation of synergies: ensuring that Energias do Brasil is worth more than the sum of its parts, thus providing adequate remuneration of capital employed, through initiatives such as the re-launch of an efficiency program and analysis of the feasibility of shared services.

We regularly review our international investments and may change their focus over time consistent with our strategic objectives. In this regard, we continuously monitor our investment portfolio in order to capitalize on our ability to efficiently manage electricity operations through significant influence or control. For a more detailed discussion of our international activities, you should read [Brazil](#) and [Other Investments and International Activities](#) below.

## **TELECOMMUNICATIONS**

Our telecommunications activities are conducted through ONI, our telecommunications subsidiary comprised of various business units. ONI is a fixed line telecommunications operator primarily focused on corporate clients and provides voice and data services in Portugal and Spain.

We plan to build on our existing operations in order to achieve a competitive role in the corporate fixed line telecommunications sector in Portugal and Spain, which we regard as attractive markets of suitable size and high growth potential.

Although our plans and strategy continue to evolve and adapt to trends in the telecommunications sector, we currently anticipate emphasizing the following business areas:

fixed line operations, using ONI's fixed line voice and data operations as a platform; and

Internet access services, building on ONI's Internet service provider activities.

We also have allied and expect to ally ourselves with other partners who may bring resources and synergies to facilitate our efforts to develop a presence in each of these business areas. For a more detailed discussion of our telecommunications activities, please see Telecommunications below.

## **INFORMATION TECHNOLOGY**

In April 2005, we completed the sale of a 60% stake in the share capital of Edinfor to LogicaCMG. This transaction involved the renegotiation of our existing contracts with Edinfor in order to ensure that we have access to the best international practices in the field of information technology at competitive prices and to ensure that our core information technology systems continue to be run by Edinfor, while benefiting from the worldwide positioning of LogicaCMG. As a result of this partnership with LogicaCMG, we expect to be better able to focus on our core business, while maintaining the availability and security of key systems and enhancing Edinfor's growth potential.

## Table of Contents

### **DEVELOPMENT OF COMPLEMENTARY BUSINESS ACTIVITIES**

Consistent with our strategy, we are selectively evaluating opportunities that are complementary to our core businesses and that may enable us to achieve cost savings along the chain of activities from us to the consumer and that management expects can generate additional shareholder value. For more information on our complementary business activities you should read [Subsidiaries, Affiliates and Associated Companies](#) below.

### **THE IBERIAN ELECTRICITY MARKET**

In 2004, total generation in the Iberian electricity market amounted to approximately 227.7 TWh in the ordinary regime (i.e., excluding special regime), of which EDP and Hidrocantábrico were responsible for approximately 38.2 TWh.

Although there is not yet an integrated electricity market in operation in the Iberian Peninsula, governments from Portugal and Spain share the common view of creating a single, integrated and competitive electricity market for Portugal and Spain, manifested by MIBEL, within the wider context of an envisaged European single electricity market, as provided for in Directives 96/92/EC and 2003/54/EC.

After several delays in the process, the international agreement entered into by the Portuguese and Spanish governments at the Iberian Summit at Santiago de Compostela on October 1, 2004, called for the beginning of operations of MIBEL on June 30, 2005. While this has not occurred yet, both governments have undertaken to create an Iberian electricity market based on the principles of free and fair competition, transparency, objectivity and efficiency.

Under the international agreement, MIBEL will operate with a spot market, which includes daily and intra-daily markets and will initially be managed by the current market operator of the Spanish market (OMEL), and a forward market, which will initially be managed by a market operator located in Portugal (OMIP). In addition, electricity transactions may also be negotiated by means of bilateral contracts with a term not less than one year. The international agreement also clarifies that the existence of two market operators, OMEL and OMIP, is temporary and that the two operators will eventually be merged into a single market operator. Pursuant to the international agreement, within one year from the implementation of MIBEL, each market operator is expected to limit the amount of its share capital held by any single shareholder to 5% and the shareholding of any system operator will be limited to a maximum of 3%. Within two years from the implementation of MIBEL, it is expected that both market operators will merge and create a single market operator designated as the Iberian Market Operator (*Operador do Mercado Ibérico*).

For the purpose of implementing MIBEL, the development of interconnections between Spain and Portugal has been a priority. Two such interconnections were put into operation in 2004: the Alqueva-Balboa 400kV line and a second 400 kV circuit in Alto-Cartelle-Lindoso. In addition, for the Douro Internacional-Aldeadavila interconnection, either the construction of a new 400kV interconnection or an increase of the existing interconnection capacity is scheduled for completion in 2006.

Within the context of MIBEL, the Portuguese government has determined the early termination of the existing PPAs by means of adequate compensation mechanisms and changing REN's single buyer status, as set forth in Decree law no. 240/2004, which sets out adequate compensation for the investments and commitments provided for in each PPA that are not achievable through the expected market revenues once the PPAs are terminated. It is also expected that both Portugal and Spain should take all necessary measures to open the market to all

consumers and harmonize both tariff structures through clear and transparent rules, particularly in Spain.

The Spanish government is currently conducting a public hearing to assess eventual measures that should be implemented in the Spanish market with a view to creating MIBEL.



**Table of Contents**

**PORTUGAL**

**ELECTRICITY SYSTEM OVERVIEW**

**Portuguese Electricity System**

Since 1997, Portugal has had an electricity market structured pursuant to the legislation enacted by the government that introduced the National Electricity System. The chart below illustrates the structure of the National Electricity System.

---

*Note: Operations that are 100%-owned by us are highlighted in bold.*

<sup>(1)</sup> *We own 10% of Tejo Energia and 40% of Turbogás.*

<sup>(2)</sup> *Began operations in early 1998.*

<sup>(3)</sup> *In 2004, the Ribatejo CCGT power plant began operations.*

<sup>(4)</sup> *At the end of December 2004, approximately 50,500 potential **Qualifying Consumers**, or **Eligible Consumers**, existed, of which 2,919 had become **Qualifying Consumers** during 2004 and 1,919 were already in the **Non-Binding Sector**. Prior to February 2004, all consumers except low-voltage consumers were **Eligible Consumers**. Decree law no. 36/2004, of February 26, 2004, provided for the decrease of the eligibility threshold in mainland Portugal to include special low-voltage consumers, which are those with subscribed demands above 41.4 KW and voltage levels below 1kV. Decree law no. 192/2004, of August 17, 2004, subsequently provided for the full liberalization of the electricity market through the decrease of the eligibility threshold in mainland Portugal to include all low-voltage customers. In early 2005, the regulator published the necessary codes that reflect the ability of normal low voltage consumers to change suppliers.*

## **Table of Contents**

The National Electricity System consists of the PES, also sometimes referred to in this annual report as the Binding Sector, and the IES. The PES is responsible for ensuring the security of electricity supply within Portugal and is obligated to supply electricity to any consumer who requests it. Within the IES are the Non-Binding Sector and other independent producers (including auto producers). We and other generators can supply electricity to the Non-Binding Sector. The Non-Binding Sector is a market-based system that permits Qualifying Consumers to choose their electricity supplier. Over the past several years the minimum consumption level required to be a Qualifying Consumer has progressively declined and Decree law no. 192/2004, of August 17, 2004, provided for the full liberalization of the electricity market through the decrease of the eligibility threshold in mainland Portugal to include all low-voltage customers. For more information on the liberalization of electricity sales you should read [Distribution Competition](#) below.

In the context of the liberalization of the Portuguese electricity sector, the creation of MIBEL and the termination of PPAs, we expect the structure of the National Electricity System to be significantly altered in the near future. For further information on the termination of the PPAs, see [Item 3. Risk Factors Risks Related to Our Core Electricity Business](#) Due to uncertainty as to the timing of our receipt of compensation relating to the early termination of the PPAs, which is conditioned on the start of operations of MIBEL, we may not receive such compensation in the same amount as is currently contemplated.

### **The Public Electricity System or Binding Sector**

The PES includes the binding generation in our generation company, CPPE, the transmission company, REN, in which we have a 30% stake, and our distribution company, EDPD. The PES also includes two independent power producers: Tejo Energia's plant at Pego, in which we have a 10% stake, and the Turbogás plant at Tapada do Outeiro, in which we have a 40% stake (after having acquired an additional 20% stake in early 2005). All plants in the PES enter into PPAs with REN through which they commit to provide electricity exclusively to the PES through REN, acting as the single buyer in the PES and operator of the national transmission grid. For more information on REN's activities, you should read [Transmission](#) below.

Power plants in the PES are each subject to binding licenses issued by the *Direcção Geral de Geologia e Energia*, or DGGE, which has succeeded the *Direcção Geral de Energia*, or DGE, that are valid for a fixed term, ranging from a minimum of 15 years to a maximum of 75 years, but which would be revoked upon termination of the related PPAs with REN. These licenses, together with PPAs, require each power plant in the PES to generate electricity exclusively for the PES.

While REN's responsibilities relate primarily to the transmission of electricity and system dispatch, it is also responsible for working with DGGE to identify potential sites for the installation of new power plants and for the management of wholesale purchases of electricity and sales to distribution companies.

### **The Independent Electricity System**

The IES consists of two parts the Non-Binding Sector and the other independent producers, including renewable source producers, which include small hydroelectric producers (under 10 MW installed capacity), and cogenerators.

*The Non-Binding Sector*

At present, the only producers in the Non-Binding Sector are our three wholly-owned embedded hydroelectric generators, which are small hydroelectric plants with more than 10MW installed capacity that deliver all of the energy they produce directly to the distribution system, and CPPE's CCGT plant in Ribatejo. Although producers in the Non-Binding Sector are required to obtain licenses, they have no obligation to supply electricity to the PES. These entities are free to contract directly with Qualifying Consumers. In 2004, the total number of Eligible Consumers in Portugal represented approximately 54% of total demand in mainland Portugal in volume terms. During 2004, 2,919 Eligible Consumers exercised their right to become Qualifying Consumers, of which 2,212 entered into contracts with EDP Comercial and 707 entered into contracts with producers in the Spanish market. As of December 31, 2004, approximately 50,500 Eligible Consumers existed and 4,838 of these had opted to become Qualifying

---

**Table of Contents**

Consumers. Of the 4,838 existing Qualifying Consumers at the end of 2004, 3,616 are customers of EDP Comercial, representing approximately 11% of the electricity sold in Portugal in 2004 by us and 9% of our revenues in the electricity distribution and supply activity in Portugal in 2004. On August 17, 2004, the electricity market in Portugal was fully liberalized through the decrease of the eligibility threshold in mainland Portugal to include all low-voltage customers. We expect a limited impact on our revenues due to this final step in the progressive elimination of the eligibility threshold. Two of the three tariff components relating to distribution, representing approximately 91% of tariff revenue in 2004, are payable to EDPD by Eligible Consumers electing to become Qualifying Consumers. In addition, EDP Comercial has the opportunity to gain Qualifying Consumers as its customers, in which case the third distribution tariff component would be payable to EDP Comercial.

Producers in the Non-Binding Sector are able to use the national transmission grid and distribution system on an open-access basis to connect to Qualifying Consumers, which pay regulated transmission and distribution charges to REN for transmission and EDPD or other companies for distribution, respectively. Our hydroelectric plants in the IES deliver all of the electricity they produce directly to the distribution system without going through the national transmission grid. These plants pay regulated transmission charges to REN. Contractual relationships between producers and consumers in the Non-Binding Sector are freely negotiable between the parties.

*Other independent producers*

The Portuguese government has implemented selected measures to encourage the development of various forms of electricity production, including auto producers (entities that generate electricity for their own use and may sell surplus electricity to REN), cogenerators, small hydroelectric producers and other producers using renewable sources. REN is currently required by law to purchase the excess electricity produced by these independent producers at a regulated price based on avoidable costs, defined as the costs REN avoids by receiving power from these producers rather than dispatching plants in the Binding Sector and/or investing in new plants to increase installed capacity, plus an environmental premium, referred to as the green tariff. For more information on our electricity sales, you should read Distribution below.

**Size and composition of Portugal's electricity market**

During the period from 2000 through 2004, the total electricity supplied by EDPD (in both the Binding and Non-Binding Sectors) experienced an average growth rate of 5.1% per annum. In 2002, there was a reduction in the annual growth rate to 2.4% due to a slowdown in the economy. In 2003, the annual growth rate increased to 3.7%. In 2004, the annual growth rate increased to 7.3%.

The primary factors that management believes have an impact on demand are the rate of gross domestic product growth, electricity connections to new households and changes in electricity consumption per capita. After the period from 1999-2001, during which consumption in the PES experienced an average growth rate of 2.1% above growth in Portugal's gross domestic product, or Portugal's GDP, there was a reduction to 0.7% above the growth rate in Portugal's GDP in the year 2002 due to a slowdown in the economy. In 2004, Portugal's GDP grew by 1.0% after a decline of 1.0% in 2003. Management estimates that overall consumption in the National Electricity System will increase at an average of 4% per year in 2005, 2006 and 2007. Residential consumption is assumed to increase each year over the same period by an average of 3.4%, services by an average of 4.7%, and industrial by an average of 2.5%.

Peak demand as a percentage of the total installed capacity, which is the sum of the total installed capacity of PES, and the total installed capacity of the Non-Binding System, or NBES, has remained fairly stable in recent years, except in 2003 when it increased slightly due to an extremely cold winter and a decrease in installed capacity in the PES following the decommissioning of the Alto Mira power plant (132 MW). Our available capacity as a percentage of the total installed capacity has returned to a value of approximately 78% after a slightly lower value in 2003. The ratio of peak demand to EDP's average available capacity indicates that EDP alone did not have sufficient available capacity to cover

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the total peak demand from 2001 through 2004. EDP is trying to address this situation by adding new generation capacity. The first two units of the Ribatejo CCGT plant began operation in 2004 and the third unit is expected to begin operation in 2006. Also, new CCGT and hydroelectric capacity is planned for future years.

**Table of Contents**

The following table sets forth the ratios of peak demand to installed capacity, EDP's available capacity to the installed capacity of the PES and the Non-Binding System and peak demand to EDP's available capacity for the periods indicated. Peak demand includes demand satisfied by generation from Other Independent Producers.

	As of December 31,				
	2000	2001	2002	2003	2004
	(in MW, except percentages)				
Installed capacity of the PES	8,758	8,758	8,758	8,626	8,626
Installed capacity of the NBES <sup>(1)</sup>	255	255	255	647	1,268
Total installed capacity (PES plus NBES)	9,013	9,013	9,013	9,273	9,893
Peak demand (PES plus NBES)	6,890	7,466	7,394	8,046	8,261
Peak demand as a percentage of the total installed capacity (PES plus NBES)	76.4%	82.8%	82.0%	86.8%	83.5%
<b>EDP:</b>					
EDP's average available capacity (PES)	6,765	6,801	6,841	6,695	6,761
EDP's average available capacity (NBES)	215	247	226	228	936
EDP's available capacity as a percentage of the total installed capacity (PES plus NBES)	77.4%	78.2%	78.4%	74.7%	77.8%
Peak demand as a percentage of EDP's average available capacity (PES plus NBES)	98.7%	105.9%	104.6%	116.2%	107.3%

<sup>(1)</sup> *Non-Binding System, which consists of generation in the IES other than the other independent producers. All of the NBES hydroelectric plants with an installed capacity less than or equal to 10 MW became special regime producers in October 2002. Special regime generation generally consists of small or renewable energy facilities, from which the electricity system must acquire all electricity offered, at tariffs fixed according to the type of generation. Installed capacity of the NBES in 2004 includes the first two operational units (2x392 MW) of the Ribatejo CCGT and the two units of the Alqueva hydroelectric power plant (2x120 MW). Installed capacity in the NBES also reflects a decrease of 11 MW related to the Ermal plant, which became a special regime power station.*

The Portuguese overall growth rate in demand for electricity is slightly higher than the rate reflected in the figures above due to the growth of auto production of electricity in certain industries. Auto producers supply their surplus electricity to REN, which displaces electricity generation in the PES.

The term "installed capacity" as used in this report refers to the maximum capacity of a given generation facility under actual operating conditions. Maximum capacity of a hydroelectric facility is based on the gross electricity emission to the transmission network by the units of such facility, whereas maximum capacity of a thermal facility is based on the net electricity emission (net of own consumption) to the transmission network.

**Transmission**

The transmission system in mainland Portugal is owned and operated by REN, which is obligated by law to supply electricity within the National Electricity System. Electricity transmission in Portugal is the bulk transfer of electricity, at voltages between 150 kV and 400 kV, from generation or acquisition sites across a transmission system to areas of use via networks that are linked to each other to form an interconnected national transmission grid. The Portuguese government purchased a 70% interest in REN from us in late 2000. We currently hold a 30% interest in REN. For more information on this purchase, you should read Item 5. Operating and Financial Review and Prospects Overview.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

REN operates the national transmission grid on an exclusive basis pursuant to Portuguese law under a concession provided for by Decree law no. 182/95, of July 27, 1995. The concession is valid for 50 years from September 2000, when the concession agreement was signed.

The Portuguese transmission system operates at a frequency of 50 Hz, which is in line with the majority of the European transmission systems. At year-end 2004, there were 47 substations operating on the national transmission grid, not including power plants. All of these substations are now fully automated and operated by remote control.

**Table of Contents**

Of REN's transmission lines at December 31, 2004, approximately 2,198 km were 150 kV lines, 2,838 km were 220 kV lines and 1,454 km were 400 kV lines. At the end of 2004, REN had seven interconnection lines with Spain, one of which is a 150 kV line, three of which are 220 kV lines and three of which are 400 kV lines. We understand that, within the context of creation of MIBEL, REN plans to establish an additional interconnection with Spain: Douro Internacional-Aldeadavila, a 220 kV line or 400 kV line scheduled for completion in 2006.

In addition to the construction and operation of the national transmission grid, REN is also system operator of the National Electricity System and market operator of the PES. This includes scheduling generation to match, as closely as possible, the demand on the national transmission grid. As part of managing the national transmission grid, REN is also responsible for scheduling imports and exports with Spain. It buys and sells electricity in the Spanish organized electricity market at market prices. Apart from the power plants in the PES, REN is also obligated to buy energy from auto producers, cogenerators, small hydroelectric producers and other renewable source energy plants operating under Portuguese law within the Independent Electricity System.

The following table sets forth REN's net imports made in the conduct of its operations in each of the last five years in GWh and as a percentage of total demand.

<u>Year</u>	<u>Net imports (GWh)</u>	<u>Percentage of total demand</u>
2000	931	2.5
2001	239	0.6
2002	1,899	4.7
2003	2,794	6.5
2004	6,480	14.2

**GENERATION**

As of December 31, 2004, our Portuguese electricity generation facilities consist of hydroelectric, thermal (coal, fuel oil, natural gas and gas oil), biomass, cogeneration and wind generation facilities, and had a total installed capacity of 8,402 MW (including two 392 MW units of the new Ribatejo CCGT plant, one of which began commercial operations in early 2004 and the other of which began commercial operations in November 2004), 7,052 MW of which was in the PES and 1,350 MW of which was in the IES. As of December 31, 2004, approximately 50% of our generation capacity was represented by hydroelectric facilities, 31% by fuel oil/natural gas facilities, 14% by coal-fired facilities, 2% by gas oil facilities and 3% by wind-driven, biomass and cogeneration facilities. We do not own or operate any nuclear-powered facilities in Portugal.

Our installed capacity in the PES of 7,052 MW represents approximately 82% of the total installed capacity in the PES. From 2000 to 2002, the installed capacity of the PES remained constant. In 2003, a small decrease resulted from the decommissioning of the 132 MW Alto de Mira plant. At the end of 2004, we decommissioned the last unit at the Tapada do Outeiro plant (46.9 MW) and the PPA between CPPE and REN for the two old generating units of Tunes (32 MW) also reached maturity. However, in this case, these two units were considered useful for system services by REN. CPPE and REN entered into a contract pursuant to which CPPE maintains the plant and keeps it in operation. Our smaller hydroelectric plants, wind generating facilities and cogeneration and biomass plants are part of the IES. In the IES, in addition to the two Ribatejo CCGT units that entered into service in 2004, there was an increase in IES capacity resulting from the entering into service of the Alqueva hydroelectric power plant in 2004 owned by EDIA-Empresa de Desenvolvimento e Infra-estruturas de Alqueva, S.A., or EDIA, a company wholly-owned by the Portuguese Republic that is developing a multi-purpose hydroelectric project for irrigation and the production of electricity.



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In 2004, our net electricity generation in Portugal was approximately 24.3 TWh, excluding special regime production. According to REN, total net generation in Portugal in 2004 was approximately 35.0 TWh.

Since its creation in 1994, CPPE has operated all of our conventional thermal plants and approximately 92.6% of our hydroelectric plants. During the second half of 2003, we began reorganizing our generation business in preparation for the commencement of MIBEL. In 2004, we consolidated a number of generation companies formerly held by EDP Produção, which operate in the IES, into CPPE as part of the reorganization of our generation business. The companies merged into CPPE were: HDN,

## **Table of Contents**

S.A., Hidrocel, S.A., TER S.A., EDP Cogeração, S.A., Hidrinor, S.A. and Hidroem, S.A. As a result of this reorganization, in 2004 CPPE accounted for approximately 97% of our generation in Portugal. Our other companies that own or operate generation assets are EDP Comercial, Enernova and EDP Bioelétrica.

EDP Comercial was created to supply electricity to Qualifying Consumers and to conduct energy trading activities. The energy trading activities were subsequently transferred to EDP Produção.

Enernova (wind energy) and EDP Bioelétrica (biomass plants) are now held directly by EDP outside of EDP Produção. Since 1996, Enernova has increased its installed generation capacity from 10 MW to 136 MW in 2004. New projects are in progress, some of which are under construction and others are in licensing or development, which are expected to add installed capacity of 872 MW by 2007, and 1,432 MW by 2010.

EDP Produção also holds a variety of engineering and operations and maintenance, or O&M, companies, including EDP Produção EM Engenharia e Manutenção, S.A., a company which undertakes hydroelectric and thermal engineering projects and studies, project management, engineering and consulting.

On March 16, 2005, we exercised a call option for a total consideration of \$52 million for the purchase from National Power International Holdings BV, or IPBV, of a 20% shareholding and related shareholder loans in Turbogás and a 26.667% shareholding and related shareholder loans in Portugal. Following the completion of this transaction, we now hold a 40% shareholding in Turbogás and a 26.667% shareholding in Portugal. Turbogás was incorporated in 1994 with the sole purpose of carrying out the development, construction and operation of a combined-cycle gas fired power station (CCGT) at Tapada do Outeiro, in Portugal, with a total installed capacity of 990 MW. Turbogás currently sells the whole of its production to REN, within the PES under a long term PPA. In 2002, 2003 and 2004, Turbogás generated 7,126 GWh, 5,404 GWh and 6,153 GWh, respectively. For more information on these transactions, please see Other Investments and International Activities. In addition, we have also reached an agreement with International Power Portugal Holdings S.G.P.S., S.A., or IPR, and IPBV regarding our possible involvement in the management of Tapada do Outeiro's power output in the event that the current PPA of Tapada do Outeiro is terminated, with any such arrangement being subject to non-opposition by the relevant competition authority.

The following maps set forth the CPPE power plants in the PES and our power plants in the IES, in each case as of December 31, 2004.

**Table of Contents**

36

**Table of Contents**

37

**Table of Contents**

The following table sets forth our total installed capacity by type of facility at year-end for the years 2000 through 2004.

Type of facility	As of December 31,				
	2000	2001	2002	2003	2004
Hydroelectric:					
CPPE plants	3,903	3,903	3,903	3,903	3,903
Independent System hydroelectric plants <sup>(1)</sup>	309	309	309	311	310
<b>Total hydroelectric</b>	<b>4,212</b>	<b>4,212</b>	<b>4,212</b>	<b>4,214</b>	<b>4,213</b>
Thermal <sup>(2)</sup>	3,281	3,281	3,281	3,149	3,149
Wind	30	41	41	65	136
Biomass	9	9	9	9	9
Cogeneration	67	67	111	111	111
CCGT <sup>(3)</sup>	0	0	0	392	784
<b>Total</b>	<b>7,599</b>	<b>7,610</b>	<b>7,654</b>	<b>7,939</b>	<b>8,402</b>

<sup>(1)</sup> In 2004, the Ermal power station began operations as a special regime producer with 9.9 MW instead of its previous 11.2 MW.

<sup>(2)</sup> On June 30, 2003, the PPA of the Alto de Mira plant expired and the plant was decommissioned.

<sup>(3)</sup> This plant was in testing at the end of 2003. The first 392 MW unit of this plant began commercial service on February 14, 2004 and the second 392 MW unit on November 2, 2004.

Hydroelectric generation is dependent upon hydrological conditions. In years of less favorable hydrological conditions, less hydroelectricity is generated and the PES depends on increased thermal production. In addition, in years of less favorable hydrological conditions, imports of electricity may increase. For purposes of forecast models, our estimated annual hydroelectric production based on current installed capacity in an average year is 10.6 TWh and can reach about 15 TWh in a wet year and may fall to less than 7 TWh in a dry year. Between 1994 and 2004, our actual hydroelectric production ranged from a low of 6.9 TWh in 1999, a very dry year, to a high of 14.9 TWh in 2003, a record wet year.

The following table summarizes our net electricity production (excluding internal losses and consumption of the plants) by type of generating facility from 2000 through 2004, and also sets forth our hydroelectric capability factor for the same period:

Type of facility	Year ended December 31,				
	2000	2001	2002	2003	2004
	(in GWh, except hydroelectric capability factor)				
Hydroelectric:					
CPPE plants <sup>(1)</sup>	10,229	12,607	6,764	13,964	8,718
Independent System hydroelectric plants	624	790	573	901	539

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Total hydroelectric	10,853	13,397	7,336	14,865	9,257
Thermal:					
Coal	9,091	8,677	9,532	9,473	9,530
Fuel oil and natural gas	4,631	5,583	7,848	3,120	2,210
Gas oil	38	50	13	26	5
Coal and fuel oil <sup>(2)</sup>	11	30	44	(1)	5
Cogeneration	134	423	590	679	656
CCGT <sup>(3)</sup>				203	3,419
Total thermal	13,905	14,763	18,027	13,500	15,825
Wind	70	90	113	128	237
Biomass	5	18	37	38	49
Total	24,833	28,269	25,513	28,532	25,368
Hydroelectric capability factor <sup>(4)</sup>	1.08	1.19	0.75	1.33	0.83

<sup>(1)</sup> Includes the following amounts of our own consumption for hydroelectric pumping, 558 GWh in 2000, 485 GWh in 2001, 670 GWh in 2002, 485 GWh in 2003 and 408 GWh in 2004.

**Table of Contents**

- (2) Since the beginning of 1998, our existing plant at Tapada do Outeiro uses only fuel oil. Production in 2003 was less than the plant's own consumption.
- (3) The Ribatejo plant was in testing at the end of 2003. The first unit of this plant began commercial service on February 14, 2004 and the second unit on November 2, 2004.
- (4) The hydroelectric coefficient varies based on the hydrological conditions in a given year. A hydroelectric capability factor of one corresponds to an average year, while a factor less than one corresponds to a dry year and a factor greater than one corresponds to a wet year.

The average availability for production of CPPE's plants remained at favorable levels from 2000 (93.2%) through 2004 (94.4%) for thermal plants, and increased from 95.0% to 97.1% for hydroelectric plants during the same period. Forced outage is unplanned availability at a power plant caused by trips, critical repairs or other unexpected occurrences. Non-availability results from planned maintenance and forced outages. CPPE is reducing planned maintenance outages through more efficient maintenance techniques. CPPE's generating facilities have achieved very low rates of forced outage over the past five years. Management believes these low rates compare favorably with the European average. In the period 2000 through 2004, forced outages of CPPE's thermal plants has ranged between 2.11% and 2.91%. During the same period, forced outages of CPPE's hydroelectric plants ranged between 0.44% and 1.00%. In 2004, forced outages of CPPE's thermal plants was 2.19% and hydroelectric plants was 0.48%.

The average availability factor is defined as the total number of hours per year that a power plant is available for production as a percentage of the total number of hours in that year. This factor reflects the mechanical availability, not the actual availability of capacity, which may vary due to hydrological conditions. The table below indicates for each type of CPPE generating facility the average capacity utilization and average availability factor indicators, comparable with other European utilities, each calculated in accordance with our computational method, for the indicated periods:

Type of facility	Average capacity utilization <sup>(1)</sup>					Average availability factor				
	Year ended December 31,					Year ended December 31,				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Hydroelectric	29.8%	36.9%	19.8%	40.8%	25.5%	95.0%	94.8%	95.9%	96.8%	97.1%
Thermal:										
Coal	86.8%	83.1%	91.3%	90.7%	91.3%	89.2%	90.5%	94.0%	94.2%	92.9%
Fuel oil and natural gas	30.8%	37.2%	52.3%	20.8%	14.7%	94.6%	96.6%	93.7%	90.8%	95.1%
Coal and fuel oil <sup>(2)</sup>	2.8%	7.2%	10.8%	0.0%	0.0%	99.6%	98.9%	98.2%	94.9%	88.0%
Gas oil <sup>(3)</sup>	1.3%	1.7%	0.4%	1.2%	0.3%	99.4%	98.4%	99.1%	98.0%	98.8%
Total weighted average thermal <sup>(4)</sup>	47.8%	49.9%	60.7%	44.8%	42.6%	93.2%	94.6%	94.4%	92.7%	94.4%

(1) The average capacity utilization is defined as actual production as a percentage of theoretical maximum production.

(2) None, primarily due to minimal generation at our Tapada do Outeiro plant as a result of a wet year in 2003 and the fact that this is a peak load power plant.

(3) Increase in average capacity utilization was due to the need to use the fuel stock of the Alto de Mira power plant in the context of its decommissioning in 2003.

<sup>(4)</sup> *Weighted average is based on total installed capacity of the thermal system.*

During the period from 2000 through 2004, CPPE had operating and maintenance costs, excluding fuel and depreciation costs, below the limits contained in the relevant PPAs over that time period. Although management expects to continue to maintain these costs below the PPA limits in 2005, we expect most of the PPAs to terminate during 2005 or 2006 as a result of the provisions of Decree law no. 240/2004. On June 30, 2003, the PPA of our 132 MW Alto de Mira plant terminated on the scheduled expiration date. The three-unit Tapada do Outeiro plant was progressively decommissioned until the end of 2004. The gas oil Tunes plant, with four units, had the PPA relating to its first two (32 MW) units terminated on December 31, 2004. Since that PPA termination, the affected units at Tunes are serving the national grid, providing ancillary services pursuant to an agreement with REN.

### **Hydroelectric plants**

As of December 31, 2004, we owned and operated 25 hydroelectric generating facilities in the Binding System, with 63 total units and an aggregate installed capacity of 3,903 MW.



**Table of Contents**

In the IES, CPPE now owns and operates 224.9 MW formerly owned by HDN and Hidrocenel. CPPE also operates 84.9 MW owned by EDP Comercial and 240 MW owned by EDIA (the Alqueva plant). As a result, the total maximum capacity operated by CPPE was approximately 4,453 MW as of December 31, 2004.

Based on an independent revaluation of our assets in 1992, we estimate that the average remaining useful life of our dams is approximately 45 years. The table below sets out our hydroelectric plants, installed capacity as of December 31, 2004, the type of hydroelectric plant, the year of commencement of operation and the year in which the most recent major refurbishment, if any, was accomplished.

Hydroelectric plants	Installed capacity (MW)	River reservoir plant type	Year entered into service	Year of last major refurbishment
<b>CPPE Plants:</b>				
Alto Lindoso	630.0	Reservoir	1992	
Miranda	369.0	Run of river	1960/95	1970
Aguieira	336.0	Reservoir	1981	
Valeira	240.0	Run of river	1976	
Bemposta	240.0	Run of river	1964	1969
Pocinho	186.0	Run of river	1983	
Picote	195.0	Run of river	1958	1969
Carrapatelo	201.0	Run of river	1971	
Régua	180.0	Run of river	1973	
Torrão	140.0	Reservoir	1988	
Castelo de Bode <sup>(1)</sup>	159.0	Reservoir	1951	2003
Vilarinho Furnas	125.0	Reservoir	1972/87	
Vila Nova (Venda Nova/Paradela)	144.0	Reservoir	1951/56	1994
Fratel	132.0	Run of river	1974	1997
Crestuma-Lever	117.0	Run of river	1985	
Cabril	108.0	Reservoir	1954	1986
Alto Rabagão	68.0	Reservoir	1964	
Tabuaço	58.0	Reservoir	1965	
Caniçada	62.0	Reservoir	1954	1979
Bouça	44.0	Reservoir	1955	1988
Salamonde	42.0	Reservoir	1953	1989
Pracana	41.0	Reservoir	1950/93	1993
Caldeirão	40.0	Reservoir	1994	
Touvedo	22.0	Reservoir	1993	
Raiva	24.0	Reservoir	1982	
<b>Total</b>	<b>3,903.0</b>			
<b>Independent System Hydroelectric Plants:</b>				
<b>CPPE plants:<sup>(2)</sup></b>				
Hidrocenel	107.6	Various	Various	
HDN <sup>(3)</sup>	117.3	Various	Various	
EDP Comercial <sup>(4)</sup>	84.9	Various	Various	
<b>Total</b>	<b>309.8</b>			
<b>Total maximum capacity</b>	<b>4,212.8</b>			

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

- <sup>(1)</sup> *We invested approximately 13 million in the modernization of the electricity generating turbines and other dam equipment at Castelo de Bode, which was completed at the end of 2003.*
- <sup>(2)</sup> *As a result of a recent reorganization, CPPE integrated 28 plants owned by HDN and Hidrocel plants with capacities ranging from 0.1 MW to 44.1 MW and dates of entry into service from 1906 to 2004.*
- <sup>(3)</sup> *In 2004, the Ermal power station began operations as a special regime power station with 9.9 MW instead of the previous 11.2 MW.*
- <sup>(4)</sup> *EDP Comercial owns four plants with capacities ranging from 0.72 MW to 80.7 MW and dates of entry into service from 1927 to 1951.*

**Table of Contents**

The following table presents the net generation, for the last three years, of CPPE's hydroelectric power plants operating under PPAs, as well as the end date of each PPA.

	End of PPA	Annual Net Generation		
		2002	2003	2004
(GWh)				
<b>Hydro</b>				
Alto Lindoso	2024	599	948	532
Touvedo	2024	48	72	46
Alto Rabagão	2015	54	145	89
Vila Nova (Venda Nova/Paradela)	2015	353	720	484
Venda Nova 2/Frades <sup>(1)</sup>	2027			
Salamonde	2015	153	261	199
Vilarinho Furnas	2022	160	181	162
Cançada	2015	238	347	263
Miranda	2013	478	1,365	797
Picote	2013	513	1,121	879
Bemposta	2013	535	1,374	913
Pocinho	2024	262	681	388
Valeira	2024	444	1,049	617
Vilar-Tabuaço	2024	48	178	88
Régua	2024	428	891	576
Carrapatelo	2024	558	1,092	765
Crestuma-Lever	2024	258	513	309
Torrão	2024	272	314	208
Caldeirão	2024	49	76	17
Aguieira	2024	538	614	351
Raiva	2024	41	66	31
Cabril	2015	185	491	236
Bouça	2015	97	230	128
C. Bode	2015	216	608	266
Pracana	2024	49	99	33
Fratel	2020	188	528	339
<b>Total Hydro</b>		<b>6,764</b>	<b>13,964</b>	<b>8,718</b>

<sup>(1)</sup> This plant, a power reinforcement of Venda Nova, started industrial service in August 2005.

**Table of Contents****Thermal plants**

CPPE operates all our conventional thermal power plants in the PES, with total installed capacity, as of December 31, 2004, of 3,149 MW and installed capacity per generating unit ranging from 16 MW to 298 MW. The following table sets forth, as of December 31, 2004, our conventional thermal plants by installed capacity, type of fuel, net efficiency at maximum output, number of units and year entered into service.

<b>Thermal plants</b>	<b>Installed Capacity (MW)</b>	<b>Fuel</b>	<b>Net efficiency at maximum output</b>	<b>Number of units</b>	<b>Years entered into service</b>
Sines	1,192.0	Coal	36.8	4	1985-89
Setúbal	946.4	Fuel oil	38.2	4	1979-83
Carregado I	473.8	Fuel oil	37.3	4	1968/1974
Carregado II <sup>(1)</sup>		Fuel oil /			
	236.4	Natural gas	37.6	2	1976
Tunes <sup>(2)</sup>	197.0	Gas oil	28.4	4	1973/1982
Tapada do Outeiro (EDP facility) <sup>(3)</sup>	46.9	Coal / fuel oil	29.4	1	1959/ 1967
Barreiro	56.0	Fuel oil	34.2	2	1978
<b>Total maximum capacity</b>	<b>3,148.5</b>				

<sup>(1)</sup> These units began burning natural gas in 1997.

<sup>(2)</sup> The PPA for the first two units terminated on December 31, 2004 and these units now serve the national grid to synchronize the transmission network.

<sup>(3)</sup> This three-unit plant was progressively decommissioned until the end of 2004; the first unit on December 31, 1997, the second unit on December 31, 1999 and the third unit on December 31, 2004.

There has been no significant change in average net efficiency of CPPE's thermal plants over the past five years. With continued proper maintenance of the thermal facilities, CPPE expects to maintain net efficiency at least at levels agreed in the PPAs.

The following table presents the net generation, for the last three years, of CPPE's thermal power plants operating under PPAs, as well as the expected end date of each PPA and the fuel costs per power station:

	End of PPA	Annual Net Generation			Annual Fuel Costs		
		2002	2003	2004	2002	2003	2004
		(GWh)			(thousands of EUR)		
Sines	2017	9,532	9,473	9,530	149,741	131,771	179,818
Setúbal	2012	5,191	1,834	1,683	173,290	71,333	64,405
Carregado (I and II)	2010	2,408	1,091	327	92,121	51,075	17,063

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Barreiro	2009	249	195	200	16,003	16,971	15,573
Tunes (III and IV)	2007	57	26	10	3,457	2,757	877
		<u>        </u>	<u>        </u>	<u>        </u>	<u>        </u>	<u>        </u>	<u>        </u>
Total		17,437	12,619	11,750	434,612	273,908	277,736

**Other energy sources**

*Renewables*

In addition to our hydroelectric and thermal plants, we promote the use of renewable energy sources with other types of facilities. Enernova, our subsidiary specializing in this area, concentrated its initial investments in wind farms (due to greater technological advances made to date). Our first wind facility commenced operation in 1996. We now have ten wind facilities with a combined installed capacity of 136 MW. In 2002, we created a new subsidiary for the biomass assets, EDP Produção Bioelétrica, which operates the Mortágua biomass (forestry waste) power plant. This plant started operations in 1999 and has an installed capacity of 9 MW.

**Table of Contents***Fuel*

CPPE uses a number of fossil fuels in the generation of electricity. The introduction of natural gas in Portugal permitted growth in the sources of primary energy. For more information on our use of natural gas you should read *Natural Gas* below. For the purposes of this section, the Ribatejo plant, which began testing in 2003 and operation in 2004, is considered as if it was owned by CPPE during such periods.

CPPE fuel consumption costs, including transportation, were 380.3 million in 2004 and 273.9 million in 2003 (for ease of comparison, the 2003 figure has been adjusted to reflect CPPE as reorganized in 2004). The increase in the total cost of fuel consumed from 2003 to 2004 resulted primarily from a dry year in 2004 compared to a wet year in 2003, the higher cost of fuel in 2004 and the added consumption in 2004 of the new Ribatejo CCGT plant.

The table below shows a breakdown of costs of fuel consumed by CPPE from 2000 through 2004.

Type	Year ended December 31,				
	2000	2001	2002	2003	2004
	(thousands of EUR)				
Imported coal	128,902	142,810	148,773	130,531	179,062
Fuel oil <sup>(1)</sup>	146,721	193,867	259,816	117,716	86,336
Gas oil <sup>(2)</sup>	1,895	4,618	1,526	2,744	586
Natural gas	25,364	12,260	24,497	22,917	114,354
<b>Total</b>	<b>302,882</b>	<b>353,555</b>	<b>434,612</b>	<b>273,908</b>	<b>380,337</b>

<sup>(1)</sup> Includes consumption for the production of steam at the Barreiro power plant.

<sup>(2)</sup> Small amounts of gas oil are consumed by the gas oil plants for the operation of these plants in synchronous compensation mode for purposes of voltage regulation and a very small amount of generation.

The following table sets forth the amounts of fuel purchased by CPPE in each of the last five years.

Type	Year ended December 31,				
	2000	2001	2002	2003	2004
	(thousands of metric tons, except natural gas)				
Imported coal	3,564	3,108	3,587	3,593	3,562
Fuel oil <sup>(1)</sup>	1,052	1,237	1,941	716	422
Gas oil	0	26	3	10	1
Natural gas <sup>(2)</sup>	142	60	150	131	632

---

(1) *Includes purchases for the production of steam at the Barreiro plant.*

(2) *Measured in millions of cubic meters. The increase in 2004 is due to the entering into commercial service of two units of the Ribatejo CCGT power plant.*

*Coal*

As the Sines power plant is a base load, or continuous operation power plant, CPPE has supply contracts for more than one year for the major part of its consumption of coal. Pursuant to the PPAs, for purchases of coal, an annual Target Contract Quantity, or TCQ, is defined by REN based on the forecasts for coal consumption for a wet year. The TCQ is the basis for long-term supply and shipping contracts, which are negotiated by CPPE, subject to REN approval. In addition, CPPE makes spot-market purchases as necessary. In 2004, CPPE purchased 63% of its coal through long-term contracts and 37% of its coal on the spot market. In 2003 and 2002 CPPE purchased 78% of its coal through long-term contracts and 22% of its coal on the spot market.

**Table of Contents**

The following table shows the evolution of CPPE's coal purchases from 2000 to 2004 by geographic markets as a percentage of total purchases for that year.

Region	Year ended December 31,				
	2000	2001	2002	2003	2004
South Africa	38.0%	28.0%	28.9%	34.6%	29.5%
United States	10.0%	17.0%	3.2%	9.9%	13.1%
Australia	0.0%	13.0%	23.2%	18.6%	3.7%
South America	48.0%	27.0%	16.3%	32.9%	41.1%
Southeast Asia	4.0%	15.0%	16.9%	0.0%	4.4%
Europe	0.0%	0.0%	11.3%	4.0%	8.2%
Total	100%	100%	100%	100%	100%

In 2004, the average cost of coal consumed was 50.3 per ton. In 2003 and 2002, the average cost of coal consumed for imported coal was 36.7 per ton and 41.4 per ton, respectively. The increase in 2004 reflects increased demand in the Chinese market and related capacity constraints on shipping from Asia.

*Fuel oil and gas oil*

Fuel oil purchases by CPPE are made in the spot market and pursuant to contracts. CPPE purchases fuel oil from refineries in Europe, primarily in northwestern Europe and also in Portugal, and is remunerated through PPAs based on, among other things, costs of fuel oil indexed to the spot market.

The average cost of fuel oil consumed in 2004 was 204.6 per ton, compared with 164.8 and 143.3 in 2003 and 2002, respectively. The increase in 2004 was due to increases in market prices as a result of the conflict in Iraq and production control by OPEC members. To meet its objectives to improve air quality, CPPE has shifted its fuel oil purchases to lower sulfur fuel oil, which has increased the cost of consumed fuel oil. In 2004, the average sulfur content of fuel oil purchased by CPPE was approximately 0.8%, compared with 0.9% in 2003. In October 2002, CPPE initiated the use of fuel with a 1% sulfur content. The use of lower sulfur fuel oil has increased, and will increase in the future, the average cost of fuel oil consumed.

CPPE maintains gas oil reserves as fuel for emergency gas turbine generators. Since gas oil is very expensive and economically inefficient, these reserves are used on a very limited basis. Consequently, small purchases of gas oil have been made by CPPE, as required by REN.

*Natural gas*

Since the introduction in 1997 of the import of natural gas from Algeria into Portugal by Transgás, CPPE has had access to natural gas as a source of primary energy. CPPE converted two units of Carregado into dual-fired (fuel oil and natural gas) in late 1997. In 2004, CPPE



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

purchased 632 million cubic meters of natural gas for a total of \$114.4 million compared to 175 million cubic meters of natural gas in 2003 for a total of \$22.9 million. However, the costs in 2003 reflect only 131 million cubic meters as the remaining 44 million cubic meters were considered as investment expenses of the Ribatejo CCGT plant while this plant was undergoing testing. For more information on our activities related to natural gas you should read "Other Investments and International Activities."

### **Planned new plants**

In order to meet increased demand for electricity in Portugal, additional capacity is planned for the National Electricity System. The following table sets out planned new power facilities in Portugal in which we are participating.

**Table of Contents**

Facility	Type of	Developing	Planned capacity	Target	Status
	generation	entity	(MW)	year	
Alqueva <sup>(1)</sup>	Hydroelectric	EDIA/CPPE	240	2005	Under Construction
Pedrogão	Hydroelectric	EDIA/CPPE	10	2006	Under Construction
Venda Nova II	Hydroelectric	CPPE	192	2005	Under Construction
Baixo Sabor	Hydroelectric	CPPE	180	2012	Licensing
Picote II	Hydroelectric	CPPE	236	2012	Licensing
Bemposta II	Hydroelectric	CPPE	178	2014	Planning
Foz Tua	Hydroelectric	CPPE	208	2015	Planning
Ribatejo CCGT <sup>(2)</sup>	CCGT	CPPE	3x392	2004/2006	Under Construction
New CCGT plants	CCGT	CPPE	2x400	2008/2011	Planning
Small hydro	Hydroelectric	CPPE	20	2006/2010	Planning

<sup>(1)</sup> EDIA is developing a multi-purpose hydroelectric scheme for irrigation and the production of electricity with the Alqueva and Pedrogão plant. CPPE will operate the Alqueva hydroelectric power plant. Alqueva's pumping capacity is expected to be in service by the end of 2005.

<sup>(2)</sup> This power station operates in the Non-Binding Sector and has three units. The first two units began operation in 2004 and the third unit is expected to begin commercial service in March 2006.

**Capital expenditures**

In 2004, we spent 247.0 million in capital expenditures in technical costs for our generation facilities, compared with 261.1 million in 2003 and 276.5 million in 2002. Our capital expenditures in the generation sector have been concentrated on the following activities: conducting preliminary studies for and building of hydroelectric plants, maintaining and upgrading existing power plants, investing in environmental projects such as the installation of emission reduction equipment and, in 2004, investing 128.3 million in the new Ribatejo CCGT (combined cycle gas turbine) power plant and 53.7 million in wind energy farms. At this stage, management expects that the Ribatejo CCGT plant will cost approximately 600 million, including all three units.

The following table sets forth our capital expenditures in technical costs from 2000 through 2004 on plants by type and status of generating plant.

Plant type and status	Year ended December 31,				
	2000	2001	2002	2003	2004
	(thousands of EUR)				
<b>Thermal/Hydro</b>					
<b>Public Electricity System</b>					
Hydroelectric plants under construction	14,235	16,877	25,690	34,359	24,127
Hydroelectric plants in operation	9,038	10,289	12,756	11,732	11,849
Thermal plants in operation	17,623	14,764	16,261	20,340	12,955
Plants under study	190	1,450	1,011	349	729
<b>Total PES</b>	<b>41,086</b>	<b>43,380</b>	<b>55,718</b>	<b>66,780</b>	<b>49,659</b>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

**Independent Electricity System**

Hydroelectric plants	7,913	4,964	4,137	3,849	1,018
Ribatejo CCGT	3,571	58,535	142,946	142,350	128,329
Wind	11,128	6,521	11,159	38,389	53,667
Cogeneration facilities	25,439	13,083	9,602	255	129
Biomass <sup>(1)</sup>	0	0	35,180	614	155
<b>Total IES</b>	<b>48,051</b>	<b>83,103</b>	<b>203,024</b>	<b>185,456</b>	<b>183,298</b>
Others <sup>(2)</sup>	0	0	0	312	2,854
Non-specific investment <sup>(3)</sup>	4,969	5,250	17,721	8,599	11,089
<b>Total Generation</b>	<b>94,106</b>	<b>131,733</b>	<b>276,463</b>	<b>261,147</b>	<b>246,900</b>

<sup>(1)</sup> Investments in 2002 include 35.2 million related to an intra-group transfer of the Mortagua biomass power plant (built in 1999) to EDP Produção.

---

## **Table of Contents**

(2) *Other investments include studies and investment relating to our trading system.*

(3) *Non-specific investment refers to investments not directly related to our plants, such as administrative buildings, transportation equipment and implementation of new information systems.*

We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium- or long-term debt financing and equity financing as additional capital expenditure requirements develop. To learn more about our sources of funds and how the availability of those sources could be affected, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

### **Early termination of the PPAs**

The generation capacity of CPPE plants in the PES is bound to the PES under PPAs between CPPE and REN. Under the PPAs, CPPE is guaranteed a monthly fixed revenue component (capacity charge) that remunerates, at an 8.5% real rate of return on assets, the net asset value of CPPE's power plants. The revenue amount CPPE receives as a capacity charge also includes the depreciation related to these assets, and is based on the contracted availability of each power plant, regardless of the energy it produces. The PPAs also allow CPPE to pass-through to the final tariff its total fuel consumption cost through a variable revenue component (energy charge) that is invoiced monthly to REN. Pursuant to the Portuguese government's policy for the reorganization of the energy sector, the PPAs will be terminated in the future in connection with the creation of MIBEL.

Pursuant to Law no. 52/2004, of October 29, 2004, enacted by the Portuguese parliament, Decree law no. 240/2004 establishes the conditions for the early termination of the PPAs and defines compensatory measures for the respective contracting parties through the pass-through of charges to all electric energy consumers as permanent components of the Global Use of System Tariff (UGS Tariff). The early termination of the PPAs set forth in the Decree law is subject to certain conditions, which include (i) the ministerial approval of termination agreements between EDP and REN, (ii) the entry into force of MIBEL under conditions that allow the sale of electricity produced, and (iii) the granting of non-binding generation licenses to the relevant producers. The first of these conditions was met on March 4, 2005 when the Ministry of Economy approved the termination agreements entered into by us and REN on January 27, 2005 for all of CPPE's power plants operating in the PES.

The termination of each PPA grants to the producer a right to cash compensation as a way to guarantee economic benefits equal to the portion of the benefit that is not otherwise sufficiently guaranteed to be received as future revenue under a free market regime. The gross value of the compensation corresponds to the difference between the present value of each PPA and the present value of the forecasted market revenues, net of fuel and variable O&M costs.

For the purposes of calculating this compensation, the value of each PPA includes the depreciation and remuneration of the relevant initial net asset value and the additional investment value, the fixed and variable operation costs and the forecasted market revenues, net of fuel and variable O&M costs, which must correspond to the expected production for the relevant power plant multiplied by the reference market price, reduced by the corresponding variable operating charges. These amounts are to be updated at a rate (as of a date closer to the entry into force of MIBEL and the effective termination dates of the PPAs) equal to the yield of Portuguese public debt with a maturity date close to the average life of all PPAs of each generator, plus 25 basis points. The reference average annual price, as defined in Decree law no. 240/2004, is 36/MWh.

The termination agreements that were signed on January 27, 2005 set the global amount of the compensation to be granted to us as a result of the early termination of all of our PPAs, at present value, at 3,356 million. This compensation, designed to ensure economic benefits equivalent to

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

those delivered by the PPAs to all parties to these contracts, was calculated based on a number of economic assumptions and parameters including the present value of the existing PPAs, the forecasted revenues of these power plants operating under market conditions and a discount rate of 3.78%.

## **Table of Contents**

The compensation value for the early termination of the PPAs was deemed adequate by two independent entities – the investment bank Rothschild and the consulting firm Deloitte & Touche – based upon the applicable legal framework, market valuation and a set of data and assumptions provided by, among others, EDP.

During the first ten years after termination, the initial amount of the compensation relating to each PPA termination agreement is subject to annual positive or negative adjustments, based on the real net revenue obtained in a market regime, so as to ensure appropriate economic benefits equivalent to the PPAs. At the end of the tenth year, the compensatory amount shall be subject to a final adjustment to be calculated based on a new forecast of the net revenues for the remaining period. However, the amount of compensation is subject to a global maximum amount per producer and is calculated based on the values set forth in the Decree law noted above, updated by a rate equal to the above mentioned yield of Portuguese public debt and assuming an inflation rate of 2% a year.

The Decree law sets forth a tax neutrality regime that allows for the inclusion of the compensation amounts in the taxable income of producers only when such amounts are recovered through energy tariffs.

The Decree law also allows securitization of compensation amounts, establishing a set of rules concerning billing and collection of such compensation that assure the rights of producers and third parties to cash flows. We are considering securitizing the compensation amounts and using the proceeds for the partial redemption of our financial indebtedness, although we cannot assure you that this securitization will occur.

## **Competition**

The existing power stations of CPPE, which in 2004 formed 97% of our generating capacity, operate in the PES and in the IES. The earnings that CPPE derives from the power stations in the PES, in accordance with the terms of the PPAs, are dependent on the availability of capacity and are substantially unaffected by levels of actual output.

The PES includes two power stations that are not owned and operated by us: the Pego power plant, which was constructed and commissioned by us and later sold to Tejo Energia, and Tapada do Outeiro, which commenced full operations in 1999 and is owned and operated by Turbogás. The admission of these power stations to the PES resulted from two international tender processes coordinated by us in accordance with Portuguese government policy in effect at that time to establish competitive practices in the electricity generation sector. In addition to these two power stations, we have constructed plants to operate in the Independent Electricity System, such as the Ribatejo CCGT plant. The first unit of this plant entered commercial service in early 2004. In connection with the creation of MIBEL, the PPAs will be subject to early termination and the power stations operating in the PES will operate in a competitive market. For more information, see “Early termination of the PPAs” above.

Because Portugal is contiguous only with Spain and there are limited connections between Spain and the rest of Europe, the Portuguese and Spanish governments entered into an agreement for the creation of MIBEL. This agreement calls for, among other things, the harmonization of tariff structures and a common pool for Portugal and Spain. Accordingly, once MIBEL is in operation, we expect to face increased competition in generation and wholesale supply from Spanish participants in the Iberian electricity market. See “The Iberian Electricity Market” and “Spain.

## **DISTRIBUTION**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Electricity distribution in Portugal is a regulated business and involves the transfer of electricity from the transmission system and its delivery across a distribution system to regulated consumers and Qualifying Consumers, meter reading and installation, and supply to regulated consumers. The local electricity distribution function in mainland Portugal is carried out almost exclusively by EDPD. Through fourteen network distribution areas, as well as seven commercial areas directed at serving customers supplied in the PES, EDP distributed electricity to approximately 5.8 million consumers in 2004 (out of a total of approximately 5.9 million according to DGGE), amounting to 41,315 GWh, of which 6,763 GWh was distributed to Qualifying Consumers. At December 31, 2004, EDPD employed 5,530 personnel.

**Table of Contents**

Under Portuguese law, distribution of high-voltage electricity, greater than 45kV and less than 110kV, and medium-voltage electricity, greater than 1kV and less than or equal to 45kV, is regulated by DGGE through the issuance of a binding license with no time limitation. EDPD holds high- and medium-voltage electricity licenses, which it obtained in 2000. Distribution of low-voltage electricity is regulated through 20-year municipal concession agreements with municipal councils. EDPD pays rent to each municipality as required by law. For more information on licenses and concessions held by us, you should read note 1 to our consolidated financial statements.

Under the terms of the binding licenses, EDPD is obliged to supply electricity to all customers located within its licensed area that are part of the PES. EDPD is also obliged to provide access to the distribution network to producers in the IES in return for a regulated access charge from consumers. EDPD owns, leases or has rights of way for the land on which its substations are situated. In addition, EDPD has long-term rights of way for its distribution lines. If necessary, new properties may be acquired through the exercise of eminent domain. In those cases, EDPD compensates affected private property owners.

The authorized area of EDPD covers all of mainland Portugal. At December 31, 2004, EDPD's distribution lines spanned a total of approximately 201,090 kilometers. The only distribution lines in Portugal not owned by EDPD are those of the auto producers and small cooperatives, which own their own lines. The following table sets forth the kilometers of EDPD's distribution lines, by voltage level, at December 31, 2004.

<b>Distribution lines</b>	<b>Km</b>
<b>Overhead lines:</b>	
High-voltage (60/130kV)	7,428
Medium-voltage (6/10/15/30kV)	53,905
Low-voltage (<1kV)	99,447
<b>Total overhead lines</b>	<b>160,780</b>
<b>Underground cables:</b>	
High-voltage (60/130kV)	383
Medium-voltage (6/10/15/30kV)	12,356
Low-voltage (1kV)	27,571
<b>Total underground cables</b>	<b>40,310</b>
<b>Total</b>	<b>201,090</b>

**Customers and sales**

EDPD distributes electricity to approximately 5.8 million customers. Approximately 70% of electricity consumption in 2004 was along the coast, with approximately 15% in the Oporto metropolitan region and 20% in the Lisbon metropolitan region. EDPD classifies its customers by voltage level of electricity consumed. The following chart shows the number of customers as of December 31, 2004, according to level of voltage contracted, and indicates whether such customers are binding customers supplied by EDPD or Qualifying Consumers to which EDPD distributes electricity on behalf of suppliers in the IES.

	<b>Year Ended 2004</b>
<b>Customers by voltage level</b>	<b>Total</b>



Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	<b>Binding customers</b>	<b>Qualifying consumers</b>	
High and very high-voltage <sup>(1)</sup>	174	3	177
Medium-voltage <sup>(2)</sup>	18,184	3,135	21,319
Special low-voltage <sup>(3)</sup>	27,306	1,700	29,006
Low-voltage <sup>(4)</sup>	5,772,840	0	5,772,840
<b>Total</b>	<b>5,818,504</b>	<b>4,838</b>	<b>5,823,342</b>

<sup>(1)</sup> High-voltage is greater than 45 kV and less than or equal to 110 kV. Very high-voltage is greater than 110 kV.

<sup>(2)</sup> Medium-voltage is greater than or equal to 1 kV and less than or equal to 45 kV.

<sup>(3)</sup> Special low-voltage consumers have subscribed demands above 41.4KW and voltage levels below 1 kV. Special low-voltage customers are primarily small industrial and commercial customers.

<sup>(4)</sup> Low-voltage is less than 1 kV.

**Table of Contents**

EDPD has experienced increased demand over the past five years in all electricity voltage levels. Considering overall demand on EDPD's distribution network, both from customers in the Binding Sector and Qualifying Consumers, consumption has grown at an average annual growth rate of 4.8% from December 31, 2000 to December 31, 2004. The highest average annual growth rate during this period (7.6%) was in demand from very high- and high-voltage customers. These voltage levels experienced a 14.3% increase in demand in 2004 due to a large increase in the industrial activity of one of our largest customers, as well as a higher demand on the distribution grid from auto producers. Under current regulations, auto producers may purchase electricity at a price below that at which they may sell it to the National Electricity System. As a consequence, auto producers have increased their demand on the distribution grid. Demand by medium-voltage levels increased from 11,225 GWh in 2000 to 13,187 GWh in 2004, representing average annual growth of 4.1%.

Following the gradual decrease of the eligibility threshold between 2000 and 2004, more electricity distributed through EDPD's network corresponds to consumption by medium-voltage qualifying consumers. As a result, electricity demand by medium-voltage binding consumers decreased from 11,092 GWh in 2000 to 6,506 GWh in 2004, whereas electricity demand by medium-voltage qualifying consumers, increased from 133 GWh in 2000 to 6,680 GWh in 2004. Consumption by low-voltage binding customers, typically residential and services, increased from 17,884 GWh in 2000 to 21,267 GWh in 2004, representing average annual growth of 4.4%. This growth is slightly lower than that in total low voltage (4.5% per annum) as 33 GWh were consumed by large low-voltage qualifying consumers. The growth in low-voltage consumption during this period resulted primarily from the increase in the number of low-voltage customers from approximately 5.4 million to approximately 5.8 million, as well as an increase in annual consumption per consumer.

The following table shows electricity distributed in each of the last five years, separated by type of consumer.

	Year ended December 31,				
	2000	2001	2002	2003	2004
	(GWh)				
<b>Electricity distributed</b>					
Very high-voltage and high-voltage:					
Binding customers	4,104	4,259	4,271	4,795	5,562
Qualifying consumers	83	176	182	114	49
Total very high-voltage and high-voltage	4,187	4,435	4,453	4,909	5,611
Medium-voltage:					
Binding customers	11,092	11,358	11,198	8,600	6,506
Qualifying consumers	133	344	776	3,934	6,680
Total medium-voltage	11,225	11,702	11,974	12,534	13,187
Low-voltage					
Binding customers	17,884	18,823	19,424	20,346	21,267
Qualifying consumers	0	0	0	0	33
Total Low-voltage	17,884	18,823	19,424	20,346	21,300
Public lighting	1,010	1,065	1,080	1,167	1,218
Total	34,306	36,025	36,931	38,955	41,315

On a revenue basis, our Portuguese electricity sales grew from 3,011 million in 2000 to 3,518 million in 2004. The most significant increase in sales has been to low-voltage customers (typically residential and services), to whom sales increased from 2,080 million in 2000 to 2,665 million in 2004. Recent growth in revenue from electricity sales was due to expansion in consumption and average tariff increases set by the regulator of

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

2.1% in 2004 and 2.8% in 2003. Furthermore, revenue from electricity sales was also influenced by the tariff adjustment, as discussed below. The following table shows EDPD's total domestic sales of electricity to binding customers by level of voltage required, as well as revenues from the use of distribution network, charged to Qualifying Consumers for the periods indicated.

**Table of Contents**

	Year ended December 31,				
	2000	2001	2002	2003	2004
	(thousands of EUR)				
<b>Electricity sales</b>					
Very high-voltage and high-voltage	156,049	165,957	167,827	186,467	228,939
Medium-voltage	749,100	772,357	783,388	615,394	487,807
Low-voltage	2,080,475	2,194,035	2,335,135	2,500,380	2,664,809
Public lighting	80,279	83,918	86,614	95,731	101,991
Tariff adjustment	(55,995)	42,218	70,482	77,919	(92,118)
<b>Total binding customers</b>	<b>3,009,908</b>	<b>3,258,485</b>	<b>3,443,446</b>	<b>3,475,891</b>	<b>3,391,427</b>
Qualifying Consumers	1,152	2,788	12,939	70,485	126,647
<b>Total</b>	<b>3,011,060</b>	<b>3,261,273</b>	<b>3,456,385</b>	<b>3,546,376</b>	<b>3,518,074</b>

Tariffs are fixed by the regulator in advance for each year and are based in part on estimated data for variables such as demand and cost. If there are differences between the estimated data and the data actually experienced during the period, adjustments, shown in the table above as the tariff adjustment, will be made to the tariff in a subsequent period to account for these differences. The tariff adjustment reflects our estimate of the amount that will be applied in fixing tariffs in subsequent periods as a result of these differences. Tariff adjustments, which represent adjustments related to EDPD's distribution and supply activities, include compensation from previous years which is factored into the tariffs. For more information on the tariff adjustments you should read Item 5. Operating and Financial Review and Prospects.

The number of distribution customers per distribution employee is an important measure for EDPD. In the period from 2000 through 2004, the number of customers per employee has increased from 658 to 1,053.

**Purchases of electricity**

EDPD purchases all of its electricity in the Binding Sector from REN. The regulator has established a limit on purchases of electricity by EDPD from the Non-Binding Sector at 8% for the 2002-2004 and 2005 regulatory periods. In the past, EDPD purchased less than 8% of its total energy from suppliers in the Non-Binding Sector and abroad. REN must purchase, and EDPD must purchase from REN, all electricity supplied by Other Independent Producers. The cost of purchased electricity is passed through to customers in accordance with the regulated tariff system and is not a determining factor in EDPD's results.

	Year ended December 31,				
	2000	2001	2002	2003	2004
	(GWh)				
<b>Electricity Purchases</b>					
From Binding Sector generation	33,915	35,282	34,801	32,307	30,342
From Other Independent Producers	2,469	2,552	2,817	3,694	4,482
From the Non-Binding Sector	622	891	1,354	2,044	2,933

Total	37,007	38,726	38,972	38,046	37,757
-------	--------	--------	--------	--------	--------

**Distribution losses**

EDPD experiences technical losses of electricity which are associated with the normal use of its network and, to a far lesser extent, commercial losses of electricity due primarily to gaps between estimated meter readings and actual levels of consumption, which are usually recovered in subsequent years, with the exception of losses due to stolen energy and faulty meters. The losses are within the normal range for the types of networks employed and we expect the amount of annual losses to remain constant as a result of capital expenditures in our distribution network, although we expect an increase in consumption.

**Table of Contents**

The following table sets forth data regarding the losses of EDPD in absolute terms and as a percentage of demand, as well as EDP's own uses of energy for the periods indicated.

	Year ended December 31,				
	2000	2001	2002	2003	2004
	(in GWh, except percentages)				
Demand on the distribution network	37,230	39,263	39,965	42,261	44,808
Own uses of energy	21	22	20	33	29
Distribution losses	2,875	3,183	3,008	3,259	3,451
Distribution losses/demand on the distribution network	7.7%	8.1%	7.5%	7.7%	7.7%

**Service interruption**

We did not experience, and we do not currently expect to experience, any interruptions to our generation and distribution activities that were or might be material to our consolidated financial condition. We cannot assure you, however, that we will be able to foresee any interruptions or that any interruptions will not occur.

In Portugal, the equivalent interruption time, or EIT, of our medium voltage grid dropped to 215 minutes in 2004 from 370 minutes in 2003, which represented a 42% improvement, as a result of our investments in the distribution grid and in quality of service. In 2003, we had already achieved a 50-minute improvement in comparison with 2002, which represented a 12% improvement. Approximately 29 minutes of the 370 minutes related to the wildfires that took place in Portugal during the summer of 2003, which affected a significant number of distribution lines and resulted in frequent cuts in electricity supply.

**Capital expenditures**

In recent years, our largest capital expenditures have been on the distribution system. EDPD is obligated by law to connect all customers who request to be linked to the PES. As a result, the largest component of capital expenditures is spent on connecting new customers, improving network efficiency and developing the network (installing new cables and new lines) to accommodate the growth in demand.

EDPD's total 2004 capital expenditures in technical costs amounted to 388.1 million, of which approximately 6% were expenditures on non-specific administrative, technical and commercial systems and corresponding technology support infrastructure, including an installment payment of approximately 7.2 million for the acquisition of an information technology system from Edinfor. EDPD's capital expenditures in technical costs in distribution totaled 334.7 million in 2003, 379.0 million in 2002, 260.4 million in 2001 and 234.0 million in 2000. These amounts also included amounts paid by customer contributions in cash, but did not include assets in kind contributed by customers. These in kind contributions amounted to 70.4 million in 2004, 61.0 million in 2003, 54.1 million in 2002, 69.5 million in 2001 and 52.8 million in 2000. New customers are required by current regulation to make a contribution, in cash or in kind, for connections based on factors such as the type of voltage, the amount of power to be supplied, and distance to the network. In 2004, total customer contributions, and certain amounts contributed for infrastructure improvements, amounted to approximately 147 million.

**Conservation measures**

We have been progressively implementing a voluntary policy to promote electricity conservation in an effort to decrease the variability of the load on the system and to increase efficient use of electricity. In doing so, we have increased dissemination of information on end-use efficiency in several industrial subsectors, services and residential use. We have also launched a program of granting awards to industrial customers for successfully implementing electricity efficiency projects and have established a joint venture with other energy sector companies whose main goal is to promote energy conservation.

In addition, the tariff structure has been designed to promote the rational use of electricity, basing tariffs on marginal costs, which may vary by time of day or season. Large consumers with a capability to reduce demand are offered an interruptible tariff rate, which results in a discount to the consumer and helps to alleviate demand at peak times.

## **Table of Contents**

### **Competition**

Until 1988, we had a monopoly for the generation, transmission and distribution of electricity in Portugal, although a very small number of municipalities distributed low-voltage electricity to consumers. Since 1988, measures have been taken to encourage limited competition in power generation in Portugal. In 1999, the regulator implemented measures to encourage competition in the supply of electricity in Portugal. For more information on these measures, you should read [Electricity System Overview](#). In addition, as a result of political and regulatory developments, especially within the context of the creation of MIBEL, we are facing and expect increased competition from Spanish electricity companies.

In December 2004, five qualified suppliers were authorized to operate in the Portuguese Non-Binding System, four of which are Spanish companies: Endesa Energia, S.A.; Iberdrola, S.A.; Union Fenosa Comercial; and Sodesa Comercialização de Energia, S.A.; and EnelViesgo, an Italian company. See [The Iberian Electricity Market](#) and [Spain History and Overview](#).

EDPD, and previously, our distribution companies, have historically held an effective monopoly over distribution. However, increases in the levels of industrial auto production have reduced the amount of electricity sold to these entities from the PES. In addition, in early 1999, the regulator implemented legislation liberalizing the electricity supply business.

As of May 15, 2003, all Eligible Consumers automatically may become Qualifying Consumers. In 2004, the total number of Qualifying Consumers represented approximately 15% of demand in mainland Portugal in volume terms.

From January 1, 2002 until February 25, 2004, all electricity consumers other than low-voltage consumers were Eligible Consumers. From February 26, 2004 to August 18, 2004, the eligibility threshold was extended to include special low-voltage consumers, and with Decree law no. 192/2004, of August 17, 2004, full liberalization of the electricity market was completed with the opening of the market to the remaining low-voltage consumers.

If Eligible Consumers elect to become Qualifying Consumers, EDPD will continue to receive two of the three tariff components relating to the activities performed by EDPD.

### **TARIFFS**

The prices we charge for electricity are subject to extensive regulation under a tariff regime that was revised in 1998, causing significant price reductions. In December 1998, the regulator implemented a new tariff regulatory code to be applied in mainland Portugal, establishing a periodic definition of regulatory parameters for tariffs and a methodology for setting tariffs. Since 1999 (the first year the regulator published tariffs), prices are set annually according to a series of formulae that are derived based primarily upon what is deemed to be an appropriate return on assets in transmission, a return fixed by price cap in distribution, and a return on assets and agreed costs in commercialization, i.e., the activity of supply, measurement and billing of energy sales to final clients.



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Generation revenues arising from power sold by CPPE in the Binding Sector under PPAs allow these plants to achieve a return on assets of 8.5% in real terms. For more information on the PPAs, you should read [Generation](#). The price of electricity in each PPA consists of the capacity and energy charges, which account for 95% of PPA costs, together with costs associated with imports, autoproduction and generation facilities. The capacity and energy charges have been, and continue to be, passed through to the final tariff paid by customers in the PES.

Transmission revenues were changed from the 1999-2001 regulatory period to the 2002-2004 regulatory period. The transmission component of the tariff is calculated annually by the regulator to cover operating and maintenance expenses of the national transmission grid as well as to provide to REN a return on assets in the 2002-2004 regulatory period of 9% in nominal terms,

**Table of Contents**

excluding the remuneration of the land used for generation sites owned by REN. During the 1999-2001 regulatory period, an 8.5% return on assets figure was used and for the 2005 regulatory period, REN is provided with a return on assets of 8%.

For the 2002-2004 and 2005 regulatory periods, the regulator considered the distribution function to consist of three business areas, which could in the future be liberalized at different times and subject to different tariff regulatory regimes: use of the distribution network, network commercialization services and commercialization of supply in the Binding Sector. The use of the distribution network area involves activities relating to investments in and the operation of the distribution grid. Tariffs applicable to the use of the distribution network are based on a price cap mechanism designed to reduce distribution tariffs on an annual basis by an average over the three years of the regulatory period, a percentage equal to the Portuguese Consumer Price Index, minus a percentage referred to as the efficiency coefficient. The efficiency coefficient was approximately 5% for the 1999-2001 regulatory period and approximately 7% for the 2002-2004 regulatory period. There is no efficiency coefficient for the 2005 regulatory period as it is a one-year period without additional years within the period for purposes of comparison. The network commercialization area consists of activities related to meter installation, reading and the billing of all services associated with the use of the distribution network. The commercialization of supply in the PES consists of activities directly relating to the final consumer, such as customer service, billing of final consumers in the PES and collecting payments from consumers. The tariff applicable to the network commercialization services and commercialization of supply in the PES area is based on costs accepted by the regulator plus a 9% return on assets for the 2002-2004 regulatory period and an 8.5% return on assets for the 2005 regulatory period. In light of the expected new framework law for the Portuguese electricity system, the termination of the PPAs and the commencement of MIBEL, the regulator determined that the 2005 regulatory period should be transitory and have a one-year duration.

Tariffs are set according to estimated data for variables such as cost and demand. Each tariff formula incorporates an annual adjustment mechanism that operates with a two year time lag and is intended to adjust for differences between amounts recorded as revenue and the revenue level permitted by the tariff when applied to actual operational data. The tariff adjustment in our consolidated financial statements reflects our estimate of the amount that will be applied in fixing tariffs in subsequent periods as a result of differences between estimated and actual data. For more information on the tariff adjustment, you should read Distribution Customers and sales. Item 5. Operating and Financial Review and Prospects and note 42(p) to our consolidated financial statements.

In the PES, distribution tariffs for customers are differentiated by voltage level, tariff option and period of electricity consumption. These tariffs, when set, are uniform throughout mainland Portugal within each level of voltage. At the beginning of the 2002-2004 regulatory period, the regulator introduced a new tariff structure, based on the concept of an additive tariff consisting of sub-tariff components using an approach that is more reflective of costs, both between the Binding and Non-Binding Sectors, and also in each sector. Beginning in 2002, the regulator applied a four-rate tariff price structure related to the time of day for medium-, high- and very high-voltage consumers. Low-voltage consumers with subscribed demands above 20.7 kVA had a three-rate time of day structure, while low-voltage consumers with subscribed demands up to 20.7 kVA were able to choose between a single-rate tariff, or a day-night tariff option. The current tariff regime offers two discount schemes for customers in the PES, which apply to all customers equally. Under the first scheme, medium voltage customers with contracted demand above 4 MW and a yearly utilization greater than 5,000 hours or consumption above 30 GWh are entitled to a discount of 3% (in 2004). Discounts are applied to monthly invoices. This scheme was over by the end of 2004. The second method available for obtaining discounts is through a reduction of a customer's load. A customer that is able to reduce its load by at least 4 MW can elect to have an interruptible tariff. In cases in which a distributor declares an interruptibility period and the customer complies with that period, the customer can receive an additional discount. Under the load discount scheme, an eligible customer may elect one of two interruptible tariffs, which results in average rebates of approximately 13.5%, depending on the interruptible load contracted. Customer tariffs for very high-voltage, high-voltage and medium-voltage are subject to quarterly adjustments, basically to accommodate changes in fuel prices and demand.

Producers and consumers in the Non-Binding Sector have a right to access and use the national transmission grid and our distribution network through the payment of access tariffs for the Global Use of System, the Use of the Transmission Network, the Use of the Distribution Network and Network Commercialization, terms and conditions of which were established by the regulator.

## **Table of Contents**

Based on certain assumptions, including an expected inflation rate in 2005 of 2.3% and an expected increase in the electricity consumption of 3.4% in 2005 (in mainland Portugal), in December 2004 the regulator published the parameters and prices of electricity and other services for 2005, according to which the tariffs for sale to final customers in mainland Portugal were increased by 2.3% in nominal terms compared to 2004. In addition, the approval of the new framework law for the electricity system, the termination of PPAs and the expected opening of MIBEL will cause a revision of the tariffs by that time. For 2002, 2003 and 2004, in nominal terms, tariffs increased across all voltage levels by an average of 2.2%, 2.8% and 2.1%, respectively, from the prior year levels. For 2001, in nominal terms, tariffs for all voltage levels increased, on average, by 1.2% from the 2000 levels. For 2000, in nominal terms, tariffs for all voltage levels declined by 0.5% from the 1999 levels. In real terms, adjusted for inflation, very high-, high- and medium-voltage tariffs have declined by an average of 3.9% over the period 1999-2005. The tariffs for low voltage customers have also declined by an average of 2.7% over the same period.

## **GAS**

EU Directives 98/30/EC and 2003/55/EC defined a legal framework for gradually establishing the internal market in natural gas in the EU. Specific provisions are contained in both Directives for emergent markets, defined as markets where the first commercial supply contract for natural gas was made not more than 10 years earlier. Due to the emergent nature of the Portuguese natural gas sector, Portugal benefits from a derogation from the obligation to liberalize the gas sector. The derogation for Portugal expires in April 2007, at which time customers representing at least 33% of the total annual gas consumption of the national gas market must be eligible to be supplied under competitive conditions. Two years thereafter, supply to all non-domestic customers must be declared eligible and three years after all the market should be liberalized.

The liberalization of the gas market in Portugal will allow us to contract gas for our CCGT plants and to be active in the retail gas market. With respect to the Portgás concession area, after households and small industrial customers become liberalized, other companies will compete with Portgás in its concession area. It is possible that the Portgás distribution network will be used by third parties to sell gas to final customers. However, the regulatory framework to be implemented is not yet defined.

In accordance with the existing legal framework, the Portuguese gas sector is currently a legal monopoly, characterized by a concessions regime in which all activities – import, transport, storage, wholesale supply, distribution and retail – are considered public services and are carried almost exclusively by GDP, which is wholly owned by GALP. Portgás is the only exception, as it is the only participant Portuguese natural gas section that is not controlled by GDP.

We established a presence in the natural gas markets in Spain and Portugal in accordance with our strategic objectives. In Portugal, we are present in the natural gas market through ownership interests of 59.55% in Portgás and 10.11% in Setgás. We acquired our interests in Portgás and Setgás as a result of the exercise, in 2004, of two options granted in two agreements signed in November 2003. Pursuant to the agreement among us, GALP, GDP and GDP Distribuição, we acquired a shareholding equivalent to 46.625% of the share capital and respective shareholder loans of Portgás for 86.4 million. Pursuant to an agreement between EDP and CGD, we acquired for 66.9 million the total share capital of NQF PTE S.A., which indirectly holds 12.9% and 10.1% of the share capital of Portgás and Setgás, respectively. Under shareholders agreements between NQF, Endesa Gás and Gaz de France/Elyo, we have joint control of Portgás, together with the entities noted above.

In the context of the implementation of our strategy for the Iberian gas market, on September 5, 2005 we concluded negotiations with Endesa Gas, S.A. for the acquisition of a 49% shareholding in NQF Gás for a reference global consideration of €56.5 million. NQF Gás directly holds a 25.348% shareholding in Portgás and, indirectly, a 19.8% shareholding in Setgás.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Upon completion of this transaction, we will be the sole shareholder of NQF Gás, thus increasing our direct and indirect shareholdings in Portgás and Setgás to 72.0% and of 19.8%, respectively.

We also have an interest in GALP corresponding to 14.27% of GALP's share capital.

Portgás and Setgás are two of six local distribution companies in Portugal. Portgás covers 29 municipalities in the northern coast area of Portugal. Setgás covers 10 municipalities on the right southern bank of the Tagus River.

As of December 31, 2004, Portgás and Setgás had approximately 139,300 customers and 98,900 customers, respectively, constituting estimated market shares of 17% and 12%, respectively. Total revenues in 2004 for Portgás and Setgás were 68.0 million and 27.7 million, respectively.



year (the first surrender date is the end of April 2006) in order to avoid being subject to financial sanctions.

Member States must issue allowances by the end of February each year in accordance with the final allocation decisions, operate the national registry, collect verified emissions data and ensure that a sufficient number of allowance are surrendered by each company. Each Member state must also produce a regular annual report to the European Commission.

#### **Public service obligations and customer protection**

Member States must ensure that electricity companies are operated in accordance with the principles of Directive 2003/54/EC with a view toward achieving a competitive, secure and environmentally sustainable market in electricity and must not discriminate between these companies with respect to rights or obligations. Member States may require distribution companies to connect customers to their grid under the Directive. Member States must ensure that eligible customers are effectively able to switch to new suppliers.

#### **Planning of new generation capacity**

With regard to construction of new generating capacity, Member States must adopt a tender procedure that must be conducted in accordance with objective, transparent and non-discriminatory criteria. Member States must provide precise criteria for the tender and these criteria must be made public. In the event of a refusal of authorization to construct new generation facilities, the applicants must be duly informed of the reasons for such refusal, and appeal procedures must be made available.

## **Table of Contents**

### **Tendering for new generation capacity**

Member States must ensure the possibility of providing for new capacity or energy efficiency/demand-side management measures through a tendering procedure or an equivalent procedure based on certain objectives, including transparency, non-discriminatory terms and published criteria. However, these procedures may only be launched if, on the basis of the authorization procedure, the generating capacity being built or the energy efficiency/demand-side management measures being taken are not sufficient to ensure the objectives referred to above.

Tender specifications must be made available to any interested undertaking established in the territory of a Member States, and must contain a detailed description of the contract specifications and the procedure to be followed by all tenderers, including an exhaustive list of criteria governing the selection of tenderers and incentives.

Member States must designate an independent authority responsible for the organization, monitoring and control of the tendering procedure.

### **Transmission system operation**

Member States must ensure the long-term ability of the system to meet reasonable demands for the transmission of electricity in order to ensure the security of supply. The transmission system operator will be, in that context, responsible for ensuring a secure, reliable and efficient electricity system and ensuring the availability of all necessary ancillary services insofar as this availability is independent from any other transmission system with which its system is interconnected. The transmission system operator must also provide to any other system operator with which its system is interconnected, sufficient information to secure efficient cooperation and non-discrimination between users or classes of system users.

Where the transmission system operator is part of a vertically-integrated undertaking, it must be independent, at least in terms of its legal form, organization and decision-making, from other activities not relating to transmission, but these rules do not require the separation of ownership of assets of the transmission system from the vertically-integrated undertaking. In order to ensure the independence of the transmission system operator, specific criteria must be followed, including that the entities responsible for the management of the transmission system operator may not be part of the corporate structure of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, distribution and supply of electricity.

### **Distribution system operation**

Member States must designate or require companies that own or are responsible for distribution systems to designate, for a period of time to be determined by the Member State, one or more distribution system operators. The distribution system operator must maintain a secure, reliable and efficient electricity distribution system in its area, respecting the environment and without discrimination between system users or classes of users in favor of its related companies.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Where the distribution system operator is part of a vertically-integrated undertaking, it must be independent, at least in terms of its legal form, organization and decision making, from other activities not relating to distribution, without having to separate the ownership of assets of the distribution system operator from the vertically-integrated undertaking. In order to ensure the independence of the distribution system operator, specific criteria must be followed, including that the ones responsible for the management of the distribution system operator may not be part of the corporate structure of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, transmission or supply of electricity. These requirements, however, may not be applied to integrated electricity undertakings serving less than 100,000 connected customers, or serving small, isolated systems.

The above considerations do not prevent the existence of a combined transmission and distribution system operator, which is independent in its legal form, organization and decision making from other activities not related to transmission or distribution system



## **Table of Contents**

operation. These rules do not require separation of ownership of assets of the combined system from the vertically-integrated undertaking.

### **Unbundling and transparency of accounts**

Member States or designated authorities, including regulatory authorities, must have access to the accounts of electricity undertakings. Electricity companies whatever their system of ownership or legal form, must draw up, submit to audit and publish their annual accounts in accordance with the rules of national law concerning the annual accounts of limited liability companies.

Electricity companies must keep separate accounts for their transmission and distribution activities, as they would be required to do if the activities in question were carried out by separate companies, in order to avoid discrimination, cross subsidization and distortion of competition. Until July 1, 2007, they must keep separate accounts for supply activities for eligible customers and supply activities for non-eligible customers.

### **Organization of access to the system**

Third party access to transmission and distribution must be ensured by Member States, based on published tariffs and applicable to all eligible customers and applied objectively and without discrimination between system users. The operator of a transmission or distribution system may refuse access only if it lacks the necessary capacity, but must provide duly substantiated reasons for such refusal.

Member States must ensure that the eligible customers are: (a) from July 1, 2004, all non-household customers; and (b) from July 1, 2007, all customers. In order to avoid imbalance in the opening of electricity markets, contracts for the supply of electricity with an eligible customer in the system of another Member State may not be prohibited if the customer is considered eligible in both systems involved.

Member States must designate one or more competent bodies as regulatory authorities. Those bodies must be completely independent from the interests of the electricity industry and are responsible for ensuring non-discriminatory, effective competition and the efficient functioning of the market and have the authority to require transmission and distribution system operators, if necessary, to modify terms, conditions, tariffs, rules, mechanisms and methodologies. They may act as dispute settlement authorities and, therefore, must be competent to judge and to decide on a complaint that any third party may present relating to the transmission or distribution system operator.

Member States are to create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position. In the event of a sudden crisis in the energy market, a Member State may temporarily take the necessary safeguard measures, taking into consideration that such measures must cause the least possible disturbance in the functioning of the internal market.

Derogation of relevant provisions concerning transmission, distribution, unbundling and transparency of accounts and organization of access to the system may apply if Member States demonstrate that there are substantial problems with regard to the operation of their small isolated systems.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Member States were requested to bring into force all necessary provisions to comply with the Directive 2003/54/EC by July 1, 2004. Member States may, however, postpone until July 1, 2007, the implementation of unbundling of distribution system operators (Article 15 (1)), without prejudice to all legal requirements to produce such implementation.

### *Gas*

The European Parliament and Council of Ministers adopted the new Gas Directive 2003/55/EC, of June 26, 2003, or the Gas Directive, which contains common rules for the natural gas market. The Gas Directive entered into force in August 2003 and Member States were requested to implement it by July 1, 2004. The Gas Directive requires legal unbundling of network activities from supply, establishes a regulator with well-defined functions in all Member States, requires that network tariffs are published, reinforces public

## **Table of Contents**

service obligations and introduces measures to increase the security of supply.

The main provisions established by the Gas Directive are as follows:

General rules for the organization of the sector: Member States must ensure, on the basis of their institutional organization and with due regard to the principle of subsidiarity, that natural gas undertakings are operated in accordance with the principles of the Gas Directive with a view toward achieving a competitive, secure and environmentally sustainable market in natural gas and must not discriminate between these undertakings with respect to either rights or obligations. Member States may require that undertakings, in the general economic interest, carry out public service obligations that are clearly defined, transparent, non-discriminatory, verifiable and guarantee equality of access for EU gas companies to national consumers and must take appropriate measures to protect final customers. Member States must ensure that eligible customers are effectively able to switch to new suppliers. Nevertheless, long-term contracts will continue to be an important part of the gas supply of Member States and should be maintained as an option for gas supply undertakings as long as they do not undermine the objectives set by the Gas Directive and are compatible with the EU Treaty, including competition rules.

Transmission, storage, LNG, distribution and supply: In the case of a gas undertaking performing transmission, distribution, storage or liquefied natural gas (LNG) activities that are separate, in legal form, from those undertakings performing production and/or supply activities, the designated operators may be the same undertaking owning the infrastructure. In order to ensure efficient and non-discriminatory network access, transmission and distribution systems should be operated through legally separate entities where vertically-integrated undertakings exist.

Organization of access to the system: Third party access to the transmission and distribution system, and LNG facilities must be ensured based on published tariffs, applicable to all eligible customers, including supply undertakings, and applied objectively and without discrimination between system users.

For the organization of access to storage facilities and linepack, Member States may choose either or both of the following access procedures (i) negotiated access (with the relevant storage system operator or natural gas undertakings) in which the parties are obliged to negotiate in good faith and must publish their main commercial conditions for the use of storage, linepack and other ancillary services; or (ii) in the case of regulated access, Member States must give rights to access on the basis of published tariffs and/or other terms and obligations for use of those facilities. This right of access for eligible customers may be given by enabling them to enter into supply contracts with competing natural gas undertakings other than with the owner and/or operator of the system or a related undertaking.

Member States must ensure that natural gas undertakings and eligible customers are able to access upstream pipeline networks in compliance with the objectives of fair and open access, achieving a competitive market in natural gas and avoiding any abuse of a dominant position.

Eligibility: Member States must ensure that the eligible customers are: (a) from July 1, 2004, all non-household customers and (b) from July 1, 2007, all customers. Contracts for supply with an eligible customer in the system of another Member State must not be prohibited if the customer is eligible in both systems involved.

Unbundling of accounts: Natural gas undertakings, whatever their system of ownership or legal form, must draw up, submit to audit and publish their annual accounts. These undertakings must, in their internal accounting, keep separate accounts for each of their transmission, distribution, LNG and storage activities as they would be required to do if the activities in question were carried out by separate undertakings, in order to avoid discrimination, cross-subsidization and distortion of competition.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Emergent markets: Member States qualifying as an emergent market, which, due to the implementation of the Gas Directive would experience substantial problems, may derogate some provisions of the Gas Directive, including matters relating to the

## **Table of Contents**

unbundling of transmission and distribution systems operators, third party access to both systems of transmission and distribution and provisions related to market opening and reciprocity. This derogation must automatically expire at that time the Member State no longer qualifies as an emergent market.

According to Article 28 of the Gas Directive, at the time the derogation referred to in the previous paragraph expires, the definition of eligible customers must result in an opening of the market equal to at least 33% of the total annual gas consumption of the national gas market. Two years thereafter, all non-household customers must be eligible customers, and three years thereafter, all customers must be eligible.

### **Portuguese electricity legislation and regulation**

The basis and principles of the organization of the electricity sector in Portugal were set out in 1995 legislation that was partially revised in 1997 in accordance with the general principles of EU Directive 96/92/CE. Following the 1997 revisions, ERSE was appointed as the independent regulator in February 1997. On April 12, 2002, ERSE became the regulatory entity of energy services, and its authority was extended to the domain of natural gas regulation. On March 25, 2002, by Decree law no. 69/2002, ERSE's authority with respect to the electric sector was extended to the autonomous regions of Madeira and Azores. The responsibilities for regulation of the electricity sector in Portugal are now generally split between Direcção Geral de Geologia e Energia, or DGGE, ERSE and the Competition Authority, as described below.

### **Direcção Geral de Geologia e Energia**

DGGE has the primary responsibility for planning and developing the PES including, approving the issuance, modification and revocation of generation and distribution licenses and preparing expansion plans for the Public Electricity Sector every two years, in conjunction with REN, for the approval of the Portuguese Ministry of Economy. DGGE is also responsible for regulations applicable to the transmission grid and the distribution network and service quality.

### **The regulator**

ERSE, or the regulator, has clearly defined regulatory duties, powers and objectives established by law, including the responsibility to approve the main regulations that are published in the form of the following codes:

the tariff code and the values for the tariffs and prices to be implemented (please see Tariffs );

the commercial relations code governing relations between entities in the Portuguese electricity system;

the dispatch code;

the access to the national transmission grid code; and

the interconnections code.

The codes listed above are applicable to the 2002-2004 regulatory period and were adopted by the regulator in September 2001. In April 2004, the regulator revised the codes referred to above to incorporate the recent expansion, in February 2004, of the eligibility threshold to include special low voltage consumers. In January 2005, the regulator revised the codes once again as a result of the expansion of the eligibility threshold to all consumers pursuant to Decree law no. 192/2004, of August 17, 2004.

### **The Competition Authority**

The Competition Authority applies legislation relating to competition, especially with regard to restrictive practices and concentrations.

## **Table of Contents**

### **National energy policy**

In March 2003, the Portuguese Council of Ministers passed two resolutions regarding, on the one hand, Portuguese energy policy, and, on the other hand, the Portuguese government's options for the restructuring of the Portuguese energy sector.

Resolution no. 63/2003 of the Portuguese Council of Ministers, of April 28, 2003, revoked the previous national energy strategy of September 2001, announced the new Portuguese energy policy and defined general objectives and specific measures to carry out the new policy. In accordance with this resolution, the Portuguese government declared its intention to:

develop and assure the safety of the national energy supply by adopting measures necessary to (i) reduce the dependency of external sources of energy primarily by country and type of source, (ii) diversify external sources of energy by country and type of source, (iii) keep mandatory reserves of combustibles, and (iv) guarantee an adequate energy generation capacity;

develop rational energy needs in order to fulfill environmental requirements, namely by (i) setting up mechanisms to achieve the Kyoto Protocol's goals, (ii) participating in European market of emissions, and (iii) promoting the rational use of energy; and

promote national competitiveness in the new liberalized energy market, namely through, among other measures, (i) the implementation of MIBEL, in stages, to be fully operational by 2006, (ii) the promotion of competition and the opening of the Portuguese electricity and natural gas sectors, which involves, for instance, implementing procedures to renegotiate or terminate the existing PPAs, and (iii) expansion of natural gas regulation, liberalization of combustibles prices and monitoring the functioning of the respective markets, which involves, for example, the separation of the gas high pressure transport network from other activities related with natural gas.

On May 10, 2003, Resolution no. 68/2003 of the Portuguese Council of Ministers defined the options the Portuguese government may utilize to restructure the Portuguese energy sector: (i) combine gas and electricity management and offer the two via the same company, allowing a better use of its synergies and complementarities; (ii) no unilateral imposition of energy sector model restructuring on the sector's companies and their shareholders; (iii) definition of the political, competition and regulatory framework of the energy sector; (iv) freedom of the market's functioning, requiring that from the strategic and organizational framework, rational solutions should arise for the interests of the companies, their shareholders, workers and costumers in order to assure competition of Portuguese companies and the economy within a progressively integrated European market.

In 2005, the Portuguese government announced its intention to consider revisions to the existing regulatory framework and policy, as described in this section. At this time, we cannot predict what changes, if any, the Portuguese government is considering or what effect, if any, such changes would have on our operations.

### **Recent developments in the liberalization of the Portuguese electricity system**

With the progression of the liberalization process and taking into account the creation of MIBEL, as established in the agreements between Portugal and Spain, new legislation has been enacted during the last year to bring the structure of the National Electricity System and its operations into line with a competitive market regime, as detailed below:

Decree law no. 153/2004, of June 30, 2004: With a view to facilitating the early termination of the PPAs, establishes that the resolution of the General Meeting of EDP of August 18, 1994, accompanied by a joint declaration by EDP and REN, for the full and accurate identification of the land provided for in Decree law no. 198/2003, of September 2, 2003. It also grants the RNT concession holder, currently REN, the right to use the public water domain under a concession regime;



## **Table of Contents**

Order no. 927/2004, of July 27, 2004: Authorizes OMI Clear Sociedade de Compensação de Mercados de Energia, S.A. to operate as clearing house for electricity derivatives;

Order no. 945/2004, of July 28, 2004: Authorizes the establishment of the electricity derivatives market operated by OMIP Operador do Mercado Ibérico de Energia (Pólo Português) S.A. and defines the entities that may operate as OMIP members;

Decree law no. 192/2004, of August 17, 2004: Building on Decree law no. 36/2004, of February 26, 2004, this decree law extends eligibility to standard low voltage electricity consumers and public lighting, corresponding to a potential customer base of 5,772,840 with an annual consumption of 19,329 GWh, and defines the exercise of the right to eligibility. Decree law no. 192/2004 also designates EDPD as a regulated retailer;

EC Decision 161/2004, of September 22, 2004: The European Commission decided not to raise objections to the stranded costs mechanism intended to compensate such irrecoverable losses on the part of EDP, Tejo Energía and Turbogás;

Law no. 52/2004, of October 29, 2004: Authorizes the Government to regulate on the compensatory measures applicable to the early termination of the PPAs;

Decree law no. 240/2004: Defines the terms for early termination of the PPAs and establishes the compensatory measures designated as Costs for the Maintenance of Contractual Balance (CMECs). For more information, please see Generation Early termination of the PPAs ;

Order no. 139/2005, of February 3, 2005: Establishes the relevant criteria for the issuing of a regulated retailer license and for the registration of external agents;

Decree law no. 33-A/2005, of February 16, 2005: Revises the factors for calculation of the remuneration value for the supply to the PES network of the energy produced in renewable power plants and defines procedures for the attribution of the PES available power and periods for attainment of the license for renewable power plants;

Order no. 228/2005, of February 28, 2005: Establishes and reviews adjustments of the power plants generation used for the computation of the CMECs.

Ministerial Order no. 4672/2005, of March 4, 2005: Approves the agreements for the PPAs early termination.

Taking into account the transitory nature of some of the recent legislation, the need to integrate all the main structural changes into a law that will effect a thorough reform of the organization and functioning of the electricity sector, and the need to translate into national law the Directive 2003/54/CE on the common rules for the electricity market, on March 2005, the Portuguese Government launched a public consultation on a draft basis law.

## **Other codes**

The Commercial Relations Code was published on September 1, 2001, and is intended to govern the commercial relations between entities within the Binding Sector as well as the commercial relations between the Binding Sector and the Non-Binding Sector. This code also governs

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the access to the Non-Binding Sector by Qualifying Consumers and the rules applicable to the purchase and sale of electricity within a system established for the Non-Binding Sector. The regulator has also enacted the rules of access to this system and the rights and obligations of the system's participants, including Qualifying Consumers who have elected to participate in the Non-Binding Sector, their agents and REN as the manager of the system. The Commercial Relations Code was recently amended in April 2004, in light of the regulatory regime set out in Decree law no. 36/2004, of February 26, 2004, and again in January 2005, in light of the regime set out in Decree law no. 192/2004 of August 17, 2004.

## **Table of Contents**

The Dispatch Code, also published on September 1, 2001 (and amended in December 2001), establishes the rules of dispatch that are applicable to REN based on principles of equality of treatment and opportunity and safeguarding the public interest in the Binding Sector.

The Access to the Grid and Interconnections Code published on September 1, 2001, is based on the same general principle as the Dispatch Code. Access to the grid is subject to the execution of an agreement in accordance with a model provided by the regulator. This Code was also amended pursuant to the approval of the Decree law no. 36/2004, of February 26, 2004 and again pursuant to the approval of Decree law no. 192/2004 of August 17, 2004.

Since 2001, the regulator has been updating these codes, on a yearly basis, to accommodate changes in the electricity sector.

On January 1, 2001, DGGE issued a quality of service code. Under this code, DGGE seeks to enhance the quality of service with a system of penalties assessed against electricity companies based on their performance. DGGE has defined benchmarks against which a company's performance can be measured if requested by the company's customers. Fines are imposed against electricity companies in the event of power failures or any disturbances in power supply that, in each case, cause an operator's performance to fall below DGGE's benchmarks. These benchmarks were effective as of July 1, 2001.

In February 2003, DGGE approved and published a new quality of service code that clarifies and tightens quality standards imposed on electricity companies as well as the compensation amounts to be paid to costumers.

## **Reversionary assets**

Our assets held under concession agreements with the Portuguese government or municipalities or licenses issued by the government for generation and distribution of electricity are treated either as being within the public domain of the Portuguese Republic or municipalities (for assets used in low voltage distribution) or dedicated to public service. We use assets that are part of the public domain and own and use assets that are dedicated to public service subject to limitations on their disposal.

Assets within the public domain that by their nature are replaceable may be replaced by another asset performing the same function, subject to prior authorization in certain cases. Any asset that has been replaced will thereafter be treated as a private asset. Other assets held by us, including land and buildings not held under concessions or license, are our private property.

Under Portuguese law, assets under public domain cannot be sold, pledged or otherwise encumbered and are not available for enforcement of judgments. The same regime applies to assets dedicated to public service, subject to specified exceptions.

The reversion of assets is subject, in specified cases, to payment as described in the following paragraphs:

**Licenses for generation**

Assets held by CPPE for generation revert to REN, as concessionaire for the national transmission grid, at the termination of the relevant PPA, subject to payment of the residual value of assets, in accordance with the relevant PPA, provided that the assets are considered by REN to be necessary for generation in the PES according to the expansion plan for the PES in place at the time. If not considered necessary by REN, CPPE is entitled to purchase those assets for use in the Non-Binding Sector.

**Licenses for distribution**

Our assets held under a binding license for distribution of high voltage and medium voltage revert to REN, as concessionaire for the national transmission grid, when the license terminates. If the termination occurs by revocation or resolution of the license, payments are due as established in the binding agreements entered into between the parties. If the license terminates for any other reason, the payment due will be the average of the net book value of the assets and value of lost profits.

## **Table of Contents**

### **Concessions with municipalities**

Assets held by EDPD in low voltage revert to municipalities at the end of the term of concession, subject to payment of the net value of assets as determined by a commission of three members, one appointed by each party and a third one by the Portuguese government. Both the expiration and early termination of these concessions can only take place if the municipalities meet specified conditions regarding the viability of the proposed distribution arrangements and the transfer of assets and workers.

### **Environmental matters**

In 1994, our board of directors adopted an Environmental Policy Declaration, which sets forth our principles for environmental policy and activities. Our policy is aimed at minimizing or, where possible, eliminating negative environmental impacts. We believe we are in material compliance with all existing EU, Portuguese, Spanish and Brazilian government environmental regulations, and expect that we will materially comply with proposed changes in EU and other applicable regulations.

We have been implementing an Environmental Management System (or EMS) for our electricity activities, as a fundamental aspect of our environmental policy. Pursuant to the EMS, 38% and 17% of our installed capacity in Portugal (85% of our thermal installed capacity) and Spain, respectively, has been certified under ISO 14001.

Our main environmental focus concerns the reduction of the emission of atmospheric pollutants, namely SO<sub>2</sub>, NO<sub>x</sub> emissions and particles. Pursuant to environmental laws and regulations to which we are subject, we have been using fuel with progressively lower sulfur levels and have introduced NO<sub>x</sub> primary reduction measures in the Sines thermoelectric power station (with the last phase of this introduction having been completed in 2004). In order to comply with new emission levels established by EU legislation, in 2003 we initiated the installation of the necessary emissions abatement equipment (fuel gas desulfurization and additional NO<sub>x</sub> primary reduction measures) at Sines and are introducing similar equipment to control SO<sub>2</sub> and NO<sub>x</sub> emissions at our thermoelectric plants in Spain. The Barreiro, Carregado and Setúbal power plants in Portugal are expected to be exempt from compliance with new emission limit requirements.

We have closely monitored national and international initiatives related to climatic changes. We have also actively contributed to discussions on the Portuguese National Program on Climate Change, which defines greenhouse gases (or GHG) emission reduction measures to be implemented in Portugal, as well as discussions on the NAP, which assigns GHG emission allowances (namely, allowances for CO<sub>2</sub> emissions) to installations in specific industrial sectors, including thermal power plants. Similar initiatives are being considered in Spain. We are prepared for the European CO<sub>2</sub> emission allowances market, which is expected to start in 2005. Monitoring mechanisms were studied and adapted to the requirements of the Emissions Trading Directive and the trading unit is now able to begin trading future CO<sub>2</sub> allowances. Our fuel purchases include, since January 2005, the cost of CO<sub>2</sub> allowances and the risk model for our trading was altered to accommodate the risk inherent in price fluctuations of CO<sub>2</sub> allowances.

We incur significant expenses in repair and prevention measures in order to fulfill the demands of environmental regulations. We made capital expenditures related to environmental matters in 2004, 2003 and 2002 of approximately 18 million, 10 million and 15 million, respectively. Our aggregate estimate for capital expenditure to control emissions of SO<sub>2</sub> and NO<sub>x</sub> in the period 2005 to 2007 is 345 million, of which half is expected to be incurred at our thermoelectric plants in Spain.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In March 2004, our Board of Directors approved the Principles for Sustained Development for the EDP Group, a set of eight principles relating to the economic, environmental and social aspects of the Group's operations.

## Table of Contents

### Portuguese gas regulation

Although the Portuguese government committed, through Resolution of the Council of Ministers no. 63/2003, to anticipate the liberalization of the natural gas sector by July 1, 2004, the corresponding legislation has not been enacted and, therefore, the Portuguese natural gas market can still be classified as an emergent and non-liberalized market.

The participation of companies in the operation of the gas sector is structured by public concession agreements (concessions for the importation, storage and treatment of natural gas and its transport and concessions for regional distribution of natural gas) and administrative licenses (for gas facilities, for the implantation and operation of autonomous local networks from liquefied gas autonomous units (UAG) and for the construction of terminals of natural gas for refilling of vehicles).

Portuguese companies operating in the natural gas market benefit from a public statute which awards a wide set of rights, such as the right to use the public domain, the possibility of benefiting from eminent domain and from administrative easements, the existence of a specific administrative procedure through which approval of infrastructure incorporated in the natural gas system is required, the right to apply for EU incentives, an exemption from payment of the Portuguese tax on oil products (*Imposto sobre Produtos Petrolíferos*) and a decrease in the percentage of Portuguese value added tax to be paid.

Decree law no. 14/2001, of January 27, 2001, provides for the organization and operation of the natural gas sector, transposing into national law EU Directive no. 98/30/CE, of June 22, 1998, which set out the common rules for the achievement of a competitive natural gas market within the broader goal of the creation of the Internal Market in Energy. In order to ensure the effective application of the natural gas market operation rules defined in Decree law no. 14/2001, Decree law no. 97/2002, of April 12, 2002, expanded ERSE's responsibilities to include the regulation of the gas sector. Among the attributions of ERSE with respect to the gas sector is the power to adopt regulations on the following subjects:

Regulation of access to the networks, interconnections and storage facilities;

Commercial relations regulation;

Regulation of the service quality; and

Tariff regulation.

With respect to tariff regulation, the organizational documents of ERSE grant to it the power to approve or to fix the tariffs proposed by the entities to which the regional distribution concessions are granted, or by the entities licensed to operate the autonomous local networks, for the supply of natural gas to industrial, commercial and domestic consumers. However, while the natural gas market maintains its present nature of being an emergent market, the powers regarding tariff regulations reside with the Portuguese government or DGGE.

Presently, the key aspects regarding the natural gas legal framework are governed by Decree law no. 374/89, of October 25, 1989, Decree law no. 274-A/93, of August 4, 1993, and Decree law no. 8/2000, of February 8, 2000, which relate to regulation of the importation, storage, treatment and distribution of natural gas, liquefied gas and substitution gases and the respective public licensing. The Portuguese natural gas

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

legal framework, which is presently characterized by a wide variety of regulations, is expected to be subject in the near future to a general revision and reorganization, pursuant to EU Directive no. 2003/55/CE, of June 26, 2003, relating to the liberalization of natural gas market. In this respect, Order no. 14/2003, of February 5, 2003 and Order no. 68/2003, of May 10, 2003 already reflect the concerns over reorganizing the natural gas sector as a part of the general reorganization of the energy sector, and, most recently, Order no. 10 317/2005, of April 20, 2005 has created two working groups for the purpose of presenting legislative proposals for the restructuring of the electricity and natural gas sectors, transposing into national law EU Directives no. 2003/54/CE and no. 2003/55/CE.



## **Table of Contents**

### **SPAIN**

#### **HISTORY AND OVERVIEW**

The creation of an Iberian electricity market is the driving force behind our decision to expand our operations to Spain. In 2001, we identified Hidrocantábrico as an independent utility company that could facilitate our entry into the Spanish energy market.

After tender offers for Hidrocantábrico shares in 2001, a consortium formed by us, CajAstur Caja de Ahorros de Asturias, or CajAstur, a Spanish savings bank, and Caser Caja de Seguros Reunidos, Compañía de Seguros y Reaseguros, S.A., or Caser, a Spanish insurance company, owned approximately 35% of Hidrocantábrico. In addition, CajAstur and Caser each owned Hidrocantábrico shares outside of the consortium. Approximately 60% of Hidrocantábrico was owned by Energie-Baden-Württemberg AG, or EnBW, a German utility company. In December 2001 we signed an agreement with EnBW, CajAstur and Caser concerning joint control of Hidrocantábrico. At that time, Hidrocantábrico was 39.52% owned by us, 34.58% owned by EnBW and 24.7% owned by CajAstur and Caser. The remaining 1.20% was comprised of shares owned by other shareholders and shares held by Hidrocantábrico itself.

Under agreements executed on July 29, 2004, we agreed to acquire the following stakes in Hidrocantábrico: 34.6% from EnBW for 649 million in cash, 17.5% from CajAstur for 453 million in EDP ordinary shares and 4.1% from Caser for 93 million in cash. In connection with our acquisition of an additional 56.2% stake in Hidrocantábrico in December 2004, we entered into a shareholders agreement with CajAstur and Caser, which retained an aggregate stake in Hidrocantábrico of 3.1%. The shareholders agreement gives CajAstur and Caser certain veto rights, especially in relation to certain regional concerns, which will preserve Hidrocantábrico's links with the region of Asturias. In addition, CajAstur has a long-term put option entitling it to sell its interest in Hidrocantábrico to us at a price indexed to the value of our ordinary shares.

#### **ELECTRICITY**

##### **Overview**

The two major characteristics of the Spanish electricity sector are the existence of the wholesale Spanish generation market, or Spanish pool, and the fact that any consumer is free to choose its supplier since January 1, 2003. Competition was first introduced in the Spanish electricity market on January 1, 1998 by Law 54/1997, which provided a regulatory framework that reorganized the functioning of the market.

Generation facilities in Spain operate either in the ordinary regime or the special regime. Special regime generators, which comprise cogeneration and renewable energy facilities of up to 50 MW may sell their net electricity output to the system either (i) at tariffs fixed by decree, or at tariffs linked to pool prices plus a premium, that vary depending on the type of generation and are generally higher than regulated tariffs, or (ii) in the Spanish pool (or by bilateral contracts), together with certain premiums and incentives. Ordinary regime generators provide electricity to the Spanish pool and by bilateral contract to consumers and liberalized suppliers at market prices.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Companies with the capability to sell and buy electricity may participate in the Spanish pool. Electricity generators sell electricity in the pool and the regulated electricity distributors, suppliers in the liberalized, or unregulated, market and consumers that are permitted to participate in the pool, or qualified consumers, buy electricity in this pool. Foreign companies or consumers that have foreign agent status may also sell and buy in the Spanish pool. The market operator and agency responsible for the market's economic management and bidding process is OMEL.

In addition to selling electricity to regulated consumers (customers that are subject to a regulated final tariff), transmission companies and regulated distributors must provide network access to all suppliers and qualified consumers that have chosen to be supplied in the liberalized market. However, qualified consumers must pay an access tariff to the distribution companies if such access is provided. At the beginning of each year, the Spanish government sets both the final and access tariffs. By Royal Decree no. 2392/2004, the Spanish government established the electricity tariffs for 2005.

**Table of Contents**

Liberalized suppliers are free to set a price to qualified consumers. These entities' main direct activity costs are the wholesale market price and the regulated access tariffs to be paid to the distribution companies. Electricity generators and liberalized suppliers or consumers may also engage in bilateral contracts without participating in the wholesale market.

**GENERATION**

Hidrocontábrico's installed capacity represents 4.3% of Spain's mainland generation capacity, or 5.1%, excluding special regime facilities. In 2004, Hidrocontábrico had a total installed capacity of 2,941 MW, approximately 54.5% of which are coal-fired facilities, 13.4% a CCGT facility, 14.8% hydroelectric facilities, 1.4% cogeneration facilities, 2.4% waste to energy facilities and 7.9% renewable energy facilities other than special regime hydroelectric. Hidrocontábrico also holds a 15.5% interest in Central Nuclear Trillo I, A.I.E., which owns the Trillo nuclear power plant, corresponding to 165 MW of the plant's total installed capacity of 1,066 MW.

The following table sets forth Hidrocontábrico's total installed capacity by type of facility at year-end 2002, 2003 and 2004.

Type of facility	As of December 31,		
	2002	2003	2004
	(MW) <sup>(1)</sup>		
<b>Hydroelectric:</b>			
Hydroelectric Ordinary regime	413	432	433
Hydroelectric Special regime	3	3	3
<b>Total hydroelectric</b>	<b>416</b>	<b>435</b>	<b>436</b>
<b>Thermal:</b>			
Coal	1,588	1,605	1,605
CCGT	393	393	393
Nuclear	165	165	165
<b>Total Thermal</b>	<b>2,146</b>	<b>2,163</b>	<b>2,163</b>
Cogeneration	23	24	41
Wind	0	81	223
Biomass	3	3	7
Waste	16	33	72
<b>Total</b>	<b>2,605</b>	<b>2,738</b>	<b>2,941</b>

<sup>(1)</sup> Capacity figures do not reflect the capacity of plants owned by companies that are consolidated by Hidrocontábrico using the equity method of consolidation.

The following table sets forth Hidrocontábrico's thermal plants.

Thermal plants	Installed capacity	Fuel	Year entered into
----------------	--------------------	------	-------------------

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	(MW)		service
<b>Coal</b>			
Aboño			
Unit I	366	Coal/Blast furnace gas/Fuel gas	1974
Unit II	556	Coal/Blast furnace gas/Fuel gas	1985
Soto de Ribera			
Unit I	68	Coal	1962
Unit II	254	Coal	1967
Unit III	361	Coal	1984
<b>Nuclear</b>			
Trillo <sup>(1)</sup>	165	Uranium	1988
<b>CCGT</b>			
Castejón	393	Natural gas	2002
<b>Total installed capacity</b>	<b>2,163</b>		

<sup>(1)</sup> Corresponding to 15.5% of Trillo's capacity.

**Table of Contents**

The following table sets forth Hidrocontábrico's hydroelectric plants in the ordinary regime:

<b>Hydroelectric plants</b>	<b>Installed capacity (MW)</b>	<b>River reservoir plant type</b>	<b>Year entered into service</b>	<b>Year of last major refurbishment</b>
La Malva	9.14	Reservoir	1917/24	2002
La Riera	7.83	Run of river	1946/56	2001
Miranda	73.19	Run of river	1962	2000
Proaza	50.33	Reservoir	1968	2002
Priañes	18.50	Reservoir	1952/67	2003
Salime	79.74	Reservoir	1954	2003
Tanes	125.46	Reservoir	1978	1995
La Barca	55.72	Reservoir	1967/74	2002
La Florida	7.60	Reservoir	1952/60	1998
Laviana	1.10	Run of river	1903	2001
Caño	1.00	Run of river	1928	1996
San Isidro	3.12	Run of river	1957	2002
<b>Total installed capacity</b>	<b>432.73</b>			

The average remaining useful life of Hidrocontábrico's hydroelectric generation plants is approximately 46 years.

Since hydroelectric generation is dependent on hydrological conditions, for forecasting model purposes the estimated Hidrocontábrico hydroelectric production based on current installed capacity in an average year is 730 GWh, ranging from a maximum of 950 GWh in a wet year to a minimum of 530 GWh in a dry year. These figures include only the electricity production from natural hydrological inflows.

Generation activity in 2004 was characterized by high availability and efficiency of Hidrocontábrico's power plants. Net production in the ordinary regime, which was 14,408 GWh in 2004, increased 1.8% from 14,154 GWh in 2003 (out of a total generation in the Spanish market in 2004 of approximately 197.7 TWh, according to REE). Hydroelectric generation represented 854 GWh, a decrease from 861 GWh in 2003; the coal-fired thermal generation amounted to 10,356 GWh in 2004, a slight decrease of 1.3% from 10,491 GWh in 2003; natural gas-fired thermal generation (combined cycle) amounted to 1,961 GWh in 2004, an increase of 26.8% from 1,546 GWh the previous year. Nuclear generation, corresponding to our 15.5% stake in the Trillo nuclear power plant was 1,237 GWh in 2004, compared to 1,256 GWh in 2003.

The following table summarizes Hidrocontábrico's electricity generation for 2002, 2003 and 2004, excluding losses at generation plants and Hidrocontábrico's own or ancillary consumption, and sets forth the hydroelectric coefficient at year-end 2002, 2003 and 2004.

<b>Type of facility</b>	<b>Year ended December 31,</b>		
	<b>2002</b>	<b>2003</b>	<b>2004</b>
	(in GWh, except by		

	hydroelectric		
	coefficient factor) <sup>(1)</sup>		
<b>Hydroelectric:</b>			
Hydroelectric Ordinary regime <sup>(2)</sup>	771	861	854
Hydroelectric Special regime	6	12	12
	<hr/>	<hr/>	<hr/>
Total hydroelectric	777	873	866
<b>Thermal:</b>			
Coal	10,997	10,491	10,356
Natural Gas	522	1,546	1,961

**Table of Contents**

Type of facility	Year ended December 31,		
	2002	2003	2004
	(in GWh, except by hydroelectric coefficient factor) <sup>(1)</sup>		
Nuclear <sup>(3)</sup>	1,212	1,257	1,237
Cogeneration	80	87	129
<b>Total thermal</b>	<b>12,811</b>	<b>13,381</b>	<b>13,683</b>
Wind	0	35	272
Biomass	9	12	15
Waste	61	86	198
<b>Total</b>	<b>13,658</b>	<b>14,387</b>	<b>15,035</b>
Hydroelectric coefficient <sup>(4)</sup>	0.96	1.07	1.08

<sup>(1)</sup> Generation figures do not reflect the generation of plants owned by companies that are consolidated by Hidrocontábrico using the equity method of consolidation.

<sup>(2)</sup> Includes the following amounts generated by hydroelectric pumping: 92 GWh in 2002, 89 GWh in 2003 and 76 GWh in 2004.

<sup>(3)</sup> Corresponding to 15.5% of Trillo's generation.

<sup>(4)</sup> The hydroelectric coefficient varies based on the hydrological conditions in a given year. A hydroelectric coefficient of one corresponds to an average year, while a factor less than one corresponds to a dry year and a hydroelectric coefficient greater than one corresponds to a wet year.

The average availability for production of Hidrocontábrico's power plants decreased from 95.68% in 2003 to 95.40% in 2004 for thermal plants and increased from 87.71% in 2003 to 96.42% in 2004 for hydroelectric plants. Hidrocontábrico's forced outages in 2004 were 2.67% at thermal plants and 1.26% at hydroelectric plants.

The table below sets out for each type of Hidrocontábrico generating facility the average capacity utilization and the average availability factor for 2002, 2003 and 2004.

Type of facility	Average capacity utilization <sup>(1)</sup>			Average availability factor		
	Year ended December 31,			Year ended December 31,		
	2002	2003	2004	2002	2003	2004
Hydroelectric	21.66%	23.12%	22.83%	89.26%	87.71%	96.42%
Thermal:						
Coal	83.79%	78.75%	77.65%	93.94%	95.73%	94.99%
Natural gas <sup>(2)</sup>	47.31%	46.55%	58.76%	97.19%	96.26%	98.40%
Nuclear	89.57%	92.95%	91.01%	89.66%	93.85%	92.23%

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Total weighted average thermal <sup>(3)</sup>	81.75%	73.98%	75.24%	94.21%	95.68%	95.40%
---	--------	--------	--------	--------	--------	--------

<sup>(1)</sup> *The average capacity utilization is defined as actual production as a percentage of theoretical maximum production.*

<sup>(2)</sup> *Hidroantábrico's natural gas fueled CCGT plant began operations in 2002.*

<sup>(3)</sup> *Weighted average is based on total installed capacity of the thermal system.*

Similar to 2003, the availability and efficiency of Hidroantábrico power plants were high, leading to a 1.8% increase in generation in 2004. The new Castejón plant had an average availability factor of 98.4%. Hidroantábrico had maintenance outages at its Soto 3 and Castejón power plants in 2004, as well as a refueling outage in the Trillo nuclear power plant. Hidroantábrico's generation facilities benefited from several environmental improvements and equipment upgrades.

Thermal generation consumed 3,749 thousand metric tons of coal in 2004, 78.3% of which was imported and 21.7% domestic. Fuel consumption costs including transportation amounted to 293 million in 2004 and 211 million in 2003. During 2004 there was an increase in Hidroantábrico's fuel costs. The increase in the price of imported coal was mainly due to strong demand in China and India, while the cost of natural gas, although lower than in 2003, was influenced by the increase in the price of oil and its derivatives during 2004.



**Table of Contents**

In 2004, capital expenditures on generating facilities amounted to 201 million, an increase of 114% from 2003. These expenditures are set forth below.

Plant type and status	Year ended December 31,		
	2002	2003	2004
	(thousands of EUR)		
Hydroelectric plants in operation	1,428	2,107	943
Thermal plants in operation	65,082	20,151	32,170
Special regime: <sup>(1)</sup>			
Hydroelectric plants in operation	2	0	0
Wind	16,264	49,047	140,685
Waste	2,067	3,500	10,530
Biomass	1,120	350	10,905
Cogeneration facilities	814	18,720	5,880
<b>Total Generation</b>	<b>86,777</b>	<b>93,875</b>	<b>201,113</b>

<sup>(1)</sup> Excludes capital expenditures of H. Santillana, a company in which we hold in minority stake. Data corresponding to Genesa I, S.L., or Genesa I, a 60%-owned subsidiary of Hidrocantábrico as of December 31, 2002, and an 80%-owned subsidiary of Hidrocantábrico as of December 31, 2003 and 2004, respectively, represents 100% of capital expenditures of SINAE and its subsidiaries. For more information on SINAE, see Special regime generation below.

Hidrocantábrico is planning to develop three CCGT plants as set forth in the table below:

Facility	Type of generation	Developing entity	Planned capacity (MW)	Target year	Status
Soto 4 and Soto 5	CCGT	Hidrocantábrico	2 x 400	2007-08	Licensing Process
Castejón 2	CCGT	Elerebro	400	2007	Licensing Process

In addition, Hidrocantábrico is currently analyzing other locations for new power plants.

**Special regime generation**

Special regime generation is developed by Hidrocantábrico through Genesa I, an 80%-owned subsidiary, which mainly focuses on cogeneration and wind power. Throughout 2004, Hidrocantábrico worked on the restructuring of this business's shareholdings and industrial activities, with the objective of providing a basis for stable and sustained development focusing on the promotion, operation and management of renewable energy sources, mainly wind power. As part of this restructuring, on July 31, 2004, Hidrocantábrico merged its subsidiaries Genesa and Sinæ to form a new company, Genesa I.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

During 2004, we finalized the construction of the 124 MW Campollano wind farm in Albacete and the 6.6 MW expansion at the Cruz del Hierro wind farm. Currently, the following plants are under construction: La Brújula, Boquerón, Sotonera, Belchite and Las Lomillas, totaling more than 200 MW.

Hidrocarbónico is planning to develop the following wind farms:

<u>Facility</u>	<u>Type of Generation</u>	<u>Planned Capacity (MW)</u>	<u>Target Year</u>	<u>Status</u>
P.E. Brújula	Wind	73.5	2005	Construction
P.E. Las Lomillas	Wind	49.5	2005	Construction
P.E. La Boquerón	Wind	22	2005	Construction
P.E. La Sotonera	Wind	18.9	2005	Construction
P.E. Belchite	Wind	49.5	2005	Construction
P.E. Carondio	Wind	47.3	2006	Planning
P.E. Munera I & II	Wind	70	2006	Planning
P.E. Medinaceli	Wind	40	2007	Planning
P.E. Avila Oeste	Wind	68.0	2007	Planning
P.E. Burgos Este	Wind	111	2007	Planning
P.E. San Roque	Wind	24.7	2006	Planning
P.E. La Dehesica	Wind	28.5	2006	Planning
P.E. Madero	Wind	33	2006	Planning
P.E. Curiscao Pumar	Wind	89.3	2006	Planning
P.E. Belmonte	Wind	34	2007	Planning

**Table of Contents****Competition**

Hidrocontábrico competes with other generators in the wholesale electricity market. The wholesale market was characterized by three very different periods in 2004: January through May, June through August and September through December. In the first five months of the year, the final prices were similar to those in 2003: 31.39 per MWh from 31.20 per MWh in 2003. In the summer period, June to August, prices were reduced: 35.47 per MWh in 2004 from 45.90 per MWh in 2003. In the last 4 months of the year prices increased: 40.97 per MWh in 2004 from 37.68 per MWh in 2003. Altogether, the final marginal pool price in 2004 was 35.65 per MWh, which represented a reduction of 3.3% compared to 37.26 per MWh in 2003. Hidrocontábrico's market share in the Spanish pool was approximately 7.4% in 2004, up 7.6% from 2003.

This price environment was determined by a lower hydro availability in the first months 2004, and an excess of offered electricity in the first months of the start up of CCGT plants and the significant increase of wind power in the system, which caused the reduction of prices, especially during the summer months. During the last part of 2004 prices rose, due to the reduction of the hydroelectric contribution.

**DISTRIBUTION AND SUPPLY****Electricity Distribution and Supply**

Hidrocontábrico has a network infrastructure that covers the regions of Asturias (accounting for the vast majority of its network), Valencia, Madrid and Alicante, totaling 19,572 km as follows:

<u>Distribution lines</u>	<u>Km</u>
<b>Overhead lines:</b>	
High-voltage (50/132kV)	1,366
Medium-voltage (5/10/16/20/22/24 kV)	4,496
Low-voltage (<1kV)	11,259
	<hr/>
Total overhead lines	17,121
<b>Underground cables:</b>	
High-voltage (50/132kV)	12
Medium-voltage (5/10/16/20/22/24 kV)	875
Low-voltage (1kV)	1,564
	<hr/>
Total underground cables	2,451
	<hr/>
<b>Total</b>	<b>19,572</b>

Electricity distributed in 2004 through Hidrocontábrico's own network amounted to 9,002 GWh, a 4.0% increase from 2003 levels. As of December 31, 2004, Hidrocontábrico's distribution business had 574,560 customers out of a total number of consumers of 22,832,749, according to the *Comisión Nacional de Energía*, representing a 2.4% increase from 2003 and including 6,723 qualified consumers that are being supplied by non-regulated suppliers. Since January 1, 2003, every consumer in Hidrocontábrico's market can elect to be supplied by non-regulated suppliers. In 2004, there were a total of 28.7 million consumers in the Iberian electricity market according to the Portuguese DGGE and the

Spanish *Comisión Nacional de Energía*.

**Table of Contents**

In 2004, the volume of electricity distributed and the number of customers by voltage level was as follows:

<b>Distribution by level of voltage</b>	<b>GWh</b>	<b>% annual increase (decrease) from 2003</b>	<b>Total customers</b>
High and very high-voltage <sup>(1)</sup>	5,691	3.1%	20
Medium-voltage <sup>(2)</sup>	1,057	6.7%	757
Low-voltage <sup>(3)</sup>	2,254	4.9%	573,783
<b>Total</b>	<b>9,002</b>	<b>4%</b>	<b>574,560</b>

<sup>(1)</sup> High-voltage is greater than 36 kV and less than or equal to 145 kV. Very high-voltage is greater than 145 kV.

<sup>(2)</sup> Medium-voltage is greater than or equal to 1 kV and less than or equal to 36 kV.

<sup>(3)</sup> Low-voltage is less than 1 kV.

During 2004, Hidroantábrico's distribution business, Hidroantábrico Distribución Eléctrica, S.A.U., continued its expansion outside of Asturias in the autonomous communities of Madrid and Valencia, both of which are geographic areas with strong economic activity.

In 2004, Hidroantábrico continued to improve technical and operational management activities. The networks and facilities were enlarged and Hidroantábrico continued the development of information technology and automation of the distribution network. The quality indicator for distribution electricity activity (TIEPI, or equivalent interruption time of installed capacity) was 1.13 hours in 2004, which we believe is better than the average of the Spanish electricity sector.

The electricity supply activity performed by Hidroantábrico Energía, S.A.U., and Naturcorp includes the supply of electricity to qualified consumers. Hidroantábrico Energía and Naturcorp invoiced 4,616 GWh of electricity supply in 2004, with sales of 259.1 million in 2004, compared to 4,526 GWh of electricity supply with sales of 260.8 million in 2003. This figure represents 5.80% of the liberalized market. More than 75% was supplied outside of Hidroantábrico's traditional market.

In 2004, Hidroantábrico Energía successfully participated in the annual auction of the RENFE electricity contract, the Spanish railroad and the biggest electricity consumer currently in the market. Hidroantábrico Energía won 13% of the 2004 supply contracts.

**Environmental activities**

In 2004, the Castejón CCGT plant obtained the UNE/EN/ISO 14001 (the 2004 compliant environmental management certification). It is the first plant in Spain to obtain this certification.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Also in 2004, Spain's NAP on greenhouse gas trading was published for the period 2005-2007. The emission rights assigned to Hidrocarbónico will enable it to operate normally.

In 2004, Hidrocarbónico published its first Environmental Annual Report, following an audit by an independent company.

### **Competition**

On January 1, 2003, the Spanish electricity market was fully liberalized, allowing million of consumers access to the market, in order to negotiate their consumption of energy.

The highlight of 2004 was the consolidation of low voltage customers in the liberalized market. During 2004, an average of 547,000 consumers purchased energy in the market. Among these 547,000 consumers, approximately 67,300 were small and medium enterprises (SMEs) and the rest corresponded to household consumers. In terms of energy, this represents a consumption of 8,613 GWh. By December 2004, the number of SMEs operating in the market exceeded 97,000 consumers and household consumers totaled over 1,000,000. Nevertheless, these 1.1 million total customers operating in the market at the end of 2004 comprised only 4.8% of the total consumers of electricity in mainland Spain.

At high voltage, a small increase of 2.3% occurred with the customers in the market (on average). This represented a consumption of 63,171 GWh, slightly lower than the consumption in 2003 that was 68,439 GWh (average supplies billed during the period), due to the fact that some large customers returned to the tariff market because of better prices.

## **Table of Contents**

### **GAS**

#### **Overview**

In March 2003, Hidrocarburo won the auction privatization process that led to its acquisition of 62% of Naturcorp. Subsequently, Naturcorp reorganized its gas holdings, as a result of which Hidrocarburo's ownership of Naturcorp decreased from 62% to 56.2%. As a result of the reorganization of Naturcorp, Hidrocarburo has become the second largest gas company in the Spanish market, with more than 500,000 customers.

#### **Gas distribution**

Gas invoiced in 2004 to the regulated market amounted to 7,227 GWh, representing a 65.4% increase from 4,370 GWh in 2003, due to the contribution of Naturcorp. Additionally, the volume of gas distributed in the liberalized market (in which we provide third-party access to our network) reached 14,832 GWh. The total number of gas consumers that are connected to Hidrocarburo's distribution network increased from 542,794 in 2003 to 577,802 in 2004, representing approximately 10.3% of the 5,632,136 total number of consumers in Spain, according to the *Comisión Nacional de Energía*. Hidrocarburo's gas distribution activities revenues of 299.9 million in 2004 compared with 157.0 million in 2003, the increase primarily reflecting the acquisition of Naturcorp. In 2004, Hidrocarburo had 9.0% of the gas consumers in Iberia (according to GALP Energía there were approximately 0.8 million consumers in Portugal in 2004 and according to the *Comisión Nacional de Energía* there were approximately 5.6 million consumers in Spain in 2004).

#### **Gas supply**

In 2004, Hidrocarburo Energía continued its natural gas supply service that began in 2002. Since August 1, 2003, Naturcorp has been included in reported results of gas supply. Taking Naturcorp into account, Hidrocarburo has entered into 1,500 contracts and invoiced 10,989 GWh.

#### **Competition**

At the end of 2004, the number of consumers operating in the liberalized market were 1,218,785, representing 21.6% of the total gas consumers in Spain (approximately one out of five consumers). Taking into account that at the end of 2003 there were a total of 171,580 consumers in the liberalized market, the increase during 2004 has been more than 1,000,000. This figure constitutes a sevenfold increase in the number of clients in the liberalized market. In terms of energy, 80.2% was sold in the liberalized market (259,960 GWh).

By group of customers, most of the consumers in groups 1 and 2, industrial customers, were in the liberalized market, with a share of consumption in such groups in terms of energy of 99% and 98%, respectively. In terms of the number of consumers, the percentages are 98.8% and 92%, respectively.

For group 3, residential and commercial consumers, 22.4% of consumption in terms of energy was purchased in the liberalized market. In terms of the number of consumers, the percentage in the liberalized market was 21.6%.

## **OTHER ACTIVITIES**

### **Telecommunications**

Hidrocantábrico is in the process of divesting in non-strategic businesses, as reflected by the sale of its shareholding in Retecal. On October 20, 2004, Hidrocantábrico sold its total shareholding of 34.96% in Retecal to Group Corporativo Ono. The cash proceeds from this sale amounted to 57.5 million, while the book value of the shareholding was 32.8 million.

Hidrocantábrico continues to own 45.95% of Sociedad Promotora de las telecomunicaciones en Asturias, S.A.



## **Table of Contents**

### **Research and development**

Research and development activities carried out in 2004 were aimed at the reduction of emissions, treatment of by-products, maintenance and the extension of equipment life at various plants and were conducted in coordination with various universities and industry groups and were partially subsidized by the Spanish government and European Union entities.

## **REGULATION**

### **Electricity regulation**

The enactment of Law no. 54/1997, of November 27, 1997, has gradually changed the Spanish electricity sector from a state-controlled system to a free-market system with elements of free competition and liberalization. With this change, the Spanish government intends to guarantee the electricity supply at the highest quality and at the lowest possible price. The current regulatory framework provides for:

the unbundling of activities so that no operator can carry out regulated activities (transmission, distribution, technical management of the system and economic management of the wholesale market) and liberalized activities (generation, trading and international/intra-community exchanges) at the same time;

a wholesale generation market, or electricity pool;

freedom of entry for new operators with liberalized activities in the electricity sector;

liberalized activities to take place in a competitive environment, while transmission, distribution, technical management of the system and economic management of wholesale market activities will continue to be regulated as these activities' particular characteristics impose severe limitations on the possibility of introducing competition;

as of January 1, 2003, all consumers may select their suppliers and the method of supply, either at market prices or with a set tariff fixed by the Spanish government;

all operators and consumers have the right to access the transmission and distribution grid by paying access tariffs previously approved by the Spanish government; and

environmental protection.

During 2004, the Industry Ministry announced the elaboration of a White Paper in order to study whether possible changes in the Electricity System to improve its operation and performance are feasible at this time.

*Technical and economic management of the system*

Prior to the enactment of Law no. 54/1997, operation of the electricity system in Spain was a public service provided by the government through Red Eléctrica de España, S.A., or REE, a state controlled entity. Currently, under Law no. 54/1997, REE continues to serve as the system operator, but some of its dispatching functions have been taken over by the market operator, Compañía Operadora del Mercado Español de Electricidad, S.A., or OMEL. Accordingly, OMEL is responsible for the economic management of the wholesale market and REE is responsible for the technical management of the transmission grid and the balancing mechanism that ensures that energy supply is equal to energy demand. The Spanish government no longer controls REE, although it still retains a 28.5% interest in the company through Sociedad Estatal de Participaciones Industriales, or SEPI. To ensure that REE and OMEL are guaranteed the highest levels of independence and transparency, the maximum stake that can legally be held in REE has been reduced to 3% (except for SEPI) and in the case of OMEL to 5%, except that economic managers of other electricity systems may hold stakes of up to 10% in OMEL until June 30, 2006.

## Table of Contents

### *Supervision of the system*

The National Energy Commission is the public authority in charge of supervision of the electricity, hydrocarbons and natural gas industries in Spain.

### *Generation*

Law no. 54/1997 seeks to create a competitive electricity generation market where power generation plants are dispatched based on the results of a competitive bidding process administered by OMEL. Moreover, the same law provides for a transitional period until 2010 during which power generation companies that were subject to the Stable Legal Framework on December 31, 1987 will be entitled to partial compensation for the costs they incurred in connection with the transition to the competitive market regime, or stranded costs. This compensation is paid from amounts collected from consumers, as part of the tariffs, and settled by the National Energy Commission. Law 54/1997 also provides that the installation of new power generation plants be completely liberalized and not subject to government planning, subject only to the authorizations required by the applicable laws and regulations (town planning and environmental protection, for example). New electricity generators will be entitled to the same rights and payments as other generators.

On March 11, 2005, Royal Decree law no. 5/2005 was adopted to increase productivity. The main consequences of this law measures are the following:

limitation of activities of dominant players, such as a prohibition on importing electricity into the MIBEL from any country. Dominant players are defined as those companies that hold market shares in the Iberian generation and supply market above 10%. This limitation will be fully in force as from the publication of the dominant players list by the Spanish authorities and as from the commencement of MIBEL activities;

implementation of measures at the wholesale level in order to comply with MIBEL requirements. One of these measures is the suspension until 2006 of the 2004 Technologic Stranded Costs payment; and

the nuclear combustible financing system has been amended. The cost of the activity related to the second part of the nuclear fuel cycle (radioactive waste management) has been excluded from the tariff and now it must be paid directly by the nuclear plants.

Due to increasing concern over environmental matters, generation activities included in the special regime (those based on non-consumable, renewable energies as well as specific cogeneration plants) have become increasingly important in recent times. Royal Decree no. 436/2004, of March 12, 2004, establishes a new legal and financial framework for generation activities. The aim of this Royal Decree is to promote clean energy such that it will constitute approximately 30% of total electricity consumption by 2010. The new financial framework allows special regime generators to choose between selling their energy at market prices (in the electricity pool, the long-term pool or through bilateral agreements, in all cases, plus certain premiums and incentives) or at set tariffs (to distributors).

On August 27, 2004, Royal Decree law no. 5/2004 established a scheme for greenhouse gas emission allowance trading, implementing Directive 2003/87 of the European Commission. On March 9, 2005, this Royal Decree law was replaced by Law no. 1/2005, which, with respect to energy generation, applies to any plant with a thermal capacity above 20 MW. As of January 1, 2005, an authorization for gas emissions is needed. The NAP states the total quantity of allowances intended to be allocated for the 2005-2007 period. This allocation was approved by the European

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Commission on December 27, 2004. On January 21, 2005, a final allowance allocation list for electricity plants was published under Royal Decree no. 60/2005.

### *Transmission and distribution*

Under some of the provisions of the current regulatory scheme, electricity transmission and distribution activities will continue to be regulated as their particular characteristics impose limitations on the possibility of introducing competition. The current regulatory framework has changed, however, the manner in which electricity businesses receive payments, in order to promote efficiency and quality of service.

The regulations take into account the investment and operational costs related to transmission activities. Fixed payment for distribution is based on investment, on a reference network model as well as distribution areas, incentives for the quality of supply, loss reduction and commercial management costs. In the future, consideration of investments and operational and maintenance costs will also be included.

## **Table of Contents**

### *Supply*

Supply (or retailing) in Spain was created by Law no. 54/1997. Suppliers are companies that have access to the transmission and distribution networks and whose function is to sell electricity to eligible consumers or other agents in the system. Economic terms of retailing transactions are freely agreed to by the parties concerned. Therefore, this type of supply is not subject to fixed tariffs.

### *Tariffs*

Spanish electricity tariffs are fixed annually by the government through Royal Decree. Royal Decree no. 1432/2002, of December 2002, established a new method of calculation for the period 2003-2010. The new method of calculation allows tariffs to be fixed under more objective, transparent and predictable conditions. Annual increases to tariffs cannot exceed 2% and electricity companies carrying out regulated activities can recover the losses known as rate deficits, caused by the reduction of tariffs during the period 2000-2002.

Royal Decree no. 2392/2004, of December 2004, fixed the tariffs for 2005 and provided for an average rise of 1.71% on the 2003 average tariff (or reference tariff, which includes all applicable tariffs and costs).

The tariff for regulated customers increased 1.71% from 2004 and access tariffs also increased 1.71% from 2004. Both the supply and access tariffs for residential consumers increased 1.74% from 2004, and tariffs for other consumers increased 1.61% from 2004.

These tariff increases are due to the inclusion of the following elements of the tariffs for 2005:

payments in respect of regulated activities such as transport, distribution and trading carried out by certain companies, mainly in the Canary and Balearic Islands;

fixed compensation for the costs incurred by specific companies owning electricity generation facilities in connection with the transition to the competitive market regime (stranded costs);

the annual compensation for recovering the rate deficit of regulated activities as well as the review of the compensation to the electricity systems inside and outside the Iberian Peninsula during 2001 and 2002;

the outcome of the updates for predictions and deviations in the estimates adopted for calculating the 2003 tariff; and

REE's costs relating to the management of the system outside the Iberian Peninsula.

### **Gas regulation**

Law no. 34/1998, of October 7, 1998, began the liberalization process of the Spanish natural gas sector and has been amended several times in recent years in order to improve this liberalization process. The main features of the current regulatory framework are as follows:

the unbundling of activities so that no operator may carry out regulated activities (regasification, strategic storage, transmission, distribution and supplying at set tariffs) and liberalized activities (trading at market prices) simultaneously;

as of January 1, 2003, all consumers, regardless of their consumption, are fully eligible to select their suppliers as well as the method of supply, either at market prices or with a set tariff;

all operators and consumers have the right to access the transmission and distribution grids by paying access tariffs previously approved by the Spanish government. This right is based on principles of free access, objectivity and transparency. Access to the grid can only be denied under circumstances set forth in certain laws and regulations in cases where there is a lack of capacity or reciprocity;

---

## Table of Contents

all tariffs, tolls and royalties are based on costs that are transferred to consumers of natural gas. The tariff is based on levels of pressure and consumption rather than by type of use. The tolls and royalties for transport and distribution are based on the level of pressure at which the network is connected to the consumers' installation and on the volume of annual consumption rather than on distance;

to ensure that ENAGAS, S.A., the current technical manager of the system, as well as the owner of the majority of the high-pressure transmission grid, is guaranteed the highest level of independence, the maximum stake that can be legally held in it, directly or indirectly, by any shareholder has been reduced to 5%. Any necessary reductions must take place before December 31, 2006;

Royal Decree no. 1434/2002, of December 27, 2002, specifically regulating transmission, distribution, trading and supply activities, as well as the process of authorizing natural gas plants and installations, regulates relations between gas companies and their customers, both in the regulated and unregulated markets; and

Royal Decree no. 1716/2004, of July 23, 2004, sets forth obligations concerning minimum security reserves and natural gas supply diversification.

## **BRAZIL**

### **OVERVIEW**

Brazil's electricity industry is organized into one large interconnected electricity system, which is known as the Sistema Interligado Nacional, or the Brazilian SIN, comprised of electricity companies in the southern, southeast, central-western, northeast and parts of the northern regions of Brazil, and several other small, isolated systems. Generation, transmission, distribution and supply activities are legally separated in Brazil.

In 2004, Brazil had a total installed generation capacity of 88,629 MW, of which approximately 78.0% was hydroelectric and 19.8% was thermal, according to the Brazilian National Electric Agency (Brazil's electricity regulator), or ANEEL. In addition, in order to satisfy its electricity requirements, Brazil imported 8.3% (8,170 MW) of its required electricity in 2004. In 2003, the Ministry of Mines and Energy (*Ministério de Minas e Energia*), or MME, approved a ten-year expansion plan under which Brazil's total installed electricity generation capacity is projected to increase to 117,473 MW by 2012, of which 90,022 MW (76.6%) will be hydroelectric, 17,072 MW (14.5%) will be thermolectric, 8,201 MW (7.0%) will be from small power plants and 2,178 MW (1.9%) will be imported through the interconnected system.

Eletrobrás, a company controlled by the Brazilian government, owns approximately 42% of the installed generating capacity within Brazil. Eletrobrás has regional subsidiaries responsible for generation and transmission of electricity: Centrais Elétricas do Norte de Brasil S.A. Eletronorte and Companhia Hidroelétrica do São Francisco – CHESF in the north and northeast of Brazil, Furnas Centrais Elétricas S.A. in the southeast and central-west of Brazil and Centrais Elétricas do Sul do Brasil S.A. – Eletrosul in the south of Brazil. In addition, Eletrobrás controls Eletrobrás Termonuclear S.A. – Eletronuclear. In addition, some Brazilian states control entities involved in the generation, transmission and distribution of electricity. They include, among others, Companhia Energética de São Paulo – CESP, Companhia Paranaense de Energia – COPEL and Companhia Energética de Minas Gerais – CEMIG. Currently, private companies own approximately 39% and 69% of the generation and distribution markets in Brazil, respectively, in terms of total capacity.

In 2004, total electricity consumption in Brazil reached 320,772 GWh, exceeding 2003 figures by 4.5% and representing growth similar to that of Brazil's GDP for the same period, which was 4.9%. Growth in electricity consumption is expected to remain consistent with Brazil's overall economic performance in the coming years.

Through Energias do Brasil, our Brazilian holding company, and our other Brazilian subsidiaries, we engage in the distribution, generation and trading of electricity in the Brazilian market. Our Brazilian electricity distribution companies have approximately 2.9 million customers, located in 171 municipalities with a total population of 9.6 million inhabitants. Our Brazilian generation assets provided our Brazilian operations with an installed capacity of 529.6 MW at December 31, 2004. Our Brazilian subsidiaries engaged



## Table of Contents

in distribution include Bandeirante, one of the principal electricity distribution concessionaires in the state of São Paulo; Escelsa, the principal electricity distribution concessionaire in the state of Espírito Santo; and Enersul, the principal electricity distribution concessionaire in the state of Mato Grosso do Sul. In the generation segment, we participate in the Lajeado hydroelectric plant, through EDP Lajeado, located on the Tocantins River, with a total installed capacity of 902.5 MW, and in the Peixe Angical hydroelectric plant, which is expected to commence operations in 2006 and to have a total installed capacity of 452 MW. We also control a number of hydroelectric and thermoelectric plants that have a combined installed capacity of 280.1 MW. We expect to expand our generation capacity through planned plant construction and generation projects and through participation in public auctions for new hydroelectric power plants. Our electricity trading operations are carried out by Enertrade, which sold a total of 4,849 GWh in 2004, making it one of the largest electricity trading companies in Brazil.

In 2005, we concluded the process of corporate reorganization of our Brazilian operations. For more information on this, see Corporate Reorganization. For the structure of our holdings in Brazil, see History and Business Overview.

In recent years, the electricity sector in Brazil has been adversely affected by internal and external economic circumstances. The Brazilian economy was affected by the worldwide economic slowdown, and in 2002, uncertainty surrounding the October presidential elections. As a result, the value of the real sharply depreciated and Brazilian inflation and interest rates increased. These conditions led to a scarcity of financing sources, which adversely affected the industrial sectors of the Brazilian economy, including the electricity sector.

In addition to these adverse economic circumstances, in recent years, electric utility companies in Brazil have had to contend with low wholesale prices in the wholesale electricity market, or the MAE, and uncertainties regarding the electricity sector's regulations and framework due to the implementation of new programs by the administration and the lack of an existing stable and consistent legal framework. Also, the Brazilian government's implementation of an electricity plan from 2001 to 2002 had an adverse effect on consumption habits in affected areas, which continues to affect demand for electricity from our distribution businesses in Brazil. In 2003, the main events affecting the Brazilian electric utility industry were the macroeconomic turnaround in the country, good hydrological conditions that resulted in an oversupply of electricity, a substantial increase in the installed capacity, mainly due to investments started in the previous periods, and moderate consumption growth.

In 2004, the main events affecting the Brazilian electric utility industry were:

Economic growth became more visible due to the effects of a less restrictive monetary policy that began to produce results. Brazil's GDP grew 4.9% in 2004 and the real appreciated by 8.8% in relation to the U.S. dollar between December 31, 2003 and 2004;

The New Electricity Law was approved in March 2004. According to the MME, the new rules will allow, in the long run, reduce electricity tariffs, while decreasing the risk of blackouts and attracting more investments;

The good hydrological conditions in the main consumption markets, which affected the prices at which electricity is bought and sold; and

Total electricity consumption in 2004 grew to 320,772 GWh, exceeding 2003 by 4.5% and representing growth similar to that of Brazil's GDP, which was 4.9%, for the same period.

As a result, the installed capacity in Brazil increased 5.23% on average from 2000 to 2004, and consumption in 2004 was higher than pre-rationing levels. Although the model under the New Electricity Law reduces market risk, its ability to encourage private investment in the electricity sector will depend on how the new regulatory framework is implemented. See Regulation Legal and regulatory framework.



## Table of Contents

### **CORPORATE REORGANIZATION**

Energias do Brasil is a holding company that holds the majority of our investments in the Brazilian electric power industry. In October 2002, we completed the first stage of the restructuring, which put our interests in the following companies under the direct control of Energias do Brasil: Energest S.A., or Energest, Enertrade, Bandeirante, EDP Lajeado, FAFEN Energia S.A., or Fafen, and Enerpeixe. On December 31, 2003, Energias do Brasil took the control of IVEN S.A., or IVEN, the company that directly controlled Escelsa and indirectly controlled Enersul. In connection with this process, Energias do Brasil merged Calibre Participações S.A., 135 Participações S.A., EDP 2000 Participações Ltda, and EDP Investimentos Ltda. Following the reorganization of the IVEN holding, Energias do Brasil owns a 69.55% stake in the voting shares and a 23.99% stake in IVEN's total capital. Another action taken was the merger of Enerpro into Energest, consolidating in Energest all activities concerning the development and implementation of generation projects, and also engineering, operation and maintenance services for the generation business units in Brazil. The main goals of these transactions were to simplify the corporate structure of our holdings and capture synergies.

On March 16, 2005, we changed the name of our subsidiary from EDP Brasil S.A., or EDP Brasil, to EDP-Energias do Brasil S.A, or Energias do Brasil. In this annual report Energias do Brasil refers to this subsidiary before and after its name change.

We implemented a second stage of corporate reorganization in order to comply with the New Electricity Law, which required the restructuring of our operations. Under the New Electricity Law, companies and concessionaires that distribute electricity through the interconnected system are restricted from various activities, including engaging in generation activities, transmission activities and the sale of electricity to free customers. Similarly, concessionaires and companies authorized to perform generation or transmission operating in the interconnected system are prohibited from associating with or controlling companies that distribute electricity in the interconnected system. Companies and concessionaires engaged in these restricted activities must restructure their activities and be in compliance by September 2005. For more information on the New Electricity Law, see Regulation.

As a result of these regulations, which effectively required the restructuring of the vertical organization of our operations, and our desire, among other things, to simplify the corporate structure of our Brazilian holdings, optimize the allocation of funds, create liquidity and dispersion of share ownership at the level of Energias do Brasil and make other necessary changes to implement our strategic plan, we implemented the second stage of our corporate reorganization this year.

This corporate organization is designed to:

simplify the corporate structure of our Brazilian holdings by transferring the direct ownership of all the shares of our Brazilian distribution companies to Energias do Brasil and making Energias do Brasil responsible for the collective financial consolidation and strategic planning;

optimize the allocation of our funds in order to provide high returns for our shareholders;

implement corporate governance policies aimed at improving the efficiency and transparency of our decision-making process, such as expanding minority shareholders' rights and improving the quality of information disclosure;

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

make necessary changes to implement our strategic plan for developing our electricity distribution, generation and trading businesses in the existing economic and competitive environment in Brazil, and in accordance with the new regulations of the Brazilian electricity sector;

take advantage of the synergies between our distribution, generation and trading operations in order to improve the return on invested capital; and

**Table of Contents**

facilitate the restructuring of the vertical organization of our operations, in compliance with the new regulations of the Brazilian electricity sector.

This corporate reorganization included the following transactions, among others:

merging IVEN into Energias do Brasil;

making Enersul a wholly-owned subsidiary of Escelsa by transferring shares issued by Enersul to Escelsa; and

making Escelsa and Bandeirante wholly-owned subsidiaries of Energias do Brasil by transferring the shares issued by such companies to Energias do Brasil.

As a result of our corporate reorganization, minority shareholders of Bandeirante, Escelsa, Enersul and IVEN that did not exercise their withdrawal rights received shares of Energias do Brasil in exchange for their shares in these companies. Following the initial steps of the corporate reorganization of our subsidiaries in Brazil, we launched an initial public offering of Energias do Brasil in July 2005. As a result, shares of Bandeirante and Escelsa ceased to be publicly traded on the day prior to this offering. Our corporate reorganization was also a necessary step in the implementation of the restructuring of the vertical organization of our operations, by separating the distribution, generation and transmission operations of Escelsa and Enersul and organizing our subsidiaries horizontally, as required by the New Electricity Law. This reorganization was approved by ANEEL.

The following chart represents the simplified corporate structure of Energias do Brasil:

---

<sup>(1)</sup> *Percentage of voting capital. Energias do Brasil owns 16.16% of the total capital of, and energy generated by, this company. All other numbers represent the percentage of total capital.*

<sup>(2)</sup> *Includes Escelsa's generation assets that were transferred CESA after the reorganization.*

<sup>(3)</sup> *Includes Enersul's generation assets that were transferred to Ochola Participações Ltda. after the reorganization. Ochola's name was changed to Pantanal Energética Ltda.*

**Table of Contents****GENERATION**

The electricity generated by our Brazilian subsidiaries is primarily hydroelectric energy. The electricity generated is transmitted through our own systems or by third parties to the electricity distribution companies that distribute the electricity to end users. Our generation companies sell the electricity they generate to electricity traders or distributors under long-term contracts, as determined by ANEEL. The amount of electricity which generation companies are allowed to sell under long-term contracts is referred to as assured electricity.

Our Brazilian generation assets, including those that are integrated with our Brazilian electricity distribution companies, had a total generation capacity of 529.6 MW at December 31, 2004, including our 27.65% share of the installed power output of our Lajeado plant. The following table provides a brief description of our Brazilian generation assets.

Company/Plant	Installed power output (MW)
<b>Lajeado (27.65%)</b>	<b>249.5</b>
<b>Escelsa</b>	<b>193.5</b>
Alegra	2.1
Fruteiras	8.7
Jucu	4.8
Rio Bonito	16.8
Suíça	30.1
Mascarenhas	131.0
<b>CESA</b>	<b>26.1</b>
Viçosa	4.5
Paraíso	21.6
<b>Enersul</b>	<b>44.6</b>
Hydroelectric Plants	31.2
Vitor A. De Brito	0.4
São João I	0.7
São João II	0.6
Mimoso	29.5
Thermoelectric Plants	13.4
Coxim	3.6
Corumbá	6.0
Porto Murtinho	3.8
<b>Costa Rica</b>	<b>16.0</b>
<b>Total</b>	<b>529.6</b>

The volume of electricity produced by our Brazilian generation companies in 2004 totaled 2,879 GWh, an increase of 8.9% compared to the 2,644 GWh generated in 2003, and an increase of 19.9% compared to the 2,204 GWh generated in 2002.

**EDP Lajeado**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In late 1997, Energias do Brasil formed a consortium with three Brazilian distribution companies that were awarded a 35-year concession to build a dam and operate a hydroelectric power plant in Lajeado, Brazil. We own 14.36% of the shares and 27.65% of the voting rights in Investco, the company that operates the plant. EDP Lajeado owns the right to sell 27.37% of the energy generated by the Lajeado hydroelectric power plant. Of the total energy generated, 24.75% can be freely traded with other electricity market agents, while the remaining energy must be sold at regulated prices to distribution companies. The Lajeado hydroelectric power plant began full operation in November 2002, following the completion and commissioning of its fifth unit, and has an installed capacity of 902.5 MW. The plant produced 4,320 GWh in 2004.

On December 31, 2004, Investco did not redeem part of the class R shares from Eletrobras scheduled to be redeemed at that time because it did not have sufficient retained results from previous years as required under Brazilian law. Discussions are under

## **Table of Contents**

way between Investco and Eletrobrás in order to find alternatives to resolve the situation. On December 31, 2004, EDP Lajeado recognized a liability and an asset, each amounting to 103.5 million reais ( 28.6 million on that date), relating to its proportional stake of the shares that were not redeemed by Investco.

With regard to EDP Lajeado, Energias do Brasil recorded a provision of 90 million reais ( 26 million, as recorded in our consolidated accounts based on the average exchange rate during 2003) in 2003. Energias do Brasil's trading company, Enertrade, entered into a PPA to acquire electricity produced by the Lajeado plant and entered into PPAs with Energias do Brasil's distribution companies with respect to such electricity. At the time these PPAs were entered into, the electricity price permitted under tariff regulations was higher than under regulations subsequently issued by ANEEL, but before ANEEL's approval of the PPAs. Enertrade contested ANEEL's decision and obtained an injunction permitting it to charge prices set forth in the PPAs until there is a decision on the merits. However, Energias do Brasil's distribution companies have not yet obtained such an injunction despite contesting ANEEL's decision and are, therefore, prohibited from passing on to customers the prices in the PPAs. Given the current situation, we have recorded a provision for future losses.

### **Couto Magalhães**

In November 2001, a consortium 49%-owned by Energias do Brasil and 51% owned by Grupo Rede was awarded a concession to build and operate a 150 MW hydroelectric power plant on the Araguaia River in Brazil, the Couto Magalhães power plant. The construction of the project was expected to start in 2003 and its operations during 2006. The project was interrupted due to additional environmental requests by regulators that were not agreed to in the original concession contract, which led to increasing development costs and postponing the start-up of construction, as well as plant operations. These requests negatively impact the economic viability of the project. The consortium has informally requested rescission by the regulator of the concession contract and is now waiting for a formal response.

### **Peixe Angical**

In June 2001, a consortium 95%-owned by Energias do Brasil and 5%-owned by Grupo Rede was awarded a concession to build and operate a 452 MW hydroelectric power plant on the Tocantins River in Brazil, the Peixe Angical power plant. The annual concession rent is 6.8 million reais ( 2.5 million) for 29 years starting in the seventh year of the 35-year concession. After a one-year suspension, construction of the plant was reinitiated in October 2003, following the completion of an agreement between us and Eletrobrás and BNDES. The agreement included an equity participation of 40% of Furnas and funding of 670 million reais ( 246 million) approved by BNDES, reducing the amount to be supported by us. At the end of 2004, we had invested 700.1 million reais ( 193.7 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) in this project. Plant operations are planned to begin in 2006.

### **Fafen**

The Fafen thermoelectric plant is located in the Bahia state of Brazil and was developed by Energias do Brasil in a joint venture with Petrobrás Petróleo Brasileiro S.A., or Petrobrás, with 80% owned by Energias do Brasil and 20% owned by Petrobrás. The original aim of the venture was to construct a cogeneration plant that was to supply electricity and steam to the Petrobrás fertilizer plant. Initially, during the early stage of investment in this project, Energias do Brasil expected to develop a wider program that would have included several thermoelectric projects, pursuant to the rules of the Brazilian Government Thermoelectric Program. However, the development of additional thermal power plants was suspended, mainly due to a delay in regulation and the subsequent awareness of higher risks associated with investments in thermoelectric plants in Brazil.



In December 2003, Energias do Brasil recorded a 139 million reais ( 40 million, as recorded in our consolidated accounts based on the average exchange rate during 2003) impairment to this investment due to the unlikelihood of Fafen selling electricity at prices equivalent to the normative value for thermal plants, i.e., the regulated tariff for electricity from thermal plants, due to regulatory complications in connection with the relevant PPA.

## **Table of Contents**

On December 17, 2004, Energias do Brasil signed a sale and purchase agreement with Petrobrás to sell its 80% shareholding in Fafen for 96 million reais ( \$ 27 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate). At the end of 2004, the total investment undertaken by Energias do Brasil, net of accumulated results, amounted to 243 million reais ( \$ 67 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate). Due to the above-mentioned 139 million reais impairment taken in 2003, the net impact of this transaction in Energias do Brasil 's 2004 results was 8 million reais ( \$ 2 million, as recorded in our consolidated accounts based on the average exchange rate during 2004) loss.

We currently consider the regulatory conditions associated with the development of thermoelectric projects to have unacceptable levels of risk and uncertainty and, as a result, we made the decision to divest in our stake in Fafen. Given the current regulatory framework in the Brazilian electricity sector, our strategy for the electricity generation activity in this geographical area does not include the development of new thermoelectric projects.

## **Generation by Escelsa**

Escelsa has a concession for six hydroelectric power plants, with a total operating installed capacity of 193.5 MW. These plants are subject to a concession contract signed in 1995. Escelsa is restructuring its generation activities to comply with the New Electricity Law. In addition, Escelsa indirectly controls Castelo Energética S.A., or CESA, which operates two small hydroelectric plants, Viçosa Plant, with installed capacity of 4.5 MW, and the Paraíso I Plant, with installed capacity of 21.6 MW.

## **Generation by Enersul**

Enersul has a concession for four hydroelectric plants and an authorization for three diesel-powered thermoelectric plants, with a total installed power output capacity of 44.6 MW. The hydroelectric plants are subject to Enersul 's concession contract signed in 1997. Enersul is restructuring its generation activities to comply with the New Electricity Law. Enersul also holds a concession for control of the Costa Rica PCH, with 16 MW of installed capacity.

## **Competition**

Our generation companies compete in the regulated contract market through auctions for the purchase of electricity for supply to the electricity distributors in the interconnected system. In addition, in the regulated contract market, our generation companies compete by submitting proposals in auctions for new concessions. The winning proposal secures a concession contract and a contract for the sale of electricity for a term of 15 to 30 years.

In the free market, the sale of electricity occurs by negotiation, where prices and conditions are freely agreed upon by the parties. In this free environment, competition exists between generation concessionaires and permit-holders, traders and electricity importers.

## **DISTRIBUTION**

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our principal Brazilian activity is electricity distribution, which represented 89.0% of our total net revenues (before intercompany eliminations) in 2004. In 2004, our Brazilian electricity distribution companies purchased 19,555 GWh, 4.8% less than the 20,535 purchased in 2003. In 2004, our distribution companies in Brazil served more than 2.9 million customers, distributed 22,396 GWh of electricity and had revenue of 3,712 million reais ( 1,023 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate).

Company	Year Ended December 31, 2004			
	Customers (millions)	GWh Distributed	Revenue (thousands of reais)	Revenue (thousands of euros) <sup>(1)</sup>
Bandeirante	1.3	12,189	1,951	538
Escelsa	1.0	7,178	1,060	292
Enersul	0.6	3,028	701	193
<b>Total</b>	<b>2.9</b>	<b>22,396</b>	<b>3,712</b>	<b>1,023</b>

<sup>(1)</sup> As recorded in our consolidated accounts based on the average exchange rate during 2004.

## **Table of Contents**

Electricity distribution services are provided to a market that is divided into captive customers, who acquire electricity provided by the distributor and pay for their use of the network, and network service customers, who choose a different electricity supplier and pay only for the use of the distribution network. Our Brazilian electricity distribution companies' captive customers are classified into five main categories: industrial, residential, commercial, rural and others (which include governmental institutions and public services).

In 2004, residential customers accounted for 25.9% of the total volume of electricity sold by Bandeirante, 22.4% of the total volume of electricity sold by Escelsa and 32.3% of the total volume of electricity sold by Enersul.

In 2004, industrial customers accounted for 49.4% of the total volume of electricity sold by Bandeirante, 47.0% of the electricity sold by Escelsa and 20.5% of the electricity sold by Enersul. Some of the customers who qualified as potentially free opted to become free consumers. Some of these free consumers invested in their own production of electricity, which accounts for the decrease in the volume of electricity sold to industrial customers from 2002 to 2004. Among our Brazilian distribution companies' industrial customers, 61 are potentially free consumers, which collectively account for 10.5% of the total volume of electricity distributed by our distribution companies.

Commercial customers accounted for 14.0% of the total volume of electricity sold by Bandeirante, 14.6% of the total volume of electricity sold by Escelsa and 20.6% of the total volume of electricity sold by Enersul in 2004.

In 2004, the number of customers of our Brazilian electricity distribution companies increased by 2.6%, and the total volume of distributed electricity increased by 4.5%. The total volume of distributed electricity represents the sum of electricity sold to end customers or other distributors, and electricity that transits through the distribution networks for consumption by free consumers or delivery to other concessionaires. The growth in distributed electricity corresponded with a period of economic recovery, which also had an impact on residential consumption, particularly in the second half of 2004.

The impact from this period of economic recovery, however, was not felt uniformly throughout the concession areas of our Brazilian electricity companies:

These variations in growth are attributable to the particular characteristics of our distributors' markets, including the heavy concentrations of industry in the markets served by Bandeirante and Escelsa. The profiles of these more industrial markets also vary. Escelsa's market, for instance, is dominated by steel mills whereas Bandeirante's is characterized by broader industrial diversity.

### **Bandeirante**

Energias do Brasil currently holds a 96.5% stake in the share capital of Bandeirante, a distribution company in the Brazilian state of São Paulo that, in 2004, had approximately 1.3 million customers and served a population of approximately 4.4 million. Bandeirante's concession area is located in a region characterized by a high concentration of industry and a strong business presence. Bandeirante's net revenues represented 53% of the total net revenues of our Brazilian electricity distribution companies in 2004. Following the corporate reorganization referred to above, Energias do Brasil will hold 100% of the share capital of Bandeirante.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In 2004, Bandeirante sold 8,812 GWh, a 7.6% decrease from 2003, primarily due to consumption decreases in the industrial segment. Consumption in the residential segment represented 25.9% of total sales volume, an increase of 7.1% from 2003. Consumption in the industrial segment represented 49.4% of total sales volume, a decrease of 16.7% from 2003, reflecting the loss of

## **Table of Contents**

liberalized customers to other energy suppliers. Consumption in the commercial segment represented 14.0% of total sales volume, an increase of 4.7% from 2003. In the other segments, which represent 10.7% of total sales volume, the consumption decrease was 6.1% from 2003. Taking into account electricity distributed to liberalized customers that pay Bandeirante a fee for use of its distribution grid, Bandeirante distributed 12,189 GWh in 2004, a 7.1% increase from 2003.

In 2004, Bandeirante made capital expenditures of 119.9 million reais ( 33.2 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) with a focus on modernization, customer service, improvement of the network's operational conditions in expanding regions and increases in the electricity grid's operational flexibility. As part of a program of modernization, 42.5 million reais ( 11.8 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) was spent in 2004, including expenditures relating to a new operations center and in the new commercial information system.

At the end of September 2003, the company issued new promissory notes in amount of 180 million reais ( 53 million at the time of the issue) to refinance the notes issued in March 2003.

At the end of 2003, Bandeirante's board of directors approved a long-term loan of U.S.\$100 million from the Inter-American Development Bank to finance the expansion of the distribution grid and to improve the general quality of services.

On October 23, 2003, Bandeirante's tariffs were adjusted as part of a periodic tariff review resulting in an increase of 18.08% over the period from 2004-2008. On October 22, 2004, ANEEL retroactively amended this tariff increase from 18.08% to 10.51%. Despite the provisional status of this review (ANEEL will definitively decide the asset base and tariff impact by October 2005), we elected to record the retroactive effects of this measure (covering the period from October 23, 2003 through October 23, 2004) in our financial statements for the third quarter of 2004. The impact of this adjustment on Bandeirante's results before taxes in 2004 was to be approximately 104 million reais ( 29 million, as recorded in our consolidated accounts based on the average exchange rate during 2004) and the total impact on EDP's net income in 2004 was approximately 66 million reais ( 18 million, as recorded in our consolidated accounts based on the average exchange rate during 2004).

On October 22, 2004, ANEEL also authorized Bandeirante to increase electricity tariffs for the one-year period commencing October 23, 2004 by an average of 15.95% from the new tariff. In practical terms, this represents an 11.4% increase on the average tariff charged by Bandeirante from October 23, 2004 through October 22, 2005.

In order to improve productivity, Bandeirante has been encouraging its employees to adopt procedures that build a creative and innovative culture that is focused on results and responsive to customers and the market. In 2004, Bandeirante reduced its workforce to 1,202 employees, achieving a customer per employee ratio of 1,059-to-1.

## **Escelsa**

EDP and its subsidiaries currently own 54.76% of Escelsa, a distribution company in the Espírito Santo state of Brazil that, in 2004, had approximately one million customers and served a population of approximately 3.1 million in an area that covers approximately 90% of the total area of the state. Escelsa's net revenues represented 29% of the total net revenues of our Brazilian electricity distribution companies in 2004. Following the corporate reorganization, Energias do Brasil will hold 100% of Escelsa.

In September 2002, a lawsuit with GTD Participações, S.A., or GTD, a Brazilian company, received a favorable decision on the merits in our favor. This decision, however, is subject to an appeal to the High State Court of Rio de Janeiro, which has not yet been decided. Previously, a shareholders' agreement with GTD that provided for joint control of Escelsa was in force. The lawsuit was filed by GTD when it contested the termination of this shareholders' agreement. GTD attempted to suspend our rights as controlling shareholder, but the judiciary denied this request. We convened an extraordinary shareholders' meeting of Escelsa in September 2002 at which we gained control of Escelsa, which control had previously been shared jointly with GTD. In October 2002, we took over the management of Escelsa and appointed new executive officers. Since that time, we have fully consolidated Escelsa. Following the

---

**Table of Contents**

decision of the Lower Court of Rio de Janeiro, GTD filed an additional lawsuit in the Federal Court of Rio de Janeiro with a similar complaint, but this time against Brazilian Union and Eletrobras as well, on which no ruling has yet been made.

We and Energias do Brasil entered into agreements with certain minority shareholders of Escelsa (including GTD) and Enersul on April 7, 2005, which we refer to as the minority shareholders agreements. Under the minority shareholders agreements, we and Energias do Brasil agreed to extend rights to minority shareholders that are a party to those agreements that, subject to certain conditions, may be extended to all minority shareholders of Bandeirante, Escelsa, Enersul and IVEN that became our shareholders as a result of the corporate reorganization. These rights will not be extended to shareholders outside of Brazil in jurisdictions where the offering of such rights would be illegal or require registration or qualification under any non-Brazilian law, including the Securities Act. These rights are not extended into the United States or to U.S. persons as defined in Regulation S under the Securities Act.

The electricity required by Escelsa's distribution grid in 2004 totaled 8,254 GWh, an 0.84% increase from the previous year. In order to meet market demand, Escelsa's hydroelectric plants generated 1,056 GWh internally, which represents 12.8% of the electricity required. Escelsa purchased the remaining 5,646 GWh from other suppliers. In addition, 1,552 GWh produced by other generators passed through Escelsa's grid.

Escelsa's total electricity sales volume was 5,615 GWh in 2004, representing a 4.7% decrease from 2003 due mainly to decreased electricity sales volume to the industrial segment. Consumption by the residential segment represented 21.2% of the total sales volume, a decrease of 0.3% from 2003. Consumption by the industrial segment represented 44.5% of total sales volume, a decrease of 9.0% from 2003, which reflects the loss of liberalized customers to other energy suppliers. Consumption by the commercial segment represented 13.8% of the total sales volume, an increase of 2.8% from 2003. The energy supply sold to other electric utilities represented 5.4% of the total sales volume, a decrease of 4.2% from 2003. Finally, sales to other segments represented 15.1% of the total sales volume, a decrease of 3.6% from 2003. Taking into account electricity distributed to liberalized customers, which pay Escelsa a fee for use of its distribution grid, Escelsa distributed 7,178 GWh in 2004, a 0.13% decrease from 2003.

Every three years, Escelsa's tariffs are reviewed according to its concession contract for the purpose of reassessing the fair return on capital employed. In August 2004, ANEEL reduced Escelsa's final regulatory remuneration base figure, used for the 2001 revision, from 980.0 million reais ( 359.8 million) to 796.6 million reais ( 292.5 million). With this new base amount, the 2001 adjustment rate of 19.9% was reduced to 17.8%. This reduction, when applied to sales that occurred in the period from August 2001 to August 2004, resulted in a 56.7 million reais ( 15.6 million, as recorded in our consolidated accounts based on the average exchange rate during 2004) reduction in the tariffs for the period of August 7, 2004 to August 6, 2005 and a 5.1% decrease in the adjustment rate applied in 2004. The effect on this reduction was recognized in 2004 by recognizing a charge to revenues of 11.2 million reais ( 3.1 million, as recorded in our consolidated accounts based on the average exchange rate during 2004), a non-operating expense of 35.8 million reais ( 9.9 million, as recorded in our consolidated accounts based on the average exchange rate during 2004) and a financial expense of 9.7 million reais ( 2.7 million, as recorded in our consolidated accounts based on the average exchange rate during 2004). As a result, the average revision of Escelsa's tariffs in August 2004 (as defined on a provisional basis) was approximately 5.0%, representing the net effect of a 6.3% repositioning increase, an additional 3.7% increase relating to the *Conta de Variação de Valores de Itens da Parcela A*, an account for non-controllable tariff cost adjustments, or CVA, and other factors and a 5.1% decrease to offset the effects of the reduction of the 2001 regulatory remuneration base amount. In August 2005, ANEEL approved Escelsa's final average 2004 tariff increase, amending the previous repositioning increase from 6.3% to 8.6%. As a result and within the scope of the 2005 annual tariff adjustments, ANEEL granted Escelsa a 6.9% average tariff increase starting August 7, 2005.

Escelsa's 920.9 million reais ( 338.1 million) regulatory remuneration base, used for the 2004 tariff revision, is still provisional and ANEEL is expected to review it by the time of the next adjustment.



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In 2004, Escelsa had capital expenditures of 108.6 million reais ( 30.0 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate), of which 64.4 million reais ( 17.8 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) were technical costs related to the expansion and improvement of the distribution grids, new substations and company modernization. The remaining 44.2 million reais ( 12.2 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) were financial costs related to the expenditures capitalized in Escelsa's assets.

## **Table of Contents**

Escelsa's workforce totaled 1,231 employees at the end of 2004, 5.7% less than in 2003. Escelsa continues to increase the customers per employee ratio, reaching 799-to-1 in 2004 from 742-to-1 in 2003, an improvement of 7.7%.

## **Enersul**

EDP and its subsidiaries indirectly hold a controlling stake in Enersul, a distribution company in the Mato Grosso do Sul state of Brazil, that, in 2004, had approximately 640,000 customers and served a population of approximately 2.1 million in an area that covers approximately 92% of the total area of the state. Enersul's net revenues represented 19% of the total net revenues of our Brazilian electricity distribution companies in 2004. Following the corporate reorganization, Energias do Brasil will control 100% of Enersul.

Enersul's total energy sales volume for 2004 was 2,844 GWh, representing a 1.2% increase from 2003. Sales to the residential segment represented 32.1% of the total sales volume, an increase of 4.6% from 2003. Sales to the industrial segment represented 20.4% of the total sales volume, a decrease of 11.4% from 2003. Sales to the commercial segment represented 20.6% of the total sales volume, an increase of 6.8% from 2003. The energy supply sold to other electric utility companies represented 0.4% of the total sales volume, a decrease of 60.3% from 2003. Finally, sales to other segments represented 26.6% of the total sales volume, an increase of 7.0% from 2003. Enersul had 639,751 customers at the end of 2004, an increase of 4.2% compared to 2003. Taking into account electricity distributed to liberalized customers, which pay Enersul a fee for use of its distribution grid, Enersul distributed 3,028 GWh in 2004, a 6.0% increase from 2003.

In April 2003, ANEEL approved a tariff increase for Enersul of 42.26% as part of a periodic tariff review. Of this amount, 32.59% has already been applied to the current tariff and the remainder, 9.67%, will be added to the tariff over the years from 2004 to the next review in 2007. In April 2004, in addition to the annual adjustment and the application of the first deferred installment of the 2003 revision, totaling 17.02%, ANEEL raised the initial rate for Enersul's 2003 tariff revision from 42.46% to 43.59% due to the company's recognition of adjustments to its operating costs. In April 2005, ANEEL issued a final determination regarding Enersul's revision for 2003, including an increase of the regulatory remuneration base amount from 751.9 million reais (276.1 million) to 781.5 million reais (286.9 million), resulting in a further increase of the revision rate for 2003 from 43.59% to 50.81%. As a result, Enersul's 2004 tariff adjustment totaled 20.7%, consisting of 14.8% for the basic tariff adjustment rate, 2.5% for the final 2003 tariff revision, 2.7% relating to the CVA parcels and 0.7% for financial adjustments.

In 2004, Enersul had capital expenditures of 93.7 million reais (25.9 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate) focused on modernizing, improving and expanding the company's distribution grid. In 2003, Enersul wrote off 22 million reais (7 million at the time of the write-off) related to the market value of Campo Grande's gas turbine acquired in 2001, as Enersul terminated this project and decided to sell the turbine. In September 2004, Enersul sold Campo Grande gas turbine for a total amount of 43 million reais (12 million at the time of the sale) with capital loss of 9 million reais (3 million, as recorded in our consolidated accounts based on the 2004 year-end exchange rate).

Although at the end of 2004, Enersul's workforce was 898 employees 4.4% less than in 2003, the company was able to improve its ratio of customers to employees to 712-to-1 in 2004 from 653-to-1 in 2003.

## **Competition**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The electricity distribution network operates as a legal monopoly, and services are compensated by the tariff for use of the distribution system, or TUSD. Thus, clients located in the concession areas of our electricity distribution companies, both captive and free, must use our distribution network to gain access to electricity, paying our distribution companies through the TUSD.

### **TRADING**

Our Brazilian energy trading operations, which focus primarily on serving free consumers both inside and outside of the concession areas of our Brazilian electricity distribution companies, are conducted by Enertrade.

**Table of Contents**

Free consumers are certain industries and other large customers that are permitted under current Brazilian regulations to choose their electricity supplier in the free market. Enertrade manages contacts between our Brazilian generation and distribution businesses and engages in electricity trading. In addition, Enertrade seeks to capture business from liberalized clients that move away from our distribution companies as sources of supply and sell to other liberalized clients. Since the New Electricity Law provides that liberalized clients may only purchase electricity from generators or traders, we expect that the shift of these clients away from our distribution companies will continue.

In 2004, Enertrade traded electricity with our companies and with the companies of the free market. The volume of electricity sold by Enertrade in 2004 totaled 4,849 GWh, including transactions with related parties, representing an increase of 77% over the 2,737 GWh sold in 2003 and an increase of 282% over the 1,270 GWh sold in 2002. Enertrade purchased 1,073 GWh from EDP Lajeado in 2004, the same amount purchased in 2003. The average prices of energy sold and purchased by Enertrade in 2004 were, respectively, 68.25 reais per MWh and 55.76 reais per MWh.

With respect to our Brazilian generation assets, Enertrade participates in auctions held by the Electricity Trading Board (*Câmara de Comercialização de Energia Elétrica*), or CCEE, for the sale of surplus electricity generated by our Brazilian generation assets, and purchases electricity required to cover insufficient reserves.

With respect to the free market, Enertrade acquires new customers not only by seeking out the customers of our distribution companies who wish to migrate to the free market, but also by seeking potentially free consumers outside our distribution concession areas. In 2004, there was significant demand from large customers seeking electricity in the free market.

The following table shows the volume of electricity traded by Enertrade during the periods indicated.

	2002	2003	2004
	(in GWh)		
Third parties	1,270	2,272	2,468
Companies of our Brazilian group		465	2,381

**Competition**

Enertrade, and other electricity trading companies, compete for the acquisition of electricity from various sources, and there is no restriction applicable to the purchase of electricity from generation companies that belong to the same economic group. Trading companies also compete in the trading and intermediation of the sale of electricity to free consumers. Our main trading competitors are AES Infoenergy Ltda., CPFL Comercialização Brasil S.A., Delta Comercializadora de Energia Ltda. and NCEnergia S.A.

**RELATED ACTIVITIES**

The following is a description of our companies that engage in other activities:

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Energest. The management of our existing and future generation assets will be consolidated in this company following the restructuring of the vertical organization of our operations.

Enercorp. This company holds the records of feasibility studies for certain generation ventures, and was merged into Energest during 2005.

ESC 90. This company is a cable TV service concessionaire that operates in the Cities of Vitória and Vila Velha, both in the State of Espírito Santo. ESC 90 billed 24.9 million reais in services for 2004.

## **Table of Contents**

Escelsapar. This company performs information technology and internet services exclusively for companies of our group.

### **Ampla, formerly CERJ**

In 1996, we formed a consortium with Chilectra and Endesa that acquired approximately 70% of the stock of Companhia de Eletricidade do Rio de Janeiro, S.A., or CERJ, an electricity distribution company in the Rio de Janeiro state of Brazil. During 2004, CERJ changed its name to Ampla. EDP, S.A. currently owns 7.70% of Ampla, reflecting reductions in our stake as a result of capital increases in which we did not participate.

## **REGULATION**

### **Legal and regulatory framework**

The Brazilian Constitution provides that the development, use and sale of electricity may be undertaken directly by the federal government or indirectly through the granting of concessions, permissions and authorizations. Historically, the Brazilian electricity industry has been dominated by generation, transmission and distribution concessionaires controlled by the federal and state governments. In recent years, the Brazilian government has taken a number of measures to reform the electricity industry. Generally speaking, these measures have been taken with a view toward increasing the role of private investment and eliminating existing barriers to foreign investment, thus increasing overall competition in the electricity industry.

Initiated in 1995, the reform carried out in the energy industry established the rules for the execution of concession agreements between concessionaires and the Brazilian government, the requirement of a public bidding process for the granting of concessions related to energy facilities and services and competition in generation activity, following a transition period to a competitive market foreseen at that time. Due to difficulties faced during the implementation of these reforms, combined with an aversion to risk caused by the rationing program that occurred in 2001, the current Brazilian government launched a new reform in the energy industry with a view toward securing the future supply of electricity and reasonable tariffs.

In March 2004, the Brazilian government enacted the New Electricity Law that significantly changed the regulatory structure of the Brazilian energy sector. The New Electricity Law is intended to reform the Brazilian electricity market in order to provide incentives to private and public entities to build and maintain the country's generation capacity and to assure the supply of electricity within Brazil at low tariffs through competitive electricity public auctions. Additionally, it significantly expanded the oversight of the federal government, through the MME, over the entire electricity sector, through changes in planning criteria, in the forms of commercialization and in the role of the current sector agents, and mainly by granting it responsibilities previously given to ANEEL (an independent federal agency that regulates the electricity industry).

The New Electricity Law has been supplemented by subsequent decrees as of May 2004, and is subject to further amendment through regulations issued by ANEEL and MME. The constitutionality of the New Electricity Law is currently being challenged in the Brazilian Supreme Court. It is expected that the Brazilian Supreme Court will decide in favor of the constitutionality of the new law.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Following the adoption of the New Electricity Law, the MME has taken over certain duties that were previously the responsibility of ANEEL, including the drafting of guidelines governing the award of concessions and the issuance of directives governing the bidding process for the construction and operation of hydroelectric plants. The MME may, at its discretion, however, delegate such tasks to ANEEL. ANEEL's primary responsibility now is to regulate and supervise the electricity industry in line with the policy to be dictated by the MME and to respond to matters that are delegated to it by the federal government.

### **The New Electricity Law**

The New Electricity Law introduced material changes to the regulation of the Brazilian power industry, in order to provide incentives to private and public entities to build and maintain the country's generation capacity and to assure the supply of electricity

## **Table of Contents**

within Brazil at low tariffs through competitive electricity public auctions. The key features of the New Electricity Law include:

the creation of a parallel environment for the trading of electricity, with (i) one market for the purchase of electricity destined for distribution companies, called the regulated contracting market, operated through electricity purchase auctions; and (ii) another market based on competition for the generators, free consumers and electricity trading companies, called the free contracting market;

a requirement that distribution companies purchase electricity sufficient to satisfy 100% of demand;

the creation of an electricity reserve for all electricity traded through contracts;

restrictions on certain activities of electricity distribution companies to ensure that they focus only on their core business, to guarantee more efficient and reliable services to their customers;

restrictions on self-dealing to encourage electricity distribution companies to purchase electricity at lower prices rather than buying electricity from related parties;

continued compliance with contracts executed prior to the New Electricity Law, in order to provide stability to transactions carried out before its enactment;

a prohibition against sales of electricity by distributors to free consumers at non-regulated prices; and

a prohibition against distributors engaging directly in electricity generation and transmission operations.

In addition, the New Electricity Law excludes Eletrobrás and its subsidiaries from the National Privatization Plan, which was created by the Brazilian government in 1990 to promote the privatization of state-owned companies. Although the New Electricity Law is already in effect, as are the directives described below, several important aspects of this model have yet to be regulated.

### **Ownership limitations**

In 2000, ANEEL established new limits on the concentration of certain services and activities within the electricity industry. Under these limits, with the exception of companies participating in the National Privatization Program (which need only comply with such limits once their final corporate restructuring is accomplished) no electricity industry company (including both its controlling and controlled companies) may (i) own more than 20% of Brazil's installed capacity, 25% of the installed capacity of the South/Southeast/Central-West region or 35% of the installed capacity of the North/Northeast region, except if such percentage corresponds to the installed capacity of a single generation plant, (ii) own more than 20% of Brazil's distribution market, 25% of the South/Southeast/Central-West distribution market or 35% of the North/Northeast distribution market, except in the event of an increase in the distribution of energy exceeding the national or regional growth rates or (iii) own more than 20% of Brazil's trading market with final consumers, 20% of Brazil's trading market with non-final consumers or 25% of the sum of the above percentages.



**Distribution tariffs**

Distribution tariff rates are subject to review by ANEEL, which has the authority to adjust and review tariffs in response to changes in energy purchase costs and market conditions. When adjusting distribution tariffs, ANEEL divides the costs of distribution companies between (i) costs that are not the under control of the distributor, or non-manageable costs, and (ii) costs that are under the control of distributors, or manageable costs. The readjustment of tariffs is based on a formula that takes into account the division of costs between the two categories.

Non-manageable costs include, among others, the following:

costs of electricity purchased for resale pursuant to Initial Supply Contracts;

## **Table of Contents**

costs of electricity purchased from Itaipu;

costs of electricity purchased pursuant to bilateral agreements that are freely negotiated between parties; and

certain other charges for the transmission and distribution systems.

Manageable costs are determined by subtracting all the non-manageable costs from the distribution company's revenues.

Each distribution company's concession agreement provides for an annual readjustment of tariffs. In general, non-manageable costs are fully passed through to consumers by the tariff. Manageable costs, however, are restated for inflation in accordance with the IGP-M index. After the initial three to five years following a periodic tariff review, depending on each concession agreement (Escelsa, 3 years; Bandeirante, 4 years; Enersul, 5 years), the IGP-M index must be reduced by a factor determined by ANEEL in order for distribution companies to share with their consumers gains of productivity, the so-called X Factor.

The X Factor is determined by ANEEL in accordance with three components: (i) expected gains of productivity from increase in scale; (ii) consumers evaluation through ANEEL's Consumer Satisfaction Index; and (iii) the cost of the labor force. Tariffs are readjusted annually to reflect the effects of inflation on tariffs. Every period, as noted in the relevant concession agreement, there is a periodic review of the tariffs rates (*revisão tarifária periódica*) in which the tariff is reviewed with a view toward assuring the necessary revenues to cover efficient operational costs and adequate remuneration of prudent investments. In addition, concessionaires of distribution are entitled to extraordinary review of tariffs (*revisão extraordinária*), on a case-by-case basis, to ensure the financial equilibrium of the concession and to compensate for unpredictable costs, including taxes, which significantly change their cost structure.

### **Impact of the New Electricity Law on our Brazilian operations**

The impact of the New Electricity Law on our Brazilian operations depends on the complete implementation of the rules. In the case of our Brazilian generation assets, it is not expected to have a major impact because most of our companies have already signed PPAs that have been approved by ANEEL, leaving only a limited exposure in the new environment.

Regarding our distribution assets, the main risks relate to the forecast of the energy consumption for the five-year period and the potential exposure to the regulated contracting environment. The distribution companies will participate in electricity auctions that could be settled up to five years prior to the beginning of the supply of electricity to their consumers. However, the regulations establish limits on the transfer of electricity purchasing costs to final customers, where the distribution companies assume the financial risk on deviations to the estimated demand.

### **The auction process under the New Electricity Law**

As of 2004, with the implementation of the new model created by the New Electricity Law, distributors may only purchase electricity through auctions in the regulated contracting market. Currently, electricity purchase contracts in the regulated contracting market are revised annually

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

according to the Amplified Consumer Price Index, or IPCA, on dates corresponding with our distributors' tariff adjustments.

In the free contracting market, prices and tenors are freely negotiated between the parties. In the regulated contracting market, prices are set in auctions organized by the CCEE. The electricity purchased in these auctions is based on the projected electricity needs of the distributors. Generators that sell electricity in the regulated contracting market auctions enter into contracts with all of the distributors in the interconnected system that participated in the auction.

## **Table of Contents**

As the quantities of electricity purchased under initial contracts are reduced during the transition to the New Electricity Law model and our electricity needs increase, we must purchase more electricity through the auctions in the regulated contracting market. Under the New Electricity Law, distribution companies cannot transfer costs to customers for electricity purchases that exceed 103% of demand, as adjusted in accordance with the applicable regulations. Our success in this process will therefore be reflected in our margins related to the service provided for the use of the distribution grid to the extent that the full allocation of our electricity purchasing costs will depend upon our accurate projection of demand.

## **TELECOMMUNICATIONS**

### **OVERVIEW**

In March 2000, we announced a strategic decision to pursue the telecommunications business. This decision provided us with an opportunity to leverage our existing resources and expertise and to build on our initiatives in the telecommunications and information technology businesses. In Portugal, our telecommunications and related activities are conducted by ONI. The current shareholder structure in ONI is as follows: EDP 56.607%, BCP 23.062%, Brisa S.A. 17.176%, GALP Serviços 3.114% and GALP Energia 0.041%.

In 2004, ONI had revenues of 325.4 million, of which 10.0 million was generated from services provided to the EDP Group, and an operating loss of 45.9 million compared with, in 2003, revenues of 331.1 million, of which 15.3 million was generated from services provided to the EDP Group, and an operating loss of 68.7 million.

In the first quarter of 2003, ONI revised its organizational structure to better achieve the goals and strategies defined for its business segments. This process was concluded in the fourth quarter of 2003, by the merger of ONI Grandes Redes, ONI Sistemas de Informação, ONI One, ONI Solutions, Shopping Direct and Brisatel into ONI Telecom.

On July 14, 2005, ONI announced that it had signed an agreement to sell its entire stake of Comunitel (wireline Spain) to Tele2 Telecommunication Services, S.L. for 215 million. The successful completion of this transaction will enable ONI to focus on its wireline Portugal business, while also allowing ONI to significantly reduce its financial debt. Following this transaction, ONI's businesses are now focused on wireline Portugal.

Wireline Portugal comprises:

ONI Telecom, a wholly-owned subsidiary of ONI, which is a licensed telecommunications company that develops and provides wireline communication services to corporate and residential clients and also serves as a carrier's carrier, selling capacity to other communications companies.

uCall, a 60%-owned subsidiary of ONI offering call center services, which fulfills ONI's needs in back office support, as well as providing services to companies outside the ONI group.



## **Table of Contents**

As of December 31, 2004, ONI had approximately 1,101 employees, with 56% based in wireline Portugal and 44% based in wireline Spain.

## **TELECOMMUNICATIONS MARKET**

In accordance with EU requirements, the Portuguese government has taken significant steps during the past several years to open the telecommunications market to competition. In 1997, Portuguese regulations took effect that permitted us and others to install and provide infrastructure for telecommunications services. On January 1, 2000, Portugal opened the entire telecommunications sector to competition.

As of January 1, 2001, alternative carriers have been permitted to offer local and regional indirect calls, and as of June 30, 2001, customers have been allowed to keep their existing phone numbers while changing to a different access operator. Although number portability now exists in Portugal, ONI believes that some additional technical issues need to be addressed by ICP-Autoridade Nacional de Comunicações, or ICP-ANACOM, to make number portability a more efficient process. ICP-ANACOM is expected to pass a regulation relating to these issues following a consultation process carried out in March 2004.

In January 2002, liberalization of the telecommunications sector advanced a step further with the long promised unbundling of the local loop (ULL). However, technical and administrative restrictions by the historical monopoly telecommunications operator Portugal Telecom, or PT, did not allow for widespread use of this technology, effectively preventing the new operators from exploiting this new opportunity.

## **COMPETITION**

In the fixed line business area, ONI is competing for market share primarily with PT, which historically held a monopoly on fixed line services in Portugal. Currently, in the first stages of liberalization of this area, PT continues to hold a dominant position in this market. Other fixed line operators in Portugal include Novis, controlled by Sonae.Com and France Telecom, and Jazztel. Based on data released by ICP-ANACOM, in the fourth quarter of 2004 new operators accounted for 18.0% of the total minutes in the fixed line area.

Indirectly, fixed line operators also face strong competition from cellular telephone service providers, particularly in the voice segment. Cellular services in Portugal are currently provided by TMN, Vodafone Portugal and Optimus.

We also face significant competition in data transmission services and as an Internet Service Provider, or ISP. Numerous operators compete in these areas, including SAPO, a PT ISP, and Clix, a Sonae.Com ISP.

## **TELECOMMUNICATIONS ACTIVITIES**

### **Infrastructure**

ONI has in place an extensive infrastructure to provide telecommunications services, which includes approximately 1,300 kilometers of fiber optic cable owned by ONI and 6,000 kilometers of fiber optic cable leased to REN, EDIS and Transgás, including multiple strings, for a total of approximately 125,000 kilometers of fiber optic owned by ONI and 40,000 kilometers of fiber optic leased to EDPD, REN and Transgás. As a result, the total length of fiber optic available to ONI, in Portugal, is approximately 165,000 kilometers. ONI currently has approximately 300 points of presence, (PoPs) and 2 network central offices, in Lisbon and Porto. At the end of 2000, ONI linked its fiber optic network to Iberdrola's network, creating two new connections to Spain and adding to the existing connection with the network of Comunitel.

The incorporation of Brisatel's assets in the ONI group in October 2001 added approximately 1,300 kilometers of fiber optic cable (of which approximately 1,120 kilometers are already installed) to the fiber optic cable that we had already in place at the time. Brisatel also added 95 PoPs and two international links with RENFE, the Spanish railroad operator, which required a restructuring of ONI's PoPs to avoid unnecessary redundancy. The incorporation of Brisatel's assets in the ONI group allowed ONI to create

## **Table of Contents**

additional redundancy for the backbone connections between Lisbon and the north of the country, thereby improving the quality of the service provided to its clients.

ONI expects to increase consumer connections to its existing fiber optic backbone to provide telecommunications services. ONI has efforts underway to develop digital powerline technology and is currently conducting pilot tests.

### **Telephone and data services**

ONI Telecom commenced operations in January 2000 as a voice and data fixed-line operator concurrent with the opening of competition in Portugal. We continue to provide services in this area through ONI. ONI Telecom's initial activities were focused on fixed-line voice services for businesses and high-value customers. ONI currently expects to develop other products and services, including value-added voice services, data transmission, and integrated voice, data and video services.

In Portugal, at December 31, 2004, ONI had approximately 94,000 active clients generating demand for approximately 2.7 million minutes per day, or an aggregate of 991 million minutes in 2004 (including transit, calling cards and special services). In comparison, in 2003 ONI's fixed line operation in Portugal accounted for approximately 939 million minutes of voice traffic.

According to a report by ICP-ANACOM for the fourth quarter of 2004, ONI holds an overall market share in fixed line telephone traffic of approximately 5%, which corresponds to approximately 22% among the new fixed line operators in Portugal.

In Spain, our subsidiary Comunitel and its subsidiary Ola Internet generated approximately 2.079 million minutes of voice traffic in 2004.

### **Internet access services**

ONI has high capacity platforms to provide Internet access services and is operating as an ISP. In 2004, in Portugal ONI generated 1.1 million minutes per day for an aggregate of approximately 418 million minutes, which represents a decrease from 638 million minutes in 2003, due to a loss of clients during 2004 and also to the transfer of clients from dial-up to ADSL.

In July 2002, ONI launched an Asynchronous Digital Subscriber Line, or ADSL, product that allows high speed Internet access over regular telephone lines and that can be installed by end users over their existing telephone lines.

## **REGULATION**



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our activities in the telecommunication area subject us to a number of regulatory regimes, including licensing requirements and operating restrictions. ONI holds licenses for the establishment and operation of public telecommunications networks (ICP-05/99-RPT, granted June 14, 1999) and the provision of Fixed Telephony Service (ICP-001/99-SFT, granted August 10, 1999). ONI also holds a registration for the provision of public use telecommunications services (Register-006/99 dated January 20, 1999). ONI was awarded two licenses for the use of frequencies aimed at fixed wireless access in the 3.6-3.8 Mhz and 24.5-26.5 Ghz bands (ICP-01/99-FWA and ICP-05/99-FWA granted December 29, 1999). In 2003, ONI requested the revocation of the 3.6-3.8 Mhz band license. The difficulties of installing terminal equipment in buildings and the lack of scale, together with other technological difficulties, made the operation of a fixed wireless network difficult and uneconomical in most cases. The Portuguese telecommunications regulator has developed a public consultation process for the review of the FWA licenses regime and new tariffs have been fixed by the government with significant decreases.

Legislative and regulatory measures have been taken in recent years to change the telecommunications market in Portugal from a monopoly held by PT to a fully open and competitive market. PT operates under a concession, which granted to it the right for 30 years from March 20, 1995, renewable thereafter for successive periods of 15 years upon agreement by the government and PT, to

## **Table of Contents**

provide, among other things, domestic and international public fixed voice telephone services and leased lines and to install and operate the related basic telecommunications network in Portugal. By the end of 2002, the government released the infrastructures that constitute the basic telecommunications network from public domain and sold them to PT, pursuant to the amendment of the terms of the concession introduced by Decree law no. 31/2003, of February 17, 2003.

The EU adopted in 2002 a number of directives (known as the Review 99 Telecom package) relating to the telecommunications market, the latest of which is Directive 2002/77/CE, of September 16, 2002, that set forth the parameters for regulating telecommunications sectors in EU member countries. This package was implemented in Portugal through the Electronic Communications Law (Law no. 5/2004, of February 10, 2004), also known as Regicom. This law revoked Law no. 91/97, of August 1, 1997, as amended by Law no. 29/2002, of December 6, known as the Basic Law of Telecommunications, which had been adopted in Portugal in anticipation of the full opening of competition in the Portuguese telecommunications market. In accordance with EU Legislation, this law established the principle of telecommunications liberalization, therefore abolishing the exclusive rights of PT and provided that the Portuguese telecommunications market would be fully opened to competition as of January 1, 2000.

## **Legislative framework**

Following the revocation of the Basic Law of Telecommunications, the Electronic Communications Law now provides the legislative framework and basis for telecommunications regulation in Portugal. The Portuguese government enacted this law in order to comply with and implement a number of directives on telecommunications adopted by the EU Council of Ministers on March 7, 2002 (part of the Telecom Package). The other key elements of the framework of laws and regulations that apply to the telecommunications sector in Portugal are:

regulations to be adopted by the Portuguese telecommunications regulator to implement and give effect to different provisions of the Electronic Communications Law (provisionally, certain provisions of the regulations approved under the former Basic Law of Telecommunications have been kept in effect until the new regulations are approved);

decree laws not revoked by the Electronic Communications Law and concerning in particular the use of radio frequencies, the approval and free circulation of terminal and radio equipment and the telecommunications infrastructures in buildings regime;

directives, recommendations, and policies of the EU;

legislation establishing and defining the competencies of the *ICP-Autoridade Nacional de Comunicações*, or ICP-ANACOM, as the Portuguese telecommunications regulator and the Ministry of Public Works, Transport and Communications, or MOPTC, as the government entity with basic responsibility for telecommunications policy in Portugal; and

ICP-ANACOM determinations and regulations issued on the basis of specific powers granted by specific legislation, which follow the relevant market analysis developed in accordance with the new EU regulatory framework.

Broadly, the Electronic Communications Law introduced, among other things, (i) new rules on access to telecommunications infrastructure, (ii) increases of administrative fines and (iii) the reinforcement of the powers and autonomy of ICP-ANACOM, namely by granting it powers to approve and publish legally binding regulations, to define the relevant telecom markets and to identify companies with significant market power.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Due to the approval of the Electronic Communications Law, which entirely superseded the Basic Law of Telecommunications and almost all previous ancillary legislation, different regulations have been passed, including the implementation of a new municipal tax for rights of way, the access to the PT network, the definition of the relevant markets to be subject to ex-ante regulation, and the identification of companies with significant market power and their inherent obligations.

## **Table of Contents**

Extensive regulation has been adopted on issues like ULL (unbundling of the local loop), mobile and fixed network termination fees and ADSL wholesale offers. More regulation is expected in 2005 concerning, among other things, the implementation of new wholesale offers by PT, in particular the interconnection flat rate and the telephone access resale wholesale offer, and the review of current procedures and administrative charges related to carrier pre-selection and number portability and PT's offer of leased lines.

With respect to data protection in electronic communications networks, Law no. 41/2004, of August 18, 2004, has implemented the corresponding EU directive.

## **The Portuguese regulator**

Although MOPTC retains basic responsibility for telecommunications policy in Portugal, ICP-ANACOM, acting under new statutes approved by Decree law no. 309/2001, of December 7, 2001, is allowed to act with great autonomy and is entrusted with a wide range of responsibilities regarding the regulation, supervision and representation of the telecommunications sector. The Electronic Communications Law also defines the main objectives of regulation and gives ICP-ANACOM the main competencies foreseen in the new EU legal framework.

## **Licensing and registration**

The new EU Licensing Directive prohibits any limitation on the number of new entrants in telecommunications markets, except as required to ensure an efficient use of radio frequencies. The licensing regime is based on general authorizations as opposed to individual licenses. However, it permits national regulatory authorities to make the granting of numbering and radio frequency resources subject to individual usage rights.

To facilitate implementation of the EU Licensing Directive, the Electronic Communications Law introduced a new concept regarding access to the telecommunications market. According to the relevant provision, telecommunications services normally fall under a general authorization regime (*Regime de autorização geral*). This, in turn, requires that the entities that provide telecommunications services in Portugal are obligated to (i) provide ICP-ANACOM with a summary and description of the services they intend to offer, (ii) communicate the date planned for the launch of their activity and (iii) provide certain identification elements under terms defined by ICP-ANACOM and recently published. After the provision of this information to ICP-ANACOM the companies may immediately start their activity.

If the provision of the relevant services requires individual rights of use of frequencies or numbering, these rights can only be granted through an open, transparent and non-discriminatory procedure. The specific rules applicable to this procedure will be established by ICP-ANACOM, unless it relates to services to be made available for the first time in a specific frequency band, or relates to frequencies available for the first time and involves a competitive selection between several interested parties. In cases for which the service is available for the first time, the government will be responsible for approving the relevant applicable regulations.

## **Pricing and fees**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Telecommunications operators in Portugal other than PT are free to establish the prices for their services. PT entered into a pricing convention with ICP-ANACOM and the former DGCP, the Portuguese commerce and prices Department in the Ministry of Economy, which established price caps on PT's prices for fixed telephone services (i.e., installation charges, line rental fees and prices for domestic and international telephone calls), leased lines and telex. Prices must be transparent, cost oriented and non-discriminatory and must be published in the Official Gazette.

Operators and service providers must pay administrative fees to ICP-ANACOM, established by MOPTC. The amount of these fees remains to be determined, as the relevant fees due under the Basic Law of Telecommunications are no longer applicable under the Electronic Communications Law. The granting of numbering resources will also be subject to administrative fees that are different than those under the previous legal framework. The possibility for competitive bidding or auction procedures for the allocation of numbers and frequencies is also considered in the Electronic Communications Law.

## **Table of Contents**

### **Interconnection**

Interconnection regulation is now generally regulated by the Electronic Communications Law. The basic principle is that operators are free to negotiate the technical and commercial terms and conditions applicable to interconnection agreements. However, it has also granted ICP-ANACOM a wide range of powers not only to intervene in dispute resolution or by its own initiative and to fix ex-ante conditions (including with respect to networks of new competitors, which has been recently implemented), but also to introduce certain conditions deemed necessary to modify existing interconnection agreements.

### **Internet**

At present, there is limited Portuguese and EU legislation specifically covering the provision of Internet services, apart from the general rules established by the Electronic Communications Law, although there are laws and regulations relating to certain specific aspects of Internet activities, including the use of domain names, digital signatures, electronic invoices and data protection. In addition, the EU adopted what is known as the E-Commerce Directive, which sets out basic principles for regulating electronic activities in the EU. There are also a number of pending legislative and regulatory proposals in Portugal and in the EU.

Internet advertising activities are subject to the relevant restrictions of the Portuguese Advertising Code, to Portuguese legislation applicable to home advertising and, more recently, to Decree law no. 7/2004, of January 7, 2004, or the E-Commerce Law implementing the corresponding EU e-Commerce Directive, as described below. In addition, sales through the Internet can be considered a form of retail sales and subject to Decree law no. 143/2001, of April 26, 2001, pursuant to which a consumer has the right to cancel a contract within 14 business days to 3 months, depending on the extent to which the seller has complied with the information requirements established by this decree law.

On June 8, 2000, in order to ensure the free circulation of electronically provided services, including commerce between Member States, the EU adopted the E-Commerce Directive (2000/31/EC). This Directive sets out two main principles: services electronically provided by an ISP established within a Member State are required to comply with the legal requirements of such Member State (country of origin principle); and any Member State may not, as a rule, restrict the electronic services provided from another Member State (principle of mutual recognition). Portugal has recently implemented this directive in the E-Commerce Law (approved by Decree law no. 7/2004, of January 7) and, although exceptions apply to several matters such as tax, competition, personal data, gambling activities and notarial acts, this law sets out the main rules applicable to the provision of services using Internet and online contracting.

On December 21, 1998, the EU approved a plan, known as the Action Plan, to promote safer use of the Internet by combating illegal and harmful content on global networks. While some member countries have adopted this Action Plan, to date Portugal has not.

It is also possible that cookies, or pieces of electronic information used to track demographic information and to target advertising, may become subject to increased levels of legislation limiting or prohibiting their use. The E-Commerce Law did not, however, clarify this issue.

In addition, because of the global nature of the Internet, our Internet activities may be deemed subject to the laws or regulations of other countries.

**FINANCIAL RESULTS**

As a recent entrant in the telecommunications sector, during its first five years of operations ONI has incurred significant operating costs in connection with developing and sustaining its business while, at the same time, increasing revenues as a result of its growing customer base. ONI had revenues for 2004 of 325.4 million, of which services provided to the EDP Group amounted to 10 million, and an operating loss of 45.9 million. In comparison, ONI had revenues for 2003 of 331.1 million, of which services provided to the EDP Group amounted to 15.3 million, and an operating loss of 68.7 million. ONI's 2004 operational capital expenditures for fixed line communications in Portugal and Spain were approximately 33.5 million (which excludes 20 million

## **Table of Contents**

capitalized as an intangible asset, i.e., the right to use the fiber optic leased to EDIS) compared with approximately 28.6 million in 2003. ONI's total assets at the end of 2004 were 775 million compared with 835 million at the end of 2003.

ONI's current assessment of expenditures in the telecommunications area anticipates an investment by ONI of approximately 100 million for the period 2005-2007 almost exclusively for network infrastructure and client connections and equipment, although the amount of investments may change as ONI's plans develop.

In view of the applicability of Article 35 of the Portuguese Companies Code, which requires that the shareholders' equity of a company may not be lower than 50% of its share capital (and in such case requires the company to increase its shareholders' equity to be at least two-thirds of its share capital), by the end of 2004, ONI incorporated 324.1 million of accumulated losses into its share capital and subsequently issued 24.0 million of new shares, which were subscribed through the incorporation of shareholders' loans, resulting in a new share capital of 100 million.

## **OTHER INVESTMENTS AND INTERNATIONAL ACTIVITIES**

We have a 30% shareholding in REN, the operator of Portuguese electricity transmission grid. The other shareholder of REN is the Portuguese Republic, which purchased its 70% holding in REN from us in late 2000. For more information on REN and the Portuguese transmission network, please see Portugal Transmission and Portugal Generation.

On October 26, 2004, we signed a call option agreement with IPR and IPBV for the purchase of a 20% shareholding and related shareholder loans in Turbogás and of a 26.667% shareholding and related shareholder loans in Portugal. On March 16, 2005, we exercised the call option and acquired the shareholdings and related shareholder loans for a total consideration of 51,984,977. As a result of this transaction, we now hold a shareholding of 40% in Turbogás, while IPBV holds the remaining 60%. In addition, we became a shareholder of Portugal with a 26.667% shareholding, while the other shareholder is International Power Portugal Holdings S.G.P.S., S.A. with a 73.333% shareholding. Turbogás was incorporated in 1994 with the sole purpose of carrying out the development, construction and operation of a combined-cycle gas fired power station at Tapada do Outeiro, in Portugal, with a total installed capacity of 990 MW. Presently, Turbogás sells all the energy it produces to the Portuguese PES through REN under a long-term PPA. Portugal is the entity in charge of the operation and maintenance of this power station.

We have a 10% interest in Tejo Energia, which was incorporated in October 1992 and acquired the Pego thermal power plant from us in November 1993. The other shareholders of the company are International Power (45%), Endesa Europa (35%) and EDFI (10%). The Pego plant has two coal units with an installed capacity of approximately 300MW each. Presently, Tejo Energia sells all the energy it produces to the PES through REN under a long-term PPA.

We have a direct and indirect interest of approximately 8.62% in Elcogas, S.A. (4.31% through EDP Participações, and 4.31% through Hidrocontábrico), a consortium that includes, in addition to us, Electricité de France, Endesa, Iberdrola, International Power and others. Elcogas, S.A. was formed to build and operate a 300 MW integrated gasification combined cycle plant in Puertollano, Spain. This plant burns gas obtained from the coal gasification process.

We hold a 21% interest in a consortium that indirectly owns an 80.88% interest in the capital of Empresa Eléctrica de Guatemala S.A., or EEGSA, which is an electricity distribution company in Guatemala. In 2004, EEGSA had approximately 750,000 customers, a sales volume of 3,697 GWh and a service area of 6,200 square kilometers. EEGSA is Central America's largest distribution company. In 2004, EEGSA generated



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

304.2 million in revenues and had a net income of 24.3 million. The consortium is made up of EDP, Iberdrola and Teco Energy, a Florida electric company.

We also own a 21.19% stake in CEM – Companhia de Electricidade de Macau, S.A., or CEM, the electric utility company of Macau, and have an active role in CEM's management. In 2004, CEM had approximately 200,000 customers and sold 2,093 GWh of

## **Table of Contents**

electricity. In 2004, CEM had revenues of 212.4 million and net income of 43.3 million. CEM has the concession for generation, transmission and distribution in Macau until December 2010. CEM serves a population of approximately 450,000 in an area of 28 square kilometers.

In late 1999, we formed a consortium, 60% owned by us and 40% owned by AdP-Águas de Portugal, which was chosen by the government of Cape Verde to acquire a 51% interest in Electra, for which we paid 27 million. Electra produces and distributes electricity and water in Cape Verde. In 2004, Electra produced 219 GWh of electricity, compared to 199 GWh in 2003, and distributed 147 GWh to 71,243 customers in an area of 4,030 square kilometers. Also in 2004, Electra produced 4.1 million cubic meters of water and distributed 2.8 million cubic meters of water to 25,102 customers. Electra had revenues of 31.7 million and a net loss of 4.4 million in 2004.

## **SUBSIDIARIES, AFFILIATES AND ASSOCIATED COMPANIES**

Apart from EDP Produção, EDPD, Hidrocantábrico, our Brazilian companies and ONI, we have a number of subsidiaries that provide various services to our other companies. Some of these subsidiaries also provide services to third parties. These entities contributed 91 million in revenues in 2004.

EDP Valor integrates some of our service companies with the objective of achieving cost reductions within EDP through the consolidation of resources and the centralizing of purchasing activities. Since the first quarter of 2002, EDP Valor has extended its services to EDP Produção and EDPD.

Edinfor Sistemas Informáticos, S.A. develops, operates and markets software and systems, and also provides consulting and vocational training in information technology. Edinfor holds a 100% interest in ACE-SGPS, which is a holding company for Portuguese companies that provide management, strategic and information systems consultancy, corporate turnaround and organization restructuring services and other services. Following the sale of 60% of our stake in Edinfor to LogicaCMG in April 2005, we now hold 40% in Edinfor. As a result of this partnership with LogicaCMG, we expect to be better able to focus on our core business, while maintaining the availability and security of key systems and enhancing Edinfor's growth potential. Under the terms of this sale, we may have the option to sell our remaining 40% interest in Edinfor to LogicaCMG after two years.

Affinis Serviços de Assistência e Manutenção Global, S.A. provides home services and contractor management to residential and corporate customers through a network of skilled professionals. In the residential area, Affinis offers home services including the planning, installation, maintenance and repair of electrical, gas, plumbing and structural systems and the replacement of household appliances. In the corporate area, Affinis provides technical assistance with respect to many of the services provided in the residential area.

## **Item 5. Operating and Financial Review and Prospects**

### **OVERVIEW**

#### **COMPANY OVERVIEW**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our principal business is the generation and distribution of electricity in Portugal and Spain (the Iberian Peninsula), which we consider to be, and refer to in this annual report, as our domestic market. We are also involved in activities related to our core energy business both in our domestic market, such as the distribution and supply of natural gas, and in Brazil, where we exercise control over three distribution companies and own interests in generation. In addition, we hold interests in other complementary businesses, such as an approximately 56% stake in ONI, a fixed line telecommunications operator in Portugal and Spain.

### **FACTORS IMPACTING OUR BUSINESS**

Our businesses, financial condition and operating performance have been and will continue to be primarily affected by:

the macroeconomic conditions in the countries in which we operate, which influence the overall level of demand for electricity and gas;

---

## **Table of Contents**

changes in the regulatory frameworks in the countries in which we operate, which can affect the tariffs that we are permitted to charge for electricity and gas;

our level of operating costs, which consist primarily of depreciation and amortization, fuel costs and costs of purchased electricity and gas, and wages and salaries; and

the volatility of the Brazilian real against the euro, which influences our reported results and the value of our consolidated assets and liabilities.

### **Economic factors**

The level of demand for electricity in countries in which we operate is directly related to the general level of economic activity in those countries.

Over the last decade, Portugal has experienced a stronger rate of economic growth than many other EU Member States. From 1994 through 2004, Portugal's real gross domestic product, or Portugal's GDP, grew at an average annual rate of 2.5%, as compared with an average of 2.1% for all 15 Member States of the EU. Portugal, like other European countries, was affected by a recession from 1992 through 1994. Since 1996, however, the Portuguese economy has recovered and growth in Portugal's GDP has exceeded the EU average. The structure of Portugal's economy has been undergoing significant changes, as higher value-added sectors, such as manufacturing and services, have gained in relative importance compared to lower value-added sectors, such as agriculture. In 2004, Portugal's GDP increased by about 1.0% compared to a growth rate of 1.8% in the euro zone. Portugal's GDP declined by 1.0% in Portugal in 2003 and grew by 0.4% in 2002. The slowdown in the Portuguese economy in 2003 was mainly the result of international economic factors, principally the difficulty experienced in the euro zone and North America as these areas attempted to stage economic recoveries, lower demand in Portugal and a decline in EU exports as a result of the appreciation of the euro against the U.S. dollar. In addition, budgetary restrictions in several EU countries prevented the adoption of expansionary economic policies. Despite the unfavorable macroeconomic environment, electricity consumption in Portugal grew by 6.1% in 2004, one of the fastest growing rates in the euro zone, driven by a cold winter and a particularly warm summer.

In Spain, where we currently have a 95.7% ownership stake in Hidroantabrico, GDP growth was 2.7% in 2004, compared to 2.4% in 2003 and 2.0% in 2002. In 2004, Spain had one of the highest-performing European economies, significantly above the EU average, despite the difficult international economic environment in 2004, particularly in Europe. Electricity consumption growth in the Spanish market was 4.0% during 2004, compared with growth of 5.8% in 2003.

During 2002, Brazil experienced a series of events that had a negative effect on its economy. On the international front, the troubled state of several of the major economies of Latin America, especially Argentina's default on its debt obligations and the Argentine government's decision to remove the peg of the Argentine peso to the U.S. dollar, raised fears that Argentina's economic difficulties would spread to Brazil. On the domestic front, the Brazilian economy was significantly affected by the energy rationing program implemented by the Brazilian government, the weakening of demand in Brazil and the uncertainty surrounding the results of the October 2002 presidential elections, which raised concerns over the continuity of a number of economic reforms. In 2003, Brazil experienced a positive turnaround in its economy, reflected in inflation indicators and currency exchange rates. This turnaround was largely due to improved liquidity in international financial markets, the economic growth of Brazil's main commercial partners (China, Argentina and the United States of America), adherence to the targets of inflation policy, agreement on primary surplus levels with the IMF and improvement in Brazil's trade balance, which reached U.S.\$24,800 million in 2003. In 2002, the real depreciated 52.2% against the U.S. dollar, reflecting the increased financing requirements and a decrease in the inflow of foreign capital. In 2003 and 2004, the real appreciated 18.2% and 8.7%, respectively, against the U.S. dollar, following the macroeconomic turnaround and the monetary policy implemented by the government. As a consequence, the Brazilian real reached 3.53 reais per U.S. dollar in 2002



## **Table of Contents**

compared with 2.89 reais and 2.65 reais at the end of 2003 and 2004, respectively. Brazilian GDP grew 1.93% in 2002, decreased by 0.22% in 2003 and increased again in 2004 by 4.9%.

Despite improvements in certain economic indicators and in currency exchange rates, the tight monetary policy pursued by the Brazilian government in 2003 adversely affected the domestic economy. However, in 2004, the effects of a less restrictive monetary policy began to produce results and economic growth became more visible. In September 2004, the Brazilian Central Bank began to implement a policy of increasing interest rates, since inflation indicators were not converging toward the targets set for 2005. As a result, the Brazilian economy is not expected to grow in 2005 at rates seen in 2004. According to the Brazilian Central Bank, market estimates indicate that Brazil's GDP will grow by approximately 3.3% in 2005.

### **Regulatory factors**

Since the 1990s, the policy of successive Portuguese governments has been to remove barriers to trade, privatize state-owned companies and liberalize key economic sectors, such as telecommunications, transportation and energy and power. Prior to 1988, we had a nearly complete monopoly of the electricity generation, transmission and distribution business in Portugal. Since 1988, however, competition has increased in the generation business and is expected to continue to do so during the next few years as the EU competition policy is implemented. In 1999, the regulator implemented measures to encourage competition in the distribution of electricity in Portugal, and since August 18, 2004, all consumers have been able to choose their supplier. To learn more about these measures, you should read Item 4. Information on the Company Portugal Generation Competition.

Tariffs are set by the regulator pursuant to a periodic registration of regulatory parameters. In November 2001, the regulator published the regulatory framework for the 2002-2004 regulatory period. For 2002, in nominal terms, tariffs increased across all voltage levels by an average of 2.2% from the 2001 levels. For 2003, in nominal terms, tariffs increased across all voltage levels by an average of 2.8% from the 2002 levels. In real terms, adjusted for inflation, very high-, high- and medium-voltage tariffs have declined by an average of 3.4% over the period 1999 to 2004. The tariffs for low-voltage customers also declined, in real terms, by an average of approximately 3.1% over the same period. For 2004, in nominal terms, tariffs have increased across all voltage levels by an average of 2.1% from the 2003 levels. In real terms, very high-voltage tariffs have increased 1.6% between 2003 and 2004, high-voltage tariffs remained stable, medium-voltage tariffs decreased by 0.1% and low-voltage tariffs increased 0.1%. For 2005, in nominal terms, tariffs increased across all voltage levels by an average of 2.3% from 2004 levels. In real terms, very high-voltage tariffs have decreased 2.1% between 2004 and 2005, high-voltage tariffs and medium-voltage tariffs decreased by 0.6% and low-voltage tariffs decreased 0.2%. Tariffs in 2004, in real terms, decreased 0.4% on average across all voltage levels. Tariffs in 2004, in real terms, increased 0.21% on average across all voltage levels. To learn more about these tariffs, you should read Item 4. Information on the Company Portugal Tariffs.

In late 2000, the Portuguese government purchased a 70% interest in REN from us. The government's decision to purchase a controlling stake in REN from us was a part of the government's reorganization of the PES in accordance with the European trend toward greater liberalization. As part of this liberalization, the government sought to separate the company managing the national grid from generation and distribution companies, which the government in the decree law stated is the most suitable model of operation and would bring greater transparency and competition to the electricity sector. The decree law relating to the REN purchase permits us to purchase the sites of the power plants used in the Binding Sector in the event REN chooses not to use such sites and plants at the conclusion of the applicable contract for the expansion of the Binding Sector, thereby permitting us to continue to operate the plant in the Non-Binding Sector. The decree law also provides that, in the event we sell our remaining shares in REN, the government will have the first right to acquire these shares. Currently, our 30% interest in REN is accounted for under the equity method of accounting.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In Spain, following the trend of privatization and liberalization in other regulated sectors, a new regime was introduced in 1997 by Law 54/97 whereby management, transmission and distribution of electricity remained the only regulated activities in the electricity sector. Furthermore, in order to accomplish a complete unbundling between generation and transmission activities, accounting separation was established for companies carrying out both activities. Under this framework, a wholesale market run by OMEL was established for generation activities. Customers above a determined voltage threshold were allowed to choose their electricity supplier, while REE, a state controlled entity, remained responsible for the technical management of the transmission grid.

## **Table of Contents**

In recent years, further measures have been implemented to enhance competition, and since January 1, 2003 all customers can choose their electricity supplier. In other words, they can decide to remain regulated and subject to the electricity tariff or enter into a contract with a supplier at a market rate.

Pursuant to Law 54/97, the regulated electricity tariffs are determined by a Spanish governmental Royal Decree on an annual basis. The tariff may be amended if special circumstances warrant doing so, once the legal requirements have been complied with and the necessary reports are obtained. In 2002, a new method of tariff calculation was adopted for the period 2003-2010. Electricity companies that were in operation as of December 31, 1997 can recover a fixed amount of competition transition costs. This enables these companies to recover part of the costs borne by electricity generators during a period of transition to a competitive market until 2010. The regulated electricity tariff is based upon an average tariff or reference tariff, which includes all the applicable tariffs and costs. These tariffs are not specifically linked to an inflation-indexed formula. The system of regulated tariffs is used to determine the price of the supply of electricity and access to the transportation and supply networks. The regulated supply tariff is based upon a range of general tariffs, which are determined by the supply tension and the use of the power contracted.

For 1999, in nominal terms, the average tariff in Spain decreased by 5.57%. The decline of the average tariff continued until 2002, when the new method of calculation was adopted. The average tariff then increased for 2003, 2004 and 2005 by 1.65%, 1.72% and 1.71%, respectively. However, the reference tariff has decreased in real terms, adjusted for inflation, every year since 1992. Thus, the cumulative variation of the tariff in real terms reflects a 44.5% reduction since 1993.

The New Electricity Law introduced material changes to the regulation of the Brazilian power industry, in order to provide incentives to private and public entities to build and maintain the country's generation capacity and to assure the supply of electricity within Brazil at law tariffs through competitive electricity public auctions. Unlike Brazilian electricity distribution concessionaires, Brazilian generation concessionaires generally lack provisions in their concession contracts for fixed tariffs or mechanisms for adjustment and revision of tariffs. Under initial contracts, the tariffs set between the generators and the respective electricity distribution companies are subject to approval by ANEEL. Under bilateral contracts, prices are freely negotiated between the parties. Limitations on the transfer of costs for contracts executed after the enactment of the New Electricity Law are based on the annual reference value, which corresponds to the average electricity prices determined at A-5 and A-3 auctions, calculated for all Brazilian electricity companies. These transfer restrictions ultimately limit the electricity prices charged by generators, since the prices cannot be higher than the normative value or the annual reference value and still remain competitive and eligible for ANEEL approval. Following the enactment of the New Electricity Law, generators can only sell their electricity to distributors through public auctions conducted by ANEEL and the CCEE.

Brazilian distribution tariffs are adjusted annually by ANEEL, pursuant to a parametric formula provided for in each distribution company's concession contract. When adjusting distribution tariffs, ANEEL segregates the costs of the distribution concessionaires between costs that are beyond the control of the distributor (known as Portion A costs) and costs that are within the control of the distributor (known as Portion B costs). The rules for calculating the transfer of electricity-purchasing costs to customers' tariffs have not been altered by the New Electricity Law with regard to electricity purchase contracts executed prior to March 16, 2004, with limits based on normative values determined by ANEEL. The transfer calculation criteria for contracts to purchase electricity executed after that date have been changed.

Electricity trading in Brazil is governed by Law no. 9,648, of May 27, 1998, as amended, and in Decree no. 2,655, of July 2, 1998, as amended. Trading is subject to a competitive regime in which several agents may participate, including the generators operating under either the public service or independent production classifications, and the agents trading or importing electricity. Unlike distribution and transmission services prices in Brazil, which are regulated, electricity trading prices are freely negotiated based on market conditions.

## **Factors affecting the comparability of our results of operations**



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In the first half of 2002, we acquired 39.5% of Hidroantábrico and started proportionally consolidating the company as of June 1, 2002 at the 40% level. Our 2002 consolidated financial statements included Hidroantábrico's contribution for the last seven

## **Table of Contents**

months of 2002, whereas in 2003 and 2004, our consolidated financial statements include Hidrocantábrico's contribution for the full year. As at December 31, 2004, the referred subsidiary was consolidated under the full consolidated method.

In October 2002, we gained operational control over Espirito Santo Centrais Electricas, S.A., or Escelsa, a Brazilian electricity distributor located in Espirito Santo State. Escelsa owns 65% of Empresa Energetica do Mato Grosso do Sul, S.A., or Enersul. Until the end of September 2002, we accounted for Enersul using the equity method, and from October 1, 2002, fully consolidated both Escelsa and Enersul. Despite the fact that this change in the consolidation method had no impact on our reported net profit, it did have an impact on our consolidated financial statements.

## **Operating margin**

Our operating margin and net profit in 2004 increased by 16.9% and 15.5%, respectively, from 2003. In 2003, our operating margin and net profit in 2003 increased by 39.6% and 13.7%, respectively, from 2002. In 2002, operating margin and net profit decreased by 3.7% and 25.6%, respectively, from 2001.

The increase in our 2004 operating margin was the result of improved performance in our Portuguese electricity generation and distribution businesses and in our Brazilian operations. The key factors that contributed to this performance were EDP's exposure to high-growth electricity markets, the successful implementation of the Human Resources Restructuring Program that cut personnel costs at EDPD by 8%, additional generation capacity from two new units at the Ribatejo CCGT plant (+800MW) and an additional 214 MW of wind farms in Iberia, a strong tariff increase granted to our distribution companies in Brazil by the Brazilian electricity regulator and the twelve months consolidation of Naturcorp following its acquisition in July 2003.

The increase in 2003 operating margin was influenced by the consolidation changes between 2002 and 2003 mentioned above relating to Hidrocantábrico, Escelsa and Enersul. If we had fully consolidated these companies for 12 months of 2002, our operating margin would have increased 23.8% in 2003. This increase is partly explained by the strong growth rates in electricity consumption across all of the countries in which we operate, an increase in the regulated revenues of EDPD, tariff increases granted to our distribution companies in Brazil by the Brazilian electricity regulator and better operating performance of ONI as a result of the implementation of a cost reduction plan and following discontinuation of ONI Way in 2002. The decrease in operating margin in 2002 was partially due to the effects of lower electricity distribution tariffs in Portugal following the start of the 2002-2004 tariff period and the combination of lower consumption in areas served by Bandeirante, Escelsa and Enersul following the electricity rationing program of the Brazilian government, and a severe devaluation of the real against the euro. A devaluation in the real negatively affects our consolidated results, as the results of our Brazilian companies are translated into euros in our consolidated results.

The 13.7% increase in net profit from 2002 to 2003 was due to a 39.6% increase in operating margin discussed above and lower extraordinary losses due to a one-time write-off in 2002 of our investment in ONI Way, in connection with the divestment of ONI's Universal Mobile Telephone Service, or UMTS, business. The factors positively affecting net profit were partially offset by higher financial charges and lower contributions from minority interests resulting from the proportional consolidation of Hidrocantábrico for 12 months in 2003 compared with seven months in 2002.

We do not expect one-time items to materially affect our results in 2005. Although we will continue to experience lower tariffs in our distribution business, we are optimistic that the regulator may allow us to include in our regulatory cost base significant restructuring costs related to our human resources, which we began to implement in the last quarter of 2003.

Our costs are influenced by inflationary trends, fluctuations in fuel costs and hydrological conditions. In years with less favorable hydrological conditions, or drier conditions, use of thermal power can increase significantly, causing our spending on fuel to increase substantially. In years with more favorable hydrological conditions, or wetter conditions, the opposite result occurs. To smooth the impact on earnings and customer prices, the hydro account was established. The hydro account is discussed below in Hydrological correction account, 2004 compared with 2003 Operating costs and expenses, and note 24 to our consolidated financial statements.

## **Table of Contents**

Our profit and loss account is prepared on the total-cost basis typically used by major Portuguese companies. Costs related to our personnel and materials incurred for assets under construction that are capitalized as part of fixed assets and will be amortized in future periods are classified in the income statement as expenses, and a corresponding amount is credited to Own work capitalized.

### **CRITICAL ACCOUNTING POLICIES**

Our reported financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of our consolidated financial statements. Our critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered in reviewing our consolidated financial statements and the discussions below in Results of Operations.

A critical accounting policy is one that is both important to results of operations and financial condition and requires management to make critical accounting estimates. An accounting estimate is an approximation made by management of a financial statement component or account. Accounting estimates reflected in our financial statements measure the effects of past business transactions or events, or the present status of an asset or liability. Accounting estimates included in the accounting policies presented in the consolidated financial statements require assumptions about matters that are highly uncertain at the time the estimate is made. Additionally, different estimates that could have been used, or changes in an accounting estimate that are reasonably likely to occur, could have a material impact on the financial statements. The inherent uncertainty of some matters can make judgments subjective and complex. The effects of estimates and assumptions related to future events cannot be made with certainty. Our estimates are based upon historical experience and on assumptions that management believes to be reasonable in the circumstances. These estimates may change with changes in events, information, experience, and our operating environment. The following critical accounting policies and estimates are those used in the preparation of our audited consolidated financial statements.

#### **PPAs**

We entered into several PPAs which are treated as leases under U.S. GAAP. The evaluation of whether an arrangement contains a lease within the scope of Statement 13 and EITF 01-8 is based on the substance of the arrangements. The PPAs include agreements that, although not nominally identified as leases, meet the definition stated in the above-mentioned statements, in particular that a lease transfers substantially all of the benefits and risks related to the property to the lessee. In substance, these contracts explicitly identify the power plants with which we produce power exclusively for REN and cannot use any other power plant to supply power to REN. Additionally, these contracts convey the right to use the power plants and require that the total production is acquired by REN, the entity which is the lessee.

The PPAs are considered as capital leases for U.S. GAAP purposes due to the fact that the contracts transfer the risks and rewards of usage to the lessee during the period of the lease term, transfer the ownership of the property to REN at the end of the lease term and the lease terms are the same as the useful lives of the power plants. As permitted under Portuguese GAAP, these assets are classified as tangible fixed assets and amortized on straight-line basis at rates accepted by the tax authorities or for general purposes business, which reflect the economic useful lives of each category of fixed assets.

On January 27, 2005, in accordance with Decree law no. 240/2004, we signed agreements for the early termination of the PPAs. The termination agreements' effects are suspended until a set of conditions is met which includes the commencement of MIBEL which assures the sales of generated electricity, and the attribution of non-binding production licenses. When the conditions set out allow for the effective termination of the PPAs, under U.S. GAAP the power plants will be accounted in a similar manner as the current accounting under Portuguese GAAP.



## **Table of Contents**

### **Hydrological correction account**

The hydrological correction account, or hydro account, was established by Decree law no. 338/91 and constitutes a legally mandated mechanism for compensating the variable costs of electricity generation. This accrual was set up mainly in 1994 through a charge against income during the period that we were owned by the Portuguese state. Despite the separation of REN from EDP in 2000, further regulation (through Decree law no. 98/2000) maintained the requirement to keep this account on our balance sheet.

The main objective of the hydro account is to avoid imbalances in the electricity sector due to changes in variable costs incurred as a result of hydrological conditions. Accordingly, since the tariffs cannot be modified immediately to reflect the changes in variable costs incurred as a result of hydrological conditions, this account is used to compensate the volatility in variable operating costs of power generators in the PES for unfavorable hydrological conditions, such as when thermal generation increases and, consequently, expenditures on fuel and electricity imports increase substantially. In years with abundant rainfall, the opposite occurs. In this context, and with a view toward avoiding major distortions in operating results due to favorable or unfavorable hydrological conditions, the hydro account is adjusted upwards or downwards based upon average hydrological conditions.

As mentioned above until 2000 REN was part of the EDP Group and therefore the movements of the hydro account were within the EDP Group. Since the separation of REN in June 2000, we (at the holding company level) pay or receive cash from REN, which is booked against the hydro account. The net movement in the hydro account between December 31, 2000 and December 31, 2004 was approximately 1 million. We record a charge for the financing cost associated with the amount of the accumulated balance of this account, which is recognized in earnings under Portuguese GAAP. REN uses the amount received or paid to compensate the operators in the PES (a significant majority of which are our subsidiaries) in accordance with the objectives of the hydro account as described above. As such, REN is effectively a flow-through entity for purposes of the hydro account. For Portuguese GAAP purposes, the operators in the PES who receive or pay cash to REN account for it against earnings.

The Portuguese government approves the amount of the accumulated balance and the movements during the year on an annual basis. REN is engaged to calculate the amounts to be received or paid by us in relation to the hydro account.

In prior years, for Portuguese GAAP purposes, the balance continued to be reported as a liability in accordance with local legislation. For U.S. GAAP purposes, the portion of the liability established through 1994 was eliminated with an offsetting increase to shareholders' equity. In essence, this increase to shareholders' equity was equivalent to accounting for accrued income. Thus, in periods up to December 2003, it was considered that the amount recorded as an asset would be recoverable through future benefits flowing to the EDP Group. Subsequent to 1994, payments and receipts by EDP to REN are treated as increases or decreases of the liability under both Portuguese and U.S. GAAP.

During 2004, Decree law no. 240/2004 was issued, with the purpose of regulating the early termination of the PPAs, a step toward the liberalization of the energy market within the Iberian Peninsula. This decree law states that with the introduction of the free trading market, which is currently expected to occur within the next twelve months, the government will be required to introduce a new regulation regarding the purpose and scope of the hydro account as well as the mechanisms to compensate producers for their increased risks resulting from the early termination of PPAs.

As a result of the introduction of this regulation mandated by the above-mentioned decree law, and in light of the above-mentioned government announcement, our board of directors and management consider that it is probable that the hydrological correction mechanism will be terminated. At such date the liability recorded for the hydro account, including the balance relating to pre-1994 activity, will be payable to a

third party to be nominated by the regulator. Moreover, since this regulation can only be introduced simultaneously with the effective liberalization of the energy market in the Iberian Peninsula, our board of directors and management consider that the accrued income accounted as an asset will cease to have any future economic benefits. Therefore, at the end of 2004, we recorded a full valuation allowance against the asset recorded in our U.S. GAAP accounts in the amount of 315 million as at December 31, 2004.

#### **Impairment of long-term assets**

Tangible and intangible fixed assets are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill is reviewed for impairment at the end of the first complete financial year after the relevant acquisition, and thereafter, if events or changes in circumstances indicate that the carrying amount may not be recoverable. When conducting a review for impairment, consideration is taken of the regulated and contractual aspects of our operations.

Uncertainties exist when assessing the recoverability of the carrying amounts of the tangible and intangible fixed assets, as the assessment is based on the best information available at that date.

## **Table of Contents**

### **Allowance for uncollectible accounts**

Estimated provisions for uncollectible accounts receivable are based on management's assessment of the probable collection of customer accounts, aging of accounts receivable, bad debt write-offs, and other factors. Certain circumstances and events can cause actual bad debt write-offs to vary from assumptions used in estimating uncollectible account provisions; these include general economic conditions, industry trends, deterioration of major customer credit worthiness, and higher defaults. This evaluation process is subject to numerous estimates and judgments. Changes in these estimates could lead to a different provisions and consequently different amounts of net income.

### **Employee retirement benefits**

We have a commitment to complement the retirement and survivors' pensions of the employees subject to the A.C.T. (collective labor agreement) to the extent that these are not covered by the government's social security plans. Those employees have the option of taking early retirement, subject to certain conditions relating to pre-defined age and length of service requirements being met. Retired employees retain the right to medical assistance based upon similar conditions as those pertaining to employees still on the active payroll. The entitlement to these benefits is usually based on the employee remaining in service up to retirement age. The expected costs of these benefits are accrued over the period of employment, using valuations performed by independent qualified actuaries. The pension plans are generally funded by payments from the EDP Group companies, taking into account the actuarial assumptions agreed with the independent qualified actuaries.

There are numerous uncertainties inherent in estimating employee retirement benefits and assumptions that are valid at the time of estimation, but may change significantly when new information becomes available. Fluctuations in the rates and other assumptions used for the actuarial valuations may, ultimately, result in actuarial gains or losses that, in accordance with the relevant accounting criteria, will be recognized in the financial statements.

### **Deferred income taxes**

Deferred income taxes, recoverable and payable, have been included in our balance sheet as deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amount of assets and liabilities and their tax bases.

There are certain uncertainties inherent in estimating deferred income taxes, namely the ability to generate future taxable income by those companies that have recognized deferred tax assets in the periods in which the temporary differences revert in the income statement.

We consider if an allowance should be recognized based on the weight of available evidence and whether it is more likely than not that some portion or all of the deferred tax asset will not be realized.

Deferred tax liabilities and assets are adjusted in the period of enactment for the effect of an enacted change in tax laws or rates. These facts could lead to a change in our earnings for future periods.



**Revenue recognition**

Revenues from retail electricity sales are recognized when monthly billings are made to customers for energy sold, based upon meter readings performed on a cycle basis during each month, together with historical consumptions individually by customer. In order to properly match revenue with related expenses (power costs, distribution expenses, etc.), estimated unbilled revenues are accrued for electricity provided from meter read dates to each month-end. Such estimated unbilled revenues are based on our net system load, the number of days from meter reading to the end of each calendar month, and current retail customer rates.

## **Table of Contents**

### **Regulatory assets and liabilities and tariff adjustments**

In activities subject to regulation, the criteria of allocation of income and expense to each accounting period may be different from the criteria applicable to non-regulated activities. For accounting purposes, when the regulator establishes a criteria of allocating income and expense to future years, then a regulatory asset or liability is recognized in the financial statements, which otherwise would be booked as profit or loss of the year.

Regulatory assets relate to deferred costs defined and regulated by the regulator, which should be recovered through the increase of electricity tariffs during subsequent periods. Regulatory liabilities relate to future decreases in income defined and regulated by the regulator, which should have an impact on customers through the decrease of electricity tariffs during the subsequent periods.

In Portugal, the tariffs of electricity supplied to clients in the Binding Sector are determined by the regulator. Tariffs for clients outside the Binding Sector are negotiated and contracted on an individual basis. Tariffs in the electricity distribution business are subject to a price cap mechanism. These earnings are subject to a gross profit restriction and after being subject to confirmation or approval by the regulator are adjusted in future tariffs revenues. We estimate those future tariff revenues or adjustments and defer or accrue the recognition of the revenues until future periods in our Portuguese GAAP accounts. Even though the tariff adjustments are subject to formal approval by the regulator, these amounts are recorded under other assets or other liabilities in the accompanying balance sheet prepared under Portuguese GAAP. In the U.S. GAAP financial statements, these assets or liabilities recorded for the regulated activities in Portugal are eliminated because, in substance, we believe that the tariff adjustments regulation does not meet in full the criteria set out in SFAS 71. Even though the scope criterion of SFAS 71 is met with respect to the regulated activities in Portugal, due to the uncertainty in relation to future income being in an amount at least equal to the capitalized cost or a situation of a permanent roll forward of cost with current year costs being deferred and prior cost being recovered in each period, the asset recognition criteria as defined in SFAS 71 is not met. As a result, tariff adjustments related to Portuguese activities are not reflected in U.S. GAAP accounts and therefore are included as a reconciling item in the reconciliation from local to U.S. GAAP. However, the assets or liabilities resulting from the tariff adjustments mechanism set out by the regulator regarding our activities in Brazil meets the requirements of SFAS 71 and therefore are accounted for on that basis. The assets and liabilities considered by the Companies in Brazil as regulatory assets are fully compliant with the regulator (ANEEL - Agência Nacional de Energia Elétrica). Eligible costs are specifically determined by the regulator and are recoverable through the recovery rates. Resulting from measures taken by the Brazilian government and by the regulator in 2001, our companies in Brazil are subject to the application of SFAS 71. In December 2001, in order to compensate the companies, an agreement with the Brazilian government was reached for all the entities operating in the sector, which allows the increase of regulated rates for a period of six years. Considering SFAS 71 and EITF 92-7, Energias do Brasil only considered regulatory assets based on two years projections of current level consumption.

The board of directors makes certain assumptions as to the recovery of the regulatory assets based on regulations issues, current legislation or past experience. If the probability of recovery is less than likely, the regulatory asset is written off against the cost of the year in Portuguese GAAP accounts.

### **Investments**

We adopted the International Accounting Standard 39 *Recognition and Measurement of Financial Instruments* effective as of fiscal year 2003. Consequently, we classify our investments in accordance with this international accounting standard, particularly with regard to the types of financial instruments and their recognition and measurement, carrying them under the following categories of investments: trading, available for sale and held to maturity. The classification depends on the purpose for which the investments were acquired. Our board of directors determines the classification of these investments on the date of acquisition and re-assesses this classification on a regular basis.

*Trading account securities*

Investments acquired primarily for the purpose of being traded in the very short-term are classified as trading securities and are recorded as current assets. For the purpose of our financial statements, short-term is defined as three months. Realized and unrealized gains and losses resulting from changes in the fair value of trading securities are recorded in the profit and loss account during the period in which they occur.

*Available for sale securities*

For listed companies, valuations are at market quotation at balance sheet date. For unlisted securities, the value is based on valuation models that may require assumptions or judgment in making estimates of fair value. For these unlisted companies, more pessimistic assumptions would have resulted in higher estimated potential losses, which would in turn have negatively impacted shareholders' equity. Unrealized gains and losses resulting from changes in the fair value of the available for sale securities are recorded in shareholders' equity. Realized gains and losses are recorded in the income statement. If any of the available for sale securities are considered other than temporarily impaired, the relevant security is written down to fair value with impact in earnings and the fair value becomes the security's new adjusted cost basis.

## **Table of Contents**

Under U.S. GAAP, a decline that is considered other than temporary is based generally on factors including (i) the length of time and extent to which the fair value of the security has been below cost and (ii) the financial condition and near term prospects of the issuer of the security. These factors involve assumptions and estimates on the part of management. Changes in fair value of securities due to impairment can adversely affect our results for a period in which such changes occur and, therefore, the reported results would be adversely affected if less favorable assumptions or different estimates were used.

### *Derivatives*

Derivatives are initially measured in our consolidated balance sheet at cost and subsequently carried at fair value. The method of recognition of the resultant gain or loss depends on whether the derivative is related to a hedge relationship.

We identify derivatives as either: (i) hedging the fair value of the recognized liabilities or (ii) hedging the exposure to variability in expected future cash flows that are attributable to a particular risk. Changes in the fair value of derivatives identified as fair-value hedging instruments and qualifying as effective, are recognized as a gain or loss in the profit and loss account together with the changes in the fair value of liability for which the hedging risk was taken. Changes in the fair value of derivatives identified and classified as cash-flow hedging instruments are recognized against reserves, and the ineffective portion of the hedge is recognized immediately in the profit and loss account. The amounts recorded against reserves are transferred to the profit and loss account and classified as income or expense during the period in which the hedge cash flows impacted on the profit and loss account.

Any transaction which, despite its purpose of economic hedging in accordance with our risk management policies, is not classified as hedging in accordance with IAS 39, is treated as trading and the gains and losses are recognized in the profit and loss account during the period to which they relate.

To achieve hedge accounting on the date of commencement of the transaction, we document the relationship between the hedging instruments and the hedged items, as well as the respective risk-management objectives and strategies underlying the respective hedging transactions. This process includes the identification of all derivatives as hedging instruments and the related liabilities. We also document the hedge's effectiveness, at the inception of the hedge and during the life of the hedge, whether the derivatives used in the hedging transactions are highly effective to compensate the fair value or the cash flows of the hedged items.

### *Valuation of financial instruments with no ready markets*

Fair values are determined based upon externally verifiable model inputs and quoted prices. All financial models, which are used for updating our published financial statements, must be validated and periodically reviewed by qualified personnel independent of the area that created the model.

Impairment losses that are considered other-than-temporary are recognized in earnings. We conduct regular reviews to assess whether other-than-temporary impairments exist. These determinations require certain assumptions as to the financial condition of specific issuers, market value and other conditions. The use of different assumptions could produce different results. Changes in the fair value of instruments are recognized in earnings. If available, quoted market prices provide the best indication of value. If quoted market prices are not available for fixed-maturity securities or derivatives, we discount the expected cash flows using market interest rates appropriate with the credit quality and

maturity of the investment. Alternatively, matrix or model pricing may be used to determine an appropriate fair value.

The determination of market or fair value considers various assumptions and factors, including time value and volatility factors, underlying options, warrants, and derivatives; price activity for equivalent synthetic instruments; counterpart credit quality; the potential impact on market prices or fair value of liquidating our positions in an orderly manner over a reasonable period of time

---

## Table of Contents

under current market conditions; and derivative transaction maintenance costs during the period. Changes in assumptions could affect the fair values of portfolios.

### **Restatements**

Under Portuguese GAAP, if a current year balance is reclassified or adjusted, the reporting entity is not allowed to restate the comparable prior year balance. Under U.S. GAAP, unless specifically prescribed in accounting guidance, the reclassification or adjustment of a current year balance will result in a corresponding reclassification or adjustment in the prior year balance to make the information comparable.

The reconciliation to U.S. GAAP for each of the two years ended December 31, 2003 and as of December 31, 2002 and 2003 has been restated to reflect the following:

- i) **Minority Interests.** Under both Portuguese GAAP and U.S. GAAP, in prior years, the losses attributable to minority interests that exceeded the equity capital attributable to minority interests in subsidiaries had been recorded as negative minority interests in the balance sheet. In the income statement, the referred losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Under Portuguese GAAP, and beginning January 1, 2004, we adopted a new accounting policy by which the negative minority interest in the balance sheet resulting from the accumulated losses attributable to minority interests which exceed the equity capital attributable to minority interests in subsidiaries are debited against equity when there is no binding obligation of the minority interests to cover such losses. In the income statement, under Portuguese GAAP, losses continue to be attributed to minority interest in the proportion of their shareholding. Under U.S. GAAP, as there is no binding obligation of the minority interest to cover such losses, such losses which exceed the equity attributable to the minority interest are charged to the majority interest, therefore the net income of the prior years has been restated to allocate the losses attributable to minority interests in 2002 and 2003 to the majority interest (EDP). If future earnings do materialize, the majority interest is credited to the extent of such losses previously absorbed.
- ii) **Concession Subsidies.** Under Portuguese GAAP, the amount classified as deferred income related to assets under concession in Brazil is not amortized. However, the assets under concession are amortized on a straight line basis over the concession period. Under U.S. GAAP, the amortization of the accrued income should be recorded using the same period as the assets amortization. As this amount was not amortized in prior years under U.S. GAAP, we made a restatement to correct this issue in the income statement and in shareholders' equity of each reported period.
- iii) **Guarantees.** Under U.S. GAAP, a guarantor is required to recognize, at the inception of certain guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantees. In 2003, we made a provision with a charge against equity, even though it is unlikely that any disbursement related to those guarantees will have to be made. An adjustment is made under U.S. GAAP as a restatement at December 31, 2003 to reverse the provision that was made in the prior year.
- iv) **Other Comprehensive Income.** In relation to other comprehensive income, in prior years, a reconciliation between the opening and closing balance of other comprehensive income was not presented in the notes to the financial statements in accordance with SFAS 130. SFAS 130 requires that the total of other comprehensive income be disclosed separately from retained earnings. We have included the information required for the total of other comprehensive income for each of the reported periods and has restated the balances to comply with the requirements of SFAS 130. While this restatement had an impact on the total value of other comprehensive income, it had no impact on the total value of shareholders' equity.

For more information on our restatement of certain U.S. GAAP financial information for each of the two years ended December 31, 2003 and as of December 31, 2002 and 2003, please see note 42.ii to our consolidated financial statements.

## RESULTS OF OPERATIONS

In 2002, following the conclusion of our acquisition of a 39.5% stake in Hidrocantábrico, we proportionally consolidated the results of Hidrocantábrico from June through December. On October 10, 2002, we gained control over the Brazilian distribution companies Escelsa and Enersul. As a result, we consolidated the results of Escelsa and Enersul from October through December 2002. We currently control 54.76% of Escelsa and 35.70% of Enersul. In December 2002, we decided to discontinue ONI Way's UMTS operations, a decision which was reflected by a write-off of ONI Way and the consequent increase in Other non-operating expenses (income) due to the creation of a non-recurring provision of 280.9 million.

In March 2003, Hidrocantábrico won the auction privatization process that led to its acquisition of 62% of Naturcorp. Subsequently, Naturcorp reorganized its gas holdings, as a result of which a minority shareholder in Gas de Euskadi exchanged its holding for shares in Naturcorp, resulting in a decrease in Hidrocantábrico's ownership of Naturcorp from 62% to 56.8%. Naturcorp started to be fully consolidated in Hidrocantábrico as from August 2003. In December 2004, we acquired an additional 56.2% stake in Hidrocantábrico, which resulted in an increase in our shareholding to 95.7% of Hidrocantábrico's outstanding share capital. Hidrocantábrico was fully consolidated in our consolidated financial statements beginning in January 2005.

## Years Ended December 31, 2004, 2003 and 2002

The following table sets forth our revenues by geography and activity for 2002, 2003 and 2004. For more information concerning our revenues, see note 29 to our consolidated financial statements.

	<u>Sales of Electricity</u>	<u>Other sales</u>	<u>Services rendered</u>	<u>Total</u>
	(millions of EUR)			
<b>Year ended December 31, 2002</b>				
Portugal				
Generation	1,425.4	18.7	18.2	1,462.3
Distribution and supply	3,503.4	1.7	33.1	3,538.2
Spain				
Generation	145.1	2.5	0.8	148.3
Distribution and supply	150.1	7.6	6.3	164.0
Gas	0	10.5	1.1	11.5
Brazil				
Distribution and supply	668.6	0	0	668.6
Telecommunications	0	46.7	274.1	320.8
Information technology	0	35.5	188.5	224.0
Services and other adjustments	(16.5)	(11.2)	(123.5)	(151.2)
<b>EDP Group</b>	<b>5,876.2</b>	<b>112.0</b>	<b>398.4</b>	<b>6,386.6</b>
<b>Year ended December 31, 2003</b>				
Portugal				
Generation	1,318.9	19.7	26.6	1,365.2
Distribution and supply	3,610.6	1.9	60.2	3,672.8
Spain				
Generation	256.8	2.0	1.1	259.9
Distribution and supply	287.7	28.9	12.4	329.0
Gas	0	75.9	10.1	86.0

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Brazil				
Generation	27.4	2.3	11.5	41.3
Distribution and supply	929.0	0	37.6	966.6
Telecommunications	0	7.3	323.8	331.1
Information technology	0	27.0	159.3	186.3
Services and other adjustments	(134.2)	(4.9)	(121.6)	(260.6)
	<u>6,296.1</u>	<u>160.3</u>	<u>521.2</u>	<u>6,977.5</u>
<b>EDP Group</b>				
<b>Year ended December 31, 2004</b>				
Portugal				
Generation	1,481.3	21.2	38.4	1,540.9
Distribution and supply	3,842.8	2.7	26.4	3,872.0
Spain				
Generation	250.1	7.1	3.5	260.7
Distribution and supply	266.1	7.0	14.8	287.9
Gas	0	184.0	14.6	198.5
Brazil				
Generation	28.3	2.8	10.5	41.6
Distribution and supply	1,038.4	0	73.9	1,112.2
Telecommunications	0	8.1	317.3	325.4
Information technology	0	23.4	151.2	174.6
Services and other adjustments	(456.6)	(7.2)	(128.2)	(592.1)
	<u>6,450.3</u>	<u>249.0</u>	<u>522.4</u>	<u>7,221.7</u>
<b>EDP Group</b>				



**Table of Contents**

The following table sets forth our operating costs and expenses and our results of operations as a percentage of total revenues:

	Year ended December 31,		
	2002	2003	2004
Total revenues	100%	100%	100%
Raw materials and consumables	57.7%	56.2%	55.6%
Personnel costs	9.8%	9.3%	8.9%
Depreciation and amortization	11.6%	12.1%	11.0%
Supplies and services	10.6%	9.1%	9.0%
Own work capitalized	(3.8)%	(3.4)%	(3.6)%
Concession and power-generation rental costs	2.5%	2.5%	2.6%
Provisions	1.6%	1.1%	1.6%
Other operating expenses (income)	(0.1)%	0.1%	0.2%
Total operating costs and expenses	89.8%	87.0%	85.3%
Operating margin	10.2%	13.0%	14.7%
Net interest and related expenses	3.5%	5.1%	4.6%
Other non-operating income / (expenses)	2.2%	0.2%	2.3%
Profit before tax	4.5%	7.6%	7.7%
Consolidated net profit	5.2%	5.5%	6.1%

**2004 COMPARED WITH 2003****Revenues**

Our total revenues for 2004 increased by 3.5% to 7,221.7 million from 6,977.5 million in 2003, due primarily to a 232.2 million increase in electricity sales from our distribution and supply activities in Portugal resulting from a 6.1% increase in

**Table of Contents**

consumption, a 162.4 million increase in electricity sales from our generation activity in Portugal as a result of the entry into industrial service of the first two units of the new Ribatejo CCGT plant, higher energy charges under the PPAs as a result of increased use of thermal generation, and a 108.1 million increase in other sales from the proportional consolidation of the Basque gas company, Naturcorp, as from August 2003.

*Sales of electricity.* Our total electricity sales increased 2.4% to 6,450.3 million in 2004, representing 89% of our total revenues, from 6,296.1 million in 2003, mainly due to a 6.4% increase in electricity sales from our distribution and supply activities in Portugal to 3,842.8 million in 2004 from 3,610.6 million in 2003 and from the 12.3% increase in electricity sales from our generation activity in Portugal to 1,481.3 million in 2004 from 1,318.9 million in 2003. This increase was partially offset by a 5.2% decrease in electricity sales from Spain to 516.2 million in 2004 from 544.4 million in 2003, partly due to lower Spanish electricity pool prices during most of 2004 when compared with 2003.

Electricity sales in Portugal from generation, distribution and supply activities, which represented 83% of our total consolidated electricity revenues, increased by 8% to 5,324.1 million in 2004 from 4,929.5 million in 2003, with an increase in electricity sales from both our distribution and supply and our generation activities.

Electricity sales from our generation activity in Portugal increased 12.3% from 1,318.9 million in 2003 to 1,481.3 million in 2004. Approximately 80.6% of our Portuguese generation electricity sales are based on long-term PPAs between each of its power plants and REN, as the single buyer for the PES. The PPAs include an energy charge component that remunerates EDP Produção's plants operating in the PES for fuel consumed by producing electricity. Given that 2004 was characterized by lower hydroelectricity levels than 2003 (a hydroelectric coefficient of 0.81 in 2004 compared with a hydroelectric coefficient of 1.33 in 2003), EDP Produção's thermal power plants were utilized more, which, combined with an increase in coal prices, resulted in higher fuel costs and thus in higher revenues from the variable component of the PPAs that remunerates EDP Produção's for fuel consumption. Electricity sales from our Portuguese generation activity also benefited from the beginning of industrial service of the first two 392 MW units of our new Ribatejo CCGT plant, the first in February 14, 2004 and the second on November 2, 2004. Both units' combined output to the system amounted to 3,419 GWh.

Electricity sales from our distribution and supply activities in Portugal increased 6.4% from 3,610.6 million in 2003 to 3,842.8 million in 2004, due to a 6.1% increase in demand to 41,315 GWh in 2004 from 38,955 GWh in 2003. This increase was primarily due to a 4.7% increase in low-voltage consumption due to a warm summer and a particularly cold winter. The increased demand was also due to a 7.6% increase in high-voltage and medium-voltage consumption due to the fact that cogenerators opted to sell to the PES most of the energy they produced at special regime prices, later buying back any electricity needed at lower prices. Electricity sales volume in the PES, which in 2004 represented approximately 84% of Portuguese electricity demand, decreased 1% as some medium-voltage consumers opted to become non-binding consumers, accordingly, in the Non-Binding Sector, electricity distributed increased 67.1% to 6,763 GWh in 2004 from 4,048 GWh in 2003.

Beginning with the new tariff regime in Portugal that became effective in 1999, tariffs are fixed by the regulator in advance of each year based in part on estimated data for variables such as demand and cost. If there are differences between the estimated data and the actual data during a period, an adjustment is made to the tariff in a subsequent period to account for these differences.

In 2004, the aggregate tariff adjustment for EDPD was a negative adjustment of 92.1 million. This figure includes a negative adjustment of 13.2 million from the tariff adjustment for 2004, a negative adjustment of 21.3 million accounting for the repositioning of the 2003 tariff adjustment and a negative adjustment of 57.7 million accounting for the repositioning of the 2002 tariff adjustment. In 2003, the aggregate tariff adjustment was 77.9 million. This figure includes a positive adjustment of 77.0 million relating to the tariff adjustment for 2003, a positive adjustment of 17.9 million from a revision made to the tariff adjustment for 2002, a negative adjustment of 10.2 million relating to the accounting for the repositioning of the 2002 tariff adjustment and a negative adjustment of 6.7 million from the accounting for repositioning of 2001 tariff adjustment.

Electricity sales in Spain fell 5.2% to 516.2 million in 2004 from 544.4 million in 2003, mainly due to the fact that in 2003 Hidroantábrico sold electricity to the Non-Binding System in Portugal, whereas in 2004 this activity was substantially reduced. Additionally, Hidroantábrico was affected by a decrease in the average price at which it sells its generation output in the Spanish

---

## **Table of Contents**

pool. Nevertheless, in 2004 Hidrocontábrico was able to account for 9.5 million as a receivable in partial compensation for electricity sold below pool reference prices in 2004.

Electricity sales in Brazil increased 11.5% to 1,066.6 million in 2004 from 956.4 million in 2003, primarily due to a 77% increase in the volume of electricity sold by our supply company in Brazil (Enertrade) and 2003 and 2004 tariff revisions and adjustments in our distribution companies, including, in particular, a 18.08% average tariff increase for Bandeirante (as of October 22, 2003) and a 17.02% average tariff increase for Enersul (as of April 8, 2004). Electricity sales to direct clients, as distinguished from access clients which are only charged on access tariff, in Brazil fell due to the switch of some industrial consumers to the liberalized market, where consumers must pay for the use of the distribution grid (accounted for as services rendered) and by the devaluation of the Brazilian real against the euro.

*Other sales.* Our other sales activities, including sales of natural gas, steam, ash, information technology products, telecommunications equipment and sundry materials, generated revenues of 249.0 million in 2004 compared with 160.3 million in 2003, due primarily to the proportional consolidation, since August 2003, of gas sales of Naturcorp on the same basis as Hidrocontábrico (i.e., at the 40% level in 2003 and 2004). Within the line item Other sales, gas sales in Spain in 2003 were accounted for within Hidrocontábrico's distribution and supply (reflecting gas sales by Hidrocontábrico Energia) and gas (reflecting gas sales by Naturcorp) functions. In 2004, most gas sales in Spain were accounted for within Hidrocontábrico's gas function, reflecting the fact that most of Hidrocontábrico's gas clients were supplied by Naturcorp during this period.

*Services rendered.* Activities generating these revenues include electricity-related services, services related to information technology systems, telecommunications and engineering, as well as laboratory, training, medical assistance, consulting and multi-utility services and other services. Our revenues from other services increased slightly to 522.4 million in 2004 from 521.2 million in 2003, due to increased sales provided to access clients by the electricity distribution and supply activity in Brazil.

Revenues from services provided by the electricity activity in Portugal decreased 25.4% to 64.8 million in 2004 from 86.9 million in 2003, due to several factors relating to the ongoing liberalization process in Portugal. Services provided in Spain contributed 23.6 million and 32.9 million in 2003 and 2004, respectively, following the proportional consolidation of Naturcorp since August 2003. Our operations in Brazil contributed 84.4 million to our consolidated revenues from services in 2004, following the increased number of liberalized clients in our concession area, who must pay for the use of the distribution grid. Telecommunications services decreased 2.0% to 317.3 million in 2004 from 323.8 million in 2003. Revenues from our information technology activity declined 5.1% from 159.3 million in 2003 to 151.2 million in 2004 due primarily to a slowdown in the information technology sector in Portugal.

## **Operating costs and expenses**

Our total operating costs and expenses increased by 1.5% to 6,163.2 million in 2004 compared to 6,071.8 million in 2003, mainly due to the 6.1% increase in electricity consumption in Portugal which drove the Portuguese distribution and supply electricity purchases up 9.3% to 2,635.9 million in 2004, and to the proportional consolidation of Naturcorp and higher fuel costs at EDP Produção following a dry year in which thermal generation was increased at the expense of hydroelectric power. These effects more than offset the positive impact of lower operating costs at ONI.

Operating costs at our Portuguese electricity business increased 5.9% to 4,560.3 million in 2004 from 4,306.3 million in 2003. This increase was partially offset by the presentation of compensation of depreciation of partly funded fixed assets in our consolidated financial statements that prior to 2004 was presented as other non-operating income, while in 2004 we started to present this income as an operating item. This portion of

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

depreciation is primarily due to new electricity connections made in prior years that were financed largely with customer payments, which are recorded as deferred income and, as the assets are depreciated, a portion of the amount is taken into income and offset by a corresponding depreciation charge. The 5.9% increase in operating costs was mainly due to higher fuel costs, reflecting the increase in international fuel prices and decreased use of hydroelectric power, and higher electricity purchases, following the 6.1% hike in consumption in Portugal. The increase in operating costs was mitigated by the continuing effects of the restarting of our Human Resources Restructuring Program in 2003, which resulted in a 9.6% decrease in 2004 compared

## Table of Contents

to 2003 in personnel costs at our Portuguese distribution and supply activities. However, this reduction is not completely reflected in our consolidated financial statements as costs in certain Portuguese subsidiaries relating to early retirees are netted against related provisions in our consolidated financial statements. The reduction at EDPD follows both a decrease in personnel costs with early retirees, reflecting a larger proportion of such costs being paid by the state social security system, and a decrease in active personnel costs through the Human Resources Restructuring Program.

Operating costs in our Spanish energy business increased 12.3% to 665.7 million in 2004, mainly due to the proportional consolidation of Naturcorp since August 2003. In Brazil, the operating costs increased 8.9% to 959.5 million in 2004, primarily due to an increase in electricity volume sold by Enertrade. Operating costs at ONI decreased 7.1% from 399.8 million in 2003 to 371.3 million in 2004, benefiting from a cost-cutting program and a reduction in the number of employees.

As a percentage of revenues, total operating costs and expenses decreased to 85.3% in 2004 from 87.0% in 2003, due primarily to lower depreciation expenses net of the compensation of depreciation of partly funded fixed assets, lower personnel costs and lower costs of raw materials and consumables, in each case, as a percentage of revenues.

*Raw Materials and Consumables.* The major components of our raw materials and consumables are the costs of energy purchased, fuel costs and costs of other materials. Our raw materials and consumables costs increased 2.5% to 4,017.3 million in 2004 from 3,921.0 million in 2003, primarily due to higher electricity purchases resulting from the 6.1% increase in consumption in Portugal, the proportional consolidation of Naturcorp and to higher fuel costs at EDP Produção resulting from a reduction in use of hydroelectric generation due to a dry year and an increase in coal prices.

Our costs of energy purchased decreased 1.7% to 3,303.1 million in 2004 from 3,360.3 million in 2003.

Generation, distribution and supply activities in Portugal represented 81.4% of our costs of energy purchased in 2004 compared with 73.7% in 2003. Electricity purchases from generation in Portugal decreased 13.9 million in 2004 to 51.4 million, due to the fact that during 2004, the EDP Produção energy management department made purchases in the Spanish pool, thus replacing purchases made in 2003 from small hydroelectric producers operating in the Non-Binding Sector. Our costs of purchased electricity in distribution and supply activities in Portugal primarily include purchases made by EDPD from REN, as well as purchases from private generators and small independent producers. The energy that EDPD purchases from REN is supplied to the PES. In 2004, electricity purchases in distribution and supply increased 9.3% to 2,635.9 million from 2,412.5 million in 2003, reflecting the higher electricity purchases resulting from the 6.1% increase in consumption in Portugal.

Costs of energy purchased in Spain by Hidrocontábrico increased 9.7% to 395.3 million in 2004 compared with 360.5 million in 2003, reflecting the consolidation of Naturcorp for the first time in August 2003.

Costs of purchased electricity in Brazil increased 7.4% in 2004 to 705.2 million from 656.5 million in 2003, due to an increase in electricity volume sold by our electricity supply company in Brazil (Enertrade), which was partly offset by the depreciation of the Brazilian real against the euro.

Our fuel costs increased 37.2% to 546.0 million in 2004 from 398.0 million in 2003. In 2004, fuel costs from generation in Portugal represented 76.4% of our fuel costs and increased 33.5% to 417.1 million in 2004 from 312.3 million in 2003. This increase in fuel costs reflects an increase

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

in fuel utilization by EDP Produção associated with a higher recourse to thermal generation due to a dry year and an increase in coal prices.

In order to account for the variability of hydrological conditions in Portugal and its impact on generation costs in the PES, we use a hydrological correction account, which is recorded on our balance sheet. The hydro account is an accounting mechanism established by Portuguese law. Because tariffs in Portugal are computed based on the assumption of conditions in an average hydrological year, the purpose of this account is to correct the short-term effect of hydro variability on PES generation costs. In years with favorable hydrological conditions, there is an increase in hydroelectric generation, whereas in years with unfavorable hydrological conditions there is a decrease in hydroelectric generation. We cannot modify the tariff we charge to take into account the

**Table of Contents**

changes in variable costs incurred due to hydrological conditions. The hydro account is reinforced, through cash payments by REN, in years of favorable hydrological conditions, while in years of unfavorable hydrological conditions, we draw from the hydro account and make cash payments to REN, in order to compensate for increased generation costs in the PES. These upward or downward adjustments to the hydro account are made based upon the economic reference cost calculated on the basis of an average hydrological year and observed fuel prices.

As of December 31, 2004, the hydro account amounted to 364.2 million, reflecting a decrease of 23.3 million compared to December 31, 2003, which primarily reflects 32.6 million paid to REN, partially offset by 9.3 million in interest. In 2003, the hydro account increased 63.4 million to 387.5 million. This difference was primarily a result of 2003 having been an exceptionally wet year (hydro coefficient of 1.33), while 2004 was a dry year (hydro coefficient of 0.81).

The Portuguese government determines the level of reference of the hydro account based upon the least favorable period of hydrological conditions during the previous 30 years. In doing so, the government determines an amount expected to be adequate to withstand unfavorable hydrological conditions that may occur in the future. The government has determined that the hydro account must not exceed the level of reference. The level of reference of the hydro account was 387.5 million for 2004, 2003 and 2002. In 2003, the hydro account exceeded the reference level, causing us to record the excess 19.4 million under non-operating income in 2003. The reference level was not exceeded in 2004.

We record as an annual expense deemed interest credited to the hydro account corresponding to the average interest rate paid on our euro-denominated borrowings for the applicable year. For more information on the hydro account, you should read note 24 to our consolidated financial statements.

Fuel costs in Spain amounted to 124.5 million in 2004, which represented 22.8% of our fuel costs compared with 85.5 million in 2003. In 2004, fuel costs in Spain were affected by an increase in imported coal prices.

The major components of our costs for other materials are the costs of cables, meters, transformers and other goods for resale, which are included under the item Raw materials and consumables Other materials. These costs increased to 168.1 million in 2004 from 162.7 million in 2003. A majority of these costs are credited to Own work capitalized and the remainder is applied to maintenance of the distribution networks. See Own work capitalized below. Costs for other materials from generation, distribution and supply activities in Portugal represent 76.3% of our total costs for other materials. Costs of materials from our generation activity in Portugal increased 15.5% in 2004 to 4.0 million from 3.5 million in 2003. Costs related to our distribution and supply activities in Portugal increased 11.6% to 124.2 million in 2004 from 111.3 million in 2003 because of the investments made on the EDPD distribution grid to improve service quality.

Costs of other materials in Spain decreased 12.9 million to 3.5 million in 2004 compared with 16.3 million in 2003. Costs from other materials in Brazil decreased 1.6 million to 8.6 million in 2004 from 10.2 million in 2003. Cost of sales for telecommunications increased 0.7 million in 2004 to 7.3 million from 6.6 million in 2003. Raw materials and consumables costs relating to our information technology activities decreased 17.0% to 20.3 million in 2004 from 24.5 million in 2003, reflecting the slowdown of the Portuguese information technology sector on Edinfor s activities related to finishing, graphics and equipment sales.

*Personnel costs.* Personnel costs, which consist mainly of wages and salaries and social security and pension fund contributions, decreased 0.6% in 2004 to 642.6 million from 646.6 million in 2003 due to the continuing effects of the Human Resources Restructuring Program restarted in 2003 at the Portuguese electricity business. However, as discussed above, this reduction is not completely reflected in our consolidated financial statements.



Personnel costs in the Portuguese electricity business decreased 7.8% to 477.3 million in 2004 from 517.4 million in 2003 as a result of the continuing effects of the Human Resources Restructuring Program, mostly with respect to EDPD. As a percentage of total personnel costs, electricity business costs in Portugal decreased in 2004 to 74.3% from 80.0% in 2003. Personnel costs in generation in Portugal decreased 1.5% to 118.5 million in 2004 from 120.3 million in 2003. Personnel costs in distribution and supply in Portugal decreased 9.6% to 358.8 million in 2004 from 397.1 million in 2003, reflecting the reduction in the number of employees at the distribution business. Following ERSE's approval, in August 2003, regarding the pass-through to final tariffs of up

## Table of Contents

to 485.7 million of restructuring costs associated with early retirements and negotiated dismissals, we decided to continue with our Human Resources Restructuring Program, which had been suspended. Additionally, apart from the Human Resources Restructuring Program, we signed agreements to bring forward the permanent retirement age of early retirees, with the result that the state social security system become responsible for a larger proportion of retirement costs.

In the Spanish energy business, personnel costs were 38.4 million in 2004 compared to 37.1 million in 2003. This increase was primarily due to the proportional consolidation of the Basque gas business, Naturcorp, commencing in August 2003. Personnel costs in the Spanish gas business increased to 7.0 million in 2004 from 4.2 million in 2003.

Personnel costs in the Brazilian electricity business decreased 0.7% to 63.5 million in 2004 from 64.0 million in 2003, which primarily reflects the depreciation of the Brazilian real against the euro in 2004.

Personnel costs in our telecommunications activities increased 6% to 54.0 million in 2004 from 51.0 million in 2003, while personnel costs in our information technology activities decreased 9.6% to 60.1 million in 2004 from 66.4 million in 2003, reflecting a reduction in the number of employees and successful wage negotiations.

*Depreciation and amortization.* Since the beginning of 2004, depreciation and amortization charges have been presented net of income related to the compensation of depreciation of partly funded fixed assets. Prior to 2004, we presented this income as an other non-operating income. This income is primarily related to new electricity connections made in prior years that were financed largely with customer payments, which are record as deferred income and, as these assets are depreciated, a portion of the amount is recorded as income and offset by a corresponding depreciation charge. This change in accounting presentation partly explains the decrease in depreciation and amortization charges of 5.9% to 795.5 million in 2004 from 845.6 million in 2003. The compensation of depreciation of partly funded fixed assets amounted to 79.6 million in 2004. This line item is discussed in note 31 to the consolidated financial statements.

Depreciation and amortization charges net of the compensation of depreciation of partly funded fixed assets in the Portuguese electricity business decreased 9.3%, or 54.1 million, to 529.2 million in 2004 from 583.3 million in 2003 due to the change in the accounting presentation described above, which mainly affects the generation and distribution and supply activities in Portugal. The compensation of depreciation of partly funded fixed assets in the Portuguese electricity business amounted to 77.4 million in 2004.

In the Spanish energy business, depreciation and amortization charges net of the compensation of depreciation of partly funded fixed assets increased to 68.2 million in 2004 from 60.1 million in 2003. This increase is primarily due to the proportional consolidation of the Basque gas business, Naturcop, since August 2003 and to the increase in wind farm capacity. Net depreciation and amortization charges in the Spanish gas business increased to 11.8 million in 2004 from 7.5 million in 2003.

Depreciation and amortization charges net of the compensation of depreciation of partly funded fixed assets in the Brazilian electricity business increased 1.7 million to 60.0 million in 2004 from 58.3 million in 2003.

Depreciation and amortization charges net of the compensation of depreciation of partly funded fixed assets relating to telecommunication activities decreased 11.8% to 64.2 million in 2004 from 72.7 million in 2003, reflecting lower investment needs. Investment required for the expansion of the network and acquisition of direct access infrastructure has already been completed.

In 2004, depreciation and amortization charges net of the compensation of depreciation of partly funded fixed assets relating to information technology activities increased 14.5% to 27.8 million from 24.3 million in 2003, primarily due to the investment in 2003 in the acquisition of new equipment for a data processing center.

*Supplies and services.* These costs consist of supplies and services provided to us by external suppliers, and include external maintenance and repairs, specialized services, communication, rents, insurance and other services.

---

**Table of Contents**

External maintenance and repairs consists of work on our power plants, substations and transmission and distribution networks that we subcontract to others. Other specialized services includes technical services such as auditing, legal, consulting and revenue collection services. Communication services include telecommunications, postal, delivery and courier services. The cost of these external supplies and services increased 2.7% to 649.5 million in 2004 from 632.5 million in 2003.

Supplies and services in the Portuguese electricity business increased 8.7% to 310.4 million in 2004 from 285.6 million, and as a percentage of our total supplies and services these costs increased to 47.8% in 2004 from 45.2% in 2003. Supplies and services relating to generation activity increased 10.3 million to 85.3 million in 2004 from 75.0 million in 2003 partly due to a higher activity level from EDP Produção's subsidiary for maintenance services, O&M Serviços, higher telecommunication costs associated with the power plants remote control, higher charges from EDP Valor (the shared services unit of EDP) and management fees from EDP S.A. Supplies and services relating to distribution and supply activity increased 6.9% to 225.1 million in 2004 partly due to an increase in management fees from EDP, S.A. and our shared services company, EDP Valor, and also due to an increase from IT logistics and related services from Edinfor.

In the Spanish energy business, supplies and services costs increased to 54.1 million in 2004 from 36.9 million in 2003. This increase in 2004 is primarily due to the allocation of the administrative costs of EDP S.A. to each activity, and to the proportional consolidation of the Basque gas business, Naturcop, since August 2003. Supplies and services costs in the Spanish gas business increased to 9.1 million in 2004 from 5.4 million in 2003.

Supplies and services relating to the electricity business in Brazil increased 15.7% to 72.0 million in 2004 from 62.2 million in 2003, mainly due to inflation and to the implementation of a new customer care and service system to improve client management and preventive maintenance programs.

Supplies and services in our telecommunications activities decreased 8.9% to 241.8 million in 2004 from 265.3 million in 2003 due to lower direct activity costs related to telecommunication services provided to our clients, resulting from the continued focus on efficiency, which enabled ONI to achieve savings in fixed network expenses, advertising and specialized projects, and from lower interconnection costs and a decrease in the cost of leased lines.

Supplies and services related to our information technology activities decreased 10.1% to 63.0 million in 2004 from 70.1 million in 2003, mainly as a result of the on-going efforts to control costs and the termination of a contract with IBM, which was no longer needed as Edinfor invested in a new data processing center.

*Own work capitalized.* Own work capitalized consists of amounts that correspond to costs related to personnel and materials and other external supplies and services incurred for projects under construction that are capitalized and will be amortized in future periods. These amounts generally consist of consumption of materials, direct internal costs, general administrative overheads and financial charges. Own work capitalized increased 9.8% to 258.8 million in 2004 from 235.6 million in 2003.

Own work capitalized in the Portuguese electricity business in 2004 represented 88.1% of our total own work capitalized (compared to 94.7% in 2003). In 2004, it increased 2.2% to 228.0 million from 223.0 million in 2003. Own work capitalized in our generation activity in Portugal decreased to 31.1 million in 2004 from 38.2 million in 2003 following the construction of the Ribatejo CCGT plant. Own work capitalized in the distribution and supply activities in Portugal increased to 196.8 million in 2004 from 184.8 million in 2003, reflecting EDPD's investments in the distribution grid to improve service quality.

In the Spanish energy business, Own work capitalized increased by two fold to 8.0 million in 2004 from 4.0 million in 2003. This increase is primarily due to the construction of the Albacete wind farm (124 MW).

A table setting forth the components of Own work capitalized for the past three years is provided in note 33 of our consolidated financial statements.

**Table of Contents**

*Concession and power-generation rents.* Concession and power-generation rental costs, which consist mainly of rents paid by EDPD to municipalities for concessions to distribute low-voltage electricity, increased to 190.2 million in 2004 from 175.6 million in 2003. The amount of rents payable to municipalities for concessions is set by government regulation and is based on the amount of low-voltage electricity consumed in the respective municipal areas in the previous year. The 8.3% increase in concession and power-generation rental costs for 2004 compared to 2003 was primarily due to an increase in the average concession fee paid by our distribution company to the Portuguese municipalities, from 7.25% to 7.50% of previous year's low-voltage sales, and to the 7.2% increase in low-voltage sales between 2002 and 2003.

*Provisions.* Provisions increased to 114.1 million in 2004 from 75.7 million in 2003, primarily due to a provision related to Bandeirante in account for the retroactive effect of a decision by ANEEL that provisionally reduced the size of Bandeirante's regulatory asset base. This reduction resulted in a reduction of the tariff increase that had been granted in the last tariff revision in October 2003, from 18.08% to 10.51%. ANEEL stated that it would confirm or amend this provisional reduction at some point between October 2004 and October 2005. Bandeirante booked a provision to account for the retroactive impact of ANEEL's decision. This line item is discussed in note 34 to the consolidated financial statements.

We systematically record the provision for doubtful accounts receivable from third parties and municipalities based on the age of the receivables and our collection history. We do not record a provision with respect to accounts receivable from other public entities since historically we have not experienced a problem in collecting these receivables. Accounts receivable are written off when a customer is declared bankrupt by a court of law because we receive the tax benefit of the write-off only when the customer is actually declared bankrupt. Consequently, we have a significant amount of accounts receivable that are fully provided for but have not been written-off. For more information on this provision, you should read note 42.i(i) to the consolidated financial statements.

Until the end of 2002, increases in provisions for doubtful accounts were reflected in our consolidated statements of income in the line item Provisions and were included in the determination of operating income while decreases were included in the line item Other non-operating expenses (income), net below the operating income. Beginning in 2003, at the electricity distribution activity in Portugal, both increases and decreases in provisions for doubtful accounts are included in the line item Provisions.

Provisions in the Portuguese electricity business increased to 60.4 million in 2004 from 55.5 million in 2003 (and as a percentage of our total provisions, decreased to 53.0% in 2004 compared to 73.4% in 2003). Provisions in distribution and supply activities increased to 48.6 million in 2004 from 42.8 million in 2003 mainly due to the fact that 2003 provisions benefited from a change in EDPD's accounting procedures (provisions for doubtful clients were netted against the non-operating gains resulting from the reversal of this provision), which was not the case in 2004, as most of the non-operating gains with provisions resulted from the write-off of existing debts. In the telecommunication activity, provisions decreased 1.2 million to 3.9 million in 2004.

*Other operating expenses/(income).* This item primarily includes taxes other than income taxes and other operating income (net). The item increased to a 12.8 million expense in 2004 from a 10.3 million expense in 2003.

**Operating margin**

As a result of the factors discussed above, our operating margin increased 16.9% to 1,058.4 million in 2004 from 905.7 million in 2003. Operating margin from our core electricity business in Portugal increased 16.5% to 852.6 million in 2004 from 731.7 million in 2003, primarily due to an increase in electricity consumption of 6.1%, the beginning of operations at the Ribatejo CCGT plant and the reduction in personnel costs following the implementation of the Human Resources Restructuring Program. Operating margin from our Spanish energy business

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

decreased 1.0% to 81.4 million in 2004 from 82.2 million in 2003. Operating margin from Brazilian electricity activities increased 67.5 million to 194.3 million in 2004, mainly as a result of the 4.5% increase in electricity consumption and tariff increases in 2003 and 2004, mitigated by the provisional decision by ANEEL to reduce Bandeirante's 2003 tariff increase, which resulted in an increase in provisions to account for the retroactive effect of the decision. Operating margin from telecommunication activities improved by 22.8 million to a 45.9 million loss in 2004 from a 68.7 million loss in 2003, mainly due to cost-cutting and a reduction in depreciation, reflecting the end of the depreciation period of part of ONI's

**Table of Contents**

assets and a decrease in investment needs. Operating margin from information technology activities decreased 56.7% to 4.0 million in 2004 from 9.3 million in 2003 due to a slowdown in the Portuguese information technology sector.

**Interest and related income/(expenses), net**

Our net interest and related income/(expenses) consist of interest and related income and expenses. These net expenses decreased to 335.3 million in 2004 from 359.0 million in 2003 (and decreased as a percentage of our total revenues to 4.6% in 2004 compared to 5.1% in 2003). This line item is discussed in note 36 to the consolidated financial statements.

Net interest expenses decreased 10.4% to 299.8 million in 2004 from 334.4 million in 2003 following the reduction of our financial debt. Contributions from equity method investments increased 7.8 million to 41.0 million in 2004, partially because results for 2003 were negatively impacted by 8.8 million in accumulated losses from Electra. This investment was fully provisioned at the end of 2003. Net exchange differences moved from a net unfavorable 10.7 million difference in 2003 to a net favorable 12.4 million difference in 2004, mainly due to 9% annual appreciation of the Brazilian real against the dollar in 2004, affecting the dollar-denominated debt of the Brazilian subsidiaries. Investment income decreased 6.3 million to 30.5 million in 2004 following the sale of our Iberdrola stake in the second half of 2003, which in 2003 provided 16.8 million in dividends, mitigated by GALP more than doubling its dividend distribution in 2004 to 13.3 million in 2004 from 6.2 million in 2003 and higher dividends received from our stake in MillenniumBCP following the distribution of an ordinary 0.06 dividend in April 2004 and an additional 0.03 interim dividend in November 2004.

**Other non-operating income/(expenses)**

We had other non-operating expenses of 164.7 million in 2004 compared to other non-operating expenses of 14.4 million in 2003, partly due to the change in the accounting presentation of the compensation of depreciation of partly-funded fixed assets, which, as described above under Operating Costs and Expenses, prior to 2004 was presented as other non-operating income, and currently is presented as an operating item. In 2004, this item amounted to 79.6 million (presented in the depreciation and amortization line item see note 31 to the consolidated financial statements for more information on this line item) in comparison with 79.8 million in 2003.

Other non-operating results include a reduction in the value fixed assets in 2004 relating to the 11.0 million write-off of assets related to the decommissioning of the Tapada do Outeiro power plant following the end of its PPA, a 7.6 million Brazilian real ( 2.1 million) loss on the sale of Fafen in Brazil to Petrobras, a 35 million loss from impairments in goodwill of Edinfor and ACE (an IT business) registered following the valuation that preceded the agreement to sell 60% of Edinfor to LogicaCMG for 81 million. The sale of Retecal by Hidrocantábrico resulted in a 10.0 million capital gain.

The net increase in provisions for contingencies and liabilities amounted to 51.2 million in 2004 from 56.7 million in 2003. In 2004, the figure is mainly with respect to ONI, which reversed a 40.0 million tax credit booked in 2002 from the sale of ONI Way to Vodafone. The use of this tax credit is being reviewed by the authorities and as soon as Vodafone begins benefiting from it, the gain will be booked. ONI also booked in 2004 a 5.0 million provision relating to three years of depreciation (2002 and 2003 having not been booked) of the right to use the Transgás fiber optic network that had been halted in 2002 because of disagreements between ONI and Transgás regarding the value of the contract. The 2003 figure includes the use of a provision that was created by Escelsa to mitigate the anticipated market loss on its dollar-denominated assets and to the reversal of a provision in 2003 that had been created for the value of joint investments in hydroelectric sites (Aguieira, Raiva and Alqueva), which were offset by the creation of a 119.2 million provision to account for possible devaluation and contingencies in Brazil and Cape Verde, specifically regarding the possible reduction of the tariff expected from the Fafen ( 37.9 million) and Lajeado ( 24.3 million) industrial projects,



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the loss of equity at Electra ( 27.0 million) and other contingencies ( 30.0 million).

Net corrections to previous years in 2004 amounted to a 24 million loss and include a 9.9 million loss relating to ANEEL's revision of Escelsa's August 2001 tariff revision and 6.2 million relating to ANEEL's provisional revision of Bandeirante's October 2003 tariff revision. For 2003, the figure amounted to a 31.6 million loss and mostly related to a 35.9 million loss associated with

## **Table of Contents**

an agreement with the Portuguese state over the amount invested in joint projects for hydroelectric sites (Aguieira, Raiva and Alqueva).

In connection with the Human Resources Restructuring Program, in 2004, EDP recorded 25.1 million in human resources rationalization costs, relating to negotiated dismissals (with respect to EDPD, this cost is permitted by regulator to be passed through to final tariffs) and compensation paid to early retirees that accepted acceleration of the legal retirement age.

### **Provision for income taxes**

Our provision for income taxes is determined on the basis of the estimated taxable income for the period. Income taxes provided for in 2004 were 256.8 million compared with 239.3 million in 2003. The reference income tax rate in Portugal was 25% in 2004 compared with 30% in 2003. In addition, a municipal surcharge of up to 10% of the base rate is typically levied by the municipality in which the income is earned.

### **Provision for deferred income taxes**

Deferred income taxes are recognized in our consolidated financial statements in accordance with local accounting standards. Our provision for deferred income tax is determined, using the balance sheet liability method, on the temporary differences between the book values of assets and liabilities and their respective taxable bases. The taxable base of assets and liabilities is determined so as to reflect the consequences of taxation resulting from the way in which we expect, on the balance sheet date, to recover or to pay the recorded amount of our assets and liabilities. In determining deferred tax, the rate used is the one in effect or otherwise applicable on the balance sheet date. Recognized deferred tax assets are reduced to the recoverable amount that can be compensated against future expected profits.

In 2004, our provision for deferred income taxes amounted to a 97.2 million benefit and, in 2003, to a 43.7 million benefit. This difference is mainly explained by the fact that, in 2004, the deferred income tax relating to tariff deviations in the electricity distribution business in Portugal was in the form of a benefit amounting to 44.4 million, while in 2003, deferred income tax related to tariff deviation was a 22.4 million charge (tariff deviations in 2004 amounted to a 92.1 million expense and in 2003 to a 77.9 million income).

Our effective tax rate is different from the reference income tax in Portugal each year, due to permanent differences arising mainly from amortization of goodwill and concession rights and amortization resulting from revaluation of fixed assets that are not deductible for income tax purposes. Our effective tax rate was 28.6% in 2004, compared with 36.7% in 2003. In 2003, the effective tax rate was partly affected by the losses before taxes in our telecommunications business (EDP recorded lower losses in 2004), which tax benefit is not accounted under this line item. For more information on provision for deferred income taxes, you should read note 38 of our consolidated financial statements.

### **Consolidated net profit**

As a result of the factors discussed above, our consolidated net income for 2004 increased 15.5% to 440.2 million from 381.1 million in 2003.

**2003 COMPARED WITH 2002**

**Revenues**

Our total revenues in 2003 increased by 9.3% to 6,977.5 million from 6,386.6 million in 2002, due primarily to the increase in electricity sales, which in 2003 represented approximately 90.2% of our total revenues compared with 92.0% of total revenues in 2002. In 2003, revenues as well as the other items in our consolidated profit and loss account were affected by the proportional (40%) consolidation of Hidrocantábrico for twelve months, which in 2002 was proportionally consolidated for seven months, and the full consolidation of Escelsa and Enersul for twelve months, which in 2002 were equity consolidated for the first nine months and fully consolidated in the last quarter of the year. We have consolidated revenues from Hidrocantábrico in the amount of 662.5 million in 2003 and 321.4 million in 2002. Escelsa and Enersul contributed 435.8 million in 2003 and 100.8 million in 2002.

**Table of Contents**

*Sales of electricity.* Our total electricity sales increased by 7.1% to 6,296.1 million in 2003 from 5,876.2 million in 2002 mainly due to the consolidation effects of Hidrocantábrico, Escelsa and Enersul noted above.

Electricity sales in Portugal from generation and distribution and supply activities, which represented 78.3% of our total consolidated electricity revenues, remained stable at 4,929.5 million in 2003 from 4,928.8 million in 2002, with the increase in electricity sales from distribution and supply activities being offset by a decline in electricity sales from generation activity.

Electricity sales from our distribution and supply activities in Portugal increased 3.1% from 3,503.4 million in 2002 to 3,610.6 million in 2003 due to a 5.5% increase in the Portuguese electricity system demand from 36,931 GWh in 2002 to 38,955 GWh in 2003 and due to the fact that, in nominal terms, tariffs increased across all voltage levels by an average of 2.8% in 2003 from the 2002 levels. The 5.5% increase in electricity sales volume was primarily due to a 4.9% increase in low-voltage consumption, which occurred as a result of a cold winter and a particularly warm summer in 2003, as well as due to a 10.2% increase in very high-voltage and high-voltage consumption following an increase in the number of our industrial clients, after EDPD gained four large industrial clients. Electricity distribution in the PES decreased 3.0% to 34,907 GWh in 2003 from 35,973 GWh in 2002, whereas in the Non-Binding Sector, electricity distributed increased by more than fourfold to 4,048 GWh in 2003 from 958 GWh in 2002 due to the fact that some medium-voltage consumers opted to become Qualifying Consumers.

In 2003, the aggregate tariff adjustment was 77.9 million. This figure includes a positive adjustment of 77.0 million from the 2003 tariff adjustment, a positive adjustment of 17.9 million from a revision made to the tariff adjustment of year 2002, a negative adjustment of 10.2 million from the 2002 tariff adjustment reposition and a negative adjustment of 6.7 million from the 2001 tariff adjustment reposition. In 2002, the aggregate tariff adjustment was 70.5 million. This figure includes a positive adjustment of 50.0 million relating to the application of the new tariff regulation in 2002, and a positive adjustment of 20.5 million relating to the 2000 tariff adjustment reposition.

Electricity sales from our generation activity in Portugal decreased 7.5% from 1,425.4 million in 2002 to 1,318.9 million in 2003. Approximately 89% of EDP Produção's generation revenues are based on long-term PPAs between each of its power plants and REN as the single buyer for the Portuguese PES. The PPAs include an energy charge component that remunerates EDP Produção's plants operating in the PES for fuel consumption incurred by producing electricity. Given that 2003 was a wet year, EDP Produção's thermal power plants were less utilized and we incurred lower fuel costs, resulting in lower revenues from the variable component of the PPAs that remunerate for fuel consumption.

Electricity sales in Spain increased to 544.4 million in 2003 from 295.1 million in 2002, primarily due to the proportional consolidation of Hidrocantábrico for twelve months in 2003 compared to seven months in 2002. Other factors that influenced this increase were higher electricity revenues in 2003 from Hidrocantábrico's supply activity that were partially offset by lower Spanish electricity pool prices during 2003.

Electricity sales in Brazil increased to 956.4 million in 2003 from 668.6 million in 2002, primarily due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. Other factors that influenced this increase were tariff revisions that affected our distribution companies in Brazil during 2003, namely a 14.68% average tariff increase for Bandeirante (as of October 22), a 17.30% average tariff increase for Escelsa (as of August 6) and a 32.59% average tariff increase for Enersul (as of April 8). These tariff increases were partially mitigated by the devaluation of the Brazilian real against the euro beginning in the first half of 2002.

*Other sales.* Our other sales activities generated revenues of 160.3 million in 2003 compared with 112.0 million in 2002, due primarily to the inclusion since August 2003 of gas sales of Naturcorp, which was proportionally consolidated in our accounts on the same basis as Hidrocantábrico. As a result, the contribution of the Spanish activities to the consolidated revenues from other sales activities increased to 105.3

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

million in 2003 from 20.1 million in 2002. This increase more than offset an 84.4% decrease in revenues from telecommunications equipment sales from 46.7 million in 2002 to 7.3 million in 2003, due to the completion of a

---

**Table of Contents**

major contract, and a 23.9% decrease in sales from our information technology activity from 35.5 million in 2002 to 27.0 million in 2003, due to a decrease in demand for IT solutions, as result of the economic slowdown that resulted in lower investments by corporations in information technology systems.

*Services rendered.* Our revenues from services increased to 521.2 million in 2003 from 398.4 million in 2002, due to the changes in EDP's consolidation of Hidrocantábrico, Escelsa and Enersul, as noted above, and increased sales by EDP Comercial, Bandeirante and ONI. Revenues from services provided by the electricity activity in Portugal increased to 86.9 million in 2003 from 51.3 million in 2002, mainly due to an increase at EDP Comercial resulting from the ongoing liberalization process in Portugal. Services provided in Spain by Hidrocantábrico contributed 6.2 million and 15.0 million in 2002 and 2003, respectively, following the proportional consolidation of Hidrocantábrico for twelve months in 2003. Our operations in Brazil contributed 49.1 million to our consolidated revenues from services in 2003, as a result of the full year consolidation of Escelsa and Enersul, as well as Bandeirante's contribution following the increased number of liberalized clients in its concession area that have to pay for the use of Bandeirante's distribution grid. The 18.2% increase in telecommunications services to 323.8 million in 2003 from 274.1 million in 2002 resulted from higher voice telecommunications services provided by ONI. Information technology activity revenues from services provided declined 15.5% from 188.5 million in 2002 to 159.3 million in 2003, due primarily to the Portuguese economic slowdown in 2003.

**Operating costs and expenses**

Our total operating costs and expenses increased by 5.8% to 6,071.8 million in 2003 compared to 5,737.9 million in 2002, mainly due to the consolidation effects already mentioned above relating to Hidrocantábrico, Escelsa and Enersul. These consolidation effects more than offset lower fuel costs at EDP Produção, following a wet year in which thermal generation was reduced in favor of hydro power, lower operating costs at Bandeirante associated with the depreciation of the Brazilian real against the euro beginning in June 2002, and lower costs at ONI, primarily as a result of the cost-cutting program and a reduction in the number of employees.

Hidrocantábrico's contribution to our total operating costs and expenses in 2003 totaled 592.6 million compared to 283.3 million in 2002 (seven months of proportional consolidation), while Escelsa and Enersul contributed 372.9 million in 2003 compared to 85.6 million in 2002 (three months of full consolidation). In addition, total operating costs at Hidrocantábrico reflect the consolidation of five months of Naturcorp in 2003 and the start of Castejón CCGT's operations in October 2002.

As a percentage of revenues, total operating costs and expenses decreased to 87.0% in 2003 from 89.8% in 2002 due primarily to lower costs of purchased electricity and fuel.

*Raw Materials and Consumables.* Our raw materials and consumables costs increased 6.3% to 3,921.0 million in 2003 from 3,687.1 million in 2002 due to the consolidation of Hidrocantábrico, Escelsa and Enersul, as noted above. These consolidation effects more than offset lower fuel costs at EDP Produção, following a reduction in use of thermal generation due to a wet year, and a decrease in the cost of sales of telecommunications equipment.

Our costs of purchased electricity increased 11.8% to 3,360.3 million in 2003 from 3,005.5 million in 2002, due to the consolidation effects of Hidrocantábrico, Escelsa and Enersul, as noted above.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Generation and distribution and supply activities in Portugal represent 73.7% of our costs of purchased electricity. Electricity purchases from generation in Portugal increased 28.1 million in 2003 to 65.3 million due to an increase in electricity purchases of small hydro producers operating in the Non-Binding Sector as these producers are allowed to acquire energy up to their installed capacity in order satisfy energy procurements of the Non-Binding Sector. Our costs of purchased electricity in distribution and supply activity in Portugal primarily include purchases made by EDPD from REN, as well as purchases from private generators and small independent producers. The energy that EDPD purchases from REN is supplied to the binding sector. In 2003, electricity purchases increased 1.1% to 2,412.5 million in 2003 from 2,386.4 million in 2002, mainly due to a 4% increase in the average tariff charged on power purchases from REN, offset by a 3.0% decrease in the Portuguese binding system electricity consumption. For more

## Table of Contents

information on these purchases of electricity, you should read Item 4. Information on the Company Portugal Electricity System Overview The Independent Electricity System and Generation Competition.

Costs of purchased electricity in Spain by Hidroantábrico represented 360.5 million in 2003 compared with 154.1 million in 2002. This increase is mostly due to consolidation effects. In addition, in 2003, Hidroantábrico's costs of purchased electricity reflect the first time consolidation of five months of Naturcorp in 2003 and the start of Castejón CCGT's operations in October 2002.

Costs of purchased electricity in Brazil increased 34.9% in 2003 to 656.5 million from 486.5 million. This increase is primarily due to the consolidation of Escelsa and Enersul, as noted above. In 2003, Escelsa and Enersul contributed 251.1 million compared with 57.5 million in 2002. Costs of purchased electricity at Bandeirante decreased 16.8% to 357.0 million in 2003 from 429.1 million in 2002, mainly due to the depreciation of the Brazilian real against the euro.

Our fuel, steam and ashes costs decreased 14.5% to 398.0 million in 2003 from 465.5 million in 2002. In 2003, fuel costs from generation in Portugal represented 78.5% of our fuel costs and decreased 32.9% to 312.3 million from 465.5 million in 2002. This decrease in fuel costs reflects a decline in fuel utilization by EDP Produção associated with a lower use of thermal generation due to a wet year.

At December 31, 2003 the hydro account amounted to 387.5 million, an increase of 63.4 million, which includes 71.9 million charged to REN. In 2002, the hydro account decreased by 63.4 million to 324.1 million. This difference was primarily a result of 2003 having been an exceptionally wet year (hydro coefficient of 1.33), while 2002 was a dry year (hydro coefficient of 0.76). To learn more about the effect of hydrological conditions on our business, you should read Item 4. Information on the Company Portugal Generation.

The level of reference of the hydro account was 387.5 million for 2003, 2002 and 2001. In 2003, the hydro account exceeded the reference level causing us to record the excess 19.4 million under non-operating income. In 2002, the hydro account did not exceed the reference level, hence we did not record an excess in non-operating income in 2002.

Fuel costs in Spain at Hidroantábrico amounted to 85.5 million in 2003 compared to 39.3 million in 2002, primarily due to the consolidation effects as noted above. In addition, fuel costs at Hidroantábrico reflect the start of operations of Castejón's CCGT power plant (October 2002) noted above.

The major components of our costs for other materials are the costs of cables, meters, transformers and other goods for resale, included under the item Raw materials and consumables Other materials. These costs decreased to 162.7 million in 2003 from 216.0 million in 2002. A majority of these costs are credited to Own work capitalized and the remainder is applied to maintenance of the transmission and distribution networks. See Own work capitalized.

Costs for other materials from generation, distribution and supply activities in Portugal represent 70.5% of our costs for other materials. Costs of materials from our generation activity in Portugal decreased 21.1% in 2003 to 3.5 million. Regarding our distribution and supply activities in Portugal, these costs increased 39% to 111.3 million in 2003 from 80.1 million in 2002 because 2002 costs with materials were lower than normal due to stocks write-offs.



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Costs of other materials in Spain from Hidrocantábrico increased 11.7 million to 16.3 million in 2003 compared with 4.6 million in 2002. This increase is the result of the consolidation effects noted above.

Costs from other materials in Brazil increased 6.2 million to 10.2 million in 2003 from 4.0 million in 2002. This increase is the result of the above-mentioned consolidation effects of Escelsa and Enersul. In 2003, Escelsa and Enersul contributed 5.9 million to our costs with other materials, compared with 1.1 million in 2002.

## **Table of Contents**

Cost of sales for telecommunications decreased 46.8 million in 2003 to 6.6 million from 53.4 million in 2002, following the discontinuation of UMTS operations in December 2002. In addition, the decrease in the cost of sales reflects the completion of a major equipment supply contract in 2002.

Raw materials and consumables relating to our information technology activities decreased 22.7% to 24.5 million in 2003 from 31.6 million in 2002, partially reflecting the economic slowdown of the Portuguese economy that, as mentioned above, affected the information technology revenues.

*Personnel costs.* Personnel costs increased 3.5% in 2003 to 646.6 million from 624.8 million in 2002, mainly as a result of the consolidation changes noted above.

Personnel costs in the Portuguese electricity business increased 3.5% to 517.4 million in 2003 from 500.1 million in 2002 following the 2.7% average salary increase. As a percentage of total personnel costs, electricity business in Portugal remained stable in 2003 and 2002 at 80%. Personnel costs in generation in Portugal increased 0.7% to 120.3 million in 2003 from 119.6 million in 2002 as a result of an increase in average salaries, partially offset by a reduction of 111 employees toward the end of 2003. Personnel costs in distribution and supply increased 4.3% to 397.1 million in 2003 from 380.6 million in 2002 reflecting the increase of pension premiums and the average salary increase.

In Spain, personnel costs at Hidroantábrico were 37.1 million in 2003 compared to 18.3 million in 2002. This increase is primarily due to the proportional consolidation of twelve months in 2003 compared to seven months in 2002. Additionally, the inclusion of Naturcorp in Hidroantábrico's accounts since August 2003 also contributed to this increase.

Personnel costs in Brazil increased 61.6% to 64.0 million in 2003 from 39.6 million, primarily due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. In addition, the average salary increase in our Brazilian subsidiaries was approximately 10%, which also contributed to the increase. However, both of these effects were partly offset by the strong depreciation of the Brazilian real against the euro beginning in June 2002.

Personnel costs in our telecommunications activities decreased 43.2% to 51.0 million in 2003 from 89.7 million in 2002, reflecting the discontinuation of the UMTS project toward the end of 2002 and the reduction in the number of employees achieved primarily at the fixed line business in Portugal.

Personnel costs in our information technology activities decreased 12% to 66.4 million in 2003 from 75.5 million in 2002, due to the ongoing staff restructuring process and successful wage negotiations.

*Depreciation and amortization.* Depreciation and amortization in 2003 increased to 845.6 million from 739.5 million in 2002, primarily due to the consolidation changes noted above.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Depreciation and amortization charges in the Portuguese electricity business increased 3.8%, or 21.4 million, to 583.3 million in 2003 from 561.9 million in 2002 (and as a percentage of our total depreciation and amortization charges, it decreased 69.0% in 2003 compared to 76.0% in 2002). Depreciation and amortization charges in generation increased 2.7% to 234.4 million in 2003 from 228.2 million in 2002. Depreciation and amortization in distribution and supply activities increased 4.6% to 348.9 million in 2003 from 333.6 million in 2002, due to the transfer of an information technology system from our information technology services provider company, Edinfor, to EDPD and greater investments made in the distribution network.

In Spain, Hidroantábrico's contribution to our depreciation and amortization charges increased to 60.1 million in 2003 from 26.9 million in 2002, primarily due to the proportional consolidation of Hidroantábrico for twelve months in 2003 compared to seven months in 2002. In addition, the inclusion of Naturcorp since August 2003 and the depreciation of the investment made in Castejón CCGT since October 2002 also contributed to this increase.

## Table of Contents

Depreciation and amortization charges in the Brazilian electricity business increased to 58.3 million in 2003 from 34.2 million in 2002 mainly due to the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. This increase was partly offset by the depreciation of the Brazilian real against the euro.

Depreciation and amortization charges relating to telecommunication activities increased 8.8% to 72.7 million in 2003 from 66.9 million in 2002 as a result of the acquisition in Spain of cable access rights, primarily during 2002, and the investments made in Portugal in connection with the expansion of the network in 2002 and the acquisition of direct access infrastructure.

In 2003, depreciation and amortization charges relating to information technology activities increased 28.4% to 24.3 million from 18.9 million in 2002, primarily due to the IT project ISU/Communications that began depreciating in 2003.

*Supplies and services.* The cost of external supplies and services decreased 6.3% to 632.5 million in 2003 from 675.1 million in 2002.

Supplies and services in the Portuguese electricity business increased 1.2% to 285.6 million in 2003 from 282.1 million, and as a percentage of our total supplies and services it increased to 45.2% in 2003 from 41.8% in 2002. Supplies and services relating to generation activity increased 2.0 million to 75.0 million in 2003, benefiting from a reduction in insurance costs, steady maintenance costs and tighter management discipline. Supplies and services relating to distribution and supply activity increased 0.7% to 210.6 million in 2003 due to the transfer of services, which were being performed internally by EDPD, to our shared services company, EDP Valor. This effect was offset by a decrease in maintenance costs due to both the renegotiation of contracts, which are no longer on a retainer basis, and a more efficient use of internal resources.

Supplies and services costs relating to Hidrocantábrico decreased to 36.9 million in 2003 from 41.1 million in 2002, primarily due to the fact that in 2002 the electricity transmission and distribution tariffs paid by Hidrocantábrico's supply unit were accounted under supplies and services, while in 2003 these tariffs started to be accounted under purchases of electricity.

Supplies and services relating to the electricity business in Brazil increased to 62.2 million in 2003 from 36.0 million in 2002 mainly due to the full consolidation of Escelsa and Enersul for twelve months in 2003 against three months in 2002. In addition, the full operations of the hydro power plant Lajeado beginning in November 2002 and the complete year of the cogenerator Fafen, also contributed to this increase.

Supplies and services in our telecommunications activities decreased 9.7% to 265.3 million in 2003 from 293.7 million in 2002 primarily due to the cost-cutting program. The major savings were in advertising costs, specialized works and fixed network costs.

Supplies and services related to our information technology activities decreased 6.7% to 70.1 million in 2003 from 75.1 million in 2002, mainly as a result of the effect of economic slowdown in the information technology business and the transfer of an information technology asset to our Portuguese electricity distribution unit.

*Own work capitalized.* Own work capitalized decreased 2.5% to 235.6 million in 2003 from 241.8 million in 2002.

Own work capitalized in the Portuguese electricity business represented 94.7% in 2003 of our total own work capitalized (against 77.7% in 2002). In 2003, it increased 18.7% to 223.0 million from 188.0 million in 2002. Own work capitalized in our generation activity in Portugal increased to 38.2 million in 2003 from 26.2 million in 2002 following the investments in TER CCGT and Venda Nova II hydro power plant. Own work capitalized in the distribution and supply activities in Portugal increased 14.2% to 184.8 million in 2003 from 161.8 million in 2002 primarily due to higher investments in the distribution grid.

## **Table of Contents**

In 2003 and 2002 Hidroantábrico contributed 4.0 million and 2.7 million to own work capitalized, respectively, primarily due to the proportional consolidation of twelve months in 2003 compared to seven months in 2002.

Own work capitalized in our telecommunication activities was almost non-existent in 2003 compared to 30.2 million accounted for in 2002. The 2002 figure is related to the UMTS project, which was discontinued by the end of 2002.

Own work capitalized relating to information technology decreased 33.5% to 8.4 million in 2003 due to the fact that 2002 figures reflect the capitalization of costs on the development of an information technology system for EDPD, that was completed in the end of 2002.

A table setting forth the components of own work capitalized for the past three years is provided in note 33 to our consolidated financial statements.

*Concession and power-generation rents.* Concession and power-generation rental costs increased to 175.6 million in 2003 from 158.2 million in 2002. The 11.0% increase in concession and power-generation rental costs between 2002 and 2003 is primarily due to the increase in the average concession fee paid by our generation activity to the Portuguese municipalities, from 7.00% to 7.25% of previous year's sales, and the 6.3% increase in low-voltage, special low-voltage and public lighting sales.

*Provisions.* Provisions decreased to 75.7 million in 2003 from 100.6 million in 2002, primarily due to a decrease in provisions for doubtful accounts charges and healthcare liabilities provision charges.

Until the end of 2002, increases in provisions for doubtful accounts were reflected in our consolidated statements of income in the line item Provisions and were included in the determination of operating income, while decreases were included in the line item Other non-operating expenses (income), net below the operating income. Beginning in 2003, at the electricity distribution activity in Portugal, both increases and decreases in provisions for doubtful accounts are included in the line item Provisions.

Provisions in the Portuguese electricity business decreased to 55.5 million in 2003 from 76.9 million in 2002 (and as a percentage of our total provisions, it decreased 73.4% in 2003 compared to 76.4% in 2002). Provisions in generation increased 1.1 million to 12.7 million in 2003. Provisions in distribution and supply activities decreased to 42.8 million in 2003 from 65.3 million in 2002, due to the accounting of the provision decreases in this line item since 2003, at the distribution business level, as noted above.

*Other operating expenses/(income).* This item includes primarily taxes other than income taxes and other operating income (net), which decreased to a 10.3 million expense in 2003 from 5.7 million income in 2002. This decrease is partly related to other operating expenses in Brazil, which increased to 18.6 million in 2003 from 6.3 million in 2002 due to the regulatory contributions to the Energy Development Account in 2003, as well as the full consolidation of Escelsa and Enersul for twelve months in 2003 compared to three months in 2002. The Energy Development Account was created in Brazil largely to promote the competitiveness of some generation technologies, including wind farms, small hydro plants, biomass plants and thermal facilities using natural gas and domestic mineral coal.

**Operating margin**

As a result of the factors discussed above, our operating margin increased 39.6% to 905.7 million in 2003 from 648.7 million in 2002. Operating margin from our core electricity business in Portugal increased 12.5% to 731.7 million in 2003 from 650.3 million in 2002, primarily due to a successful costs control program. In Spain, Hidroantábrico contributed 82.2 million to our consolidated operating margin in 2003 compared to 38.1 million in 2002. In addition to the changes in consolidation noted above, Hidroantábrico benefited from the first-time consolidation of Naturcorp. Operating margin from Brazilian electricity activities increased 65.4 million to 126.8 million in 2003. This increase is partly due to the changes in consolidation related to Escelsa and Enersul noted above. These companies contributed 62.8 million to our operating margin in 2003 compared to 15.2 million in 2002.

**Table of Contents**

In addition, Brazilian electricity activities benefited from tariffs increases and recovery in Brazilian consumption. Operating margin from telecommunication activities improved by 86.2 million to a 68.7 million loss in 2003 from a 154.8 million loss in 2002, due to the discontinuation of UMTS operations, an increase in voice traffic, lower interconnection costs and rigorous cost cutting. Operating margin from information technology activities decreased 26.3 million to 9.3 million in 2003 from 35.6 million in 2002 due to the slowdown of the Portuguese economy.

**Interest and related income/(expenses), net**

Our net interest and related income/(expenses) consist of interest and related income and interest and related expenses. These net expenses increased to 359.0 million in 2003 from 222.8 million in 2002 (and increased as a percentage of our total revenues to 5.1% in 2003 compared to 3.5% in 2002). This variation was mainly influenced by the consolidation changes noted above. Hidroantábrico contributed a 62.4 million net expense in 2003 compared to a 37.7 million net expense in 2002, reflecting the 40% proportional consolidation of Hidroantábrico since June 2002. From January until May 2002, we accounted for 5.4 million income from the application of the equity method in respect of Hidroantábrico. Escelsa and Enersul contributed a 8.8 million income in 2003 compared with a 37.3 million income in 2002, reflecting full consolidation of the Escelsa and Enersul since October 2002. This was offset by a 102.9 million expense from the application of the equity method in respect of Escelsa and Enersul, which we accounted for in the period from January to September 2002.

During 2002, we recognized 56.4 million of positive foreign exchange differences on U.S. dollar assets that we acquired for the sole purpose of covering foreign exchange differences on the U.S. dollar debt of our Brazilian subsidiaries. By the end of 2002, we used these U.S. dollar assets in the purchase of approximately 83% of Escelsa's U.S. dollar bond issue. These Escelsa bonds were acquired at below par value, resulting in an 89.2 million financial gain. In 2003, we recognized negative foreign exchange differences of 65.0 million in respect of the Escelsa bonds as a result of the Brazilian real's increase in value against the U.S. dollar.

Net expense from interest on debt increased due to the consolidation changes and to the financial gain registered on Escelsa bonds in 2002, as noted above. This increase was partly offset by lower interest rates associated with our debt in 2003.

Contributions from equity method investees were positively influenced in 2003 as a result of higher contributions from REN and CEM. Investment income decreased 8.2% to a 36.7 million income in 2003 from a 40.0 million income in 2002, due to lower dividends received from BCP.

Amortization of investments (goodwill) increased as a result of the consolidation changes, the acquisition of Naturcorp by Hidroantábrico and, for the first time in 2003, amortization of a client portfolio acquired by Comunitel.

**Other non-operating income/(expenses)**

We had other non-operating expenses of 14.4 million in 2003, compared to other non-operating expenses of 138.9 million in 2002 (which reflected ONI Way's write-off), primarily due to a 56.7 million expense in 2003 related to non-operating provisions net of provision utilizations and a 47.8 million expense associated to costs with human resources rationalization in Portugal. These losses in 2003 were partially offset by non-operating income of 79.8 million related to the reversal of depreciation of fixed assets that were funded by third parties, mostly related to our Portuguese electricity distribution activity, and 19.4 million related to the hydrological correction mechanism explained above (we did not



record such income in 2002).

We recorded a net expense of \$56.7 million in 2003 related to non-operating provisions net of provision utilizations compared with a net income of \$58.1 million recorded in 2002. The net expense recorded in 2003 reflects a \$114.7 million provision for financial assets in order to cover for contingencies and possible devaluations in Brazil and Cape Verde and \$72.5 million income related to the reduction of provisions for financial assets and other risks and contingencies. For more information on non-operating provisions net of utilizations you should read note 34 to the consolidated financial statements.

## **Table of Contents**

An income item of 79.8 million was registered in 2003, compared to 71.8 million in 2002, for the portion of depreciation due primarily to new electricity connections made in prior years that were financed largely with customer payments. We record the amount of these payments initially as deferred income and as the assets are depreciated over 30 years, a portion of the amount is taken into income and offset by a corresponding depreciation charge.

As the primary supplier of low-voltage electricity in Portugal, we have in the past been obliged to provide electricity to municipalities for street lighting and other public buildings even in situations where the recipient municipalities were not paying their bills on a timely basis. Although we have not encountered significant collection problems in recent years, prior to 1988 collection problems were encountered with certain municipalities and we still have on our books receivables from municipalities related to electricity and other services provided prior to 1988. These receivables consist of amounts receivable from a small number of municipalities that have not signed a concession agreement with us and with which a payment plan has not been agreed and amounts receivable from municipalities that have signed a concession agreement and have agreed to a deferred payment plan.

## **Provision for income taxes**

Income taxes provided for in 2003 were 239.3 million compared with 171.2 million in 2002. The reference income tax rate in Portugal was 30% in 2003 and 2002. In addition, a municipal surcharge of up to 10% of the base rate is typically levied by the municipality in which the income is earned.

## **Provision for deferred income taxes**

In 2003, our provision for deferred income taxes amounted to a 43.7 million benefit, whereas in 2002 the provision for deferred income taxes amounted to a 0.6 million charge. This difference is mainly explained by the fact that in 2002 we booked the deferred tax effect of a charge, in the amount of 29.6 million, related to the capital gain arising from the acquisition of the Escelsa U.S. dollar bonds below par value; and we also experienced a 5.6 million decrease in the deferred income tax charge related to tariff deviations in the electricity business in Portugal. This difference is also explained by the fact that in 2003 we booked the deferred tax effect of a benefit, in the amount of 8.3 million, related to an extraordinary provision for the investments in Brazil and Cape Verde and associated contingencies.

Our effective tax rate is different from the reference income tax in Portugal each year due to permanent differences arising mainly from amortization of the goodwill and concession rights, amortization resulting from revaluation of fixed assets and tariff deviations in the electricity business that are not deductible for income tax purposes. Our effective tax rate was 36.7% in 2003, compared with 59.9% in 2002. The effective tax rate in 2003 reflects impairment charges relating to Brazil that were not tax deductible, while the 2002 effective tax rate reflects higher charges relating to the write-off of our investment in ONI Way that were not tax deductible.

## **Consolidated net profit**

As a result of the factors discussed above, our consolidated net income for 2003 increased 13.7% to 381.1 million from 335.2 million in 2002.

**LIQUIDITY AND CAPITAL RESOURCES**

We manage and control our funding and treasury activities centrally at the EDP, S.A. level, except with respect to ONI and our businesses in Spain and Brazil. At EDP, S.A., the account balances of our subsidiaries are netted in EDP, S.A.'s accounts and centralized payments are made for the entire EDP Group. In Portugal, there are no legal or economic restrictions on the ability of our subsidiaries to transfer funds to EDP, S.A. Our subsidiaries in Portugal do not enter into their own financing arrangements except for our cogeneration subsidiary, EDP Cogeração, which finances some of its own projects, ONI and Edinfor.

Our primary source of liquidity is cash generated from operations. Net cash provided from operating activities was 1,643.3 million in 2004, compared with 1,773.6 million in 2003 and 897.7 million in 2002.

---

**Table of Contents**

Total cash and cash equivalents, net of bank overdrafts, at December 31, 2004 amounted to 278.0 million compared with 287.5 million at December 31, 2003 and 214.0 million at December 31, 2002.

Net cash used in investing activities was 2,271.7 million in 2004, compared with 529.1 million in 2003, and 1,141.4 million in 2002, representing a 329.3% increase in 2004 and a 53.6% decrease in 2003. The increase in 2004 compared with 2003 reflects the acquisition of an additional 56.2% stake in Hidrocantábrico's share capital. The decrease in 2003 compared with 2002 reflects our sale in 2003 of our investment in Iberdrola and Hidrocantábrico's acquisition of Naturcorp and, in 2002, our acquisition of Hidrocantábrico. See Item 4. Information on the Company History and Business Overview Group capital expenditures and investments for further information on our capital expenditures and investments.

Net cash from financing activities in 2004 was 644.2 million compared with net cash used in financing activities of 1,143.9 million in 2003 and net cash from financing activities of 415.5 million in 2002. The increase in net cash from financing activities in 2004 was due to our rights offering. The increase in net cash used in financing activities in 2003 was mainly due to debt reduction, partially resulting from the liquidity achieved by the sale of our investment in Iberdrola.

As of December 31, 2004, EDP, S.A. had available committed credit facilities of 1,477.4 million and a fully underwritten 350 million commercial paper program. In July 2004, we established a 1,300 million five-year revolving credit facility, to be used for general corporate purposes. This credit line permits drawings of one, two, three and six months at agreed margins over the euro interbank offered rate, or Euribor, based on a rating grid. We believe that the combination of this negotiated credit line and our commercial paper program provides an adequate source of liquidity for our operations. Our credit facility agreements do not impose financial ratio requirements and events of default clauses are not based on credit rating, so that their availability is not impacted by downgrades or declines in financial ratios or other measures of financial performance.

Our consolidated indebtedness, including bonds, long-term bank loans, commercial paper and bank overdrafts, was 8,598.8 million at December 31, 2004 compared with 7,492.7 million at December 31, 2003 and 7,994.1 million at December 31, 2002. During 2004, in line with our objective of extending the average life of our debt portfolio, we entered into a 15 year loan contract with the European Investment Bank in the amount 200 million. As of December 31, 2004, debt at EDP, S.A. and EDP Finance B.V. amounted to 5,553 million, corresponding to 64.6% of our total debt. Our debt management guidelines continue to be focused on controlling financial costs and reducing our exposure to foreign exchange risk.

At December 31, 2004, the weighted average interest rate of our indebtedness at EDP, S.A. and EDP Finance B.V. was flat when compared with 3.58% at December 31, 2003. At December 31, 2002, the value was 3.67%. At December 31, 2004, total debt held by EDP, S.A. and EDP Finance B.V. was denominated in euros (or hedged using cross currency swaps), and we therefore do not have currency exchange rate risk relating to this debt. At December 31, 2004, approximately 71% of our total long-term indebtedness at EDP, S.A. and EDP Finance B.V. carried a floating rate, but 37% of it was hedged against interest rate risk through collar structures. For more information on our interest rate risk, please see Item 11. Quantitative and Qualitative Disclosures About Market Risk Interest Rate Risk. At December 31, 2003, approximately 68% of our total long term indebtedness carried a floating rate.

**Table of Contents****TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS**

Our contractual obligations and commercial commitments consist primarily of credit facilities, as described above. The following table provides details regarding our contractual and commercial obligations subsequent to December 31, 2004:

**Payments Due and Amount of Commitment by Expiration Period**

	December 31,						
	Total	2005	2006	2007	2008	2009	Thereafter
	(millions of EUR)						
Long-term debt	6,741.0		1,487.0	1,269.4	792.0	1,152.0	2,040.6
Short-term debt	1,857.8	1,857.8					
Total contractual cash obligations	8,598.8	1,857.8	1,487.0	1,269.4	792.0	1,152.0	2,040.6
Guarantees	575.0	122.5	25	45		22.5	360
<b>Total</b>	<b>9,173.8</b>	<b>1,980.3</b>	<b>1,512.0</b>	<b>1,314.4</b>	<b>792.0</b>	<b>1,174.5</b>	<b>2,400.6</b>

We believe that cash generated from operations and existing credit facilities is sufficient to meet present working capital needs. We currently expect that our planned capital expenditures and investments will be financed from internally generated funds, existing credit facilities and customer contributions, which may be complemented with medium- or long-term debt financing and equity financing as additional capital expenditure requirements develop. For more information on our planned capital expenditures you should read Item 4. Information on the Company History and Business Overview Group capital expenditures and investments.

**PENSIONS AND BENEFITS**

We maintain a defined benefit pension plan for all our active and retired employees included in the Collective Labor Agreement, or the A.C.T., for Portuguese group companies created in 1994 with the restructuring of EDP. Pension benefits are based on the employees' years of service and the compensation level at the end of their employment period, less Portuguese social security benefits. The normal retirement age is 65. However, employees at least 60 years of age with 36 years of service, or employees of any age with 40 years of service, may elect early retirement. Employees electing early retirement are entitled to full pension benefits that are calculated on the same basis as that for employees retiring at the normal retirement age. Our policy has been to make contributions to the plan based on the availability of funds while making the minimum annual contributions required by applicable regulations. Some companies not a part of the A.C.T., such as the Brazilian and Spanish companies, also have complementary social benefits to their own social security systems, either as a defined benefit plan (Bandeirante, for example) or a defined contribution plan (Escelsa and Hidroantábrico, for example).

We also provide comprehensive medical coverage, in addition to that provided by the Portuguese national health system, for retired employees, including those who have taken early retirement, and their dependents. Additionally, we provide a death benefit to retirees' survivors. We administer the program internally and assume the full cost of funding the program net of employee contributions, amounting to approximately 10% of the total medical expenses covered.

At December 31, 2004, our provisions for pension and medical benefit liabilities were 796.4 million compared with 562.3 million at December 31, 2003 and 608.2 million at December 31, 2002. The provisions for medical benefits and pensions in 2004 were 468.9 million and 327.6 million, respectively, compared with 412.6 million and 149.6 million, respectively, in 2003, and 396.7 million and 211.5 million, respectively, in 2002, which amounted to 608.2 million in total. We expect to fund pension liabilities from our internal resources.

### INFLATION

Inflation in Portugal, as measured by changes in the Portuguese CPI, averaged 2.3%, 3.3% and 3.6% in 2004, 2003 and 2002, respectively. During the period from 1994 through 2004, changes in the Portuguese CPI averaged 3.3% per annum, ranging from a high of 5.4% in 1994 to a low of 2.2% in 1997.

To reflect the impact of inflation, Portuguese GAAP and regulations permit companies to revalue their fixed assets. Accordingly, we revalued our assets in 1992 based on an assessment of the remaining useful life and modern equivalent asset value of the assets at December 31, 1992. In accordance with Portuguese GAAP, depreciation of fixed assets is computed on the revalued amounts, with depreciation in respect of the original acquisition cost and 60% of the revaluation increment being deductible for corporate income tax purposes. Under U.S. GAAP, fixed assets may not be stated at more than their historical acquisition cost.

**Table of Contents**

**PORTUGUESE GAAP COMPARED WITH U.S. GAAP**

Our financial statements have been prepared in accordance with Portuguese GAAP, which varies in certain significant respects from U.S. GAAP. The principal differences between Portuguese GAAP and U.S. GAAP as they relate to us concern:

- the revaluation of fixed assets, as discussed above under Inflation;
- the capitalization of overheads and foreign exchange differences in connection with the construction of fixed assets;
- the capitalization of research and development costs, advertising costs, maintenance and repair, and reorganization costs;
- the hydro account;
- the deferral of certain costs, profit distributions to management and employees and employee termination benefits;
- the accounting for employee retirement benefits;
- the reversal of allowances for certain doubtful accounts;
- the capital treatment of contracts for the purchase of capacity and electricity;
- the accounting for investments, including REN;
- the accounting for the sale proceeds from the disposal of REN;
- the accounting for Hidrocantábrico;
- the accounting for derivative instruments;
- the depreciation of goodwill;
- the tariff adjustments and other regulatory assets;
- losses attributable to minority interests;

assets under concession in Brazil;

guarantees; and

comprehensive income.

We include in the cost of assets constructed for our own use a portion of our general and administrative overhead. Assets constructed prior to 1995 also include the net foreign exchange differences, both gains and losses, which resulted from loans denominated in foreign currencies contracted to fund the capital expenditures. Under U.S. GAAP, these amounts are not included in the cost of the asset and are recorded in income in the period in which they are incurred.

We capitalize and amortize research and development costs, advertising costs, major maintenance and repair costs, and reorganization costs. Under U.S. GAAP, these amounts are included as expenses in the period incurred.

The main objective of the hydro account is to avoid imbalances in the electricity sector due to changes in variable costs incurred as a result of hydrological conditions. Accordingly, since the tariffs cannot be modified immediately to reflect the changes in variable costs incurred as a result of hydrological conditions, this account is used to compensate the volatility in variable operating costs of power generators in the PES for unfavorable hydrological conditions, such as when thermal generation increases and, consequently, expenditures on fuel and electricity imports increase substantially. In years with abundant rainfall, the opposite occurs. In this context, and with a view toward avoiding major distortions in operating results due to favorable or unfavorable hydrological conditions, the hydro account is adjusted upwards or downwards based upon average hydrological conditions.

Until 2000 REN was part of the EDP Group, therefore the movements of the hydro account were within the EDP Group. Since the separation of REN in June 2000, we (at the holding company level) pay or receive cash from REN, which is booked against the hydro account. The net movement in the hydro account between December 31, 2000 and December 31, 2004 was approximately €1 million. We record a charge for the financing cost associated with the amount of the accumulated balance of this account, which is recognized in earnings under Portuguese GAAP. REN uses the amount received or paid to compensate the operators in PES (a significant majority of which are our subsidiaries) in accordance with the objectives of the hydro account as described above. As such, REN is effectively a flow-through entity for purposes of the hydro account. For Portuguese GAAP purposes, the operators in the PES who receive or pay cash to REN account for it against earnings.

The Portuguese government approves the amount of the accumulated balance and the movements during the year on an annual basis. REN is engaged to calculate the amounts to be received or paid by us in relation to the hydrological correction account.

In prior years, for Portuguese GAAP purposes, the balance continued to be reported as a liability in accordance with local legislation. For U.S. GAAP purposes, the portion of the liability established through 1994 was eliminated with an offsetting increase to shareholders' equity. In essence, this increase to shareholders' equity was equivalent to accounting for accrued income. Thus, in periods up to December 2003, it was considered that the amount recorded as an asset would be recoverable through future benefits flowing to EDP Group. Subsequent to 1994, payments and receipts by EDP to REN are treated as increases or decreases of the liability under both Portuguese and U.S. GAAP.

During 2004, Decree law no. 240/2004 was issued, with the purpose of regulating the early termination of the PPAs, a step toward the liberalization of the energy market within the Iberian Peninsula. This decree law states that, with the introduction of the free trading market, which is currently expected to occur within the next twelve months, the government will be required to introduce a new regulation regarding the purpose and scope of the hydro account as well as the mechanisms to compensate producers for their increased risks resulting from the early termination of PPAs.



As a result of the introduction of this regulation mandated by the above-mentioned decree law, and in light of the above-mentioned government announcement, our board of directors and management consider that it is probable that the hydrological correction mechanism will be terminated. At such date the liability recorded, including the balance relating to pre-1994 activity, will be payable to a third party to be nominated by the regulator. Moreover, since this regulation can only be introduced simultaneously with the effective liberalization of the energy market in the Iberian Peninsula, our board of directors and management consider that the accrued income accounted as an asset will cease to have any future economic benefits. Therefore, at the end of 2004, we recorded a full valuation allowance against the asset recorded in our U.S. GAAP accounts in the amount of €315 million as at December 31, 2004.

## **Table of Contents**

As part of our profit sharing plan, we distribute a bonus to management and employees. Under Portuguese GAAP, this distribution is reflected in the period in which formal shareholder approval is obtained and is recorded as a reduction of retained earnings or other reserves. U.S. GAAP requires that these distributions be recorded as compensation expense in the period they are earned.

We and some of our subsidiaries have pension obligations, in connection with both defined benefit and defined contribution plans, and also have medical benefits for retired employees. Costs for defined contribution plans are expensed when incurred. Both under Portuguese GAAP and U.S. GAAP, unrecognized actuarial gains and losses are amortized under the corridor method. The corridor method does not allow actuarial net gains or losses up to ten percent of the greater of the projected benefit obligation or the value of plan assets to be recognized or amortized as part of the annual net pension cost. The value of the unrecognized actuarial gains or losses that exceeds the value of ten percent, as defined above, will be amortized over the average remaining service period of the employees. Obligations and annual expenses for medical benefits and defined benefit pension plans are determined on actuarial basis. Thus, differences in accounting for these obligations generally originate from the date of application of the corridor method, which results in a different value for the unrecognized actuarial gains and losses, as well as for the recognition of the additional pension minimum liability.

From 1998 to 2000, we reached agreements with several municipalities on the terms of the future settlement of outstanding debts, and, for Portuguese GAAP, reversed at that time the corresponding bad debt provision. Under U.S. GAAP, the collection of the receivables had previously been considered not probable and consequently had been fully provided. Therefore, under U.S. GAAP, the provision for doubtful debts was written-back based on the actual collections and on the estimated recoverable amount of outstanding receivables.

We entered into several PPAs with REN which are treated as leases under U.S. GAAP. The evaluation of whether an arrangement contains a lease within the scope of Statement 13 and EITF 01-8 is based on the substance of the arrangements. Those PPAs include terms that, although not nominally identified as leases, meet the definition stated in the above-mentioned statements, in particular, that a lease transfers substantially all of the benefits and risks related to the property to the lessee. In substance, the PPAs explicitly identify the power plants with which we produce power exclusively for REN, and we are prohibited from using any other power plant to supply power to REN. Additionally, the PPAs convey the right to use the power plants and require that the total production is acquired by REN.

The PPAs are considered as capital leases for U.S. GAAP purposes due to the fact that the PPAs transfer the risks and rewards of usage to the REN during the period of the lease term, transfer the ownership of the property to REN at the end of the lease term and the lease terms are the same as the useful lives of the power plants. As permitted under Portuguese GAAP, these assets are classified as tangible fixed assets and amortized on straight-line basis at rates accepted by the tax authorities or for general purposes business, which reflects the economic useful lives of each category of fixed assets.

On January 27, 2005, in accordance with Decree law no. 240/2004, we signed agreements for the early termination contracts of PPAs. The termination agreements' effects are suspended until a set of conditions is met which includes the commencement of MIBEL, which assures the sales of generated electricity and the attribution of non-binding production licenses. When the stated conditions allow for the effective termination of PPAs, under U.S. GAAP the power plants will be accounted in a similar manner as the current accounting under Portuguese GAAP.

We constructed and sold the Pego and Tapada de Outeiro power plants in 1993 and 1998, respectively. Before 1999, at the time of the sales, REN signed PPAs with the producers in the Binding Sector by which the capacity and electricity of the plants were fully

## Table of Contents

contracted to the Binding Sector represented by REN. Under the PPAs, REN is required to make specified minimum payments whether or not it is able to take delivery of the electricity. As permitted under Portuguese GAAP, REN recorded the sales of the power plants and it also recorded the minimum contracted payments as an expense of the respective periods. U.S. GAAP would require the sales to be treated as sale lease-back transactions and the power purchase agreements to be recorded as capital leases. Prior to the sale of REN to the Portuguese government, the contracts with Tejo Energia and Turbogás were recorded in this manner.

Our investment in REN and appropriation of the attributable equity and earnings of REN are affected by certain accounting differences between U.S. GAAP and Portuguese GAAP. These differences include: revaluation of fixed assets, overheads capitalized, deferred costs, employee termination benefits, distribution to management and employees, power purchase agreements and deferred income taxes.

Under Portuguese GAAP, since the sale proceeds from the disposal of our 70% interest in REN were equal to the net book value of the interest sold, no gain or loss was recorded on the transaction. Under U.S. GAAP, the net book value of the interest sold would be lower as a result of the accounting differences between Portuguese GAAP and U.S. GAAP; therefore, the proceeds received from the disposal of REN would exceed the net book value of the interest disposed, resulting in a gain on disposal and the remaining investment in REN would be reduced accordingly.

Until December 2004, our 39.5% holdings in the voting rights of Hidrocontábrico plus the existing shareholders' agreement allowed the investment to be consolidated as a joint venture on a proportionate basis under Portuguese GAAP. Under U.S. GAAP this investment would be accounted for under the equity method. Hidrocontábrico's shareholders' equity and net income have been adjusted to U.S. GAAP before applying the equity method to our accounts. As of December 31, 2004, we acquired an additional investment of 56.2% in Hidrocontábrico, increasing our investment to 95.7%. Consequently, at December 31, 2004, Hidrocontábrico was consolidated under the full consolidated method, both under Portuguese GAAP and U.S. GAAP.

Until 2002, derivative financial instruments were not recognized in the financial statements under Portuguese GAAP. Under U.S. GAAP, derivative financial instruments would be recognized in the balance sheet at market value. For instruments that do not qualify for hedge accounting under FAS 133, as implemented on January 1, 2001, the movements in the market value are included in our net profit. Upon adoption of FAS 133 on January 1, 2001, no transition adjustment was recorded as all derivatives existing at that date were previously recorded at fair market value in the balance sheet for U.S. GAAP. As of the date of our adoption of IAS 39 in 2003, in Portuguese GAAP consolidated financial statements derivative financial instruments are recognized in our consolidated balance sheet at market value, and those that do not qualify for hedge accounting are included in net profit. FAS 133 compliant hedge relationships were designated and documented from January 1, 2004.

Under Portuguese GAAP, goodwill is amortized over the estimated useful life not exceeding 20 years. From January 1, 2002, U.S. GAAP requires that goodwill, including previously existing goodwill, and intangible assets with indefinite useful lives are not amortized but are tested for impairment annually. Concession rights in Brazil continue to be amortized, as these are intangible assets with finite lives.

In activities subject to regulation, the criteria of allocation of income and expense to each accounting period may be different from the criteria applicable to non-regulated activities. For accounting purposes, when the regulator establishes a criteria of allocating income and expense to future years, then a regulatory asset or liability is recognized in the financial statements, which otherwise would be booked as profit or loss of the year.

Regulatory assets relate to deferred costs defined and regulated by the regulator, which should be recovered through the increase of electricity tariffs during subsequent periods. Regulatory liabilities relate to future decreases in income defined and regulated by the regulator, which should

have an impact on customers through the decrease of electricity tariffs during the subsequent periods.

In Portugal, the tariffs of electricity supplied to clients in the Binding Sector are determined by the regulator. Tariffs for clients outside the Binding Sector are negotiated and contracted on an individual basis. Tariffs in the electricity distribution business are subject to a price cap mechanism. These earnings are subject to a gross profit restriction and after being subject to confirmation or approval by the regulator are adjusted in future tariffs revenues. We estimate those future tariff revenue or adjustments and defer or accrue the recognition of the revenues until future periods in our Portuguese GAAP accounts. Even though the tariff adjustments are subject to formal approval by the regulator, these amounts are recorded under other assets or other liabilities in the accompanying balance sheet prepared under Portuguese GAAP. In the U.S. GAAP financial statements, these assets or liabilities recorded for the regulated activities in Portugal are eliminated because, in substance, we believe that the tariff adjustments regulation does not meet in full the criteria set out in SFAS 71. Even though the scope criterion of SFAS 71 is met with respect to the regulated activities in Portugal, due to the uncertainty in relation to future income being in an amount at least equal to the capitalized cost or a situation of a permanent roll forward of cost with current year costs being deferred and prior cost being recovered in each period, the asset recognition criteria as defined in SFAS 71 is not met. As a result, tariff adjustments related to Portuguese activities are not reflected in U.S. GAAP accounts and therefore are included as a reconciling item in the reconciliation from local to U.S. GAAP. However, the assets or liabilities resulting from the tariff adjustments mechanism set out by ANEEL regarding our activities in Brazil meets the requirements of SFAS 71 and therefore are accounted for on that basis. The assets and liabilities considered by our companies in Brazil as regulatory assets are fully compliant with ANEEL. Eligible costs are specifically determined by the regulator and are recoverable through the recovery rates. Resulting from measures taken by the Brazilian government and by ANEEL in 2001, our companies in Brazil are subject to the application of SFAS 71. In December 2001, in order to compensate the companies, an agreement with the Brazilian government was reached for all the entities operating in the sector, which allows the increase of regulated rates for a period of six years. Considering SFAS 71 and EITF 92-7, Energias do Brasil only considered regulatory assets based on two years projections of current level consumption.

Under both Portuguese GAAP and U.S. GAAP, in prior years, the losses attributable to minority interests that exceeded the equity capital attributable to minority interests in subsidiaries had been recorded as negative minority interests in the balance sheet. In the income statement, the referred losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Under Portuguese GAAP, and beginning in January 1, 2004, we adopted a new accounting policy, by which the negative minority interest in the balance sheet resulting from the accumulated losses attributable to minority interests which exceeded the equity capital attributable to minority interests in subsidiaries were debited against equity whenever there is no binding obligation of the minority interests to cover such losses. In the income statement, under Portuguese GAAP, losses continue to be attributed to minority interest in the proportion of their shareholding. Under U.S. GAAP, as there is no binding obligation of the minority interest to cover such losses, such losses which exceed the equity attributable to the minority interest are charged to the majority interest, therefore the net income of the prior years has been restated to allocate the losses attributable to minority interests in 2002 and 2003 to the majority interest (EDP). If future earnings do materialize, the majority interest is credited to the extent of such losses previously absorbed.

Under Portuguese GAAP, the amount classified as accrued income related to assets under concession in Brazil is not amortized. However, the assets under concession are amortized on a straight-line basis over the concession period. Under U.S. GAAP, the amortization of the accrued income should be recorded using the same period as the assets amortization. As this amount was not accrued in prior years under U.S. GAAP, we made a restatement to correct this issue in the income statement and in shareholders' equity of each reported period.

Under U.S. GAAP, a guarantor is required to recognize, at the inception of certain guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantees. In 2003, we made a provision with a charge against equity, even though it is unlikely that any disbursement related to those guarantees will have to be made. An adjustment is made under U.S. GAAP as a restatement at December 31, 2003 to reverse the provision that was made in the prior year.

In relation to other comprehensive income, in prior years, a reconciliation between the opening and closing balance of other comprehensive income was not presented in the notes to our consolidated financial statements in accordance with SFAS 130, which requires that the total of other comprehensive income should be disclosed separately from retained earnings. We have included the information required for the total of other comprehensive income for each of the reported periods and have restated the balances to comply with the requirements of SFAS 130. While this restatement had an impact on the total value of other comprehensive income, it had no impact on the total value of shareholders' equity.

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our net profit in 2004 under U.S. GAAP amounted to 238.6 million and 451.2 million in 2003 (restated) compared with 440.2 million in 2004 and 381.1 million in 2003, respectively, under Portuguese GAAP.

## **Table of Contents**

Our shareholders' equity under U.S. GAAP was 4,582.9 million at December 31, 2004 and 3,439.6 million at December 31, 2003, compared with 6,401.7 million and 5,298.0 million, respectively, under Portuguese GAAP.

See note 42.i to our consolidated financial statements for the significant adjustments to net income and shareholders' equity that would have been required if U.S. GAAP rather than Portuguese GAAP had been applied in the financial statements.

## **IMPACT OF RECENTLY ISSUED U.S. ACCOUNTING STANDARDS**

### **Standards adopted in the years covered by the financial statements**

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections* (SFAS 145). SFAS 145 rescinds SFAS No. 4, *Reporting Gains and Losses from Extinguishment of Debt* (SFAS 4) and an amendment of that statement, SFAS No. 64, *Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements* (SFAS 64). SFAS 145 also amends SFAS No. 13, *Accounting for Leases* (SFAS 13), to eliminate an inconsistency between the required accounting for sale-leaseback transactions and the required accounting for certain lease modifications that have economic effects that are similar to sale-leaseback. The adoption of SFAS 145 did not have a material impact on our financial position, results of operation or cash flows.

In June 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities* (SFAS 146), which requires companies to recognize costs associated with exit or disposal activities when they are incurred, rather than at the date of a commitment to an exit or disposal plan. In addition, SFAS 146 requires that the liability be measured at fair value and be adjusted for changes in estimated cash flows. Examples of costs covered by the standard include lease termination costs and certain employee severance costs that are associated with restructuring, discontinued operations, a plant closing or other exit or disposal activity. The adoption of SFAS 146 did not have a material impact on our financial position, results of operation or cash flows.

In November 2002, the EITF released Issue No. 02-3, *Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities* (EITF 02-3). In EITF 02-3, the FASB staff clarified that, in the absence of (a) quoted market prices in an active market, (b) observable prices of other current market transactions or (c) other observable data supporting a valuation technique, the transaction price represents the best information available with which to estimate fair value at the inception of the arrangement for all derivatives. The adoption of EITF 02-3 did not have a material impact on our financial position, results of operation or cash flows.

In November 2002, the FASB issued FIN No. 45 *Guarantors' Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others - an Interpretation of FASB Statements No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34* (FIN 45). FIN 45 requires certain disclosures to be made by a guarantor in its financial statements for periods ending after December 15, 2002 about its obligations under certain guarantees it has issued. It also requires a guarantor to recognize, at the inception of a guarantee issued or amended after December 31, 2002, a liability for the fair value of the obligation undertaken in issuing the guarantee. The adoption of FIN 45 did not have a material impact on our financial position, results of operation or cash flows.

In April 2003, the FASB issued SFAS No. 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities* (SFAS 149), which amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

hedging activities under SFAS No. 133, *Accounting for Derivatives and Hedging Activities* (SFAS 133). Specifically, SFAS 149 clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative and when a derivative contains a financing component that warrants special reporting in the consolidated statement of cash flows. Certain derivative instruments entered into or modified after June 30, 2003 and that we have determined contain a financing element at inception and where we are deemed the borrower, are now included as a separate component within the line item *Cash flows from financing activities* in our consolidated financial statements. Prior to July 1, 2003, these derivative instruments were included within *Cash flows from operating activities*. The adoption of SFAS 149 did not have a material impact on our financial position, results of operation or cash flows.

## **Table of Contents**

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity* (SFAS 150). SFAS 150 establishes standards for an issuer's classification of certain financial instruments that have both liability and equity characteristics and imposes additional disclosure requirements. Effective September 30, 2003, we adopted SFAS 150 for financial instruments entered into or modified after May 31, 2003. The adoption of SFAS 150 did not have a material impact on our financial position, results of operation or cash flows.

In May 2003, the EITF reached a consensus on EITF 01-8, *Determining Whether an Arrangement contains a Lease*. EITF 01-8 clarifies certain provisions of SFAS 13, *Accounting for Leases*, with respect to the identification of lease elements in arrangements that do not explicitly include lease provisions. Any lease element identified under EITF 01-8 should be accounted for under current lease accounting literature by lessors and lessees. We were required to apply the provisions of EITF 01-8 prospectively to arrangements newly agreed to, modified, or acquired in a business combination beginning January 1, 2004. The adoption of EITF 01-8 did not have a significant impact on our consolidated financial statements because we had already applied these requirements in prior years.

In November 2003, the Emerging Issues Task Force reached a consensus on certain additional quantitative and qualitative disclosure requirements in connection with its deliberations of Issue 03-1, *The Meaning of Other-than-Temporary Impairment and Its Application to Certain Investments*, which also discussed the impairment model for available for sale and held to maturity securities under SFAS No. 115 (EITF 03-1). We have adopted the new disclosure requirements of EITF 03-1.

In December 2003, FASB released a revision of FIN 46 (FIN 46-R), which includes substantial changes from the original. The calculation of expected losses and expected residual returns have both been altered to reduce the impact of decision maker and guarantor fees in the calculation of expected residual returns and expected losses. In addition, FIN 46-R changes the definition of a variable interest. The interpretation permits adoption of either the original or the revised versions of FIN 46 until the first quarter of 2004, at which time FIN 46-R must be adopted. The adoption of FIN 46 did not have a material impact on our financial position, results of operation or cash flows.

In January 2004, FASB issued FASB Staff Position FASB FAS 106-1, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (FSP FAS 106-1), in response to the December 2003 enactment of the U.S. Medicare Drug Improvement and Modernization Act of 2003, or the MDIM Act. The MDIM Act introduces a prescription drug benefit for individuals under Medicare (Medicare Part D) as well as a federal subsidy equal to 28% of prescription drug claims for sponsors of retiree health care plans with drug benefits that are at least actuarially equivalent to those to be offered under Medicare Part D. FSP FAS 106-1 allows plan sponsors the option of accounting for the effects of the MDIM Act in financial statements for periods that cover the date of enactment or making a one-time election to defer the accounting for the effects of the MDIM Act. As the MDIM Act is only applicable to U.S. resident companies, it is not expected to have a material effect on our consolidated financial statements.

In December 2003, the FASB issued *Employers' Disclosure about Pensions and Other Post-Retirement Benefits - an amendment of FASB Statements No. 87, 88 and 106* (SFAS 132R). This statement revises employers' disclosures about pension plans and other postretirement benefit plans. It does not change the measurement or recognition of those plans required by FASB Statements No. 87, *Employers' Accounting for Pensions*, No. 88, *Employer's Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits*, and No. 106, *Employers' Accounting for Postretirement Benefits Other than Pensions*. This statement retains the disclosure requirements contained in FASB Statement No. 132, *Employer's Disclosures about Pension and Other Postretirement Benefits*, which it replaces. It requires additional disclosures to those in the original statement. SFAS 132R is effective for years ending after December 15, 2003. We have adopted the new disclosure requirements of this standard. Please see note 42.i to our consolidated financial statements for additional information.

## **Standards to be adopted in future years**



On July 16, 2004, the FASB ratified the Emerging Issues Task Force (EITF) consensus on Issue No. 02-14, *Whether the Equity Method of Accounting Applies When an Investor Does Not Have an Investment in Voting Stock of an Investee but Exercises*

## Table of Contents

*Significant Influence through Other Means* (EITF 02-14). The consensus concludes that an investor should apply the equity method of accounting when it can exercise significant influence over an entity through a means other than holding voting rights. The consensus is effective for reporting periods beginning after September 15, 2004. We do not expect the adoption of EITF 02-14 to have a material impact on our financial position, results of operation or cash flows.

In October 2004, the EITF reached a consensus on EITF 04-1, *Accounting for Preexisting relationships between the Parties to a Business Combination* (EITF 04-1). EITF 04-1 addresses various elements connected to a business combination between two parties that have a pre-existing relationship and the settlement of the pre-existing relationship in conjunction with the business combination. We will be required to apply the provisions of EITF 04-1 to business combinations consummated and goodwill impairment tests performed beginning January 1, 2005. We do not expect the adoption of EITF 04-1 to have a material impact on our financial position, results of operation or cash flows.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs* (SFAS 151), which is an amendment of Accounting Research Bulletin No. 43, *Inventory Pricing*. SFAS 151 clarifies that abnormal amounts of idle facility expense, freight, handling costs and wasted materials (spoilage) should be recognized as current period charges. The provisions of SFAS 151 are effective for inventory costs incurred beginning January 1, 2006, and are applied on a prospective basis. We do not expect the adoption of SFAS 151 to have a significant impact on our consolidated financial statements.

In November 2004, the EITF reached a consensus on EITF 03-13, *Applying the Conditions in Paragraph 42 of FASB No. 144 in Determining Whether to Report Discontinued Operations* (EITF 03-13). EITF 03-13 addresses how an ongoing entity should evaluate whether the operations and cash flows of a disposed component have been or will be eliminated from the ongoing operations of the entity, and the types of continuing involvement that constitute significant continuing involvement in the operations of the disposed component. If continuing cash flows are determined to be direct, then the cash flows have not been eliminated and the operations of the component should not be presented as discontinued operations. If continuing cash flows are determined to be indirect, then the cash flows are considered to be eliminated and the operations of the component should be presented as discontinued operations. In order to determine the significance of the continuing involvement, consideration must be given to the ability to influence the operating and or financial policies of the disposed component, as well as the retention of risk or the ability to obtain benefits. We will be required to apply the provisions of EITF 03-13 to a component of an enterprise that is either disposed of or classified a held for sale beginning January 1, 2005.

In December 2004, the FASB issued SFAS No. 123 (Revised 2004), *Share-Based Payment* (SFAS 123R). SFAS 123R is effective for annual reporting periods beginning after June 15, 2005. Although the application of this standard will impact the accounting of the fair value of the unvested stock options held by our employees, we do not expect that SFAS 123R will have a material impact on our consolidated financial statements.

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Non-monetary Assets* (SFAS 153), which becomes effective for financial statements for fiscal years beginning after June 15, 2005. According to Accounting Principles Board Opinion No. 29 (APB 29), exchanges of non-monetary assets are generally measured based on the fair value of the assets exchanged, with certain exceptions. SFAS 153 amends APB 29 to eliminate the exception for non-monetary exchanges of similar productive assets, which were exchanged at carrying values, and replaces it with a general exception for exchanges of non-monetary assets that do not have commercial substance. A non-monetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. We do not expect the adoption of SFAS 153 to have a material impact on our financial position, results of operation or cash flows.

In March 2005, the FASB issued FIN No. 47 *Accounting for Conditional Asset Retirement Obligations* (FIN 47), which clarifies that a liability (at fair value) must be recognized for asset retirement obligations when it has been incurred if the amount can be reasonably estimated, even if settlement of the liability is conditional on a future event. FIN 47 is effective as of December 31, 2005. The Company is reviewing its asset

retirement obligations to determine the need to record a liability to cover any conditional obligation. The Company is still evaluating the impact of the adoption of FIN 47.

## **Table of Contents**

In May 2005, the FASB issued SFAS 154, *Accounting Changes and Error Corrections a Replacement of APB Opinion No. 20 and FASB Statement No. 3* (SFAS 154). SFAS 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS 154 also redefines *restatement* as the revising of previously issued financial statements to reflect the correction of an error. This statement is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. We do not expect the adoption of SFAS 154 to have a significant impact on our consolidated financial statements.

## **TRANSITION AND IMPLEMENTATION OF IFRS**

### **Transition and implementation of International Financial Reporting Standards (IFRS)**

Regulation no. 1606/2002 of the European Council and Parliament requires companies whose securities are admitted to trading on a regulated market of any Member State of the European Union to adopt International Financial Reporting Standards as their primary GAAP as from January 1, 2005. Because IFRS 1 - First Time Adoption of International Financial Reporting Standards (IFRS 1) requires issuers to present comparative financial statements for the period immediately preceding the year ending December 31, 2005, our consolidated financial statements for the year ended December 31, 2004 will be restated under IFRS.

The adoption of IFRS involved considerable changes in the preparation of our consolidated financial statements as of December 31, 2004 in relation to the application of Portuguese GAAP, which were applied prior to December 31, 2004.

The following information is prepared on a pro-forma basis in accordance with the IFRS standards which are currently applicable, does not include all the financial information that should be disclosed in the financial statements as at December 31, 2005. Nor does it consider any accounting impacts that may result from changes that may occur in the accounting standards by December 31, 2005.

The financial information presented is preliminary and unaudited. Therefore, the information concerning the transition adjustments to IFRS should be considered provisional in that they reflect the best current estimate of the standards that will be in place as at December 31, 2005, but do not present all the disclosures, classification or presentation differences under IFRS.

The financial information was prepared based on expectations, analyses, assumptions and estimates, involving risks and uncertainties which could lead to material differences between the actual financial information and the estimates.

The following is a summary of the main differences identified between the accounting policies adopted by the EDP Group under Portuguese GAAP and the application of IFRS on transition:

**December 31,  
2004  
Euro'000**

<b>Shareholders' equity as reported under Portuguese GAAP</b>	<b>6,401,714</b>
<b>IFRS/IAS adjustments:</b>	
a) Fixed assets	-1,021,905
b) Retirement pensions and other employee benefits	-1,177,702
c) Distribution of bonus to employees	-24,626
d) Goodwill	51,567
e) Hedge accounting	-107,944
f) Tariff adjustment and regulatory assets	-211,238
g) Regulatory assets on restructuring costs	-352,281
h) Equity investment in REN	-114,074
i) Minority interests	58,831
j) Concession subsidies	30,222
k) Deferred taxes	514,063
Other	-8,769
<b>Net Adjustments</b>	<b>-2,363,855</b>
<b>Shareholders' equity as reported under IFRS/IAS</b>	<b>4,037,858</b>
<b>IFRS/IAS vs. Portuguese GAAP (%)</b>	<b>-36.9%</b>

### Fixed assets

Under IFRS 1, we elected to use the previous GAAP revalued amount of fixed assets at the date of transition as our deemed cost of those assets. However, in relation to intangible assets, capitalized overheads and exchange differences, we considered that these assets did not meet the recognition criteria under IFRS and such assets were adjusted accordingly as explained below.

Under Portuguese GAAP, general and administrative overhead costs associated to assets under construction are capitalized and amortized on a straight line basis considering the useful life of the referred assets. Under IFRS, those overheads are expensed in the period incurred.

As permitted under Portuguese GAAP, prior to 1995, we capitalized gains and losses related to net foreign exchange differences that resulted from loans contracted to fund capital expenditures denominated in foreign currencies. Under IFRS, foreign exchange gains and losses are considered as expenses in the period when incurred.

Under Portuguese GAAP, set-up costs, research and development expenses and other deferred costs are capitalized and amortized over their useful life. Under IFRS, such costs are expensed in the period incurred. Subsidies received with respect to research and development costs, which are also deferred under Portuguese GAAP, were recognized as income under IFRS, as the related research and development costs were expensed.

### **Retirement pensions and other employee benefits**

We and some of our subsidiaries have pension obligations, both defined benefit and contribution plans and also medical benefits for retired employees. Costs for defined contribution plans are expenses when incurred. Under Portuguese GAAP, unrecognized actuarial gains and losses are amortized under the corridor method. The corridor method does not allow actuarial net gains and losses up to 10 percent of the greater of the projected benefit obligation or the value of plan assets to be recognized or amortized as part of the net pension cost of the year. The value of the unrecognized actuarial net gains or losses that exceeds the value of 10 percent as defined above shall be amortized over the average remaining service period of the employees. Obligations and annual expenses for medical benefits and defined benefit pension plans are determined on actuarial basis.

Under IFRS 1, in accordance with the transition rules, we elected to recognize on transition the unrecognized value of the actuarial losses against reserves.

### **Distribution of bonus to employees**

In accordance with the by-laws of certain subsidiaries, shareholders are required to approve at the annual general meetings any percentage of profits to be paid to management and employees. These amounts payable to the managers and employees are considered to be a distribution of profits on the same basis as dividends payable to the shareholders because they are legally a reallocation of entitlements from shareholders to managers and employees. Under Portuguese GAAP, this attribution of bonus is charged to retained earnings in the year that it is paid and is deductible for tax purposes from the profits of the year to which it relates. Under IFRS, bonuses distributed as a result of rendered services are recognized as an expense in the period to which they relate.

### **Goodwill**

Under Portuguese GAAP, goodwill arising from acquisition of shareholdings in subsidiaries and associates, resulting from the difference between the cost of acquisition and the proportional fair value of net assets acquired, is amortized over the estimated useful life not exceeding 20 years.

IFRS requires that goodwill, including previously existing goodwill, is not amortized but is tested for impairment annually. We review the value of the goodwill periodically for other than temporary impairment and during 2004, impairment losses related to information technologies business were identified and recognized in earnings.

### **Hedge accounting**

As mentioned above, we qualified as a first time adopter under IFRS 1 and will present our consolidated financial statements according to IFRS beginning January 1, 2005. Therefore, the IFRS 1 transition rules on the application of IAS 39 are applicable to us.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

As at January 1, 2003, our board of directors decided an earlier adoption of IAS 39 complementarily to the Portuguese Plan of Accounts. At that date, the requirements of IAS 39, regarding the interest rate risk and the exchange rate risk hedging, were not fully complied with. Therefore, and even considering that the operations were contracted for hedge purposes, the hedge accounting criteria was not applied.

Considering the documentation prepared and that the operations were contracted by the management to hedge the interest rate and exchange rate risk, under the transition rules defined by IFRS 1, the referred operations were considered as hedging since the transition date.

We have adopted, in accordance with IAS 39, the fair value hedge and cash flow hedge models. Therefore, the changes in fair value of the liabilities hedged were recognized against equity as a transition adjustment in accordance with IFRS 1.

### **Tariff adjustments and regulatory assets**

In activities subject to regulation, the recognition of profits and losses to accounting periods may differ from unregulated activities. For accounting purposes, when the regulator establishes a criteria of allocating income or cost to future years, a regulatory asset or liability is booked in the financial statements, which otherwise would be booked as profit or loss of the year.

In accordance with the IFRS conceptual framework, regulatory assets and liabilities are not recognized and on that basis, at the transition date, these assets and liabilities were reversed against reserves.

Under IFRS, regulatory assets, which relate to deferred costs and are defined and regulated by the regulator, being recoverable through tariff adjustments charged to customers in future years, have been charged against reserves.

### **Regulatory assets on restructuring costs**

During 2003 and 2004, we set up a restructuring plan that consisted of a reduction of employees, most of them through preretirements, early retirements or indemnities schemes. These costs were accepted by ERSE as a deferred cost (regulatory asset) amortizable over a period of 20 years, beginning in 2005. For IFRS purposes, the regulatory assets were charged to income in the year in which the restructuring took place.

### **Equity investment in REN**

Our equity investments are affected by certain accounting differences between IFRS and Portuguese GAAP. The main differences are related with overheads capitalized, deferred costs, distribution to management and employees, PPAs and deferred income taxes. These differences are of a similar nature as described in the paragraphs above.

### **Minority interests**

Under Portuguese GAAP, in prior years, the accumulated losses attributable to minority interests that exceeded the equity capital attributable to minority interests in the subsidiaries were recorded in the balance sheet as negative minority interests. In the income statement, the losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Beginning on January 1, 2004, we adopted a new accounting policy by which the accumulated losses attributable to minority interest which exceed the equity capital attributable to minority interest in subsidiaries resulting in negative minority interest are debited against equity. In the income statement, losses continue to be attributed to minority interest in the proportion of their shareholding.

Under IFRS, as there is no binding obligation of minority interests to cover such losses, losses exceeding the equity attributable to minority interest are charged to the majority interest in the income statement. If future earnings do materialize, the majority interest will be credited to the extent of such losses previously absorbed.

Under IFRS, the amount of goodwill attributable to minority interests, which resulted in a negative minority interest can be added to goodwill. On this basis, the amount of 58 million, which was charged against equity in the Portuguese GAAP, was reversed under IFRS against goodwill.

#### **Concession subsidies**

Under Portuguese GAAP, the amount classified as deferred income related to subsidies on assets under concession in Brazil which were not amortized. However, the assets under concession are amortized on a straight-line basis over the concession period. Under IFRS, the amortization of the deferred income was recorded using the same period as the assets amortization.

#### **Deferred taxes**

In accordance with our accounting policy, the income tax charge is determined considering the present legal framework and deferred taxes are recognized when the situations giving rise to them are significant.

Therefore, the deferred tax adjustments are related to the impact of the adjustments mentioned above, while in accordance with IAS 12 there are temporary differences between accounting principles and tax regulations that result in a deferred tax asset or in a recorded liability.

#### **Hydrological correction account**

The hydro account was established by Decree law no. 338/91 and constitutes a legally mandated mechanism for compensating the variable costs of electricity generation. This accrual was set up mainly in 1994 through a charge against income during the period that we were owned by the Portuguese state. Despite the separation of REN from EDP in 2000, further regulation (through Decree law no. 98/2000) maintained the requirement to keep this account in the balance sheet of EDP.

The main objective of the hydro account is to avoid imbalances in the electricity sector due to changes in variable costs incurred as a result of hydrological conditions. Accordingly, since the tariffs cannot be modified immediately to reflect the changes in variable costs incurred as a



result of hydrological conditions, this account is used to compensate the volatility in variable operating costs of power generators in the PES for unfavorable hydrological conditions, such as when thermal generation increases and, consequently, expenditures on fuel and electricity imports increase substantially. In years with abundant rainfall, the opposite occurs. In this context, and with a view toward avoiding major distortions in operating results due to favorable or unfavorable hydrological conditions, the hydro account is adjusted upwards or downwards based upon average hydrological conditions.

As mentioned above until 2000 REN was part of the EDP Group and therefore the movements of the hydro account were within the EDP Group. Since the separation of REN in June 2000, we (at the holding company level) pay or receives cash from REN, which is booked against the hydro account. The net movement in the hydro account between December 31, 2000 and December 31, 2004 was approximately 1 million. We record a charge for the financing cost associated with the amount of the accumulated balance of this account, which is recognized in earnings under Portuguese GAAP. REN uses the amount received or paid to compensate the operators in the PES (a significant majority of which are our subsidiaries) in accordance with the objectives of the hydro account as described above. As such, REN is effectively a flow-through entity for purposes of the hydro account. For Portuguese GAAP purposes, the operators in PES who receive or pay cash to REN account for it against earnings.

The Portuguese government approves the amount of the accumulated balance and the movements during the year on an annual basis. REN is engaged to calculate the amounts to be received or paid by us in relation to the hydro account.

In prior years, for Portuguese GAAP purposes, the balance continued to be reported as a liability in accordance with local legislation. On transition, under IFRS a value for accrued income was set up as an asset with an increase in shareholders' equity.

During 2004, Decree law no. 240/2004 was issued, with the purpose of regulating the early termination of the PPAs, a step toward the liberalization of the energy market within the Iberian Peninsula. This decree law states that with the introduction of the free trading market, which is currently expected to occur within the next twelve months, the government will be required to introduce a new regulation regarding the purpose and scope of the hydro account as well as the mechanisms to compensate producers for their increased risks resulting from the early termination of PPAs.

As a result of the introduction of this regulation mandated by the above-mentioned decree law, and in light of the above-mentioned government announcement, our board of directors and management consider that it is probable that the hydrological correction mechanism will be terminated. At such date the liability recorded for the hydro account, including the balance relating to pre-1994 activity, will be payable to a third party to be nominated by the regulator. Moreover, since this regulation can only be introduced simultaneously with the effective liberalization of the energy market in the Iberian Peninsula, our board of directors and management consider that the accrued income accounted as an asset will cease to have any future economic benefits. Therefore, at the end of 2004, we recorded a full valuation allowance against the asset recorded in its IFRS accounts in the amount of 315 million as at December, 31 2004.

### **Power purchase agreements**

Under Portuguese GAAP, electric generation facilities in the PES are booked as fixed assets in our consolidated financial statements, being depreciated in accordance with Decree law no. 2/90.

Under IFRS, and as set forth by interpretation rule IFRIC 4 issued in December 2004 and applicable from January 1, 2006, PPAs can be considered as financial leases. In accordance with the transition regime set by this rule, these contracts should be analyzed, based on the existing information and facts at the date of such transition, as to whether in substance the contracts are financial leases.

On this basis, the terms of the Decree law no. 240/2004 of December 27, 2004, establishing the early termination of the PPAs, and the terms of the termination agreements signed in January 2005 by us, relating to the electric generation facilities in the PES, are relevant facts.

The adoption of IFRIC 4, on January 1, 2006, concerning the accounting treatment of the PPAs as financial leases, should be analyzed taking into consideration the evolution of the facts mentioned above, as at that date, and in accordance with the transition regime of the referred standard.

**Item 6. Directors, Senior Management and Employees**

**BOARD OF DIRECTORS**

Our board of directors manages our affairs and monitors the daily operation of our activities in accordance with Portuguese law and our articles of association. Executive officers are in charge of our various administrative departments and report directly to our board of directors. Our operating companies are each managed by their respective boards of directors who report ultimately to our board of directors.

Under Portuguese law, the board of directors has the power to perform any and all acts necessary or desirable for the furtherance of our purposes, with the exception of any acts that under Portuguese law or our articles of association are subject to the express

approval of shareholders at a general meeting. Pursuant to our articles of association the shareholders may in a general meeting appoint a board composed of an uneven number of members with a minimum of 5 and a maximum of 15 members. One of the directors can be elected separately by a minimum of 10% of the shareholders that voted against the list of proposed directors by, in the same shareholders meeting, voting for a new director that automatically substitutes the last person on the list of proposed directors. Currently, the board of directors consists of a Chairman and fourteen other directors elected by a simple majority of the votes cast at a general meeting.

Pursuant to our articles of association, which provide that the board of directors may delegate day-to-day management responsibilities to an executive committee composed of an uneven number of directors, the board of directors has appointed an executive committee and established the following guidelines for the executive committee:

to globally define our policies on our different areas of activity, the coordination of activities among EDP Group companies, and the management of our holdings; and

to submit to the board of directors for a decision only those matters that executive committee finds to be of suitable importance.

However, certain decisions can only be adopted by our board of directors and, therefore, our executive committee is not authorized to:

appoint new directors,

convene general meetings of shareholders,

approve our annual report and accounts in order to submit them to a general meeting of shareholders,

approve plans and annual or multi-year budgets nor monitor their execution,

approve our semi-annual or quarterly accounts,

move our principal office,

prepare plans for a merger, spin-off, transformation or sale of our group companies; or

provide guarantees.

## Table of Contents

The current executive committee was appointed in May 2003, although its composition may change in order to fill vacancies, and is currently composed of the following five directors: Mr. João Luis Ramalho de Carvalho Talone, our Chief Executive Officer, Mr. Rui Miguel de Oliveira Horta e Costa, our Chief Financial Officer, Mr. Arnaldo Pedro Figueirôa Navarro Machado, Mr. Jorge Manuel Oliveira Godinho and Mr. Pedro Manuel Bastos Mendes Rezende.

In July 2003, the board of directors created an audit committee composed of three directors. Mr. José Manuel Trindade Neves Adelino is the President of the audit committee. Mr. Luís Filipe Rolim de Azevedo Coutinho and Mr. António Afonso de Pinto Galvão Lucas are also members of the audit committee. The members of the audit committee are qualified as independent directors under CMVM Regulation no. 11/2003 of December 2, 2003.

The audit committee has, among others, the following main functions:

supervises compliance with and proper application of prevailing accounting principles and standards, in conjunction with the work of the Registered Chartered Accountant (*Fiscal Único*) and of the external auditors;

analyzes the quarterly, semi-annual and annual financial information, draws up non-binding initial reports on this information for appraisal by the board of directors, which may include recommendations on the provision of information to shareholders; and

submits proposals in connection with the appointment of the external auditor and its remuneration to the board of directors, monitors the activity of the external auditor and checks consistency and adequacy of expenditure with the external auditor and its efficiency.

Our remuneration committee is composed of three members, which are shareholders elected at our general meeting of shareholders, as provided for in Portuguese law and in article 24 of our articles of association. This committee has the capacity to determine the remuneration of our board of directors and of our other corporate bodies, including retirement plans. The current members of the remuneration committee are Mr. Vasco de Mello (Chairman), Mr. Ruy de Albuquerque and Mr. Plácido Pires. Neither the law nor our articles of association impose or provide for a charter or regulation to be approved in relation to the organization or activity of the remuneration committee.

The board of directors has the exclusive authority to represent us in transactions with third parties, but may delegate these powers. The board of directors has no power to amend or repeal the articles of association, which may only be amended or repealed by the shareholders in a general meeting by a resolution adopted by two-thirds of the votes cast, representing, on a first call, a quorum of at least one-third of our share capital, as set forth in Portuguese law.

The term of office of the board of directors is three calendar years, with the year of election or appointment being considered as a full calendar year. Directors may be removed at any time, with or without cause, by the general meeting of shareholders, and their mandate is renewable. Vacancies that occur on the board of directors may be filled by the board, with the term of the new director being coterminous with that of the substituted director. Directors filling board vacancies pursuant to designation by the board of directors must be submitted for ratification at the first general meeting of shareholders subsequent to the substitution. Our directors do not have service contracts with us or our subsidiaries that provide for benefits upon termination of employment. According to its internal regulations, the board of directors must convene once a month, and a majority of directors must be present to constitute a quorum. A director may be represented at a meeting only by another director by proxy given in writing for the meeting in question, and no more than one director can be represented by proxy at a particular meeting. Directors have equal voting rights, and all resolutions of the board of directors are adopted by a majority of the votes cast. The Chairman has the deciding vote in the event of a tie. For the year ended December 31, 2004, the board of directors met 24 times (12 ordinary meetings and 12 extraordinary meetings) and the executive committee met 54 times (40 weekly meetings and 14 extraordinary meetings). Generally, since the beginning of the



**Table of Contents**

current mandate in 2003, both of these bodies met with the participation of all its members, rarely holding meetings without any one director. In such cases the practice is to delegate on the chairman, with an adequate proxy for that specific meeting.

Pursuant to our articles of association, the shareholders at a general meeting appoint the remuneration committee, which is a committee of shareholders that determines the compensation of directors and directors' benefits.

Under Portuguese law, a director must act diligently and with due care, always seeking to promote the company's interest while taking due account of the interests of shareholders and employees. A director will be liable to the company, the company's shareholders and third parties for any damages caused by a breach of these duties.

The members of our board of directors, their principal past affiliations, information on their business experience and principal business activities outside of us and selected other information are set forth below:

<b>Name</b>	<b>Age</b>	<b>Position</b>	<b>Year originally elected</b>
Mr. Francisco de la Fuente Sánchez	63	Chairman (former CEO)	2000
Mr. João Ramalho Talone	53	Chief Executive Officer	2003
Mr. Rui Miguel Horta e Costa	44	Chief Financial Officer	2000
Mr. José Manuel Trindade Neves Adelino	51	Director	2003
Mr. João Eduardo Moura da Silva Freixa	60	Director	2004
Mr. José Manuel Gonçalves de Morais Cabral	58	Director	2003
Mr. Luis Filipe Rolim de Azevedo Coutinho	44	Director	2003
Mr. Jorge Manuel Oliveira Godinho	52	Executive Director	2003
Mr. António Afonso de Pinto Galvão Lucas	49	Director	2004
Mr. Arnaldo Pedro Figueirôa Navarro Machado	59	Executive Director	2002
Mr. José Alfredo Parreira Holtreman Roquette	68	Director	2005
Mr. Pedro Manuel Bastos Mendes Rezende	44	Executive Director	2003
Mr. Paulo de Azevedo Pereira da Silva	44	Director	2003
Mr. José Pedro da Silva Sucena Paiva	62	Director	2004
Mr. Manuel Menéndez Menéndez	45	Director	2005

*Mr. Francisco de la Fuente Sánchez* is Chairman of our board of directors and has been on our board of directors since January 1997. In addition, Mr. Francisco Sánchez is Chairman of the board of directors of ONI SGPS, Honorary Chairman of Hidrocontábrico, Chairman of EDP Foundation, Chairman of BCSD Portugal, Chairman of PROFORUM, Chairman of ELECPOR, the Portuguese Electricity Industry Association, Portuguese representative to EURELECTRIC and member of the Superior Council of Banco Comercial Português. Mr. Francisco Sánchez served as Director of EDP, SA since 1997, Chairman and CEO of EDP, S.A. between 2000 and 2003, Chairman of EDP Produção and EDPD between 2002 and 2003, and Chairman of EDP Energia and EDP Valor between 2001 and 2003. From 1997 to 1998, Mr. Francisco Sánchez was a member of the board of directors of EN, CENEL, LTE and SLE and between 1998 and 2001, he was Chairman of CERJ and EDP - Cogeração, Vice-Chairman of Bandeirante, and a member of the board of directors of EDP Internacional. Mr. Francisco Sánchez also served as member of

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the boards of directors of LTE and Hidrotejo from 1994 to 1996. He was General Manager of one of our distribution divisions from 1990 to 1994 and Central Commercial Manager of EDP from 1988 to 1989. He was assistant to our board of directors from 1987 to 1988. Mr. Francisco Sánchez holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa.

*Mr. João Ramalho Talone* was appointed our Chief Executive Officer in May 2003. In addition Mr. Talone is Chairman of the board of directors of EDP Produção and EDPD and a member of the board of directors of ONI SGPS and Hidrocantábrico. In April

**Table of Contents**

2003, he was elected deputy-chairman of the board of directors of Lusotur. Until 2002, Mr. Talone served as Chairman and CEO of the Executive Board of Directors of Eureko (appointed in September 1999), member of the Board of Directors of BCP Banco Comercial Português, S.A. (appointed in 1991) and Chairman of Seguros & Pensões (appointed in 1995). In January 2003, by appointment of the Council of Ministers, he was charged with rethinking the corporate strategy of the national energy sector. Between December 2002 and January 2003, he headed the project to terminate IPE Instituto de Participações do Estado, a state owned company holding the Republic of Portugal's interests in several of its subsidiaries. Mr. Talone is a member of the Board of Directors of Association de Génève (international insurance forum), to which he was elected in June 1995. In 1988-89, he was a guest lecturer at the Universidade Nova de Lisboa in the International Business area. Mr. Talone holds a degree in civil engineering from Instituto Superior Técnico de Lisboa, an MBA from Universidade Nova de Lisboa in association with the Wharton School of Pennsylvania and has completed the Higher Management Course at the National Institute for Industrial Research and the Advanced Management Program at Harvard Business School.

*Mr. Rui Miguel Horta e Costa* was appointed to our board of directors in May 2000 and re-elected in May 2003. Mr. Horta e Costa is also a member of the boards of directors of Hidrocantábrico, GALP, EDPD, EDP Produção and ONI. Mr. Horta e Costa is also our chief financial officer. He served as Executive Director of UBS Warburg in London from 1995 to 2000, and from 1990 to 1995, he was a member of the board of directors of Grupo Jorge de Mello. Mr. Horta e Costa was Resident Vice-President of Citibank Portugal from 1989 to 1990, and from 1987 to 1989 he served in the positions of Director of Banco Finantia and assistant of the board of directors for the same bank. From 1986 to 1987, he was Account Manager for MDM Sociedade de Investimentos. Mr. Horta e Costa holds a degree in economics from Universidade Católica Portuguesa, as well as an MBA in management from the University of Minnesota.

*Mr. José Manuel Trindade Neves Adelino* was appointed to our board of directors in May 2003. He has been a full Professor of Finance at Universidade Nova de Lisboa since 1995. He is also a member of the National Education Council and of the board of the Deposit Insurance Fund, and he belongs to the strategic councils of Portugal Telecom and CTT-Correios de Portugal. He was a non-executive member of the board of Banco Português do Atlântico and has acted as a consultant to several companies and government organizations in his areas of expertise. Mr. Neves Adelino holds a degree in finance from Universidade Técnica de Lisboa and a graduate degree in business administration (DBA) from Kent State University.

*Mr. João Eduardo Moura da Silva Freixa* was appointed to our board of directors in January 2005. He is also currently Vice-Chairman of the CGD bank. He was previously a lecturer at the Instituto Superior de Economia (1978-86). He has been an auditor for Price Waterhouse & Co. (1978-79), Treasurer at the Industrial Português Group (1979-85), a senior manager at Barclays Bank Plc. (1985-2002), a director of the Association of Portuguese Banks (2000-2002), Chairman of Euronext Lisbon (2003-2004), a director of the Stock Exchanges of Paris, Amsterdam and Brussels and a director of the Euronext N.V. holding company. Mr. Silva Freixa holds a degree in business management from the Instituto Superior de Economia and an MBA from the Universidade Nova in Lisbon.

*Mr. José Manuel Gonçalves de Morais Cabral* was appointed to our board of directors in May 2003. He is also Director of Efacec Capital, SGPS, S.A. and José de Mello Participações II, SGPS, S.A., and Senior Manager of José de Mello Serviços, Lda. From 1995 to 1999, he served as Director and CEO of Lisnave, S.A. Previously, he was Director of IPE, S.A. between 1992 and 1994, and Director of Celbi, S.A. between 1993 and 1995. From 1989 to 1992, he served as Chairman of Air Atlantis, S.A., and between 1970 and 1989, he was Controller and CFO of METAL Portuguesa, S.A. Mr. Morais Cabral holds a degree in economics from I.S.C.E.F., Lisbon.

*Mr. Luís Filipe Rolim de Azevedo Coutinho* was appointed to our board of directors in May 2003. He is also Senior Adviser of the Holding of Grupo Abrantina, as well as Professor in Economics at Universidade Nova de Lisboa. Between 1984 and 2002, he served as Senior Advisor at José Bento Pedroso & Filhos, Lda., I.P.E., Grupo V.I/B.T.A., Grupo Abrantina, Bank of Portugal, Lisbon Municipality, Calouste Gulbenkian Foundation Portuguese and Finance Secretary of State. He was a member of the boards of directors of several companies of Abrantina Group and CFO of Valora Serviços de Apoio à Emissão Monetária. He holds a degree in management from Universidade Católica Portuguesa and an MBA from Universidade Nova de Lisboa.





**Table of Contents**

*Mr. Jorge Manuel Oliveira Godinho* was appointed to our board of directors in May 2003. From March 2001 to May 2003, Mr. Godinho was President of the Executive Committee at Edinfor and Chairman at Ace-Holding, SGPS, S.A. Between 1998 and 2000 he was Adviser of the Board of Electricidade de Portugal, S.A., Executive Member of the Board of OPTEP and Vice-Chairman of the Board of Optimus. Between 1991 and 1998, Mr. Godinho was Chairman of the Board of Portucel SGPS, Portucel Industrial and Portucel Florestal. From 1985 to 1990, he served as Secretary of State for Fisheries. He was also chairman of the board of directors of Docapesca, deputy-chairman of the Portuguese Industrial Association and member of the Social Security Financial Management Institute, the National Scientific and Technological Research Board, the Forum for Competitiveness, Efacec Capital SGPS, S.A. and the Fund for the Internationalization of the Portuguese Economy. He was Assistant and Senior Lecturer at the Instituto Superior Técnico. Mr. Godinho holds a degree in engineering from Instituto Superior Técnico and an MBA from Universidade Nova de Lisboa.

*Mr. António Afonso de Pinto Galvão Lucas* was appointed to our board of directors in 2004. He is presently Chairman of the board of directors of EPM - Sociedade Gestora de Participações Sociais, S.A. and of its subsidiaries Fábrica Cerâmica de Valadares S.A., Valadares España S.A. and CCS Serviços de Gestão Lda., companies operating in the ceramics sector. Also in this sector, he is Chairman of the board of directors of Secla. Previously, he was manager and director of the CUF Group and SAPEC Group. He was also director of CIP Portuguese Industry Confederation and is currently the President of APICER Portuguese Ceramics Association and member of the Superior/Consultive Councils of AEP Portuguese Entrepreneurship Association, COTEC Association for Innovation, Forum for Competitiveness and ERSE Energy Services Regulator. Mr. Galvão Lucas holds a degree in industrial-chemical engineering from Instituto Superior Técnico.

*Mr. Arnaldo Pedro Figueirôa Navarro Machado* was appointed to our board of directors in May 2002 and he is presently the Chief Executive Officer of EDPD - Energia. Mr. Navarro Machado served as Chief Executive Officer of Sociedade Central de Cervejas from 2000 to 2002. He acted as member of the board of directors of HLC - Engenharia de Gestão e Projectos, S.A. between 1998 and 2000. In the EDP Group he has served as Vice-Chairman of the board of directors of EDP, S.A. from 1992 to 1998, Chairman of the board of directors of MRH - Mudança e Recursos Humanos, S.A. in 1997 and 1998, member and Chairman of the board of directors of INTERNEL - Electricidade de Portugal Internacional, S.A. from 1992 to 1998 and of CPPE, S.A. between 1994 and 1997, member of the board of directors of CERJ from 1996 to 1998, of INVESTCO - Veículo de Investimento de Empreendimento and of Hidroeléctrica do Lajeado in Brazil during 1998, of OPTEP from 1997 to 1998, of Turbogás from 1995 to 1998 and of EDP, S.A. in 1991 and 1992. Prior to this, he has served as member of the Management Council of Sociedade Central de Cervejas from 1988 to 1991, as Chairman of the board of directors of Sociedade da Água de Luso, S.A. during January 1990 and as member of the board of directors of Setenave from 1984 to 1988. Mr. Navarro Machado holds a degree in naval engineering from the University of the Stracholyde, Glasgow.

*Mr. José Alfredo Parreira Holtreman Roquette* was appointed to our board of directors in January 2005. He is currently Chairman of Finagra and a member of the Senior Board of BCP. He was formerly a member of the Executive Committee of BES (1971-1975). He was a director of the Espírito Santo Group's main holding companies (after 1975), Chairman of Banco Inter-Atlântico, Brazil (1976-1981), Chairman of Emptel Empresa de Equipamentos de Telecomunicações (partly controlled by Siemens) (1986-1993), Chairman and CEO of Valores Ibéricos, SGPS (Banco Totta & Açores) (1989-1993), Chairman of BTA, Totta Gespar, Totta Urbe (1991), Chairman of Mantero (1992), Chairman of the Board of Sporting Club de Portugal and the main companies of the SCP Group (1996-2000), Chairman of Sirius (2000) and Chairman of SAIP, Sociedade Alentejana de Investimentos e Participações (2003). Mr. Roquette holds a degree in economics from the University of Oporto.

*Mr. Pedro Manuel Bastos Mendes Rezende* was appointed to our board of directors in May 2003. In addition to serving as a member of the board of directors of EDP, he is also serving as President of the Executive Committee of EDP Produção and Chairman of its subsidiaries, as well as a board member of EDP Comercial, EDPD and Hidrocantábriico. Since 1990, Mr. Pedro Bastos Rezende has been a member of The Boston Consulting Group, where he served in the Madrid office until 1995 and in the Lisbon office thereafter. He was elected Partner and Director in May 1997 and has co-led the Lisbon office since then. He was also the local leader of the Energy Practice Area. From 1985 to 1989, he was Head of the Testing Department for VALEO Clutch Division in Spain. Mr. Pedro Bastos Rezende holds a degree in industrial mechanical engineering from ICAI Madrid, Spain and an MBA from Insead Fontainebleau, France.

**Table of Contents**

*Mr. José Pedro Sucena Paiva* was appointed to our board of directors in November 2004. He is currently a professor in the Department Electric Energy Systems of Instituto Superior Técnico, where he earned his degree of Aggregate Professor, since 1980. He is Chairman of the Scientific Council of the Electric Energy Center of Instituto Superior Técnico, member of the Board of Directors of COGEN Portugal, member of the Consultant Council of GOGEN Europe. Former Secretary of State of Science and Technology (1988-1991), Chairman of Tagusparque (1992-1996) and Chairman of the General Meeting of the Enersis Group. Mr Sucena Paiva holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa and a doctorate degree from the Imperial College of Science and Technology, University of London.

*Mr. Paulo de Azevedo Pereira da Silva* was appointed to our board of directors in May 2003. He is also General Manager of BCP Banco Comercial Português, S.A., Director of LEASEFACTOR S.G.P.S. and CREDIBANCO Banco de Crédito Pessoal and a non-executive director of ONI. He was also Chairman of the Board of Directors of BCP LEASING, of BCP Factoring and of Luso-Atlântica. He was a director of CISF, of Sociedade Portuguesa de Risco, of Comercial Dealer, of Sociedade de Capital de Risco do CISF and of Interfinança and manager of CISF. Mr. Paulo Azevedo holds a degree in economics from the Faculty of Economics of the University of Oporto. He also attended the training course run by the Euromoney Institute of Mergers and Acquisitions at Cranfield, and the INSEAD Executive Education Programme.

*Mr. Manuel Menéndez Menéndez* was appointed to our board of directors in January 2005. He is currently Chairman of CajaAstur, of HidroCantábrico and of NaturCorp, a voting member of the boards of the Spanish Confederation of Savings Banks and of UNESA and a member of the Official Registry of Auditors of Accounts. He was previously a voting member and member of the boards of directors of CajAstur and HidroCantábrico, a voting member of the board of directors and a member of the Executive Committee and Audit and Control Committee of AIRTEL, a voting member of the Board of the LICO Corporación, Vice-Chairman of SEDES, S.A. and Executive Chairman of the Sociedad de Garantías Recíprocas de Asturias (Asturgar). He has been a professor in the Department of Business Administration and Accountancy at the University of Oviedo, where he earned his doctorate in economic sciences in 1985 (cum laude and with a Special Mention from the Board of Examiners). He earned degrees in economics and business administration in 1982.

**SENIOR MANAGEMENT**

We have twenty-nine Executive Officers who are in charge of various business and administrative departments at the holding company level of EDP and report directly to the board of directors. Selected information is set forth below for the executive officers in charge of a principal business function.

<b>Name</b>	<b>Age</b>	<b>Year of Appointment</b>	<b>Position</b>
Mr. António Manuel Barreto Pita de Abreu	55	2003	General Manager, General Secretary, Secretary of the Company
Mr. António Pacheco de Castro	46	2003	General Manager
Mr. António Martins da Costa	50	2003	General Manager
Mr. João Manuel Manso Neto	47	2003	General Manager
Mr. Joaquim Armando Ferreira Silva Filipe	56	2003	General Manager
Mr. Joaquín Coronado	43	2005	General Manager
Mr. Jorge Manuel Ribeirinho Soares Machado	61	2003	General Manager
Mr. Manuel Luís Machado Norton Brandão	59	2005	General Manager
Mr. Vasco Manuel de Castro Coucello	53	2003	General Manager

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Mr. António José Marrachinho Soares	44	1998	Alternate Secretary of the Company
Mr. António José da Silva Coutinho	36	2003	Head of Energy Planning Office
Mr. António Manuel Neves de Carvalho	55	2000	Head of Sustainability and Environment Office
Mr. António Maria Ramos da Silva Vidigal	55	2003	Chief Risk Officer
Mr. António Pedro Alfaia de Carvalho	59	1998	Head of Legal Office

140

**Table of Contents**

<b>Name</b>	<b>Age</b>	<b>Year of Appointment</b>	<b>Position</b>
Mr. Bernardo Sá Nogueira Dantas Cunha	29	2005	Chief of Staff, Cabinet of the CEO
Mr. Carlos Alves Pereira	39	2003	Head of Business Analysis Office
Mr. Eugénio André Purificação Carvalho	51	2001	Head of Human Resources Office
Ms. Adília Pina Pereira	40	2005	Head of Talent Management Office
Mr. Joaquim Pedro de Macedo Santos	51	2003	Head of Brazil Link Office
Mr. José Manuel Ferrari Bigares Careto	42	2003	Head of Gas Project
Mr. Luís Manuel da Costa Veloso	43	2004	Head of Pension Fund Office
Mr. Luís Pedro Ferraz Flores	42	2004	Head of Information Systems Office
Mr. Miguel Ribeiro Ferreira	37	2003	Head of Planning and Control, Consolidation Accounting and Tax Office
Mr. Pedro Manuel Carreto Pires João	35	2000	Head of Investor Relations Office
Mr. Rui Ferin Cunha	41	2005	Corporate Coordination Office
Mr. Vítor Manuel Silva Leitão	51	2000	Head of Internal Audit Office
Ms. Ana Paula Pinto da Fonseca Morais	44	2003	Head of Quality Office
Ms. Magda Abdool Magid Vakil	42	1998	Head of Financial Management Office
Ms. Maria Joana Mano Pinto Simões	44	2000	Head of Regulation and Tariff Office

*Mr. António Manuel Barreto Pita de Abreu* is currently General Manager of EDP, General Secretary and Company Secretary of EDP, Chairman of Edinfor, EDP Powerline and MRH, Vice-President of Turbogás, S.A., a member of the Board of Directors of EDP Participações and a member of the Board of Directors of Electricidade dos Açores, S.A. He was a member of the Board of Directors (Executive Director) of EDP (2000-2003), Chairman and CEO of EDP Produção and CPPE, Chairman of REN (2000), Chairman of TER, EDP Cogeração and TERGEN, Chairman and CEO of Onitecom (1998-2000), a member of the Board of Directors of Edinfor and EDPD, a member of the Board of Directors of 093x (2000-2002), a member of the Board of Directors of Sãvida (2000-2001) and MRH (2000-2001), Oni Açores, Onisolutions (1999-2000) and Edinet (1997-1999), a member of the Board of Directors of Optep (1997-1998), Executive Director of REN (1994-1997), Director of DORE-Direção Operacional da Rede Eléctrica (1991-1994) and had several roles in EDP's divisions in charge of the Portuguese National Grid (1977-1991). Mr. Pita de Abreu holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa.

*Mr. António Pacheco de Castro* was appointed General Manager in June 2003 and is the coordinator of energy planning, regulation and environment. He has served as head of strategic planning since September 2000. Between 1997 and 2000, Mr. Castro served as the executive officer responsible for our investor relations office. Mr. Castro also served as an assistant manager of our strategic planning office from 1995 to 1997. Mr. Castro holds a management degree and an MBA from Lisbon's Instituto Superior de Economia.

*Mr. António Martins da Costa* is currently the CEO of Energias do Brasil and Chairman of the Board of Directors of the respective controlled companies of energy generation, distribution and trading. Having started his professional career in 1976 as a lecturer at the University, he joined EDP in 1981 and later, in 1989, moved to the financial sector, assuming the position of General Manager and Executive Board Member of insurance companies, pension funds and asset management operations of Banco Comercial Português (Portugal) and Eureko BC (Holland). Since 1999, he was also the vice-president of the Management Board of PZU (Poland). He holds a degree in Civil Engineering and an MBA from the University of Oporto, and has completed executive education studies at INSEAD (Fontainebleau), AESE (University of Navarra) and Wharton School (Philadelphia, USA).

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

*Mr. João Manuel Manso Neto* joined EDP in July 2003 as General Manager. He is CEO of Hidrocontábrico. Previously, he was a member of the Board of EDP Produção, being responsible for Trading. Before joining EDP, he worked in banking since 1981, mainly in what is now the BCP Group (in Portugal and in Poland), where he was General Manager in charge of several areas, including Treasury and Capital Market and Large Corporate Clients. Mr. Neto holds a degree in economics from Instituto Superior de Economia de Lisboa, a post graduate degree in European economy from Universidade Católica de Lisboa and a masters degree in economics from Universidade Nova de Lisboa. Until 1993, he also taught economics in Universidade Nova de Lisboa.

## **Table of Contents**

*Mr. Joaquim Armando Ferreira Silva Filipe* was appointed General Manager of EDP in June 2003. He is also CEO of Bandeirante Energia since January 2002 and a member of the Boards of Directors of Energias do Brasil, Bandeirante Energia, Escelsa, Enersul and Iven. He holds a degree in electrical engineering from the University of Oporto.

*Mr. Joaquín Coronado* was appointed General Manager in March 2005. Previously, he served within the EDP Group as CEO of Hidrocantábrico, Chairman of Genesa, and Vice-Chairman of Naturcorp. Mr. Coronado developed his career at the Spanish industrial conglomerate Abengoa, where he served as CEO of Telvent (1993-2001) and Chairman and CEO of Abengoa Bioenergy, Inc, formerly High Plains, Corp, USA (2001-2002). Mr. Coronado holds a degree in chemical engineering from Escuela Superior de Ingenieros Industriales de Sevilla (Spain) and an MBA from Instituto Internacional San Telmo.

*Mr. Jorge Manuel Ribeirinho Soares Machado* was appointed General Manager in June 2003. He is Executive Vice-President of EDP Produção, S.A. since July 2001, CEO of CPPE, S.A. since January 2004 and Board Member of EDP Produção EM, S.A. since July 2002. He has been Board Member of CPPE since January 1995 and Chairman of Erenova, S.A. between 1993 and 1995. From 1987 to 1994 he has been Central Planning Manager of EDP. Mr. Machado holds a civil engineering degree from Faculdade de Engenharia da Universidade do Porto and has been professor of the same faculty between 1971 and 1984.

*Mr. Manuel Luís Machado Norton Brandão* is currently General Manager of EDP, Chairman of EDPD and a member of the board of directors of EDP POWERLINE. He has been a member of the board of directors of EDP Serviner (2002-2003), a member of the board of directors of EDP Energia (2002-2003), a member of the board of directors of LABELEC (1996-2002), advisor to the board of directors of EDP LTE (1995-1996), head of the Fiscal Committee of REN (1994-1995), a member of the Fiscal Committee of EDP (1994-1995), head of the Cabinet of the Secretary of State for Industry and Energy (1991-1994), Corporate Planning Department director of EDP DPL (1989-1991), director of EDP DODS (1989-1991), deputy director of EDP DODS (1988-1989), assistant director of EDP DODS (1987-1988), head of Department of EDP DODS (1981-1985), Commercial Technical manager of EDP DODS (1977-1981), assistant division manager of EDP DODS (1976-1977) and assistant division manager of União Eléctrica Portuguesa (1974-1976). Mr. Norton Brandão holds degrees in electrotechnical engineering from Instituto Superior Técnico and in business from Finance do Instituto Superior de Ciências Económicas e Financeiras.

*Mr. Vasco Manuel de Castro Coucello* was appointed General Manager in June 2003. He has served as head of the unit responsible for the supply to corporate clients in the liberalized market since the beginning of 2000 (EDP Comercial). During the 1990s he served as General Manager for Energy in the Portuguese Administration. In the early 1990s he was head of the strategic planning and management information department within the planning directorate of EDP. Internationally, he served as Vice-President of the European Energy Charter Bureau and head of the Standing Group on the Oil Market in the International Energy Agency. Mr. Coucello holds a civil engineering degree from Instituto Superior Técnico and an MBA from Universidade Nova, Lisbon.

*Mr. António José Marrachinho Soares* has been our alternate company secretary since April 1998. Between August 1994 and March 2005, Mr. Soares was assistant to the board of directors and the head of the secretariat of the board. Mr. Soares holds a law degree from Faculdade de Direito de Lisboa and post-graduate degree in securities law, as well as a post-graduate degree in public regulation from Universidade de Coimbra CEDIPRE, Centro de Estudos de Direito Público e Regulação.

*Mr. António José da Silva Coutinho* was appointed head of energy planning in November 2003. From 1997 to 2003, he has worked as a business consultant for The Boston Consulting Group, focused mainly on the Energy Practice Area. Before joining BCG, he worked for four years in a civil engineering firm as a structural designer. Mr. Coutinho holds a BSc in civil engineering and MSc in operational research from Lisbon s Instituto Superior Técnico.





## **Table of Contents**

*Mr. António Manuel Neves de Carvalho* was appointed head of our sustainability and environment office in September 2000. He also served as REN's director responsible for the systems and equipment department from 1994 to 2000 and as an assistant executive officer in the systems department from 1991 to 1994. Mr. Carvalho holds a degree in telecommunications and electronics engineering from Instituto Superior Técnico de Lisboa.

*Mr. António Maria Ramos da Silva Vidigal* was appointed Chief Risk Officer in June 2003. Previously, he served as CEO of OniWay, a 3G start-up mobile operator, after having participated as Executive Board Member of Optimus Telecomunicações from the company launch to June 2000. Mr. Vidigal joined the EDP Group in 1976. He was Executive Board Member of EDP, S.A. from 1992 to 1997, and acted as Chairman, CEO or Board Member in subsidiaries encompassing Information Technology, Power Distribution, Power Plant Engineering, Hidro Power Plant Operation and Telecommunications. Mr. Vidigal holds a degree in power systems engineering from Instituto Superior Técnico de Lisboa, and completed complementary studies in computer science at Universidade Nova de Lisboa and in Management at AESE in Lisbon.

*Mr. António Pedro Alfaia de Carvalho* was appointed head of our legal office in May 1998, where he has been a legal counselor since 1979. From 1986 to 1988 he served as a director of Empresa Industrial do Freixo, at the time a subsidiary of EDP. He also served as our company secretary between July 1997 to July 2000, and again from February 2004 to March 2005. Mr. Alfaia de Carvalho holds a law degree from Faculdade de Direito de Lisboa.

*Mr. Bernardo Sá Nogueira Dantas Cunha* was appointed Chief of Staff for the CEO in February 2005. From 2001 to 2003 he was Senior Business Product Manager for OniWay. In 2000 and 2001 he was Project Manager for Cofina.com and in 1999 and 2000 he was Product Manager for the Insurance company Mundial-Confiança. Mr. Bernardo Dantas da Cunha holds a degree in environmental engineering, a post-graduate degree in general management by EGP and an MBA from INSEAD.

*Mr. Carlos Alves Pereira* was appointed head of the business analysis office in October 2003, after serving as Assistant to the Board of Directors (2002-2003). He served as head of Corporate Finance and Project Finance for Portugal in Argentaria Banca de Inversiones (1996-2002). Prior to that, he worked for 4 years in Jorge de Mello's Group where he served as Associate Director for the Financial Area of the holding company Nutrinveste (1994-1996) and as Senior Analyst of Corporate Finance in Incofina. From 1988 to 1990, he was a Financial Analyst at the fund manager company Gestifundo. Mr. Pereira holds a management degree from Lisbon's Universidade Católica Portuguesa and an MBA from Insead.

*Mr. Eugénio André Purificação Carvalho* was appointed head of our human resources office in July 2001. He was also head of CPPE's human resources office between 1998 and 2001. He served as assistant executive officer of REN's commercial department between 1993 and 1998, and he also served as an electrical engineer in power control systems from 1979 to 1993. Mr. Carvalho holds a degree in telecommunications and electronics engineering from Instituto Superior Técnico de Lisboa, and a post-graduate degree in industrial management from Lisbon's Instituto Superior de Ciências do Trabalho e da Empresa.

*Ms. Adília Pina Pereira* was appointed as head of our talent management office in June 2005. Between January 2002 and May 2005 she was a Human Resources Director and member of the board at Aventis Pharma, lda. From October 1997 to December 2001 she served as a Human Resources Director at GE Capital ITS. Between 1991 and 1997 she held the position of human resources manager at Sojornal. Ms. Pereira holds a law degree from Lisbon's Faculdade de Direito da Universidade de Lisboa and a post-graduate degree in human resources from Universidade Católica Portuguesa, Lisbon.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

*Mr. Joaquim Pedro de Macedo Santos* was appointed head of the Brazil link office in July 2003. He was a member of the Board of Directors of Enernova (2003-2005), head of strategic planning in Edinfor (2001-2003) and a member of the Board of Directors of Copidata and Mecaresopre (Edinfor subsidiaries). From 1998 to 2001, he was head of strategic planning and control in OPTEP (Telecommunications Holding of EDP) and, prior to that, he was head of department in ERSE (1996-1998) and assistant manager of our strategic planning office (1994-1996). Mr. Santos holds a degree in electrical engineering from Lisbon's Instituto Superior Técnico and an MBA from Universidade Nova de Lisboa.

## **Table of Contents**

*Mr. José Manuel Ferrari Bigares Careto* is currently Coordinator of the Gas Project, a member of the Gas Project Committee and a board member of Portgás S.A., Setgás S.A., NQF PTE S.A., NQF Energia S.A. and NQF Gás S.A. Previously, he served as Executive Board Member of companies controlled by ONI. He also worked for Sonae (1998-2000) as head of Optimus departments and as Executive Board Member of Novis and Sonae Redes de Dados. He served as head of Department of Maxitel (1997) and as head of Studies and Planning Department of ICP-ANACOM (1989-1996). He started his career at CTT- Correios in 1986. Mr. Ferrari Careto holds an economics degree from Universidade Nova de Lisboa and has completed executive education studies at AESE.

*Mr. Luís Manuel da Costa Veloso* was appointed as head of the Pension Fund Office in October 2004. He spent the last 19 years at Bank of Portugal after being appointed in October 1985. He was head of the financial markets unit at the management company of Bank of Portugal Pension Fund (2000-2004) and the head of foreign investment at the same company (1993-2000). Prior to 1993, he served as a human resources officer at the salary and benefits division of the human resources department (1989-1993) after being at the credit operations department (1985-1989). Mr. Veloso holds an MBA and a post-graduate degree in European Economic Studies from the Portuguese Catholic University and a management and public administration degree from Lisbon's Universidade Técnica.

*Mr. Luís Pedro Ferraz Flores* was appointed head of the Information Systems Office in April 2004, after serving as a board member in the subsidiary company Edinfor (2003-2005). He served as CEO/Country Manager in Brazil (1998-2003) and Portugal (1996-1998) for GONVARRI, a Spanish industrial group. Prior to that, he worked as a business consultant with The Boston Consulting Group in Portugal and Spain and with The MAC Group in Portugal, Spain, UK and USA. He holds a degree in naval architecture from Instituto Superior Técnico and an MBA from Universidade Nova de Lisboa.

*Mr. Miguel Ribeiro Ferreira* was appointed head of our planning and control, consolidation, accounting and tax office in August 2003. From August 2001 to July 2003 he was head of treasury, consolidation, planning and control, accounting and tax issues of Novabase Group (a Euronext/Lisbon listed company). From April 1993 to July 2001 he was responsible for consolidation and financial and prudential reporting of the BCP Group (a Euronext/Lisbon listed company). From September 1991 to March 1993, he served as an Audit Staff at Price Waterhouse Audit Department. Mr. Ribeiro Ferreira holds a management degree from Lisbon's Instituto Superior de Gestão and post-graduate degree in advanced corporate finance from Universidade Católica Portuguesa, Lisbon.

*Mr. Pedro Manuel Carreto Pires João* was appointed head of our investor relations office in June 2000. From 1999 to 2000, he served as an equity sales manager at BCI in Oporto. He also served as an associate director at Banco Bozano Simonsen in London between 1997 and 1999 and as an equity research associate at Goldman Sachs International in London between 1996 and 1997. Mr. Pires holds a management degree from Lisbon's Instituto Superior de Gestão and an MBA from the London Business School.

*Mr. Rui Ferin Cunha* was appointed head of the Corporate Coordination Office in February 2005. He joined EDP in March 2003. Prior to 2003, he was the secretary to the board of directors of ONI WAY and head of Planning and Control at ONI since 1998. He also served as manager at Andersen Consulting between 1995 and 1998. Mr. Rui Ferin Cunha holds a degree in telecommunications engineering from Lisbon's Instituto Superior Técnico and attended the e-MBA programme at Lisbon ISCTE.

*Mr. Vítor Manuel Silva Leitão* is currently head of our internal audit office and was head of our information systems office between 1995 and 2000. He was also an assistant manager in the accounting department from 1990 to 1995. Mr. Leitão holds a degree in mechanical and production engineering from Instituto Superior Técnico de Lisboa and an MBA from Universidade Nova, Lisbon.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

*Ms. Ana Paula Pinto Fonseca Morais* was appointed as head of our quality office in November 2003. Between July 2000 and June 2003, she was the head of our public relations office. From 1995 through to 1999, she served as the Public Relations Officer for the Portuguese Health Minister and between 1990 and 1995 she held the position of Executive Officer for Marketing and Communication in IAPMEI (Institute of Medium and Small sized companies). Ms. Fonseca holds a degree in sociology from Universidade Nova de Lisboa.

**Table of Contents**

*Ms. Magda Abdool Magid Vakil* was appointed head of our financial management office in July 1998. Between 1994 and 1997, she served as a loan officer in the European Investment Bank in Luxembourg and between 1988 and 1994 as a senior manager of corporate banking in the Royal Bank of Canada in London. Ms. Vakil holds a degree in economics from the University of Kent, Canterbury.

*Ms. Maria Joana Mano Pinto Simões* was appointed head of our regulation and tariffs office in July 2000. She also served as an assistant director of our strategic planning department from 1998 to 2000. Ms. Simões holds a degree in electrotechnical engineering from Instituto Superior Técnico de Lisboa and has an MBA from Universidade Nova de Lisboa.

**COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT**

Aggregate compensation paid in 2004 by us to our directors and executive officers was approximately 4.3 million and 31.6 million, respectively. Our Portuguese annual report to shareholders includes individual compensation for the chairman of our board of directors and for our chief executive officer. During 2004, we paid 740,600 to Mr. Francisco Sánchez, Chairman of our board of directors, and 740,600 to Mr. João Talone, our Chief Executive Officer and Chairman of the executive committee of our board of directors.

**SHARE OWNERSHIP**

As of December 31, 2004, the directors and executive officers listed in Item 6 as a group owned less than 1% of our outstanding ordinary shares (not including ordinary shares held by any entity with which any of the directors or executive officers are affiliated).

<b>Members of the Board of Directors</b>	<b>Number of Shares*</b>
Mr. Francisco de la Fuente Sánchez	12,654
Mr. João Ramalho Talone	2,324
Mr. António Afonso de Pinto Galvão Lucas	0
Mr. Arnaldo Pedro Figueirôa Navarro Machado	11,809
Mr. João Eduardo Moura da Silva Freixa	0
Mr. Jorge Manuel Oliveira Godinho	35,380
Mr. José Alfredo Parreira Holtreman Roquette	1,000,000
Mr. José Manuel Gonçalves de Morais Cabral	0
Mr. José Manuel Trindade Neves Adelino	1,091
Mr. José Pedro da Silva Sucena Paiva	10,060
Mr. Luís Filipe Rolim de Azevedo Coutinho	0
Mr. Manuel Menéndez Menéndez	0
Mr. Paulo Azevedo Pereira da Silva	7,304
Mr. Pedro Manuel Bastos Mendes Rezende	0
Mr. Rui Miguel de Oliveira Horta e Costa	4,432

\* Number of Shares reflects aggregate shares held by directors and the directors' family members.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

On July 10, 2004, we acquired 366,402 shares in the market on behalf of our management team, corresponding to a portion (net of tax) of the annual cash bonuses granted. These shares were not held in treasury by us and were subsequently delivered to employee accounts.

**Table of Contents**

The directors and executive officers listed in Item 6 have also been granted an aggregate of 612,725 stock options under our stock option plans that remain outstanding. We have adopted two stock options plans:

A plan for members of the board of directors, initially comprising a total of 1,750,000 ordinary shares, which were increased to 2,450,000 ordinary shares at the general shareholders meeting on May 10, 2000. This plan is managed by disinterested persons who are not employees of EDP or its subsidiaries.

A plan for members of the boards of directors of our operating companies and senior officers of EDP and its subsidiaries comprising a total of 16,250,000 ordinary shares. Awards of options under this plan are determined in the sole discretion of the board of directors of EDP.

Under both plans, the exercise price of each option equals the market price of our stock on the date of grant and an option's maximum term is 5 years. A summary of the status of our two fixed stock option plans as of December 31, 2002 and 2003, and changes during the years then ended on those dates is presented below:

	<u>Shares available for grant under 1999 option plans</u>	<u>Option activity</u>	<u>Weighted average exercise price</u>
Balance December 31, 2002	16,413,750	2,286,250	3.43
Options forfeited <sup>(1)</sup>		(353,992)	
Options granted <sup>(2)</sup>	(980,000)	490,000	
Balance December 31, 2003	15,433,750	2,422,258	3.36
Options forfeited		(2,299,533)	
Options granted		490,000	
Balance December 31, 2004	15,433,750	612,725	2.44

<sup>(1)</sup> Option forfeited includes options not exercised within the required period and option forfeited by departing plan participants.

<sup>(2)</sup> The number of options to be granted for 2005 has not yet been determined.

The following table summarizes information about stock options outstanding and exercisable as of December 31, 2004.

<u>Options outstanding</u>	<u>Weighted average exercise price</u>	<u>Weighted average remaining contractual life</u>	<u>Options exercisable</u>
612,725	2.44	2.62 years	283,111

**EMPLOYEES**

As of December 31 for the years indicated, the following table shows our number of employees by business areas and geographic area.

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Employees	2002	2003	2004
Electricity Generation			
Portugal	2,173	1,992	1,800
Spain		471	595
Brazil		139	103
Energy Distribution and Supply			
Portugal	7,048	6,397	5,607
Spain		672	803
Brazil		3,514	3,361
Other <sup>(1)</sup>	3,612	4,433	3,788

<sup>(1)</sup> Includes employees from electricity generation in Brazil in 2002, the EDP holding company, Edinfor and ONI.

	December 31,		
	2002	2003	2004
Permanent staff Fixed-term	12,445	17,261	15,653
Contract	388	357	404
<b>Total</b>	<b>12,833</b>	<b>17,618</b>	<b>16,057</b>



---

## **Table of Contents**

Approximately 59.8% of our employees are members of a union. Our non-management employees in Portugal are represented by 28 unions, of which six represent the majority of employees. Most of the unions are members of one of the two principal confederations in Portugal: CGTP-Intersindical and UGT. Our non-management employees in Spain are represented by nine unions and our non-management employees in Brazil are represented by seven unions. The unions assume responsibility for annually negotiating salary levels, negotiating the collective bargaining agreements and ensuring that the collective bargaining agreements are correctly applied. In May 2000, we reached agreement with all of the unions representing our employees in Portugal on a new collective bargaining agreement which provides for, among other things, higher entry level compensation across professional categories and greater opportunities for seniority-related compensation increases within individual professional categories. The May 2000 agreement and related agreements provide for certain salary increases for employees in Portugal determined on an annual basis. The weighted average salary increases for employees in our electricity business companies are 3.1% for 2004, 5.4% for 2003, 4.3% for 2002 and 4.5% for 2001. Future increases will be negotiated on an annual basis.

From 1988 through 2004, we experienced 14 strikes, six of which lasted only 24 hours each, and two of which lasted 48 hours each. Nine of the 14 strikes concerned salary negotiations, our privatization or our restructuring.

In 2002, there were 3 strikes, concerning employee s rights, salary negotiations, the maintenance of the National Wealth Service and the public social security system, protests against new labor laws approval and against installation closing. One of these strikes was a national strike and in all there were 2,639 workers involved and 25,530 hours of strike time (number of persons per strike multiplied by the number of hours of each strike).

In 2003, there were two strikes concerning salary negotiations, new labor laws and the defense of workers rights recognized in the Collective Work Agreement. These strikes involved 528 workers and 3,526 hours of strike time (number of persons per strike multiplied by the number of hours of each strike).

In 2003, there were no strikes by our Spanish or Brazilian employees.

In 2004, there were two strikes concerning the disagreement against Portuguese government policy, a new labor law and the defense of workers rights recognized in the Collective Work Agreement. These strikes involved 181 workers and 1,056 hours of strike time (i.e., the number of persons striking multiplied by the hours of each strike). In 2004, there were no strikes by Spanish or Brazilian employees.

## **EMPLOYEE BENEFITS**

Our employees are entitled to participate in a profit sharing program. In 2004, approximately 24.6 million was distributed to our labor force as profit sharing. We maintain defined benefit pension plans for all employees of the companies that have subscribed to the Collective Labor Agreement in Portugal and Brazil. These pension plans are supplemental to the pension provided to retirees by the social security systems. As of December 31, 2004, the value of the underlying pension funds totaled 1,137.6 million, and the pension expense in 2004 was 69.1 million. For further information about our pension and benefit plans, see Item 5. Operating and Financial Review and Prospects Pensions and Benefits and notes 2(k), 21, and 34 to our consolidated financial statements. Our directors and senior officers are also eligible for stock option plans, described in Share Ownership.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Our employees are eligible to participate in a complementary health plan that supplements benefits from the Portuguese National Health Service. Currently, the health plan covers approximately 100% of our people among the existing labor force, retired people, pensioners and relatives. In addition, employees receive personal accident insurance that covers death and invalidity, as well as a death subsidy complement.

**Table of Contents****Item 7. Major Shareholders and Related Party Transactions****MAJOR SHAREHOLDERS**

The Portuguese government, through Parpública, a corporation wholly-owned by the Portuguese government, which was formed in 1991 for the purposes of holding the Portuguese Republic's interest in a number of enterprises in various industries, at June 30, 2005, owned approximately 15.59% of our outstanding ordinary shares. Through Caixa Geral de Depósitos, S.A., a state-owned bank, the Portuguese government owns an additional 9.8% of our ordinary shares. The Portuguese government's ownership of EDP ordinary shares declined from approximately 70% in 1997 to the current level as a result of the offering of our ordinary shares in successive stages of our privatization, the last of which took place in November 2004.

The following table sets forth information concerning the ownership of our ordinary shares as of June 30, 2005. Other than as set out in the following table, we are not aware of any shareholder owning more than 2.0% of our ordinary shares.

Name of owner	Number of Ordinary Shares owned	Percentage of Outstanding Ordinary Shares
Parpública	569,951,658	15.59%
Caixa Geral de Depósitos, S.A.	358,298,869	9.80%
Iberdrola S.A.	208,422,650	5.70%
Caja de Ahorros de Asturias (CajAstur)	202,250,158	5.53%
BCP - Banco Comercial Português, S.A.	106,399,730	2.91%
The BCP Group's Pension Fund	112,464,496	3.08%
BRISA - Participações, SGPS, S.A.	73,211,244	2.00%
All directors and executive officers as a group <sup>(1)</sup>	1,300,000 <sup>(2)</sup>	<1%

<sup>(1)</sup> Does not include ordinary shares held by any entity with which any such officers or directors are affiliated.

<sup>(2)</sup> Approximate.

The Portuguese government or equivalent entities have special rights that all other holders of our ordinary shares do not have. To learn more about the special rights of the Portuguese government or equivalent entities you should read Risk Factors Other Risks Restrictions on the exercise of voting rights, as well as special rights granted to the Portuguese government or equivalent entities, may impede an unauthorized change in control and may limit our shareholders' ability to influence company policy.

As of September 26, 2005, approximately 3.7% of our ordinary shares were represented by ADSs that were held by three holders of record, including The Depository Trust Company. The number of ADSs outstanding was 13,487,895 as of September 26, 2005.

**RELATED PARTY TRANSACTIONS**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Mr. Paulo de Azevedo Pereira da Silva, general manager of BCP and a director of various companies of the BCP group, is a non-executive member of our board of directors. In March 2000, we and BCP entered into a strategic alliance, pursuant to which we acquired 4.25% of BCP's outstanding shares and BCP acquired approximately 5% of our outstanding shares. In March 2003, we subscribed to a share capital increase of BCP, bringing our stake to 4.36%. In the ordinary course of business, we and BCP enter into customary commercial banking transactions, such as deposits and loans.

On May 9, 2001, we entered into an agreement for a strategic alliance in the telecommunications sector with BCP, GALP and Brisa. Brisa became a shareholder of ONI in exchange for its 100% stake in Brisatel, which owned 4% of ONI Way. As a result of the agreement, EDP holds 56% of the share capital of ONI and Brisa holds 17%, while BCP and GALP hold the remaining 22.8% and 4.2%, respectively. Within the context of the strategic alliance, Brisa proposed two members of ONI's board of directors and they were subsequently elected by the shareholders of ONI. Mr. José Manuel Gonçalves de Moraes Cabral, a director of EDP, is a director

## **Table of Contents**

of various companies within the José de Mello Group, which owns a significant interest in Brisa. Brisa owns approximately 2% of our ordinary shares.

Mr. Manuel Menéndez Menéndez is the Chairman of Hidrocantábrico and CajAstur and is a member of our board of directors. We are party to a shareholders' agreement with CajAstur concerning Hidrocantábrico. For more information on this shareholders' agreement, please see Item 4. Information on the Company Spain History and Overview.

## **INTERESTS OF EXPERTS AND COUNSEL**

Not applicable.

## **Item 8. *Financial Information***

### **CONSOLIDATED STATEMENTS**

Please refer to Item 18. Financial Statements and pages F-1 through F-76 of this annual report.

### **OTHER FINANCIAL INFORMATION**

### **LEGAL PROCEEDINGS**

We are subject to a number of claims and legal and arbitral proceedings incidental to the normal conduct of our business. Management does not believe that liabilities related to such claims and proceedings are likely to be, individually or in the aggregate, material to our consolidated financial condition.

### **DIVIDENDS AND DIVIDEND POLICY**

We have declared dividends each year since 1991, when we became a limited liability corporation. The following table shows our dividends per share based on 3,000,000,000 ordinary shares outstanding in the years until 2003 and 3,656,537,715 ordinary shares outstanding in 2004:

2000	2001	2002	2003	2004
------	------	------	------	------

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Dividends per ordinary share (in euro) <sup>(1) (3)</sup>	0.14	0.11	0.09	0.09	0.09
Dividends per ordinary share (in U.S. dollars) <sup>(2) (3)</sup>	0.12	0.10	0.11	0.11	0.11

<sup>(1)</sup> For 2000, escudos are translated into euro at the fixed rate of exchange established at the commencement of the third stage of European Monetary Union on January 1, 1999 by the European Council of Ministers between the euro and escudo of PTE 200.482 = 1.00.

<sup>(2)</sup> Translated at the prevailing rate of exchange at the date of payment, which for the 2004 dividend (paid in 2005) was \$1.2919 = 1.00.

<sup>(3)</sup> Actual dividend paid in 2004 was 0.09243 (U.S.\$0.11923).

The payment and amount of dividends are subject to the recommendation of our board of directors and the approval by our shareholders at a general meeting. It is the current intention of the board of directors, subject to our financial condition and 2005-2007 strategic business plan, to increase our annual total dividend distribution during the 2005-2007 period by 7% to 8% annually.

In 2005, the first year in which dividends were distributed after our share capital increase in 2004, the total amount of dividends was adjusted by the technical effect resulting from the increase. For this purpose, the total amount of dividends distributed by us, and future variations of that amount, is determined taking into account the proportional impact of the share capital increase on our market capitalization, based on the closing price of our ordinary shares on Euronext Lisbon on the last day in which such shares were traded with rights.

Pursuant to Portuguese law, dividends are paid to shareholders of record as of the date established for payment. These payments are effected by means of Portugal's book-entry clearance and settlement system.

**Table of Contents**

All dividends are paid in euro. Dividends received by a holder of ordinary shares or ADSs will, under current law and practice, be subject to taxation. The effective rate of Portuguese withholding tax has changed periodically in recent years and may change again in the future. For more information regarding taxation of dividends, you should read Item 10. Additional information Portuguese Taxation. Dividends received by holders of ADS will be paid in U.S. dollars, net of conversion expenses of the depository.

**SIGNIFICANT CHANGES**

No significant change in our financial condition has occurred since the date of our consolidated financial statements included in this annual report.

**Item 9. The Offer and Listing****TRADING MARKETS**

In Portugal, our ordinary shares trade on the EUROLIST by Euronext Lisbon, or the Official Market. In the United States, our ordinary shares trade in the form of ADSs represented by ADRs issued by Citibank, N.A., as depository. Our ADSs are listed on the NYSE and our ordinary shares are listed on Euronext Lisbon. Our ADSs and our ordinary shares are also listed on the Frankfurt Stock Exchange, and our ordinary shares are quoted on SEAQ International.

**MARKET PRICE INFORMATION**

The tables below set forth, for the periods indicated, the reported high and low sales prices of our ADSs on the NYSE and of our ordinary shares on Euronext Lisbon, based on the 3,656,537,715 ordinary shares outstanding after giving effect to the 5-for-1 stock split approved at our May 12, 2000 general meeting and the 11-for-50 rights issue in November 2004:

	Per ADS		Per Ordinary Share	
	High	Low	High	Low
	(U.S. Dollars)		(Euro)	
<b>2000</b>	39.50	25.81	4.05	2.98
<b>2001</b>	34.31	20.90	3.50	2.20
<b>2002</b>	22.19	14.56	2.40	1.41
<b>2003</b>				
First Quarter	18.50	15.10	1.62	1.33
Second Quarter	23.27	17.32	1.90	1.51
Third Quarter	24.40	21.30	2.06	1.78
Fourth Quarter	26.50	22.33	2.02	1.86
Full Year	26.50	15.10	2.06	1.33

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

<b>2004</b>				
First Quarter	31.15	25.15	2.42	1.93
Second Quarter	29.49	26.17	2.34	2.07
Third Quarter	29.80	26.65	2.31	2.12
Fourth Quarter	31.15	28.60	2.40	2.16
Full Year	31.15	25.15	2.42	1.93
<b>2005</b>				
First Quarter	30.35	28.00	2.32	2.15
Second Quarter	28.87	24.84	2.22	2.05
Month of				
March 2005	30.30	28.00	2.26	2.15
April 2005	28.87	26.81	2.22	2.06
May 2005	27.95	25.39	2.15	2.05
June 2005	26.10	24.84	2.12	2.05
July 2005	26.80	24.60	2.21	2.04
August 2005	28.34	26.52	2.29	2.16



---

**Table of Contents**

**THE PORTUGUESE SECURITIES MARKET**

The Portuguese equity market, which had experienced significant increases in liquidity and trading volumes until 2001, registered a slowdown in 2002 and 2003, consistent with the worldwide economic situation. In 2004, the Portuguese equity market registered a turnaround in line with the other European equity markets. Since November 1997, Portugal's status in the Morgan Stanley Capital International, or MSCI, indices has changed from emerging market to developed market. In particular, Portugal joined the MSCI Europe and World indices and left the MSCI Emerging Market index.

The integration of the former Lisbon and Oporto Stock Exchange in Euronext, N.V. (under the name Euronext Lisbon Stock Exchange, or Euronext Lisbon) on January 30, 2002, has allowed Euronext Lisbon to participate in a wider European capital market, which also includes Euronext Paris Stock Exchange, Euronext Amsterdam Stock Exchange and Euronext Brussels Stock Exchange. This integration process is intended to create a European common capital market, in order to allow investors to have access to a single equity and derivatives trading platform, common netting, clearing and settlement services and harmonized market rules and procedures.

A single equity and derivatives trading platform was recently implemented by migration of several platforms of the Euronext Stock Exchanges. The migration of both the equity and derivatives markets platforms managed by Euronext Lisbon SGMR to a single equity and derivatives trading platform common to all Euronext Stock Exchanges occurred in November 2003 for the equity market and in March 2004 for the derivatives market.

This migration involved the adoption by Euronext Lisbon *Sociedade Gestora de Mercados Regulamentados, S.A.*, or Euronext Lisbon SGMR, of the Euronext Market Model, which consists of the harmonization of rules applicable to the markets, members and transactions of Euronext Stock Exchanges. For this purpose, Euronext Lisbon SGMR approved a number of rules, which entered into force on November 7, 2003, in order to accommodate the Euronext Market Model, respecting, where necessary, the requirements of Portuguese regulation on these matters. Currently, there are Harmonized Rules, accommodating the Euronext Market Model, and Non-Harmonized Rules, where the requirements of the Portuguese regulation are safeguarded.

As of December 31, 2004, the market capitalization of equity securities listed on Euronext Lisbon was 112,724 million, compared with 91,180 million as of December 31, 2003, representing 66.2% and 58.1%, respectively, of the total market capitalization of Portuguese listed securities. As of December 31, 2004, 145 Portuguese companies' financial assets were listed on Euronext Lisbon (representing a total of 654 different issues), of which 55 were in the form of equity securities (59 issues), 70 in the form of bonds (197 issues), 10 in the form of warrants (377 issues) and 10 in the form of other listed funds and certificates (21 issues). On the basis of euro value, the ten most actively traded equity securities in ordinary sessions of Euronext Lisbon in 2004 represented approximately 93.2% of total trading volume of equity securities on Euronext Lisbon compared with 94.6% in 2003. Turnover of equity securities was 27,763 million in 2004 compared with 19,024 million in 2003.

In 2004, our ordinary shares represented approximately 19.9% of total trading volume of equity securities on the Euronext Lisbon. As of April 30, 2005, our ordinary shares accounted for 19.3% of total market turnover since January 1, 2005. As of September 26, 2005, our ordinary shares weighted 12.6% in the PSI General Index, 18.6% in the PSI 20 Index and 0.5% in the Euronext 100 Index, each as defined below.

The Official Market, created in July 1991, is the market on which most significant Portuguese equity and derivative securities are listed. The Official Market index, or the PSI General Index, published since February 1991, is a weighted average price of all shares listed on the Official Market, other than preferred shares without voting rights. The exact number of companies in the PSI General Index's portfolio may change each

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

day as a result of new admissions, exclusions, suspensions and the absence of quotations. This index essentially reflects the Official Market's global profitability.

## **Table of Contents**

Euronext Lisbon calculates an index called the PSI 20, which includes the 20 largest and most actively traded stocks listed on the Official Market. This index was created for the purpose of acting as the Portuguese stock market benchmark and as an underlying reference for futures and options contracts. Market operators also use the PSI 20 as an underlying index for structured financial products whose performance depends on the performance of the Portuguese stock market. The methodology for the composition and calculation of this index was changed in May 2001 and was implemented on October 1, 2001. The weight of the index components, which before this revision was based on the 20 companies with the largest market capitalization listed in the Official Market, now also takes in consideration the free float of these companies and introduces a maximum limit of 20% of the weight that a given company can have in the index.

Pursuant to the integration of the former Portuguese stock market with Euronext, some Portuguese listed companies are now also included in Euronext indices. We, along with six other Portuguese companies, are included in the Euronext 100 Index, which is a market capitalization weighted price index comprised of the 100 largest and most actively traded stocks on Euronext Stock Exchanges. Each stock participating in the Euronext 100 Index must experience turnover of over 20% of its issued shares over the course of a rolling one-year analysis period.

Euronext Lisbon is supervised by the Ministry of Finance and the Portuguese Securities Market Commission, or CMVM, and operated by the Euronext Lisbon SGMR.

## **TRADING**

Since March 1, 1999, all shares currently listed on the Official Market of Euronext Lisbon are traded through a continuous trading system, which is designed to provide automatic execution and trading through LIST, a computerized trading system. The principal feature of the continuous trading system is the computerized matching of buy and sell orders based, first, on matching sales price and, second, on the time of entry of the order. Each order is executed as soon as a matching order is entered, but can be modified or revoked up to its execution. Between 7:30 a.m. and 8:00 a.m. on each trading day, from Monday to Friday excluding public holidays, the daily opening market clearing price is established for each security on the continuous trading system based on the bids and offers outstanding. During the last five minutes of this pre-opening period it is possible to immediately present purchase and sale orders, which may not, however, be modified or revoked. On any trading day, the opening price may not change more than 15% from a reference price, which is the closing price of the last session or the price resulting from an automatic roll-call held during the session in order to reset the reference price. Computer-matched trading then proceeds on the continuous trading system from 8:00 a.m. until 4:30 p.m.

An automatic trading procedure by roll-call auction will be used if there is an interruption in the continuous trading system. In trading through a roll-call auction, all the orders to buy or sell the same security are processed together. Each roll-call auction originates one single price for the security and is followed by the matching of trades according to the priority of each of the orders, which is established according to the respective prices. Sell orders below and buy orders above the auction price will not be matched.

At present there are no official market makers or independent specialists in the continuous trading system and therefore orders to buy or sell shares in excess of corresponding orders to sell or buy shares are not executed.

According to the Portuguese Securities Code, which entered into force on March 1, 2000, transactions on Euronext Lisbon may only be performed by its members. There are two categories of members of Euronext Lisbon: negotiator members and clearance members. Negotiator members may perform stock exchange transactions but are not allowed to execute their clearance and are therefore required to enter into an agreement with one or more clearance members for clearance of the operations they negotiate. Only financial institutions authorized to buy and sell securities for their own accounts, such as banks and dealers, may become clearance members. Clearance members can clear stock exchange

transactions and negotiate transactions.

Any trading of stocks listed on the continuous trading system that takes place off-market must be cleared through financial institutions and physically settled through the Portuguese Clearing House (*Central de Valores Mobiliários*), or CVM, where those stocks are registered or deposited. Stock prices are quoted in euro per share.

## **Table of Contents**

### **CLEARANCE AND SETTLEMENT**

All securities traded on Euronext Lisbon, either in certificated form or in book-entry form, must be deposited or registered in the CVM. The CVM provides a system for the registration and control of securities, including custody of certificated securities and registration of book-entry securities. The CVM is managed by Interbolsa Sociedade Gestora de Sistemas de Liquidação e de Sistemas Centralizados de Valores Mobiliários, S.A., or Interbolsa, a company wholly-owned by Euronext Lisbon SGMR that also manages the Clearing and Settlement System for stock exchange transactions.

The Clearing and Settlement System is currently the most widely used clearing and settlement system in Portugal. Under this system, the member of the stock exchange inputs trade information on LIST, the nation-wide computerized trading system. The clearance member, which also has to be a participant of the Clearance and Settlement System, accepts the trade, at the latest, one day after the date of the trade, becoming the legal counterparty to the transaction until it settles. By the third business day after the trade, the electronic book-entry for the transfer of the securities takes place in the books of the CVM. This physical settlement is provisional until the financial settlement takes place after the end of the market daily process of the same third business day after the trade. In the business day following the settlement of the trade, the participants are informed of the volume of securities and cash amounts that were settled and those that failed to be settled.

Our ordinary shares have been accepted for trading on Euroclear and Clearstream and settle and trade with Euroclear and Clearstream in accordance with standard settlement procedures for internal clearances and with external counterparties through the CVM. Our ordinary shares are subject to such rules and regulations as Euroclear and Clearstream may from time to time determine.

Under Portuguese law, the acquisition of shares through a stock exchange transaction allows the owner to immediately sell those shares in the same market, without awaiting the physical and financial settlement of the transaction. However, the clearance member related to that transaction is primarily responsible for its physical settlement. In case of default in the physical settlement, Interbolsa must immediately initiate the substitution procedures necessary for good settlement of the transaction. These procedures involve an automatic lending and borrowing system, or if there are no securities available, an automatic buy-in system, in relation to the short positions on the closing date.

To hold our ordinary shares directly in book-entry form through the facilities of the CVM, an entity that is a non-resident of Portugal must, prior to the execution of the transaction, open a special share portfolio account with a financial intermediary located in Portugal and duly licensed to act as a financial intermediary pursuant to applicable legislation. The investor may then buy and sell listed securities with some restrictions and repatriate the proceeds. Persons who hold ordinary shares through Euroclear and Clearstream will not be required to open a special share portfolio account with a financial intermediary located in Portugal in order to hold the ordinary shares.

### **TRADING BY US IN OUR SECURITIES**

Except in specified circumstances, under Portuguese law companies may not, at any time, hold more than 10% of their own share capital and may purchase or otherwise trade in their own equity securities only with shareholder authorization. Under our articles of association, the shareholders may, at a general meeting, grant us the authority to purchase our own shares.

At our general meeting held on March 31, 2005, the shareholders renewed the authorization for our board of directors and the management bodies of our subsidiaries to purchase our shares under the following conditions: (1) the number of shares to be acquired cannot exceed 10% of

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

our share capital (a limit that already includes any shares to be acquired under the stock options plans); (2) the acquisition can only be done within the regulated markets where we are listed; and (3) the acquisition price shall have as maximum and minimum limits 115% and 85%, respectively, of the weighted average of the closing quotations of our shares in the last ten sessions of Euronext Lisbon preceding the date of the acquisition.

## **Table of Contents**

The shareholders also renewed the authorization for our board of directors and the management bodies of our subsidiaries to sell our shares under the following conditions: (1) the number of sales and shares to be sold will be defined by our board of directors and by the management bodies of our subsidiaries, which shall include any shares to be granted under the stock options plans; (2) the sale of shares can only be done within the regulated markets where we are listed, without prejudice of obligations to be satisfied within the stock options plans whose creation has been duly approved by the general meeting; and (3) the sale price cannot be lower than 90% of the weighted average of the closing quotations of our shares in the last ten sessions of Euronext Lisbon preceding the date of the sale, except if the sale is executed to fulfill the stock options plans whose creation has been duly approved by the general meeting.

This general meeting resolution has renewed the authorization for our board of directors to purchase and sell our own shares for an additional period of 18 months, which had already been granted in previous identical resolutions passed at the general meetings held since 1999.

We buy and sell EDP shares on the market or otherwise as and when we believe it appropriate. As of September 26, 2005, we held 19,257,109 of our own ordinary shares, 1,750,000 of which we purchased in 1999, 650,000 of which we purchased in 2000, 9,326,209 of which we purchased in 2001, 5,702,717 of which we purchased in 2002, 4,002,038 of which we purchased in 2003, 7,143,307 of which we sold in 2004 and 4,969,452 of which we purchased in 2005. Ordinary shares held by us will be deemed to be outstanding under Portuguese law but are not entitled to any dividends, voting rights or preemptive rights, except the right to receive ordinary shares upon increases of share capital by incorporation of reserves.

### **PLAN OF DISTRIBUTION**

Not applicable.

### **SELLING SHAREHOLDERS**

Not applicable.

### **DILUTION**

Not applicable.

### **EXPENSES OF THE ISSUE**

Not applicable.

**Item 10. Additional Information**

**SHARE CAPITAL**

Not applicable.

**ARTICLES OF ASSOCIATION**

The following is a summary of both the rights of our shareholders and certain provisions of our articles of association. Rights of our shareholders are set out in our articles of association or are provided for by applicable Portuguese law. Because it is a summary, it does not contain all the information that may be important to you. For more complete information you should read our articles of association. Directions on how to obtain a complete copy of our articles of association are provided under [Documents on Display](#) below.



## **Table of Contents**

### **GENERAL**

We are registered at the Lisbon Commercial Registry Office under number 1805. Under Article 3 of our articles of association, we have as our company purpose the promotion, involvement and management, in a direct or indirect manner, of capital projects and activities in the electrical sector, both at the Portuguese national and international level, with the aim of enhancing and streamlining the performance of the universe of companies comprising the EDP Group. We may also acquire participating interests as a limited liability member in companies having corporate missions that differ from our own, even if such companies are regulated by special laws, or participate in complementary company groupings, European economic interest groupings, consortia or in any other type of association, temporary or permanent.

### **TRANSACTIONS WITH DIRECTORS**

According to the Portuguese Company Law, contracts between us or our affiliates, on one hand, and our directors or any person acting on behalf of them, on the other hand, must be previously authorized by our board of directors, without the interested director's vote, and approved by our Registered Chartered Accountant ( *Fiscal Único* ). Companies may not grant loans or extend any kind of credit to their directors, make payments on their behalf, guarantee their obligations or pay their remuneration more than one month in advance. Under Article 26 of our articles of association, our directors need not be shareholders of us. For more information on our board of directors, you should read Item 6. Directors, Senior Management and Employees Board of Directors.

### **VOTING RIGHTS**

Pursuant to our articles of association, any holder of 100 or more ordinary shares registered in its name at least 15 days in advance of any meeting of shareholders is entitled to attend the meeting and to have one vote for every 100 ordinary shares owned. Shareholders must provide us, up to eight days prior to the date of the meeting, with a certificate from a financial intermediary confirming that the shareholder held the ordinary shares on the date 15 days prior to the meeting and that the ordinary shares have been blocked from that date up to the date of the meeting. According to the Portuguese Company Law, those shareholders holding fewer than 100 ordinary shares may aggregate their interests with other shareholders of ordinary shares, which themselves may own more or less than 100 ordinary shares, and permit one of them, or another holder entitled to attend the meeting, to attend and vote on their behalf at the meeting.

Under Portuguese law, holders of ordinary shares entitled to vote may be represented by proxy at a meeting of shareholders. The proxy must be filed with us by the date of the scheduled meeting of shareholders. Proxies must be in hand signed and are only valid for a single meeting.

The voting rights exercised by a single shareholder, other than the Portuguese government or an equivalent entity, are limited to a maximum of 5% of our share capital. No single shareholder can exercise voting rights, in its name or on behalf of other shareholders, representing more than 5% of our share capital. For purposes of computing the percentage of the share capital held by a single shareholder, the votes corresponding to the following shares are aggregated:

the number of shares held by the shareholder;

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the number of shares held by any other entity controlled directly or indirectly by the shareholder;

the number of shares held by other persons or entities in their own name or in the name of another for the benefit of the shareholder;

the number of shares held by an entity belonging to the same corporate group as the shareholder entity;

the number of shares held by third parties with whom the shareholder has an option or any other right to buy our shares;

the number of shares held by third parties with whom the shareholder has entered into a shareholder agreement related to a joint exercise of voting rights; and

## **Table of Contents**

the number of shares held by any person as security where the person is entitled to exercise the voting rights corresponding to our shares.

Holders of ADSs are treated as holders of the ordinary shares represented by the ADSs for purposes of determining the applicability of the 5% limitation on voting rights. Voting instructions of an individual ADS holder may not be carried out by us as votes of ordinary shares to the extent that those votes, together with any votes cast by the ADS holder as a holder of ordinary shares, exceed 5% of our share capital.

Under Portuguese law, a company may not vote its own shares that it holds as treasury stock, nor may any subsidiary that holds stock of its parent vote the treasury stock, and a company's treasury stock will not be counted towards a quorum or for purposes of determining a requisite percentage of votes cast. In accordance with Portuguese law, our shareholders must approve the acquisition by us of our own shares. Under Portuguese law, a Portuguese company may not, except under specified limited circumstances, purchase more than 10% of its nominal share capital as treasury stock.

Under Portuguese Company Law and our articles of association, we can create shares with special rights (e.g., priority rights over a company's profits) with the approval of two-thirds of the votes cast at a general meeting of shareholders.

## **SHAREHOLDERS MEETINGS**

A general meeting of shareholders must be held annually within the first five months of the year following the close of the year for which the general meeting is convened. Other general meetings of shareholders are convened by the president of the general meeting whenever deemed appropriate or suitable and requested by the board of directors, the Registered Chartered Accountant or the holders of at least 5% of our total share capital. Currently, notices of shareholders' meetings must be given by an announcement published in the *Diário da República*, the Portuguese Official Gazette, and in a national newspaper with general circulation in Lisbon and Oporto, at least 30 days before the scheduled date of the meeting. However, in our March 30, 2004 general meeting, an amendment to our articles of association was approved to allow shareholders' meetings to be convened within the shortest period permitted by Portuguese law, in order to create the flexibility to apply eventual changes to the current legal periods for convening such meetings. This amendment to our articles of association has not yet been implemented.

Under Portuguese Company Law and our articles of association, the general meeting is constituted by the presence, in person or by proxy, of shareholders. There is no quorum requirement unless the meeting is called to vote on the extraordinary matters referred to below. In general, resolutions can be approved by a simple majority of votes cast. However, there are special quorum and majority requirements in cases where the general meeting is called to vote on extraordinary matters, which are amending our articles of association, approving a merger, break-up or transformation or dissolution of us, increasing our share capital and waiving pre-emptive rights. In these cases, the presence on a first call, in person or by proxy, of shareholders representing at least one-third of our share capital is required. There is no quorum requirement on a second call. Resolutions on these foregoing matters must be approved by at least two-thirds of the votes cast unless, on a second call, there are present, in person or by proxy, shareholders representing at least 50% of our share capital, in which case a simple majority of votes cast is required. However, there is a special majority requirement in the case of the election of our board of directors. If a group of minority shareholders holding at least 10% of the voting rights votes against the resolution providing for the election of the members of the board of directors, those minority shareholders have the right to elect one director.

All resolutions adopted at a general meeting of shareholders are binding upon all shareholders.

**PROXY REQUIREMENTS**

In the event that any person requests a proxy from more than five shareholders, whether for that person or others, those proxies may be used for only one specified general meeting and a proxy will be considered revoked if the shareholder granting the proxy attends the meeting. A proxy request must contain at least the following information:

the date, time, place and agenda for the meeting for which the proxy is requested;

## **Table of Contents**

identification of relevant documents that may be reviewed by shareholders;

the identity of the person or persons who will act as the shareholder's proxy holder;

a statement as to how the proxy holder will vote the related shares in the absence of instructions from the shareholder; and

a statement that, in the event of circumstances unforeseen at the time the request was sent, the proxy holder will vote according to his or her evaluation of the shareholder's best interests.

Furthermore, pursuant to the Portuguese Securities Code, it is also required, in order for a person to represent more than five shareholders, that the proxy includes a description of the voting rights of the proxy holder and the voting instructions to the proxy holder.

If a shareholder provides voting instructions with respect to a proxy request, the proxy holder must vote the related shares in accordance with those instructions except in the event of unforeseen circumstances as indicated above, in which case the proxy holder must inform the shareholder of how he or she has voted and the reasons for the vote. If a person requesting a proxy does not agree with the voting instructions received from the shareholder, he or she must reject the proxy and immediately inform the shareholder of the rejection.

Any person that has requested proxies is required to send, at that person's expense, to shareholders for whom that person was the proxy holder, a copy of the minutes of the related general meeting.

## **VOTING BY CORRESPONDENCE**

According to our by-laws and the Portuguese Securities Code, our shareholders may vote by correspondence. Under the Portuguese Securities Code, public notices concerning shareholders' meetings must indicate the possibility of voting by correspondence and must specify the procedures to follow in order to vote by correspondence, including a mailing address and deadline for receipt of the votes. We are obligated to verify the authenticity of each vote and ensure its confidentiality. According to our articles of association, shareholders may cast their vote by correspondence for each item on the agenda, provided that they send a registered letter with recorded delivery addressed to the chairman of the general meeting at our registered office in Portugal, signed in accordance with the signature on their identity card, at least eight days prior to the general meeting, enclosing a legible photocopy of the identity card of the person signing the letter.

## **DIVIDENDS AND DISTRIBUTIONS**

Under Portuguese law, we are required to establish and maintain a legal reserve equal to 20% of the aggregate nominal value of our share capital and, if necessary to maintain this legal reserve, to contribute a minimum of 5% of our annual net income to the legal reserve. The legal reserve is distributable only upon our liquidation but it can be used to cover losses and be incorporated as our share capital. Currently, our total legal reserve is approximately 345 million, which is in compliance with Portuguese law. Net income in each fiscal year, as increased or decreased by any profit or loss carried forward from prior years, less any contribution to the legal reserve, is available for distribution to shareholders as dividends, subject to the requirements of Portuguese law and our articles of association. The payment and amount of dividends are subject to the recommendation of our board of directors and the decision by our shareholders at a general meeting.

If we have earned distributable profits since the end of the preceding fiscal year, as shown on an interim income statement certified by our auditors, our board of directors has the authority, with the prior approval of the audit board and subject to Portuguese law and regulations, without the approval of shareholders, to distribute interim dividends to the extent of these distributable profits.

## **Table of Contents**

Under Portuguese law, dividends are generally distributed to shareholders *pro rata* according to their respective holdings of shares. The payment of the dividend is due within 30 days of the date of the general meeting approving the dividend. The board of directors determines the actual dividend payment date within that period. You should read Portuguese Taxation below to learn about taxes on dividends we pay. According to Decree law no. 187/70 of April 30, 1970, dividend entitlement lapses in favor of the Portuguese Republic if not claimed by the shareholder within five years.

In the event that we are liquidated, our assets remaining after payment of our debts, liquidation expenses and all of our remaining obligations will be distributed first to repay in full the nominal value of our ordinary shares. Thereafter, any surplus will be distributed *pro rata* among the holders of ordinary shares based on the nominal value of their holdings.

## **PRE-EMPTIVE RIGHTS**

Shareholders have a preferential, ratable right to subscribe for any new issue of ordinary shares for cash, except if a special resolution at the general meeting duly limits or waives these rights in furtherance of our best interests. These rights are separately transferable and may be traded on the Euronext Lisbon Stock Exchange, where our ordinary shares are listed, during the period when the rights may be exercised.

Unless they agree otherwise, holders of convertible bonds generally are granted rights equal to those of shareholders to subscribe for new issues of ordinary shares and subsequent issues of convertible bonds. Shareholders have a pre-emptive right to subscribe for convertible bonds unless the right is waived by special resolution at a general meeting.

Portuguese law, except as mentioned above, requires a Portuguese company to grant preemptive rights to all of its existing shareholders to purchase a sufficient number of shares to maintain their existing percentage of ownership of the company whenever the company issues new shares for cash. Under this requirement, any preemptive rights in connection with any future issuance of ordinary shares for cash will be offered by us to the depositary as the registered owner of the ordinary shares underlying the ADSs. However, under current U.S. law, U.S. holders of ADSs or ordinary shares would not be entitled to exercise their preemptive rights unless a registration statement under the Securities Act is effective with respect to these rights and ordinary shares or an exemption from these registration requirements is available. We intend to evaluate at the time of any preemptive rights offering the costs and potential liabilities associated with a registration statement, as well as the indirect benefits to us of enabling U.S. holders of ADSs and ordinary shares to exercise preemptive rights and any other factors we consider appropriate at the time, and then to make a decision as to whether to file a registration statement.

No assurance can be given that a registration statement would be filed. If no registration statement is filed and no exemption from the registration requirements under the Securities Act is available, the depositary is required, pursuant to the terms of the depositary agreement between it, us and the owners and holders from time to time of ADSs, to sell U.S. holders' preemptive rights and distribute the proceeds if a premium can be recognized over the cost of any sale.

## **BOOK-ENTRY REGISTRATION OF ORDINARY SHARES**

Our articles of association require that each ordinary share be indivisible and in uncertificated, book-entry and registered form. In the case of joint or co-ownership of ordinary shares, a common representative must be designated by the joint or co-owners of those ordinary shares through whom all rights associated with the ordinary shares must be exercised. The ordinary shares must be registered in accounts opened with

commercial banks or authorized dealers located in Portugal and authorized by the CMVM to act as custodians of securities. The banks are also obligated to be members of the CVM, through which all ordinary shares must be transferred.

**SHAREHOLDERS REPORTING OBLIGATIONS**

Under Article 13 of our articles of association, those shareholders who become the holders of a participating interest equal to or in excess of 5% of our voting rights or share capital pursuant to the rule contained in former Article 346 of the Portuguese Securities



## **Table of Contents**

and Capital Markets Code, which corresponds to Article 20 of the current Portuguese Securities Code, must communicate this fact to our board of directors within five business days following the date on which the 5% shareholding was acquired, and are barred from exercising voting rights until such time as they make this communication. For purposes of this provision, the shareholders are required to furnish to our board of directors, in writing and in a complete, objective, clear and accurate manner, and to the satisfaction of our board of directors, all the information that our board of directors requests from them. Under Article 7 of our articles of association, a shareholder must notify our board of directors of any shareholders' agreement into which the shareholder has entered into relating to our ordinary shares. This information must be supplied within 30 days following the execution of the shareholders' agreement in question. Under the Portuguese Securities Code, notification of these shareholders' agreements must also be given to the CMVM within three days after execution.

Also, under the Portuguese Securities Code, any person or persons acting in concert, including companies and their affiliates, making a purchase or sale of our ordinary shares that results in that person either owning or ceasing to own specific threshold percentages, i.e., 2%, 5%, 10%, 20%, 1/3, 50%, 2/3 and 90%, of our voting rights must, within three business days, notify us, the Euronext Lisbon Stock Exchange and the CMVM. Upon receiving this notification, we must publish it in the Euronext Lisbon Stock Exchange bulletin and in a major daily newspaper.

## **PORTUGUESE REPORTING AND DISCLOSURE REQUIREMENTS**

Under Portuguese law we are required to publish, among others:

annual reports of operations and financial statements that include, among others:

a management report; and

an audited financial statement.

a report on corporate governance practices with information regarding the following matters:

measures for and a statement indicating the level of compliance with the CMVM recommendations on corporate governance and an explanation of the reasons for non-compliance with any of those recommendations;

organizational structure of the departments involved in the entrepreneurial decision process;

a list of specific committees created in the company such as ethic or governance commission;

description of the risk control system implemented by the company;

governance structure of the board of directors, including description of the allocation of functions between Chairman of the board and Chairman of the executive committee,

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

number of members of the board of directors with specific distinction between executive and non-executive members and the tasks performed by each member, as well as indication of independent directors;

remuneration of the members of the board of directors on an aggregate or individual basis, with separation of the amount received by executive and non-executive members and the fixed and variable amount of such total remuneration, including remuneration paid by group companies or companies that are otherwise controlled;

composition of the remuneration committee or equivalent body of the company;

description of codes of conduct and other internal regulations;

**Table of Contents**

indication of the remuneration paid to auditors and persons in a group or domain relation, with separation of auditing, consulting and other services;

description of the evolution of our shares quotation;

description of our dividends policy;

description of the main characteristics of our stock option plans;

description of the main elements of transactions with economic relevance executed between the company group companies and controlled companies, on the one hand, and members of corporate bodies and holders of significant stakes, on the other hand, except if executed on arm's length terms and within the ordinary course of business of the company;

description of the new technologies used for disclosure of financial data and other data for the preparation of the annual general shareholders meeting;

information on the investor relations department, including its functions, the type of information provided, web site and representative for assistance to investors;

a report on the exercise of voting rights and on proxy requirements; and

a report on corporate rules, namely regarding to internal procedures applicable to conduct of business, management and control of activity risk.

semi-annual reports that include financial statements, material information on our activities and performance and factors that may potentially influence future performance;

quarterly reports that include material information on our activities;

specified information concerning the acquisition or sale by us of our ordinary shares;

non-public information that investors would consider relevant to an evaluation of us or the price of our ordinary shares; and

specified information concerning outstanding bonds and changes in the composition of our board of directors, our Registered Chartered Accountant and the board of our general meeting.

**LIMITATIONS ON THE PURCHASE AND TRANSFER OF ORDINARY SHARES; SPECIAL RIGHTS OF THE PORTUGUESE GOVERNMENT**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Individual buying and selling decisions regarding our ordinary shares are not subject to consent from us or any Portuguese authority. On March 10, 2004, the government enacted Decree law no. 49/2004, revoking Decree law no. 380/93, which established the former requirement of approval of the Portuguese Ministry of Finance for a person to be able to acquire more than 10% of our ordinary shares.

According to article 10 of the Reprivatization Decree Law, special rights granted to the Portuguese government or equivalent entities by Decree law no. 141/2000, of July 15, 2000, are to be maintained for so long as the Portuguese government or an equivalent entity is an EDP shareholder. These rights provide that, without the favorable vote of the Portuguese government or an equivalent entity, no resolution can be adopted at our general meeting of shareholders relating to:

amendments to our articles of association, including share capital increases, mergers, spin-offs or dissolution;

---

## **Table of Contents**

authorization for us to enter into group/partnership or subordination agreements; or

waivers of, or limitations on, our shareholders' pre-emptive rights to subscribe to share capital increases.

The Reprivatization Decree Law also entitles the Portuguese government or an equivalent entity to appoint one member of our board of directors whenever it votes against the list of directors presented for election at our general meeting of shareholders.

## **LIABILITY IN RESPECT OF SUBSIDIARIES**

Under Portuguese law, a company that wholly owns a subsidiary is ultimately liable for the debts of that subsidiary.

## **DISSOLUTION AND LIQUIDATION RIGHTS**

Except as otherwise permitted by Portuguese law, we may be dissolved and liquidated by a resolution approved at a general meeting by the vote of at least two-thirds of the votes cast, subject to the requirements applicable to the adoption of amendments to the articles of association as described above. In this case, our board of directors will adopt and implement a plan for dissolution and liquidation, unless decided otherwise by our shareholders. The shareholders acting at the general meeting approving the proposal would retain full authority to direct the liquidation, including replacing liquidators, approving liquidation accounts and granting release to the liquidators. Any shareholder, the Portuguese government or a creditor of us may also resort to judicial dissolution in specific cases as provided for in the Portuguese law. Upon our liquidation, each shareholder is entitled to receive its *pro rata* share of any assets remaining after the payment of our debts and taxes and expenses of the liquidation.

## **NYSE CORPORATE GOVERNANCE STANDARDS**

Pursuant to Section 303A.11 of the Listed Company Manual of the NYSE, we are required to provide a summary of the significant ways in which our corporate governance practices differ from those required for U.S. companies under the NYSE listing standards. Our corporate governance practices are described in greater detail in Item 6 of this annual report on Form 20-F. The table below discloses the significant differences between our corporate governance practices and the NYSE standards.

### **NYSE Standards**

***Director Independence.*** *Majority of board of directors must be independent. §303A.01*

### **Our Corporate Governance Practice**

The composition of our board of directors is in compliance with relevant Portuguese laws, which do not require independent directors. However, the three board members serving on our audit committee are independent as defined in CMVM Regulation no. 11/2003, of December 2, 2003, and Rule 10A-3 under the Exchange Act.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

***Executive Sessions.*** *Non-management directors must meet regularly in executive sessions without management. Independent directors should meet alone in an executive session at least once a year. §303A.03*

Our non-management directors do not meet regularly without management. Portuguese law and our articles of association provide for meetings of the entire board and meetings of board committees. Our independent directors meet regularly only as a result of the fact that all of our independent directors serve on our audit committee.

**Table of Contents**

**NYSE Standards**

***Audit committee.*** *Audit committee satisfying the independence and other requirements of Rule 10A-3 under the Exchange Act and the more stringent requirements under the NYSE standards is required. §§303A.06, 303A.07*

***Nominating/corporate governance committee.*** *Nominating/corporate governance committee of independent directors is required. The committee must have a charter specifying the purpose, duties and evaluation procedures of the committee. §303A.04*

***Compensation committee.*** *Compensation committee of independent directors is required, which must approve executive officer compensation. The committee must have a charter specifying the purpose, duties and evaluation procedures of the committee. §303A.05*

***Equity compensation plans.*** *Equity compensation plans require shareholder approval, subject to limited exemptions.*

***Corporate governance guidelines.*** *Corporate governance guidelines must be adopted and disclosed. §303A.09*

**Our Corporate Governance Practice**

Our audit committee complies with the independence requirements of Rule 10A-3 but the members of our audit committee are not required to satisfy the NYSE independence and other audit committee standards that are not prescribed by Rule 10A-3.

We have a three-member audit committee, which is composed of directors.

The members of our audit committee and the committee's president are independent as such term is defined in CMVM Regulation no. 11/2003, of December 2, 2003.

Our audit committee operates pursuant to a written charter which is described in Item 6 of this annual report on Form 20-F.

We do not have a nominating/corporate governance committee. Our shareholders elect all of our directors, in accordance with Portuguese law and our articles of association. Neither Portuguese law nor our articles of association provide for a formal procedure for nomination of directors.

Pursuant to our articles of association, the shareholders at a general meeting appoint the remuneration committee, which is a committee of shareholders that determines directors' compensation and benefits. The remuneration committee, which is composed of three members, does not have a written charter that addresses the responsibilities identified by the NYSE listing standards. Portuguese law provides the basic criteria for determining compensation of the members of the board of directors, including executive directors.

Shareholder approval is required under Portuguese law for the acquisition and sale of own or treasury shares, including for the purpose of the adoption and amendment of an equity-compensation plan or stock option plan. Our current stock option plans have been approved our general shareholders' meeting, which has also granted authorization for the acquisition and sale of our own shares for that purpose.

We have not adopted a separate set of corporate governance guidelines. The duties of our directors are set forth in our articles of association and Portuguese law. In addition, each of our board of directors and our executive committee has specific regulations. The regulations of our board of directors govern, among other things:

Functioning of the board;

Power of the board and how power may be delegated to the executive committee;

162



**Table of Contents**

**NYSE Standards**

**Our Corporate Governance Practice**

*Code of Ethics. Corporate governance guidelines and a code of business conduct and ethics is required, with disclosure of any waiver for directors or executive officers. §303A.10*

*CEO certification and disclosure of material non-compliance. Each listed company CEO must certify to the NYSE each year that he or she is not aware of any company violations of NYSE corporate governance listing standards. In addition, each listed company CEO must promptly notify the NYSE in writing after any executive officer of the company becomes aware of any material non-compliance with any applicable provisions of these standards. §303A.12*

Creation of board committees;

Responsibilities of directors; and

The decision-making process and other procedural matters.

Under Portuguese law, a director must act diligently and with due care, always seeking to promote the company's interest while taking due account of the interests of shareholders and employees. A director may be liable to the company, the company's shareholders and third parties for any damages caused by a breach of these duties. Our senior executives and financial officers are bound by these standards, which we believe have a purpose and function that is substantially similar to a code of ethics.

In addition, in early 2005, we adopted a code of ethics. While not strictly in accordance with Rule §303A.10, we believe that our code of ethics has a purpose and function that is substantially similar to the code of ethics described in Rule §303A.10. For more information on our code of ethics, please see Item 16B. Code of Ethics.

Our CEO will promptly notify the NYSE in writing after any executive officer becomes aware of any material non-compliance with any applicable provisions of the NYSE listing standards.

**MATERIAL CONTRACTS**

Our power plants in the Binding Sector are subject to binding licenses issued by DGE and such plants enter into PPAs with REN, as described in Item 4. Information on the Company Portugal Electricity System Overview The Public Electricity System or Binding Sector. In the Non-Binding Sector, EDP Comercial enters into contracts with Qualifying Consumers, as described in Item 4. Information on the Company Portugal Electricity System Overview The Independent Electricity System The Non-Binding Sector.

In December 2004, we updated our 5,000,000,000 MTN program. Our MTN program provides for the periodic issuance, by us and our wholly owned finance subsidiary EDP Finance B.V., of debt instruments on terms and conditions determined at the time the instruments are issued.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In 2001, we issued a 1,000,000,000 bond under the MTN program maturing in 2011. This 1,000,000,000 bond issue pays a fixed interest rate of 5.875%.

In 2002, we issued two bonds under the MTN program: the first was a GBP 200,000,000 bond issued in August maturing in August 2017 with a 6.625% annual coupon and the second was a 500,000,000 bond issued in December maturing in March 2008 with a 5% annual coupon.

In June 2005, we issued a 500,000,000 bond under our MTN program maturing in June 2015, with a 3.75% annual coupon. This issue resulted partially from an exchange offer which we launched in the beginning of June in respect of our bonds maturing in

## **Table of Contents**

2008 and 2011. Pursuant to the exchange offer, the principal amount outstanding of the 500,000,000 bond maturing in 2008 was reduced by 144,976,000 and the principal amount outstanding of the 1,000,000,000 bond maturing in 2011 was reduced by 252,648,000.

In June 2005, we issued a 300,000,000 bond under our MTN program maturing in June 2020, with a 4.125% annual coupon.

In April 2001, we established an 1,000,000,000 commercial paper program that provides for the periodic issuance of notes by us and EDP Finance, B.V. The notes can have maturities of not less than 1 day and not more than 364 days and an interest rate determined at the time of issuance.

For more information on these programs and our other borrowings, you should read Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources.

## **EXCHANGE CONTROLS**

### **EXCHANGE CONTROLS**

Portugal does not impose exchange controls on transfers of currency abroad.

A non-resident of Portugal who wishes to invest in ordinary shares (but not ADSs) must open a special share portfolio account with a commercial bank located in Portugal and duly licensed to act as securities custodian pursuant to applicable legislation prior to the execution of the transaction. The investor may then buy and sell listed securities with some restrictions and repatriate the proceeds.

Dividends may be freely transferred to a foreign country. See Portuguese Taxation below for a summary of certain Portuguese tax consequences to holders of ordinary shares and ADSs, including the payment of dividends thereon and the realization of capital gains with respect thereto.

There are also limitations on voting that apply to our ordinary shares and our ADSs. For more information, you should read Articles of Association above.

### **EXCHANGE RATE POLICY**

The value of the euro with respect to non-euro currencies, including the U.S. dollar, is affected by European Central Bank exchange rate policy. As of March 31, 2002, the following twelve Member States are participating in the third stage of the EMU: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. These Member States are referred to as the participating

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Member States. Since January 1, 1999 the value of the national currency of a participating Member State in the national currency of another country, whether a participating Member State or not, may be determined only through the bilateral conversion method, i.e., by converting the first currency into euro and then converting this euro equivalent into the second currency. Pursuant to the third stage of EMU, the participating Member States have adopted a single currency, which is designated the euro and have transferred authority for conducting monetary policy to the European Central Bank. The value of the euro as against the currencies of each of the participating Member States was irrevocably fixed. The conversion rate between the euro and the escudo was fixed at PTE 200.482 per euro.

### TAXATION

The statements regarding Portuguese and U.S. tax laws set forth below are based on the laws in force on the date of this annual report, which are subject to change.

You should consult your own tax advisers as to the tax consequences of an investment in our shares in the light of your particular circumstances, including the effect of any state, local, or other national laws.

**Table of Contents**

**PORTUGUESE TAXATION**

**GENERAL**

The following is a summary of the principal Portuguese tax considerations that are likely to be material to the purchase, ownership and disposition of ordinary shares or ADSs if a holder is a non-resident of Portugal for Portuguese tax purposes, does not hold 10% or more of any class of our stock and does not hold our ordinary shares or ADSs through a permanent establishment in Portugal.

Resident holders for purposes of Portuguese taxation include collective entities having their registered office or effective place of management in Portugal and individuals having remained in Portuguese territory more than 183 days in any given calendar year or having the use of a dwelling in Portuguese territory at the end of any given calendar year which may imply their intention of using it as their habitual residence.

A non-resident holder may be broadly defined as any collective entity or individual not satisfying the above criteria. However, non-resident holders having a permanent establishment or a fixed installation in Portugal to which Portuguese-source income may be attributed will be taxed on such income under rules applicable to resident holders.

This summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to non-resident holders, and does not address tax rules applicable to special classes of holders.

Furthermore, this summary is based on the tax laws of Portugal in effect on the date of this annual report, including the Convention between the United States of America and the Portuguese Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income that together with the related Protocol is referred to in this annual report as the Treaty, and is subject to changes to those laws and practices or the Treaty subsequent to that date, which changes could be made on a retroactive basis.

Prospective purchasers should consult their own advisers as to the tax consequences of the acquisition, ownership and disposition of ordinary shares or ADSs in light of their particular circumstances, including the effect of any other national laws.

For purposes of the Treaty and for Portuguese tax purposes, a U.S. person holding ADSs will be treated as a beneficial owner of our ordinary shares represented by such ADSs.

**Dividends**

Dividends paid in respect of shares or ADSs to non-residents generally are subject to a Portuguese withholding tax of 25% of the gross amount of the dividends.

Under article 59 of the Portuguese Tax Incentives Statute (*Estatuto dos Benefícios Fiscais*), only 50% of the dividends arising from shares acquired in a privatization process executed prior to December 31, 2002 or shares of companies undergoing a privatization process by virtue of a ministerial order of the Minister of Finance, including those resulting from share capital increases, are subject to taxation. This tax benefit is applicable up to five years after the date of the conclusion of the privatization process.

As such, only 50% of dividends (net of other income tax benefits) that are paid with respect to EDP shares prior to the end of fiscal year 2007 will be subject to Portuguese tax.

Whenever a shareholder benefits from a total or partial exemption of income taxes, withholding at the source with respect to the exempted amount will not take place upon presentation of proof by the interested party, before the paying entity, of the exemption that they benefit from.

Under the Treaty, the rate of withholding tax on dividends distributed to U.S. residents eligible for Treaty benefits will not exceed 15%. Since Portuguese effective rates are at or below the Treaty rates, according to the Portuguese Tax Authority, at the present time it is not necessary for U.S. residents to claim Treaty benefits with respect to dividends paid on ordinary shares or ADSs.

## **Table of Contents**

### **Capital Gains**

In general, capital gains realized by non-resident individuals on the transfer of ordinary shares or ADSs are subject to tax at the rate of 10% if those ordinary shares or ADSs were held for 12 months or less, and are not subject to tax if those ordinary shares or ADSs were held for more than 12 months. Capital gains realized by non-resident corporate holders on the transfer of ordinary shares or ADSs are subject to tax at the rate of 25%. Regardless of the length of time ordinary shares or ADSs have been held, however, non-resident corporate holders and non-resident individual holders of ordinary shares and ADSs are not subject to tax on capital gains in Portugal if the following three conditions are met:

no more than 25% of the non-resident entity is owned, directly or indirectly, by resident entities;

the non-resident entity does not have as its place of residence a state or jurisdiction identified in a list of tax havens published by the Portuguese Ministry of Finance; and

the capital gains do not arise from the transfer for consideration of shares or other participations in a Portuguese resident company the assets of which primarily are comprised (more than 50%) of immovable property located in Portugal or in a Portuguese resident company that controls such a company (a Portuguese Real Property Holding Company ).

Under the Treaty, unless EDP is a Portuguese Real Property Holding Company, capital gains derived from the sale or other disposition of ordinary shares, including deposits of ordinary shares in exchange for ADSs, by an individual holder who is eligible for Treaty benefits will not be subject to Portuguese capital gains tax, regardless of the length of time our ordinary shares are held.

### **Stamp Duties**

Transfers by a non-resident of ordinary shares or ADSs by gift or at death will not be subject to Portuguese Stamp Duty provided the beneficiary is also a non-resident or otherwise if the beneficiary is the respective spouse, parents or children.

### **Portuguese Transaction Costs**

Pursuant to Decree law no. 183/2003, of August 19, 2003, which revoked Regulation no. 1303/2001, of November 22, 2001, as amended by Regulation no. 323/2002, of March 27, 2002, both issued by the Ministry of Finance, and pursuant to Decree no. 913-I/2003, of August 30, 2003, as amended by Decree no. 1018/2004 of August 31, 2004, also issued by the Ministry of Finance, fees applicable to securities transactions performed in a stock exchange, on other regulated securities markets or off-market were abolished and replaced by supervision fees that are paid by the entities subject to the supervision of the CMVM in connection with the performance of services in relation to securities, such as clearance and settlement services, registration or custodian services or portfolio management.

A stamp tax of 4.0% is payable on brokerage fees, bank settlement fees and bank commissions.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Under current laws and practice, no Portuguese transfer fees, taxes or other charges are levied on the transfer of ADSs, other than the deposit or the withdrawal of ordinary shares, unless the transfer is made through a financial intermediary domiciled or established in Portugal. If the transfer is made through a financial intermediary domiciled or established in Portugal, the transfer may be regarded as a transfer of ordinary shares over the counter with the consequences stated above.

The status of Portuguese law with respect to transfer fees, taxes and other charges applicable to deposits and withdrawals of ordinary shares for ADSs is uncertain. Under current law and practice, a negotiable bank settlement fee and a stamp tax of 4.0% of



## **Table of Contents**

the fee may apply to deposits and withdrawals of ordinary shares. However, Portuguese brokerage fees, bank commissions and stock exchange fees will not be levied on a deposit of ordinary shares in exchange for ADSs or a withdrawal of ordinary shares in exchange for the cancellation of ADSs, unless the deposit or withdrawal is made through a financial intermediary domiciled or established in Portugal. If a deposit or withdrawal of ordinary shares is made through a financial intermediary, the deposit or withdrawal may be regarded as a transfer of ordinary shares over the counter with the consequences stated above. Current practice with respect to the applicability of Portuguese transfer fees, taxes or other charges to deposits and withdrawals of ordinary shares is subject to change.

## **UNITED STATES TAXATION**

### **GENERAL**

The following discussion summarizes certain U.S. federal income tax considerations that may be relevant to you if you are a U.S. holder. You will be a U.S. holder if you are an individual who is a citizen or resident of the United States, a U.S. domestic corporation, or any other person that is subject to U.S. federal income tax on a net income basis in respect of an investment in our securities.

This summary deals only with U.S. holders that hold our securities as capital assets. It does not address considerations that may be relevant to you if you are an investor that is subject to special tax rules, such as a bank, thrift, real estate investment trust, regulated investment company, insurance company, dealer in securities or currencies, trader in securities or commodities that elects mark to market treatment, person that will hold our securities as a hedge against currency risk or as a position in a straddle or conversion transaction, tax-exempt organization or a person whose functional currency is not the U.S. dollar.

This summary is based on U.S. tax laws, regulations, rulings and decisions currently in effect, all of which may change. Any change could apply retroactively and could affect the continued validity of this summary.

You should consult your tax adviser about the tax consequences of the purchase, ownership and disposition of ordinary shares or ADSs in light of their particular circumstances, including the effect of any state, local or other national laws.

In general, for U.S. federal income tax purposes, holders of ADSs will be treated as the beneficial owners of our ordinary shares represented by those ADSs.

### **DIVIDENDS**

The gross amount of any dividends received with respect to our ordinary shares or ADSs, including amounts withheld in respect of Portuguese withholding tax, generally will be subject to U.S. federal income taxation as foreign-source dividend income, and will not be eligible for the dividends received deduction allowed to corporations. Dividends paid in euros will be includible in your income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt by you or, in the case of ordinary shares held in ADS form, by the Depositary. If dividends paid in euros are converted into U.S. dollars on the date of receipt, you generally should not be required to recognize

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

foreign currency gain or loss in respect of the dividend income. If you do not convert euros that are received by you into U.S. dollars on the date of receipt, you generally will have a basis in those euros equal to their U.S. dollar value on that date. You also generally will be required to recognize foreign currency gain or loss realized on a subsequent conversion or other disposition of the euros, which will be treated as U.S. source ordinary income or loss.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual prior to January 1, 2009 with respect to our ordinary shares or ADSs will be subject to taxation at a maximum rate of 15% if the dividends are qualified dividends. Dividends paid on our ordinary shares or ADSs will be treated as qualified dividends if (i) the ordinary shares or ADSs are readily tradable on an established securities market in the United States and (ii) we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, (a) a passive foreign investment company ( PFIC ) or (b) a foreign personal holding company ( FPHC ) or foreign investment company ( FIC ). The

## **Table of Contents**

ordinary shares and ADSs are listed on the New York Stock Exchange, and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on our audited financial statements and relevant market and shareholder data, we believe that we were not treated as a PFIC, FPHC or FIC for U.S. federal income tax purposes with respect to our 2003 or 2004 taxable year. In addition, based on our audited financial statements and our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market and shareholder data, we do not anticipate becoming a PFIC for our 2005 taxable year. The U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of ADSs or common stock and intermediaries through whom such securities are held will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them. Holders of our ADSs and ordinary shares should consult their own tax advisers regarding the availability of the reduced dividend tax rate in light of their own particular circumstances.

Portuguese withholding tax on dividends should be treated as foreign income taxes that, subject to generally applicable limitations under U.S. tax law, are eligible for credit against your U.S. federal income tax liability or, at your election, may be deducted in computing taxable income. Foreign tax credits will not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions in securities and may not be allowed in respect of arrangements in which the expected economic profit is insubstantial. U.S. Holders are urged to consult their own tax advisers to determine whether they are eligible for benefits under the Treaty, and whether, and to what extent, foreign tax credits will be available with respect to dividends paid by us.

Distributions of additional shares with respect to ordinary shares or ADSs that are made as part of a *pro rata* distribution to all of our shareholders generally will not be subject to U.S. federal income tax.

## **CAPITAL GAINS**

Upon a sale or other disposition of ordinary shares or ADSs, a U.S. Holder will recognize gain or loss for United States federal income tax purposes in an amount equal to the difference between the U.S. dollar value of the amount realized and the U.S. Holder's tax basis, determined in U.S. dollars, in its ordinary shares or ADSs. Generally, such gain or loss will be capital gain or loss, will be long-term capital gain or loss if the U.S. Holder's holding period for such ordinary shares or ADSs exceeds one year and any gain will be income from sources within the United States for foreign tax credit limitation purposes. The net amount of long-term capital gain recognized by an individual U.S. Holder before January 1, 2009 generally is subject to taxation at a maximum rate of 15%. The deductibility of capital losses is subject to significant limitations.

As discussed in Portuguese Taxation Capital Gains, above, U.S. Holders could be subject to a tax on capital gains realized under Portuguese law on the sale or other disposition of ordinary shares or ADSs. In the event that such a Portuguese tax is imposed, U.S. Holders that do not receive significant foreign source income from other sources may not be able to derive effective U.S. foreign tax credit benefits in respect of such Portuguese tax.

Deposits and withdrawals of ordinary shares in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

## **U.S. INFORMATION REPORTING AND BACKUP WITHHOLDING**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Dividends and payments of the proceeds of a sale of ordinary shares or ADSs paid to a U.S. Holder within the United States or through certain U.S.-related financial intermediaries are subject to information reporting and may be subject to backup withholding unless the U.S. Holder is a corporation or other exempt recipient or provides a taxpayer identification number and certifies that no loss of exemption from backup withholding has occurred. Holders that are not U.S. persons generally are not subject to information reporting or backup withholding. However, a non-U.S. person may be required to provide a certification to establish its non-U.S. status in connection with payments received within the United States or through certain U.S.-related financial intermediaries. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a U.S. Holder's U.S. federal income tax liability. A holder may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim or refund with the Internal Revenue Service and filing any required information.

**Table of Contents**

**DIVIDENDS AND PAYING AGENTS**

Not applicable.

**STATEMENT BY EXPERTS**

Not applicable.

**DOCUMENTS ON DISPLAY**

Copies of our articles of association and by-laws may be examined at our principal place of business at Praça Marquês de Pombal, 12 1250-162 Lisbon, Portugal.

We also file reports, including annual reports on Form 20-F, periodic reports on Form 6-K and other information with the SEC pursuant to the rules and regulations of the SEC that apply to foreign private issuers. You may read and copy any materials publicly filed with the SEC at the SEC's public reference room at the following location:

Public Reference Room

100 F Street, N.E.

Room 1350

Washington, D.C. 20549

Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC filings are also available to the public from commercial document retrieval services.

As of November 2002 we file electronically with the SEC. Documents we have filed as of November 2002 are available on the website maintained by the SEC.

Our ADRs are listed on the New York Stock Exchange, or NYSE. Reports and other information concerning us are available for inspection at the offices of the NYSE, 20 Broad Street, New York, New York 10005.

**SUBSIDIARY INFORMATION**

Not applicable.

**Item 11. *Quantitative and Qualitative Disclosures About Market Risk***

**CREATION OF THE RISK MANAGEMENT OFFICE**

During the second half of 2003, we established a Risk Management Department whose mission consists of the definition implementation and upkeep of an Integrated Risk Management System, or SGIR, for the EDP Group. Use of the SGIR allows risk to be taken into account in our strategic and operational decisions. The SGIR will be implemented in stages. During 2004, we established the rules and the methodologies that implemented the risk function within the EDP Group. Efforts have been directed at adopting best practices and in creating a state-of-the-art infrastructure. In the first stage of implementation of the risk management function, we have addressed the finance and trading areas, as well as pension fund asset management. The development of SGIR has been pursued using different risk modeling and aggregation methodologies. We are continuing to develop the means necessary to allow, in particular, quantitative analyses to be performed using a model for value at risk analysis. In performing its duties, the Risk Management Department has a functional relationship with the company's various business areas in which the risks are identified, so as to achieve an aggregate overview of risk within the EDP Group, taking into account the correlations between the several variables that cause risk.

## **Table of Contents**

### **BUSINESS UNIT RISK CONTROL**

In addition to the consolidated control and management of group business risks, the processing and control of business risks at the level of the various business units is also of importance to us. At the business unit level we have implemented the following aspects of risk control:

the Internal Audit Department monitors compliance of the internal operational procedures in accordance with our policies;

the Financing Department manages the risk associated with financial markets and enters into financial instruments to reduce exposure to interest-rate and exchange rate risks. This is undertaken in accordance with defined risk management policies approved by the Board and on a prudent basis. Periodic evaluation is made of the financial instruments' fair values;

EDP Valor monitors the contracting of insurance at the EDP Group level in order to achieve the most adequate means of cover of insurable risks;

EDP Produção has a risk board that monitors all risks associated with electricity generation, ranging from operation and maintenance to partnerships and outsourcing. The risk board performed a set of audits during 2003 of the electricity generating facilities; and

EDPD, EDP Comercial and our trading activity, in close cooperation with various EDP departments, have characterized the risks and opportunities stemming from the progressive liberalization of the energy sector.

### **GENERAL**

We are exposed to market risks, including foreign currency, commodity price and interest rate risk. We use financial derivative instruments to manage our exposure to interest rate fluctuations and, in the case of Energias do Brasil, to manage currency exposure. Management's guidelines with respect to the use of financial derivative instruments are that we do not engage in speculative derivative transactions and that all derivative transactions are solely for hedging purposes and must relate to a specific underlying asset, for example, cash flows of the derivative transaction must match those of the underlying asset being hedged. The negotiation of financial derivative transactions follows our internal procedures set by management, which require that for each transaction our financial department must submit to the executive committee of the Board of Directors for its approval a description of the hedging strategy that defines the objective of the hedge, the specific asset being hedged and the parameters of the proposed transaction. Following this approval, it is the responsibility of our financial department to negotiate with the counterparty and complete the transaction, which is then ratified by the executive committee of the Board of Directors. With respect to the management of our debt portfolio, our hedging strategies have mainly been limited to the debt at the EDP, S.A. level (including EDP Finance B.V.), and not at the level of any of our subsidiaries. However, Hidrocontábrico manages its interest rate exposure, Energias do Brasil manages currency exposure and we have in the past acquired U.S. dollar-denominated bonds of Escelsa in order to manage currency risk at the consolidated level.

The counterparties to our financial derivative transactions are major financial institutions and these transactions expose us to market and credit risk and, occasionally, may be concentrated with certain counterparties. Management believes the credit risk and interest rate risk arising from non-performance by the counterparties is not significant, based on the investment grade rating of the counterparties. We do not require collateral or other security to support the financial instruments with credit risk.





---

**Table of Contents****INTEREST RATE RISK**

Management is aware of our exposure to market risks arising from our outstanding debt and derivative instruments. Our market risks result mainly from interest rate fluctuations. We estimate the sensitivity of the fair values of our financial instruments to changes in interest rates. The methods and assumptions used by us to determine fair values for financial instruments in our consolidated financial statements are the following:

Bonds the quoted market price at December 31 of the respective years.

Bank loans discounted cash flow analysis, based on our incremental borrowing rates for similar types of borrowing arrangements.

The fair value of interest rate and currency swap agreements is determined using discounted cash flow analysis based on zero-coupon yield curve rates. Zero-coupon rates used to discount cash flows are derived from market rates (mid bid-offer spread) quoted by market dealers. Interest rate swap agreements are used to manage the proportion of variable rate debt in our debt portfolio and to reduce the level of interest expense.

The debt and derivatives portfolio of EDP, S.A. and EDP Finance B.V. are managed together, and notional amounts of interest rate swap agreements, including cross-currency interest rate swaps, outstanding as of December 31, 2004, decreased to 2,920.3 million from 3,450.7 million at December 31, 2003, primarily due to the repayment of associated debt. The swap agreements have remaining maturities between 1 year and 13 years. The fair value of these derivative financial instruments is the amount that would be paid or received upon termination of the agreement based on available market rates. Fair values are estimates that involve uncertainties and cannot be determined with precision. These agreements, if terminated, would result in receivables of 172.3 million at December 31, 2004.

Our main exposure is to euro interest rates. The fair value of all interest rate sensitive financial instruments at the EDP, S.A. and EDP Finance B.V. level amounted to a net liability of 7,160.0 million as of December 31, 2004. These include primarily long-term debt, interest rate and cross currency interest rate swaps. At December 31, 2004, in the event of a 10% increase in interest rates for all maturities, this fair value would increase to 7,291.3 million. A 10% decrease would result in a decrease of this fair value to 7,180.8 million. At December 31, 2004, outstanding long-term debt held at the subsidiary level was as follows: Energias do Brasil, 494.6 million and Hidrocantábrico, 1,460.0 million.

At December 31, 2003, the fair value of all interest rate sensitive financial instruments at the EDP, S.A. and EDP Finance B.V. level amounted to a net liability of 6,251.4 million. At December 31, 2003, in the event of a 10% increase in interest rates for all maturities, this fair value would increase to 6,274.6 million. A 10% decrease would result in a decrease of this fair value of 6,244.4 million.

Hidrocantábrico manages interest rate risk with financial instruments. The notional value of interest rate swap agreements and collars outstanding at December 31, 2004 amounted to 1,413 million. These instruments have remaining maturities between 1 month and 3 years. The fair value of these derivative financial instruments is the amount that would be paid or received upon termination of the agreements based on available market rates. These fair values are estimates that involve uncertainties and cannot be determined with precision. These agreements, if terminated, would result in payment of 20.4 million at December 31, 2004. The fair value of all interest rate sensitive financial instruments at the Hidrocantábrico level outstanding at December 31, 2004 amounted to 1,460.0 million. At December 31, 2004, in the event of a 10% increase in interest rates for all maturities, this fair value would decrease to 1,454.0 million. A 10% decrease would result in an increase of this fair value to 1,466.0 million.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

At the Hidroantábrico level, the notional value of interest rate swap agreements and collars outstanding on December 31, 2003 amounted to 607 million with remaining maturities between 6 months and 3 years. At December 31, 2003, the fair value of all interest rate sensitive financial instruments at the Hidroantábrico level amounted to a net liability of 769.7 million.

## **Table of Contents**

Given the floating-rate nature of the long-term debt of our Brazilian businesses and the lack of a medium or long-term yield curve in the Brazilian financial markets, the most accurate estimate of the fair value of our Brazilian businesses' long-term debt is the notional value of such debt.

### **FOREIGN EXCHANGE RATE RISK**

We are exposed primarily to two types of foreign exchange risk arising from our Brazilian investments: the impact of foreign exchange fluctuations on the value of our equity investment, which does not have an impact on our profit and loss account but is reflected in our balance sheet, and the impact of foreign exchange fluctuations on the non-Brazilian currency denominated debt of our Brazilian businesses which is reflected in their income statements and, in the case of consolidated subsidiaries, has a corresponding effect on our income statement. Management's policy with respect to the impact on the value of our equity investment is not to use financial instruments to hedge against this risk given the long-term nature of these investments and that short-term fluctuations in their value impacting our balance sheet are considered acceptable.

In respect of the impact of foreign exchange rate fluctuations on the non-Brazilian real denominated debt of our Brazilian businesses, it is our management's policy that all future debt be raised in Brazilian reais or, if this is not possible, debt denominated in non-Brazilian currency must be swapped to Brazilian reais. The Brazilian companies manage the impact of foreign exchange fluctuations of the U.S. dollar against the Brazilian real using cross-currency interest rate swaps. At December 31, 2004, outstanding notional amounts amounted to 174.8 million, an increase from 84.2 million at December 31, 2003. These agreements, if terminated, would result in payments of 22.2 million at December 31, 2004 and 5.6 million at December 31, 2003.

Of our Brazilian businesses, Escelsa had the largest amount of non-Brazilian real denominated debt, which consists of US\$431 million of senior notes outstanding, maturing in 2007. In addition to the Brazilian companies' local use of financial instruments to hedge against foreign exchange fluctuations, our management decided to purchase the U.S. dollar denominated debt of Escelsa through a tender offer for Escelsa's senior notes, thus limiting the impact of the devaluation of the Brazilian real against the U.S. dollar on our consolidated profit and loss account. As a result of the tender offer in 2002, we acquired 357,400 of these bonds, corresponding to 83% of the total outstanding bonds, at an average discount of 25% of their nominal value.

Currently all outstanding consolidated debt, with the exception of that held by our Brazilian companies, is raised in euro or immediately converted to euro at time of issuance. Management is also aware that foreign exchange rate risks may exist for us in the future if a material portion of our outstanding debt is denominated in a currency other than the euro.

### **COMMODITY PRICE RISK**

As a result of our activities in the energy sector, we are exposed to different commodity-related risks that are managed by a specialized trading area within the EDP Group. These risks mainly relate to:

the energy loads of our clients in the liberalized markets;

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

the electricity generated by our coal, nuclear, CCGT, wind and hydroelectric power plants, that are exposed to the liberalized markets; and

the fuel consumed by power plants in the liberalized markets.

To mitigate risks relating to price and quantity, we operate in the electricity markets and have long-term fuel supply contracts at fixed and variable prices. In addition, we also enter into transactions in the derivative markets for fuel and foreign exchange and in the short-term coal and shipping markets.

To manage and control the risks that impact in our trading area, we developed a framework to measure, control and analyze the Cash Flows at Risk, or CFaR, at any moment. A pillar of this framework is the risk policy statement that:

identifies risks and the corresponding measures;

**Table of Contents**

sets limits in terms of CFaR, complemented by quantitative restrictions on the different types of positions;

defines the information and control procedures; and

outlines the responsibilities to authorize transactions with a significant impact on risk.

Execution of risk management transactions is carried out by an information technology system that: (1) calculates the portfolio margins generated by assets and transactions for different scenarios; (2) estimates the CFaR for different time periods and levels of confidence; and (3) produces gap analysis for different risk factors.

The CFaR for EDP's Iberian trading activities, considering a 95% confidence interval and a one-year time horizon, was less than 22 million at the end of 2004.

**Item 12. *Description of Securities Other Than Equity Securities***

Not applicable.

**Table of Contents**

**GLOSSARY OF TERMS**

Capacity charge:	Refers to the monthly charge payable by REN to the generators in the Binding Sector for each power plant, in respect of each PPA, based on contracted firm capacity, whether or not dispatched, payable by REN to such generators.
CCGT (Combined Cycle Gas Turbine):	A type of generating plant in which turbines, typically fueled by natural gas, are used to drive generators to produce electricity. The exhaust gases are then passed through a boiler to produce steam that in turn drives an additional turbine coupled to a generator.
Cogeneration:	The simultaneous generation of steam and electricity, typically where the need arises for industrial purposes.
Dry year:	A year in which hydrological conditions are unfavorable such that hydroelectric generation in that year is below average (10,600 GWh).
Energy charge:	Refers to the variable charge based on actual electricity delivered to the national transmission grid.
Generating unit:	An electric generator together with the turbine or other device that drives it.
Gigawatt (GW):	1,000,000,000 watts (1,000 megawatts).
Gigawatt hour (GWh):	One gigawatt of power supplied or demanded for one hour.
Hydroelectric unit:	A generating unit that uses water power to drive the electric generator.
Installed capacity:	The level of electric power which can be delivered from a particular generating unit on a full-load continuous basis to the transmission network under actual conditions.
Kilovolt (kV):	1,000 volts.
Kilovolt ampere (kVA):	1,000 volts ampere.
Kilowatt (kW):	1,000 watts.
Kilowatt hour (kWh):	One kilowatt of power supplied or demanded for one hour.
Megawatt (MW):	1,000,000 watts (1,000 kilowatts).
Megawatt hour (MWh):	One megawatt of power supplied or demanded for one hour.
Megavolt ampere (MVA):	1,000,000 volts ampere.
NO <sub>x</sub> :	Oxides of nitrogen.
SO <sub>2</sub> :	Sulfur dioxide.

**Table of Contents**

Substation:	An assemblage of equipment that switches and/or changes or regulates the voltage of electricity in a transmission and distribution system.
Technical cost:	The cost incurred in making a capital expenditure excluding the cost of financing the expenditure.
Terawatt (TW):	1,000,000,000,000 watts (1,000,000 mega watts)
Terawatt hour (TWh):	One terawatt of power supplied or demanded for one hour.
Thermoelectric unit:	A generating unit that uses combustible fuel as the source of energy to drive the electric generator.
Volt:	The basic unit of electric force analogous to water pressure in pounds per square inch.
Volt ampere:	The basic unit of apparent electrical power.
Watt:	The basic unit of active electrical power.
Wet year:	A year in which hydrological conditions are favorable such that hydroelectric generation in that year is greater than average (10,600 GWh).

**Table of Contents**

**PART II**

**Item 13. *Defaults, Dividend Arrearages and Delinquencies***

Not Applicable.

**Item 14. *Material Modifications to the Rights of Security Holders and Use of Proceeds***

At our general meeting held on October 7, 2004, our shareholders approved an amendment to our articles of association granting authorization to the board of directors to increase our share capital. This authorization provided the board of directors with the ability to effect a one-time increase of our nominal share capital by a maximum of 1.2 billion on or before March 31, 2005. That capital increase occurred in connection with the rights offering in November 2004. Our nominal share capital is presently approximately 3.7 billion. The amendment was enacted by public deed dated October 21, 2004, and has been registered at the *Conservatória do Registo Comercial de Lisboa*.

Following this amendment to our articles of association, our board of directors decided, with the prior favorable opinion of our Portuguese statutory auditor, on October 26, 2004, on the increase of our share capital pursuant to the rights offering. This increase reflects the fifth privatization phase of EDP, as contemplated by Decree law no. 218-A/2004, of October 25, 2004. Currently, the share capital is represented by 3,656,537,715 ordinary shares with a nominal value 1 euro.

**Item 15. *Controls and Procedures***

We carried out an evaluation under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2004. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that the disclosure controls and procedures as of December 31, 2004 were effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported as and when required.

We have restated our reported U.S. GAAP financial information for 2003 and 2002 to correct certain errors in the application of U.S. GAAP, as discussed in note 42.ii to our consolidated financial statements. In connection with that restatement, we identified deficiencies in our internal control over financial reporting related to the preparation of U.S. GAAP financial information. We are in the process of implementing procedures to correct these deficiencies by recruiting qualified personnel at our head office with U.S. GAAP experience and implementing rigorous reporting procedures by all subsidiaries in relation to U.S. GAAP reconciliation figures.

There has been no change in our internal control over financial reporting during 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.



**Item 16.** *[Reserved]*

**Item 16A.** *Audit Committee Financial Expert*

Our board of directors has reviewed the qualifications and backgrounds of each member of the audit committee and determined that, although no one member of the audit committee is an audit committee financial expert within the meaning of Item 16A of this annual report, the combined qualifications and experience of the members of the audit committee give the audit committee collectively the financial expertise necessary to discharge its responsibilities.

**Item 16B.** *Code of Ethics*

We have not adopted a code of ethics, as described in Item 16B of Form 20-F under the Securities Exchange Act of 1934. However, in early 2005, we adopted a code of ethics that is similar in many respects to the code of ethics as described in Item 16B. This code of ethics, which is applicable to all our employees, as well as our senior officers and directors, covers, among other things, the following:

Compliance with laws;

**Table of Contents**

Ethics;

Conduct in the workplace;

Prevention of corrupt practices;

Related party transactions;

Misuse of company information;

Quality of information provided to shareholders;

Relationships with customers and suppliers; and

Disciplinary action for breaches of the code of ethics.

In addition, under Portuguese law, a director must act diligently and with due care, always seeking to promote the company's interest while taking due account of the interests of shareholders and employees. A director will be liable to the company, the company's shareholders and third parties for any damages caused by a breach of these duties. Our senior executives and financial officers are also bound by these standards, which we believe have a purpose and function that is substantially similar to a code of ethics within the meaning of Item 16B.

**Item 16C. Principal Accountant Fees and Services****AUDIT AND NON-AUDIT FEES**

The following table sets forth the fees billed to us by our principal independent auditors during the fiscal years ended December 31, 2003 and 2004:

	Year ended December 31,	
	2003	2004
	(in euros)	
Audit fees	660,031	3,157,028
Audit-related fees	548,102	1,394,284
Tax fees	0	846,606
Other fees	0	0

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Total fees	1,208,133	5,397,918
------------	-----------	-----------

Fees in the above table for 2004 are the aggregate fees billed by PwC and KPMG in connection with the audit of our consolidated annual and interim financial statements and audit work performed for our major subsidiaries in Portugal, Spain and Brazil. In October 2004, our principal independent auditor changed from PwC to KPMG.

Audit-related fees for 2004 in the above table are the aggregate fees billed by PwC and KPMG for work on this annual report, the implementation of provisions of the Sarbanes-Oxley Act of 2002 and due diligence related to the sale of 60% of Edinfor to LogicaCMG.

Tax fees in the above table are fees billed by PwC and KPMG for work on tax declaration revision, aid in the process of claims for 2001 and 2002, reporting on 2003 price-transfer at EDPD and revisions on tax procedures in the EDP Group.

**Table of Contents****AUDIT COMMITTEE PRE-APPROVAL POLICIES AND PROCEDURES**

In order to safeguard the independence of the auditor and taking into account best domestic and international practices and standards, particularly the Sarbanes-Oxley Act of 2002, we have adopted pre-approval policies, which can be summarized as follows:

Our principal auditor, currently KPMG, and those companies or corporate persons belonging to the same network may not provide us with any services that are considered prohibited under Section 201 of the Sarbanes-Oxley Act of 2002; and

The hiring of other non-prohibited services by any of our divisions or subsidiaries requires the prior approval of our audit committee. Such approval has been specifically granted for a predefined number of services for a renewable period of twelve months. Specific approval by the audit committee is required for other services.

According to the internal regulations of our audit committee, this committee is required to provide a proposal to our board of directors in relation to the engagement of auditors and their fees.

**Item 16D. Exemptions from the Listing Standards for Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

The table below sets forth, for the periods indicated, the total number of shares purchased, the average price paid per share, the total number of shares purchased as a part of a publicly announced plan or program, and the maximum number (or approximate dollar value) of shares that may yet be purchased under our plans and programs, with respect to any purchase made by us or on our behalf, or by an affiliated purchaser or on behalf of an affiliated purchaser.

Period	(a) Total number of Shares (or Units) Purchased <sup>(1)</sup>	(b) Average Price Paid per Share (or Units) (In )	(c) Total number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
Month # 1				
(January 1, 2004-January 31, 2004)	1,169,982	2.09	0	0
Month # 2	1,239,128	2.13	0	0

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

(February 1, 2004-February 28, 2004)

Month # 3

(March 1, 2004-March 31, 2004)

547,700

2.28

0

0

Month # 4

(April 1, 2004-April 30, 2004)

1,403,000

2.33

0

0

Month # 5

(May 1, 2004-May 31, 2004)

2,669,216

2.29

0

0

Month # 6

(June 1, 2004-June 30, 2004)

100,000

2.23

0

0

Month # 7

(July 1, 2004-July 31, 2004)

110,242

2.28

0

0

Month # 8

(August 1, 2004-August 31, 2004)

0

0

0

0

Month # 9

(September 1, 2004-September 30, 2004)

450,000

2.25

0

0

Month # 10

(October 1, 2004-October 31, 2004)

1,440,391

2.32

0

0

Month # 11

(November 1, 2004-November 31, 2004)

0

0

0

0

Month # 12

(December 1, 2004-December 31, 2004)

550,000

2.22

0

0

Total

9,679,659

0

0

<sup>(1)</sup> All shares were purchased in open-market transactions.

**Table of Contents**

**PART III**

**Item 17. Financial Statements**

Our financial statements have been prepared in accordance with Item 18 hereof.

**Item 18. Financial Statements**

Index to Financial Statements and Schedules

Reports of Independent Registered Public Accounting Firms	F-1
<u>Consolidated Balance Sheets as at December 31, 2004 and 2003</u>	F-3
<u>Consolidated Profit and Loss Account for the years ended</u>	
<u>December 31, 2004, 2003 and 2002</u>	F-4
<u>Consolidated Statement of Cash Flows for the years ended</u>	
<u>December 31, 2004, 2003 and 2002</u>	F-5
<u>Changes in Consolidated Statements of Shareholders' Equity for the years ended</u>	
<u>December 31, 2004, 2003 and 2002</u>	F-6
<u>Notes to the Financial Statements</u>	F-7

**Item 19. Exhibits**

Index to Exhibits

- 1.1 Amended and restated Articles of Association of EDP, together with an English translation thereof.
- 2.1 Amended and restated Articles of Association of EDP (see Exhibit 1.1).
- 2.2 Deposit Agreement dated June 16, 1997 among Citibank, N.A. EDP and the holders from time to time of American Depositary Receipts ( ADR ) (incorporated by reference to our registration statement on Form F-1 (file no. 333-6928) filed on May 16, 1997).
- 2.3 Amendment No. 1 dated September 8, 2000, to the Deposit agreement dated June 16, 1997 among Citibank, N.A., EDP and the holders from time to time of ADRs (incorporated by reference to our registration statement on Form F-3 (file no. 333-12620) filed on October 20, 2000).
- 2.4 Amended form of ADR (incorporated by reference to our Rule 424(b)(3) filing in respect of our registration statement on Form F-6 (file no. 333-119881) filed on October 26, 2004).
- 2.5 Certain documents relating to EDP Finance B.V. Programme for the Issuance of Debt Instruments (incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 1999).
- 2.6 Certain documents relating to amendment and increase of EDP Finance B.V. Programme for the Issuance of Debt Instruments (incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 2000).

**Table of Contents**

- 2.7 Certain documents relating to EDP Finance B.V. Euro-Commercial Paper Programme (incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 2000).
- 2.8 Other than as provided in Exhibits 2.5 and 2.6, the total amount of long-term debt securities of EDP authorized under any instrument does not exceed ten percent of the total assets of the EDP Group on a consolidated basis. EDP agrees to provide to the Securities and Exchange Commission, upon request, copies of any instruments that define the rights of holders of long-term debt of EDP that are not filed as exhibits to this annual report.
- 4.1 License for Sines Power Plant, together with English translation thereof (incorporated by reference to our registration statement on Form F-1 (file no. 333-6928) filed on May 16, 1997).
- 4.2 Power Purchase Agreement, dated December 20, 1994, between REN and TURBOGÁS-Produtora Enérgica, S.A. (incorporated by reference to our registration statement on Form F-1 (file no. 333-6928) filed on June 16, 1997).
- 4.3 Energy Management Agreement, dated December 1993, between REN and Transgás-Sociedade Portuguesa de Gás Natural, S.A. (redacted version; subject to confidential treatment request; incorporated by reference to our registration statement on Form F-1 (file no. 333-6928) filed on June 12, 1997).
- 4.4 Supplemental Agreement to the Power Purchase Direct Agreement for the CCGT Power Station at Tapada do Outeiro (incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 1999).
- 8.1 Subsidiaries of EDP.
- 12.1 Certifications pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
- 13.1 Certifications pursuant to 18 U.S.C. § 1350 as adopted by section 906 of the Sarbanes-Oxley Act of 2002.

**Table of Contents**

**Signature**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant certifies that it meets all of the requirements for filing on Form 20-F and has fully caused this Annual Report on Form 20-F to be signed on its behalf by the undersigned, thereunto duly authorized.

EDP Energias de Portugal

Date: September 30, 2005

/s/ João Ramalho Talone  
João Ramalho Talone  
Chief Executive Officer

Date: September 30, 2005

/s/ Rui Miguel Horta e Costa  
Rui Miguel Horta e Costa  
Chief Financial Officer



**Table of Contents**

**PricewaterhouseCoopers, Lda.**  
Palácio Sottomayor  
Rua Sousa Martins, 1 -2º Esq.  
1050-217 Lisboa  
Portugal  
Tel +351 213 599 000  
Fax +351 213 599 999  
www.pwc.com/pt

To the Board of Directors of

**EDP Energias de Portugal, S.A.**

**Report of Independent Registered Public Accounting Firm**

In our opinion, the accompanying consolidated balance sheets and the related consolidated profit and loss account, consolidated statement of cash flows and changes in consolidated statement of shareholders' equity present fairly, in all material respects, the financial position of EDP Energias de Portugal, S.A. and its subsidiaries at December 31, 2003 and December 31, 2002, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in Portugal. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Additionally, as described in Note 2 to the accounts, the Company has changed its accounting policy for recognition and measurement of financial instruments and impairment of assets during the year ended December 31, 2003.

Accounting principles generally accepted in Portugal vary in certain significant respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in the Note 42, as restated, to the consolidated financial statements.

/s/ PricewaterhouseCoopers

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Lisbon, Portugal

March 15, 2004, except for Note 42.ii,

as to which date is September 30, 2005

PricewaterhouseCoopers - Assessoria de Gestão, Lda.

Sede: Palácio Sottomayor, Rua Sousa Martins, 1 -2º Esq., 1050 - 217 Lisboa

NIPC 504 193 279 Capital Social Euros 750.000

Matriculada na Conservatória do Registo Comercial sob o nº. 7297

**Table of Contents**

**KPMG & Associados - Sociedade de Revisores** Telephone: +351 210 110 000

**Oficiais de Contas, S.A.** Fax: +351 210 110 121

Edifício Monumental Internet: www.kpmg.pt

Av. Praia da Vitória, 71 - A, 11º

1069-006 Lisboa

Portugal

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Shareholders and Board of Directors of

**EDP Energias de Portugal, S.A.**

We have audited the accompanying consolidated balance sheet of EDP Energias de Portugal, S.A. and subsidiaries (collectively, the Company ) as of December 31, 2004 and the related consolidated profit and loss account statement, consolidated statement of cash flows and changes in consolidated statement of shareholders equity, for the year then ended. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of EDP Energias de Portugal, S.A. and subsidiaries as of December 31, 2004, and the results of their operations and their cash flows for the year then ended, in accordance with generally accepted accounting principles in Portugal.

As discussed in Note 23 to the consolidated financial statements, the Company changed its method of accounting for minority interest deficits in 2004.

Accounting principles generally accepted in Portugal vary in certain significant respects from U.S. generally accepted accounting principles. Information relating to the nature and effect of such differences is presented in note 42 to the consolidated financial statements.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Lisbon, Portugal

March 1, 2005

(Except for notes 42i) and 42ii) which are as of September 30, 2005)

/s/ KPMG & Associados, SROC

KPMG & Associados, SROC, S.A.

KPMG & Associados - Sociedade de Revisores Oficiais de Contas, S.A., a portuguese company is a member firm of KPMG International, a swiss cooperative.

KPMG & Associados - SROC, S.A.

Capital Social: 511.700 Euros

Pessoa Colectiva N° PT 502 161

078 Inscrito na O.R.O.C. N°

189 Inscrito na C.M.V.M. N° 9093

Matriculada na Conservatória do registo Comercial de Lisboa sob o n° 715, fls. 178 do Livro C - 2/3

F-2

**Table of Contents****EDP - Energias de Portugal, S.A.****Consolidated Balance Sheets as at December 31, 2004 and 2003**

	Notes	2004 USD 000 (*)	2004 Euro 000	2003 Euro 000
<b>Assets</b>				
Cash and cash equivalents	4	334,607	278,005	287,496
Accounts receivable - Trade, net	5	1,496,155	1,243,067	1,108,064
Accounts receivable - Other, net	6	1,314,324	1,091,994	691,510
Inventories	7	202,887	168,567	159,236
Prepaid expenses and other current assets				
<b>Total Current Assets</b>		<b>3,347,973</b>	<b>2,781,633</b>	<b>2,246,306</b>
Long term receivables, net	8	1,137,911	945,423	435,842
Investments	9	1,944,167	1,615,293	1,582,784
Tangible fixed assets	10	16,320,004	13,559,325	11,651,599
Intangible fixed assets	11	1,165,884	968,664	950,182
Goodwill	12	2,394,951	1,989,823	899,514
Deferred taxes	13	709,034	589,094	609,338
Deferred costs	14	168,583	140,066	275,104
<b>Total Non-Current Assets</b>		<b>23,840,534</b>	<b>19,807,688</b>	<b>16,404,363</b>
<b>Total Assets</b>		<b>27,188,507</b>	<b>22,589,321</b>	<b>18,650,669</b>
<b>Liabilities</b>				
Short term debt	15	2,236,084	1,857,830	1,579,130
Accounts payable - Trade	16	1,292,022	1,073,465	782,626
Accounts payable - Other	17	367,800	305,583	187,262
Accrued cost	18	638,196	530,239	236,534
Taxes payable	19	265,281	220,406	269,103
Deferred revenue	20	315,513	262,141	235,764
<b>Total Current Liabilities</b>		<b>5,114,896</b>	<b>4,249,664</b>	<b>3,290,419</b>
Medium/long term debt	15	8,113,484	6,741,014	5,913,579
Accrued pension and post retirement liabilities	21	958,599	796,443	562,262
Deferred taxes	13	657,046	545,901	616,056
Deferred revenue and other liabilities	22	3,236,925	2,689,370	2,346,355
Hydrological correction account	24	438,348	364,197	387,506
<b>Total Non-Current Liabilities</b>		<b>13,404,402</b>	<b>11,136,925</b>	<b>9,825,758</b>
<b>Total Liabilities</b>		<b>18,519,298</b>	<b>15,386,589</b>	<b>13,116,177</b>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Minority interests	23	964,105	801,018	236,485
Hydrological correction account				
<b>Shareholders Equity</b>				
Share capital (Ordinary shares, Eur 1 per share)	25	4,401,009	3,656,538	3,000,000
Treasury stock	27	-38,108	-31,662	-49,020
Share premium	25	569,249	472,955	
Reserves and retained earnings	28	2,243,187	1,863,731	1,965,918
Consolidated net profit	28	529,767	440,152	381,109
Total Shareholders Equity		7,705,104	6,401,714	5,298,007
Total Liabilities and Shareholders equity		27,188,507	22,589,321	18,650,669

(\*) Converted at 1.2036 USD

See the accompanying notes to the Consolidated Financial Statements

F-3

**Table of Contents****EDP - Energias de Portugal, S.A.****Consolidated Profit and Loss Account**

for the years ended December 31, 2004, 2003 and 2002

	Notes	2004 USD 000 (*)	2004 Euro 000	2003 Euro 000	2002 Euro 000
<b>Revenues</b>					
Sales	29	8,063,270	6,699,294	6,456,361	5,988,140
Services rendered	29	628,756	522,396	521,159	398,417
		<u>8,692,026</u>	<u>7,221,690</u>	<u>6,977,520</u>	<u>6,386,557</u>
<b>Operating costs and expenses, net</b>					
Raw materials and consumables	29	4,835,186	4,017,270	3,921,046	3,687,097
Personnel costs	30	773,456	642,619	646,636	624,771
Depreciation and amortization	31	957,484	795,517	845,592	739,541
Supplies and services	32	781,743	649,504	632,518	675,070
Own work capitalized	33	-311,460	-258,774	-235,623	-241,769
Concession and power-generating rents		228,917	190,194	175,643	158,176
Provisions	34	137,304	114,078	75,706	100,645
Other operating expenses, net	35	15,449	12,836	10,260	-5,678
		<u>7,418,079</u>	<u>6,163,244</u>	<u>6,071,778</u>	<u>5,737,853</u>
<b>Operating Margin</b>		<b>1,273,947</b>	<b>1,058,446</b>	<b>905,742</b>	<b>648,704</b>
Income arising from financial operations	36	331,876	275,736	309,025	381,720
Expenses arising from financial operations	36	-735,385	-610,988	-668,045	-604,564
Other non-operating income / (expenses)	37	-198,271	-164,732	-14,443	-138,939
		<u>672,167</u>	<u>558,462</u>	<u>532,279</u>	<u>286,921</u>
Profit before tax		672,167	558,462	532,279	286,921
Provision for income taxes	38	-309,095	-256,809	-239,255	-171,168
Provision for deferred taxes	38	116,980	97,192	43,721	-571
		<u>480,052</u>	<u>398,845</u>	<u>336,745</u>	<u>115,182</u>
Profit after tax		480,052	398,845	336,745	115,182
Minority interests		49,717	41,307	44,364	220,034
		<u>529,769</u>	<u>440,152</u>	<u>381,109</u>	<u>335,216</u>
<b>Consolidated Net Profit</b>		<b>529,769</b>	<b>440,152</b>	<b>381,109</b>	<b>335,216</b>
<b>Net Profit per share (basic and diluted)</b>		<b>0.17 USD</b>	<b>0.14 EUR</b>	<b>0.13 EUR</b>	<b>0.11 EUR</b>

(\*) Converted at 1.2036 USD

See the accompanying notes to the Consolidated Financial Statements

F-4



**Table of Contents****EDP - Energias de Portugal, S.A.****Consolidated Statement of Cash Flows**

for the years ended December 31, 2004, 2003 and 2002

	2004 USD 000	2004 Euro 000	2003 Euro 000	2002 Euro 000
<b>Operating Activities</b>				
Operating activities :				
Cash receipts from customers	8,697,085	7,225,893	6,871,324	6,215,764
Cash paid to suppliers	-5,407,499	-4,492,771	-4,255,316	-4,085,818
Cash paid to staff	-895,957	-744,398	-707,233	-685,792
Concession rents paid	-226,040	-187,803	-171,749	-158,176
Other receipts/ (payments) relating to operating activities	149,899	124,542	149,004	-62,527
<b>Cash flows generated by operations</b>	<b>2,317,488</b>	<b>1,925,463</b>	<b>1,886,030</b>	<b>1,223,451</b>
Income tax received / (paid)	-276,024	-229,332	-146,033	-277,444
Receipts / (payments) relating to extraordinary balances	-63,571	-52,817	33,602	-48,337
	-339,595	-282,149	-112,431	-325,781
<b>Net cash flow from operating Activities</b>	<b>1,977,893</b>	<b>1,643,314</b>	<b>1,773,599</b>	<b>897,670</b>
<b>Investing Activities</b>				
Cash receipts resulting from:				
Investments and long term-receivables	73,347	60,940	456,820	193,377
Tangible and intangible fixed assets	52,333	43,480	33,604	77,603
Fixed assets subsidies	105,960	88,036	74,059	56,448
Interest	24,417	20,287	13,266	4,083
Dividends	36,683	30,478	36,663	40,042
Disposal of investments in subsidiaries				315,000
	292,740	243,221	614,412	686,553
Cash payments resulting from:				
Investments	-1,625,008	-1,350,123	-140,834	-853,635
Tangible and intangible fixed assets	-1,402,004	-1,164,842	-1,002,726	-974,327
	-3,027,012	-2,514,965	-1,143,560	-1,827,962
<b>Cash Flow used in Investing Activities</b>	<b>-2,734,272</b>	<b>-2,271,744</b>	<b>-529,148</b>	<b>-1,141,409</b>
<b>Financing Activities</b>				
Receipts / (payments) from loans	226,035	187,799	-388,751	1,020,958
Shareholders' capital increase and share premium	1,394,466	1,158,579		

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Interest and similar costs	-478,111	-397,234	-456,069	-375,734
Dividends	-322,574	-268,008	-268,275	-337,675
Treasury stock sale/ (purchase)	20,892	17,358	-5,526	-10,399
Overdrafts	-65,372	-54,314	-25,326	118,325
<b>Cash Flow used in Financing Activities</b>	<b>775,336</b>	<b>644,180</b>	<b>-1,143,947</b>	<b>415,475</b>
<b>Variation of cash and cash equivalents</b>	<b>18,957</b>	<b>15,750</b>	<b>100,504</b>	<b>171,736</b>
Effect of currency translation differences	-30,369	-25,232	-26,981	7,857
Cash and cash equivalents at the beginning of the period	346,037	287,502	213,979	34,386
<b>Cash and cash equivalents at the end of the period (*)</b>	<b>334,625</b>	<b>278,020</b>	<b>287,502</b>	<b>213,979</b>

(\*) See note 4 to the Financial Statements, detailing the breakdown of Cash and Cash equivalents

See the accompanying notes to the Consolidated Financial Statements

F-5

**Table of Contents****EDP - Energias de Portugal, S.A.****Changes in Consolidated Statements of Shareholders Equity**

for the years ended December 31, 2004, 2003 and 2002

	Total Shareholders Equity	Share capital	Share premium	Legal reserve	Reserves and retained earnings	Treasury stock
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Balance as at December 31, 2001</b>	<b>6,096,758</b>	<b>3,000,000</b>		<b>287,090</b>	<b>2,842,763</b>	<b>-33,095</b>
Transfer to reserves:						
Legal reserves				22,541	-22,541	
Bonus to employees	-22,073				-22,073	
Dividends paid	-337,675				-337,675	
Purchase and sale of treasury stock	-10,399					-10,399
Net profit for the year	335,216				335,216	
Exchange differences arising on consolidation	-300,028				-300,028	
Fair value of investments available for sale	-268,975				-268,975	
Other reserves arising on consolidation	1,358				1,358	
<b>Balance as at December 31, 2002</b>	<b>5,494,182</b>	<b>3,000,000</b>		<b>309,631</b>	<b>2,228,045</b>	<b>-43,494</b>
Transfer to reserves:						
Legal reserves				16,760	-16,760	
Bonus to employees	-25,062				-25,062	
Dividends paid	-268,275				-268,275	
Treasury stock	-5,526					-5,526
Net profit for the year	381,109				381,109	
Deferred taxes	-252,296				-252,296	
Effects of IAS 36 and 39 implementation:						
- Financial derivatives instruments	131,181				131,181	
- Fair value of investments available for sale	10,758				10,758	
- Reversion of Fair value of Iberdrola in 2002	21,223				21,223	
Exchange differences arising on consolidation	-193,032				-193,032	
Other reserves arising on consolidation	3,745				3,745	
<b>Balance as at December 31, 2003</b>	<b>5,298,007</b>	<b>3,000,000</b>		<b>326,391</b>	<b>2,020,636</b>	<b>-49,020</b>
Transfer to reserves:						
Legal reserves				19,055	-19,055	
Bonus to employees	-20,722				-20,722	
Dividends paid	-268,008				-268,008	
Treasury stock	17,358					17,358
Net profit for the year	440,152				440,152	
Increase in capital with the issue of 656,537,715 new shares in Dec 2004	1,208,029	656,538	551,491			
Expenses with share capital increase	-78,536		-78,536			
Negative minority interests charged to EDP Group (note 23)	-193,525				-193,525	
Exchange differences arising on consolidation	936				936	
Cash flow hedge - Fair value reserve	643				643	

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Other reserves arising on consolidation	-2,620					-2,620
<b>Balance as at December 31, 2004</b>	<b>6,401,714</b>	<b>3,656,538</b>	<b>472,955</b>	<b>345,446</b>	<b>1,958,437</b>	<b>-31,662</b>

See the accompanying notes to the Consolidated Financial Statements

F-6

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004 and 2003

**1. The business operations of the EDP Group**

The EDP Group operates mainly in the Iberian and Brazilian markets in the electricity and telecommunications sectors.

**Activity in the Energy Sector on the Iberian Peninsula**

In Portugal, the National Electricity System (SEN) is based on the coexistence of a Public Service Electricity System (SEP) and of an Independent Electricity System (SEI), the latter comprising the Non-Binding Electricity System (SENV) and the Special Regime Producers (PRE).

The SEP comprises the National Transport Network (RNT), Binding Producers, Binding Distributors and Binding Customers. The RNT, under concession to REN - Rede Eléctrica Nacional, S.A., is responsible for providing electricity transport and the overall technical management of the SEP. Binding Producers are tied to RNT by long-term exclusive supply contracts. Binding Distributors are obliged to supply their customers in accordance with fixed prices, under the law, defined by the Energy Services Regulatory Entity (ERSE). Binding Customers are entities and individuals that cannot opt for a SENV supplier (currently low-tension consumers), or either those that are able to do so or opt to acquire electricity from their respective binding distributor under conditions determined by the ERSE.

The SENV essentially comprises Non-Binding Producers and Non-Binding Customers, the latter being entitled to use the SEP networks using fixed tariffs determined by ERSE under the terms of the law. Special Regime Producers operate in the renewable energies and cogeneration areas, delivering their electricity to the SEP networks under special legislation. In accordance with the law, ERSE is responsible for exercising the regulation of the sector, through the preparation, issue, and application of regulations, and also through the definition of the tariffs both for the use of infrastructure and for the supply of electricity to SEP customers. Through the generation and distribution companies, the EDP Group plays a fundamental role in the entire SEN, by having a relevant position within the SEP, and also owning generation companies that operate within the SEI both at the level of the SENV and at the level of the PREs.

In December 2004, the EDP Group increased its financial position in Hidroeléctrica del Cantábrico S.A. (Hidrocantábrico) to 95.7% of total share capital, through the acquisition of 23.915.657 shares, achieving the exclusive control of the company. Hidrocantábrico is the parent company of an industrial Group that operates in the electric, gas and telecommunication sectors. In the electric sector, the activity is developed in the production, transportation and distribution and supply areas. The production infrastructure relies on classic coal thermal power stations and, secondly, in hydroelectric and nuclear power stations. The activity of transportation and distribution of electricity is regulated as well as the supply of energy to clients subject to tariffs, whereas in the supply activity the prices are subject without restraints to market conditions.

Hidrocantábrico increased its position in the distribution and supply of the gas sector following the acquisition of Naturcorp during the third quarter of 2003 and the subsequent integration in that company, of all gas related assets held by Hidrocantábrico. The gas distribution activity is also regulated. In the telecommunications sector, Hidrocantábrico holds a significant investment in cable communication concessions in Astúrias

and Castilla-Leon regions (large band width transmission of radio, cable and internet).

### **The Iberian electricity market**

Governments from Portugal and Spain share the common view of creating a single, integrated and competitive electricity market for Portugal and Spain, designated by MIBEL, within the wider context of an envisaged European single electricity market, as provided for in Directives 96/92/EC and 2003/54/EC. After several delays in the process, the international agreement entered into by the Portuguese and Spanish governments at the Iberian Summit at Santiago de Compostela on October 1, 2004, called for the beginning of operations of MIBEL. While this has not occurred yet, both governments have undertaken to create an Iberian electricity market based on the principles of free and fair competition, transparency, objectivity and efficiency.

Under the international agreement, MIBEL will operate with a spot market, which includes daily and intra-daily markets and will initially be managed by the current market operator of the Spanish market (OMEL), and a forward market, which will initially be managed by a market operator located in Portugal (OMIP). In addition, electricity transactions may also be negotiated by means of bilateral contracts with a term not less than one year. The international agreement also clarifies that the existence of two market operators, OMEL and OMIP, is temporary and that the two operators will eventually be merged into a single market operator. Pursuant to the international agreement, within one year from the implementation of MIBEL, each market operator is expected to limit the amount of its share capital held by any single shareholder to 5% and the shareholding of any system operator will be limited to a maximum of 3%. Within two years from the implementation of MIBEL, it is expected that both market operators will merge and create a single market operator designated as the Iberian Market Operator (Operador do Mercado Ibérico).

Within the context of MIBEL, the Portuguese government has determined the early termination of the existing PPAs (Power Purchase Agreements) by means of adequate compensation mechanisms and changing REN's single buyer status, as set forth in Decree law 240/2004, which provides adequate compensation for the investments and commitments provided for in each PPA that are not achievable through the expected market revenues once the PPAs are terminated. It is also expected that both Portugal and Spain should take all necessary measures to open the market to all consumers and harmonize both tariff structures through clear and transparent rules, particularly in Spain. The termination agreements effects are suspended until a set of conditions is met which includes the start up of the spot market that assures the sales of generated electric energy and the attribution of Non-Binding production licenses.

### **Activity in the Energy Sector in Brazil**

In Brazil, the EDP Group operates in the electricity sector namely in generation, distribution and supply. In distribution it has a 96.5% shareholding in Bandeirante Energia S.A., and holds 100% of IVEN, S.A., which controls Escelsa Espírito Santo Centrais Eléctricas, S.A., and Enersul Empresa Energética do Mato Grosso do Sul S.A.

In the electricity generation sector, the EDP Group has holdings in Usina Hidroeléctrica (UHE), Lajeado (27.65%), and won in 2001 in partnership with the Rede do Brazil Group the concession for the construction and operation of Peixe Angical and Couto Magalhães hydroelectric power stations.

In the supply business, in addition to the business carried on by the distribution companies, the EDP Group operates in the electricity trading market through Enertrade, a wholly owned Group company.

**Activity in the Telecommunications Sector**

In the telecommunications sector, the EDP Group holds 56.607% of the share capital of ONI SGPS (ONI), the remaining capital being held by BCP, GALP Energia and Brisa. ONI operates in fixed telecommunications, providing voice and data services in the Portuguese market (both corporate and residential customers) and in the Spanish market (in the corporate segment).

F-7

## **Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

### **Activity in the Information Technologies Sector**

The EDP Group operates in the information technologies through EDINFOR - Sistemas Informáticos S.A., a wholly owned subsidiary which holds 59.8% of ACE, engaged namely in consultancy, systems integration, processing, application outsourcing, IT infrastructure, georeferenced solutions, printing solutions, and finishing.

### **Price regime of Electric Energy**

According to Portuguese law, ERSE is responsible for the sector regulation, through the preparation, issue and application of the rules, as well as tariff definition of infrastructure utilization and electric energy supply to SEP clients. In Brazil these functions are also assumed by a regulatory entity - Agência Nacional de Energia elétrica (ANEEL). In Spain, electric energy prices are established by the government after opinion or proposal of the regulatory entity - Comissão Nacional de Energia .

### **Low-tension Electricity Distribution Concession Regime**

In accordance with specific legislation (Decree-Law 344-B/82), the right to distribute low-tension electricity in Portugal is given to the municipalities (local authorities). However, EDP is allowed to carry on this activity, under concession, by celebrating concession contracts generally with a 20 years term, which can be revoked with 2 years previous notice. During the EDP split process that took place in 1994 this possibility was maintained in relation to the 4 electricity distribution companies set-up at that time and merged in 2000 into EDP Distribuição S.A. In respect to these concessions, a rent is paid to the concessor municipalities.

### **Public Domain Assets**

In Portugal, some fixed assets allocated to electricity generation and distribution within the SEP are subject to the public domain regime. These assets are connected to the Group's activity which can administrate them for that purpose without restraints, but can not use them for private commerce purposes. In Brazil the fixed assets used in the distribution and supply of electricity are tied to those services and cannot be withdrawn, sold, assigned or mortgaged without the prior express consent of the Regulator. ANEEL has already created regulations releasing the assets of the Public Electricity Service concessions, granting prior authorisation for the release of assets of no use to the concession, provided they are to be sold, further determining that the sale money is to be deposited in a tied bank account, to be used in the concession.

## **2. Accounting policies**



## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The Group's parent company, EDP – Energias de Portugal, S.A. (EDP, S.A.), was incorporated in 1976 as a result of the nationalization and consequent merger of the main companies of the electricity sector operating in mainland Portugal. Its registered office is in Lisbon at Praça Marquês de Pombal, 12, 6°. During 1994, as established by Decree-Laws 7/91 and 131/94, the EDP Group was set up (EDP Group or Group) following the split of EDP, S.A., which led to a number of subsidiaries wholly owned by, directly or indirectly, EDP S.A. itself.

The Group's businesses are currently focused on the generation, distribution and supply of electricity, on the distribution and supply of gas, on telecommunications and on information technologies. Although complementary, the Group operates as well in related areas such as water, engineering, laboratory tests, vocational training and property management.

The Consolidated Financial Statements of EDP Group have been prepared in accordance with generally accepted accounting principles in Portugal ( Portuguese GAAP ). In order to provide a more adequate presentation of the Group's financial position, the Board of Directors decided, as at December 31, 2003, to adopt International Accounting Standards 19 and 39, on a supplementary basis as permitted by the Portuguese Accounting Directive 18.

The following explanatory notes have due regard for the sequential numbering of the balance sheet and profit and loss account headings included in the Financial Statements. All the financial information, both on a consolidated and individual basis, required in accordance with the Portuguese Official Plan of Accounts, is detailed in full in the following notes to the financial statements.

### **a) Basis of consolidation**

The consolidated financial statements reflect the assets, liabilities and results of EDP, S.A., and of its subsidiary companies, as defined in Note 9, and the proportional result of the financial holding in associated companies in respect of the years ended December 31, 2004 and 2003.

### **Shareholdings in subsidiaries**

Shareholdings in subsidiaries and in companies in which the Group directly or indirectly holds more than 50% of the voting rights at General Meetings of Shareholders or is able to control the financial and operating policies of the company, have been included in the consolidated financial statements by the full consolidation method. Subsidiaries are included in the consolidation as from the date on which control is acquired up to the date on which it actually ends. The purchase method is used in accounting for the acquisition of subsidiaries. The acquisition cost corresponds to the fair value of the assets acquired, shares issued and liabilities assumed on the date of acquisition, plus those costs directly attributable to the acquisition.

Intra-group transactions, dividends distributed between Group companies, balances and unrealized gains on transactions between Group companies are eliminated. The results of subsidiaries acquired or sold during the year are included in the profit and loss account from the date they are included in the consolidation perimeter up to the date of their sale. The companies consolidated using this method are detailed in Note 9. In prior years, the accumulated losses attributable to minority interest, which exceeded the equity capital attributable to minority interest in the subsidiaries, has been recorded in the balance sheet as a negative minority interest. In the income statement, the losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Beginning on January 1, 2004, the EDP Group adopted a new accounting policy, by which the accumulated losses attributable to minority interest which exceeded the equity capital attributable to minority interest in subsidiaries resulting in negative minority interest are charged against the equity of the EDP Group. In relation to the income statement, losses continue to be attributed to the minority interest in the proportion of their shareholding.

**Shareholdings in associate companies under the form of joint control**

The interests of the Group in jointly-controlled entities are consolidated by the proportional method. The Group consolidates its proportion of costs and revenues, of the assets and liabilities and of the cash flows of the joint undertakings on a line-by-line basis with the respective similar components of the Group's financial statements. Intra-group transactions and balances are eliminated in proportion of the joint undertakings.

F-8

## **Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

### **Shareholdings in associated companies**

Investments in associates are carried at the value resulting from the application of the equity method. In accordance with this method, the consolidated financial statements include the Group's share of the total profits and losses recognized from the date on which significant influence begins up to the date on which it actually ends. Associates are entities in which the Group holds between 20% and 50% of the voting rights, or over which the Group has significant influence. Unrealized gains or losses on transactions between the Group and its associate are eliminated. The Group's investment in associates includes goodwill (net of accumulated amortization), on acquisition. When the share of losses in an associate exceeds the value of the investment in that associate, the Group recognizes additional losses only if the Group has assumed obligations or made payments in benefit of the associate.

### **Shareholdings in foreign subsidiaries**

In the consolidation, the value of assets and liabilities of foreign subsidiaries are recorded at their value in euros translated at the official exchange rates ruling at the balance sheet date. The results of the subsidiaries are consolidated using their value in euros translated at the average monthly exchange rates for the year. Currency differences resulting from exchange into euros of the net assets at the beginning of the year and of the results of the year at the official exchange rate ruling on the balance sheet date, are recorded against consolidation reserves.

### **Goodwill**

The Goodwill arising from the acquisition of shareholdings in subsidiaries and associates is defined as the difference between the cost of acquisition and the proportional fair value of the net assets of the company acquired. Positive Goodwill is recorded under assets and amortized over the estimated useful life not exceeding 20 years. Negative Goodwill is recorded in the same way, unless it can be imputed to future losses or fixed assets. The value of the Goodwill carried in the balance sheet, as an intangible fixed asset, is reviewed annually and impairment adjustments are recorded as necessary.

### **Concession rights in Brazil (investments in Bandeirante, Escelsa and Enersul)**

The Concession rights in Brazil, namely the investments in Bandeirante, Escelsa and Enersul, are the result of application of calculations and methodologies identical to those of Goodwill, corresponding to, the difference between the cost of acquisition and the proportional fair value of the net assets acquired. Concession rights are recorded under intangible fixed assets and are amortized over the useful life of the concession, not exceeding 30 years.

**Accounting, on an unconsolidated basis, of shareholdings in subsidiaries and associates**

Financial investments in subsidiaries and associates, on an unconsolidated basis, are accounted for under the equity method as defined by Portuguese Official Accounting Directive 9. The difference between the acquisition cost and the proportional value of the shareholders' equity at the date of acquisition is recorded as Goodwill. The net results of these companies are recorded, as from the date of acquisition, in the profit and loss account.

**b) Investments Implementation by the EDP Group of International Accounting Standard 39 to financial instruments**

The EDP Group has implemented early the International Accounting Standard 39 - Recognition and Measurement of financial instruments during fiscal year 2003, having calculated the retroactive effects as at December 31, 2002. Consequently, the EDP Group classifies its investments in accordance with this international accounting standard, particularly with regard to the types of financial instruments and their recognition and measurement, carrying them under the following categories of investments: trading, held to maturity, and available for sale. The classification depends on the purpose for which the investments were acquired. The Board of Directors determines the classification of these investments on the date of acquisition and re-assesses this classification on a regular basis.

**Trading account securities**

Investments acquired mainly to be traded in the very short term are classified as trading securities and are recorded as current assets. For the purpose of these financial statements, short term is defined as 3 months. Realized and unrealized gains and losses resulting from changes in the fair value of trading securities are recorded in the profit and loss account during the period in which they occur.

**Investments securities available for sale**

Investments to be held for an undetermined period of time, that can be sold to meet liquidity requirements or because of changes in interest rates, are classified as available for sale under non-current assets, unless the Board of Directors has the express intention of holding the investments during a period of less than 12 months as from the balance sheet date or if there is a need to sell them to generate operating capital, in which case they are carried under current assets. Acquisition cost includes transaction costs. Investments available for sale are accounted at their fair value.

Unrealized gains and losses resulting from changes in the fair value of investments classified as available for sale are recognized against fair value reserves.

The fair value of quoted investments is based on their quoted prices at the balance sheet date. The fair values of unlisted equity investments are estimated using applicable price/earnings or price/cash-flow ratios, adjusted to reflect any specific circumstances of the securities' issuers. Shares for which fair values cannot be reliably measured are recognized at cost less impairment losses.

When instruments classified as available for sale are sold, the cumulative adjustments of fair value are included in the profit and loss account as gains and losses on financial investments. Impairment in the value of investments is charged against the profit and loss account.

**c) Impairment of long-term assets**

Tangible fixed assets and other non-current assets including goodwill, concession rights and intangible fixed assets, are subject to annual impairment tests, whenever events or circumstances indicate that their carrying amount may not be recovered. An impairment loss is recognized for the excess of the carrying amount of an asset over its recoverable amount, which is defined as the greater of the net realizable value of the sale of the asset and its value in use.

**d) Assets and liabilities expressed in foreign currencies**

All assets and liabilities expressed in foreign currencies have been translated into euros using the exchange rate ruling on the balance sheet date. Favorable and unfavorable currency translation differences arising on differences between the exchange rate ruling on the date of the transaction and those ruling on the collection, payment or balance sheet date are recorded as gains and losses in the profit and loss account for the year.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**e) Tangible fixed assets**

**Fixed assets owned by the Group**

Tangible fixed assets, except with regard to those assets existing at the time of the split of EDP in 1994, which are carried at the amounts resulting from the valuation undertaken in 1992, are recorded at cost (acquisition or construction), net of accumulated depreciation. Fixed assets include financial costs and currency exchange differences capitalized during the construction stage, resulting from loans taken out to finance them, as well as overheads.

Until December 31, 2003, the EDP Group recognized as of depreciation of partially-funded fixed assets, in other non-operating income, the amount of the depreciation of fixed assets contributed by third parties. Since 2004, this value is presented as a deduction to the depreciation of the period.

The depreciation and amortization rates are calculated on the straight-line basis taking into consideration the useful life of each type of tangible fixed assets and are analyzed as follows:

	<b>Rates in Years</b>
Buildings and related improvements	8-50
Plant, machinery and equipment:	
Hydroelectric generation	32-60
Thermoelectric generation	25-30
Renewables generation	30
Distribution	10-30
Other plant and equipment	5-10
Transport equipment	4-25
Administrative equipment	4-10
Other fixed assets	10-25

**Fixed assets allocated to the EDP Distribuição concessions**

Under the terms of Decree-Law 344-B/82, as mentioned in note 1, low-tension electricity distribution concessions do not involve the sale of the assets by the concessor municipalities, which remain their property, without prejudice to their allocation to operation by the Group. The fixed assets allocated to the concession are recorded under Tangible fixed assets, against a medium and long-term liability (Other debtors and creditors)

- DL 344-B/82 Regularization Account).

The amounts of these fixed assets are carried at the values resulting from the valuation realized in 1992, net of accumulated depreciation. The fixed assets allocated to the concession are amortized on the same basis and at the same rates as the Company's own fixed assets, the respective cost being compensated under other non-operating income (Note 37), by the reduction, of an equal amount, of the amounts payable to Municipalities carried under liabilities. The Group is responsible for the maintenance and repair of these fixed assets during the period of the concession contract, the costs being recorded on the same basis of the Group's own fixed assets.

**f) Intangible fixed assets**

Intangible assets are booked at acquisition cost, net of accumulated depreciation. Set-up costs and research and development costs are amortized using the straight-line method over a period of five years and industrial property is amortized over a period not exceeding 6 years.

Goodwill and concession rights in Brazil are booked according to the accounting policy mentioned in note 2. a).

The investments that increase the useful life of software programs over their original specifications are added to the original cost of the software. Software development costs recognized as assets are amortized using the straight-line method over their useful life.

**g) Inventories**

Inventories are carried at cost or at market value if less than cost, their usage (consumption) being valued at average cost.

**h) Recognition of costs and revenues**

Costs and revenues are recorded during the year to which they refer regardless of when paid or received, in accordance with the accruals concept. Differences between amounts received and paid and the corresponding revenue and expenditure are recorded under accruals and deferrals.

Revenues comprises the amounts invoiced on the sale of products or of services rendered, net of value added tax, rebates and discounts, after elimination of intra-group sales. The invoicing of electricity sales is undertaken on a monthly basis. Monthly electricity invoices are based on real meter reading or on estimated consumptions based on the historical data of each consumer. In Portugal, ERSE establishes by law the SEP electricity tariffs.

Revenues regarding the energy to be invoiced based on actual consumption not yet metered as at the balance sheet date are accrued on the basis of recent average consumptions.

The revenues of telecommunications services are recognized during the period in which they occur. The invoice of these services is carried out on a monthly basis, and amounts not invoiced between the last invoicing cycle and the end of the month are recorded on the basis of an estimate

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

of actual traffic. Differences between estimated amounts and the actual amounts, which are normally not significant, are recorded during the subsequent periods.

Interest earned is recognized using the accrual concept, taking into consideration the amount owed and the actual interest-rate during the period to maturity.

### **i) Accounts receivable**

Accounts receivable are recorded at their net realizable amount, considering the necessary provisions for doubtful debts. These provisions are recorded based on the valuation of estimated losses from non-collection of accounts receivable at the end of each year.

F-10



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**j) Liabilities for holiday pay and holiday subsidy**

The amount of liabilities for holiday pay and holiday subsidy and the respective social security charges for the current year, payable in the following year, are recorded as a cost for the year, under Accrued costs.

**k) Social benefits extended to EDP Group employees**

The Group records costs resulting from pensions and other employee benefits in accordance with IAS 19. Pensions and unrecognized actuarial gains and losses are amortized under the corridor method. The corridor method does not allow actuarial net gains or losses up to 10 per cent of the greater of the projected benefit obligation or the value of plan assets to be recognized or amortized as part of the net pension cost of the year. The value of the unrecognized actuarial net gains or losses that exceeds the value of 10 per cent as defined above shall be amortized over the average remaining service period of the employees. Obligations and annual expenses for medical benefits and defined benefit pensions plans are detailed in Note 21 to the financial statements.

**l) Own work capitalized**

Costs incurred by the Group (essentially materials, personnel costs and financial charges) in the construction of fixed assets are initially recorded in the profit and loss account in accordance with its nature and are then allocated to fixed assets based on specific predefined criteria.

**m) Dividends payable**

Dividends payable are recorded in the Group's financial statements during the year in which they are approved by the shareholders of the parent company EDP S.A.

**n) Taxation**

The income tax charge, including the amount of deferred tax, when applicable, is calculated in accordance with current legislation. Income tax is calculated based on the taxable income of the companies included in the tax consolidation. Group companies are taxed on a consolidation regime whenever it is permissible by the legislation of the countries in which the companies operate.

According to Portuguese tax legislation, tax returns remain open for review and adjustment by the tax authorities for a period of four years after the year to which they relate.

Deferred taxes are calculated using the balance sheet liability method, and correspond to the temporary differences between the book values of assets and liabilities and their respective tax values. Recognized deferred tax assets are reduced to the recoverable amount that can be compensated against future taxable profits. At the balance sheet date, the temporary differences related to deferred tax assets are reviewed according to the present expectation of their future recovery.

**o) Regulatory assets and liabilities**

In activities subject to regulation, the criteria of allocation of income and expense to each accounting period may be different from the criteria applicable to non-regulated activities. For accounting purposes, when the Regulator establishes a criteria of allocating income and expense to future years, then a regulatory asset or liability is recognized in the financial statements, which otherwise would be booked as profit or loss of the year.

Regulatory assets relate to deferred costs defined and regulated by the Regulator, which should be recovered through the increase of electricity tariffs during the following periods. Regulatory liabilities relate to future decreases in income defined and regulated by the Regulator, which should have an impact on customers, through the decrease of electricity tariffs during the following periods.

The Board of Directors makes certain assumptions as to the recovery of the regulatory assets based on regulations issued, current legislation, or past experience. If the probability of recovery is less than likely than the regulatory asset is written off against cost of the year.

**3. Financial-risk management policies**

**Financial-risk management**

The businesses of the EDP Group are exposed to a variety of financial risks, including the effects of changes in market prices, foreign exchange and interest rates. The Group's exposure to financial risks lies essentially in its debt portfolio, arising from the interest-rate risk, the exchange-rate risk and, and to a limited extent, the risk of non-compliance by the counterparty in each operation. The maturity of the financial markets is analyzed on an ongoing basis in accordance with the Group's risk management policy. Financial instruments are used to minimize potential adverse effects on its financial performance.

The management of the financial risks of EDP S.A., EDP Finance, B.V. and other Group entities is undertaken by the Financial Department of EDP, S.A. in accordance with policies approved by the Board of Directors. The Financial Department of EDP, S.A. identifies, evaluates and submits to the Board for approval hedging mechanisms appropriate to each exposure. The Board of Directors is responsible for the definition of general risk-management principles and the establishment of exposure limits. All transactions undertaken using derivative instruments require the prior approval of the Board of Directors, which defines the parameters of each transaction and approves the formal documents describing their objectives.

**Exchange-rate risk management**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The Group operates internationally and is exposed to the exchange-rate risk resulting from different currencies, mainly US Dollars (USD) and Brazilian Reals (BRL). Currently, the exposure to the USD/Euro currency fluctuation risk results from the Brazilian companies, that have financial debt expressed in USD. The debt contracted by the holding company is fully denominated in Euro. Bonds issued by EDP Finance BV under the Medium Term Notes Programmes in JPY and GBP were hedged in what concerns exchange-rate risk and interest-rate risk at the date of issue.

The Financial Department of EDP, S.A. is responsible for monitoring the evolution of the currencies referred above, seeking to mitigate the impact of currency fluctuations on the financial costs of the Group companies and, consequently on consolidated net profit, using exchange-rate derivatives and/or other hedging structures.

F-11

## **Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The Brazilian subsidiaries exposed to USD/BRL currency fluctuation through their debt in USD use forward rate agreements and currency swaps to hedge these risks. Additionally, investments in the Brazilian subsidiaries, whose net assets are exposed to exchange-rate risks, are monitored through analysis of the evolution of the BRL/Euro exchange-rate. Given the long-term nature determined for investments in the Brazilian subsidiaries, the Group has decided not to use financial instruments to hedge the exchange-rate risk inherent on the investment in these subsidiaries.

The policy implemented by the EDP Group consists of undertaking derivatives operations for the purpose of hedging risks with characteristics similar to those of the hedged liability. The operations are revalued and monitored throughout their useful life and, periodically, their effectiveness in controlling and hedging the risk that gave rise to them is evaluated.

### **Interest-rate risk management**

The Group's operating and financial cash flows are substantially independent from fluctuation of the interest-rate markets. The Group has no substantial volume of interest-earning assets.

The aim of the interest-rate risk management policies is to reduce the financial charges and to reduce the exposure of debt cash flows from market fluctuations by the settlement of derivative instruments (swaps and collars) to fix the debt interest rates. Therefore, in floating-rate financing, the Group contracts interest-rate instruments to hedge cash flows associated with future interest payments, which have the effect of converting floating-interest rate loans into fixed-interest rate loans. Long-term loans contracted at fixed rates are, when appropriate, converted into floating rate loans through interest-rate instruments designed to reduce financial charges and to level them to market conditions. In addition to these operations, more structured collar operations are contracted, as necessary, to mitigate exposure of the debt cash flows to market rate fluctuations.

All these operations are undertaken on liabilities in the Group's debt portfolio and mainly involve effective hedging, through the effectiveness of changes in the fair value of the hedging instrument and the changes in fair value of the interest-rate risk or exchange-rate risk being covered. The Group has a portfolio of interest-rate derivatives with maturities between approximately 1 and 15 years. The Group's Financial Department undertakes sensitivity analyses of the fair value of financial instruments to interest-rate fluctuations.

### **Counter party credit-rate risk management in financial transactions**

The EDP Group policy in terms of the counter-party-risk of financial transactions is managed by an analysis of the technical capacity, competitiveness, credit notation and exposure of each counter-party, avoiding significant concentrations of credit risks. Counter-parties in derivatives and financial transactions are restricted to high-quality credit institutions, therefore, it is not considered that there is any significant

risk of counter-party non-compliance. No collateral is demanded for these transactions.

At the Group level, all derivative operations are engaged under ISDA Master Agreements, and bond issues are undertaken under a Debt Instrument Issue Program.

Regarding the third-party debt generated by the Group's day-to-day business, the credit risks arise essentially from the legal obligation of providing continuous low-tension electricity supplies even when there are payment delays. This risk is considered to be mitigated by the large number of customers and by their diversity in terms of sectors of activity and by the large volume of residential customers.

### **Liquidity risk**

The EDP Group undertakes prudent management of the liquidity risk, contracting and maintaining credit lines and financing facilities with a firm underwriting commitment by national and international financial institutions of high credit rating notation, allowing immediate and flexible access to funds. These lines are used to complement and backup national and international commercial paper programmes, allowing the Group's short-term financing sources to be diversified.

### **Accounting for financial instruments**

As referred in Note 2, the EDP Group decided to implement in 2003, International Accounting Standard 39: Recognition and Measurement of Financial Instruments. The effects were calculated retroactive to December 31, 2002. EDP Group uses financial instruments to hedge exposures to exchange-rate risk and interest-rate risk, resulting from its operational and financing activity. The Group does not use financial instruments for trading purposes.

The financial instruments are initially measured at fair value, at acquisition date. The recognition of gains or losses resulting from subsequent revaluation are registered against income if the financial instrument is classified as fair value hedge under IAS 39, or in reserves if the financial instrument is classified as cash flow hedge. Under IAS 39, the Group classifies the financial instruments as either: hedging the fair value of the recognized asset or liability (fair value hedge) and hedging of cash flow variability in liabilities and highly probable future transactions (cash flow hedge).

In accordance with IAS 39, when the financial instruments are not considered as a hedge, they are accounted as trading and the changes in fair value resulting from its subsequent revaluation, are recorded through income in the period they occur.

### **Fair Value hedge**

The gains and losses resulting from changes in fair value of financial instruments classified as fair value hedge, are recognized against income together with the changes in fair value of the risk being hedged (interest rate risk or exchange rate risk), associated to the asset or liability covered.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

When the hedge accounting is discontinued by sale, termination or exercise of the hedge instrument or when the hedge relation does not comply with the requirements defined by IAS 39, the changes of fair value of the risk being hedged already accounted, are recognized through the remaining life of the hedged item against income.

### **Cash flow hedge**

When a financial instrument is considered to be a cash flow hedge of assets and liabilities recognized or of future transactions highly probable, the changes of fair value resulting from its subsequent revaluation, corresponding to the effective part of the coverage, are accounted against reserves. The changes of fair value attributable to the non-effective part of the coverage are accounted against income at the time they occur.

F-12

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

When a highly probable future transaction covered by a cash flow hedge, results in the recognition of a financial asset or liability, the changes of fair value of the hedging instrument recorded in reserves, are charged through income over the period in which the financial asset acquired or the financial liability assumed, has impact in the profit and loss account.

When a highly probable future transaction results in the recognition of a non-financial asset or liability, the changes in fair value of the hedging instrument recorded against reserves, are reclassified and recorded as acquisition cost of the non-financial asset or liability.

On the remaining cash flow hedge cover, the changes of fair value of the hedging instrument recorded against reserves, are recognized in the profit and loss account over the same period in which the cash flows generated by the item being hedged have impact in income.

The changes of fair value of the hedging instruments charged against reserves, in the case the instrument was used in order to cover the variability of assets or liabilities cash flows, are recognized through income over the remaining period.

When the hedging instrument expires, is sold or is exercised, or when the hedging relation does not comply with the necessary requirements to adopt hedge accounting under IAS 39, the changes of fair value of the hedging instruments should be maintained in reserves until the recognition of the future transaction.

The derecognition of an asset or liability, in the cash flow hedge model, or when the future transaction is no longer highly probable, imply that the changes of fair value of an hedging instrument, recorded in reserves, must be immediately charged against income.

**Estimate of the fair value of financial instruments**

The fair value of derivatives traded on liquid markets and of assets available for sale is based on their quoted prices on the balance sheet date. The fair value of interest-rate swaps is calculated on the basis of the present value of future estimated cash flows.

In the valuation of the fair value of non-negotiable derivatives and other financial instruments, the Group uses a variety of methods and assumptions based on market conditions existing on the balance sheet date. Market prices or the prices given by parties involved in the market for a specific instrument or for similar products are used in terms of long-term debt. The estimated value of future cash flows is used to determine the fair value of other financial instruments.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The book values of financial assets and liabilities with a maturity of less than one year are assumed to be close to their fair values.

### 4. Cash and cash equivalents

The balance **Cash and cash equivalents** is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Cash:</b>		
- Cash in hand	93	20,375
<b>Bank deposits:</b>		
- Current deposits	187,246	116,205
- Term deposits	8,744	6,963
	195,990	123,168
	196,083	143,543
<b>Trading securities:</b>		
- Other securities	51,214	56,291
<b>Other treasury investments:</b>		
- Financial products at domestic banks	8,700	85,300
- Financial products at foreign banks	22,023	2,368
	30,723	87,668
Provision for other treasury investments	-15	-6
	278,005	287,496

For the **Group**, the breakdown, for the purpose of determining and detailing the **Cash and Cash equivalents** components, is as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Cash components:</b>		
- Cash	93	20,375
- Bank deposits	195,990	123,168
- Trading securities	51,214	56,291
	247,297	199,834



Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Cash equivalents:		
- Other treasury investments	30,723	87,668
Cash and cash equivalents	278,020	287,502

F-13

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**5. Accounts receivable - Trade, net**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Resident customers:</b>		
State and official entities	41,240	36,234
Local government	31,222	31,041
Corporate sector and individuals	792,975	789,986
Unbilled receivables	40,817	85,193
Trade accounts - Bills receivable	17	46
	<u>906,271</u>	<u>942,500</u>
<b>Non-resident customers:</b>		
Corporate sector and individuals	336,363	158,490
	<u>1,242,634</u>	<u>1,100,990</u>
<b>Doubtful debt</b>	193,049	188,689
<b>Provision for doubtful debt</b>	-192,616	-181,615
	<u>1,243,067</u>	<u>1,108,064</u>

The breakdown of the **Provision for doubtful debt** is as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Balance as at January 1	181,615	150,863
Changes in consolidation perimeter	13,395	3,889
Charge for the year	21,739	9,649

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Transfers	-9,018	18,658
Write-back	-7,127	-1,444
Charge-off	-7,988	
	<u>          </u>	<u>          </u>
Balance as at December 31	192,616	181,615
	<u>          </u>	<u>          </u>

6. Accounts receivable Other, net

This balance is analyzed as follows:

	<u>Group</u>	
	<u>2004</u>	<u>2003</u>
	<u>Euro 000</u>	<u>Euro 000</u>
<b>Other accounts receivable - Short term / Current</b>		
State and other public entities:		
- Income tax	3,840	73,398
- Value added tax	151,620	100,730
- Other taxes	15,969	5,647
Other related companies		
- Galp, S.A.	13,269	
- Other	2,247	1,178
Advances to suppliers	4,178	2,478
Other debtors:		
- Current account with the Pension Fund	12,120	12,120
- Amounts owed to staff	2,711	8,536
- Amounts owed by the State and concessors	5,949	6,879
- Debtors in respect of other goods and services	68,736	94,437
- Regulatory assets	98,141	51,732
- Amounts receivable from Retecal sale	28,887	
- Amounts receivable from Enerpeixe sale	11,923	
- Amounts receivable from Fafen sale	19,919	
- Interests and financial assets	40,664	
- Amounts recoverable from telecommunication business	90,045	39,667
- INAG/EDP Protocol - Alqueva		26,082
- Advances to pensioners	6,241	8,497
- Conta certa tax regularization	7,129	
- Re-insurance activities	6,747	
- Other debtors and sundry operations	55,456	7,344
	<u>645,791</u>	<u>438,725</u>
Provision for short-term debtors	-13,952	-9,335
	<u>631,839</u>	<u>429,390</u>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Accrued income</b>		
- Interest receivable	138,711	10,926
- Revaluation of financial instruments		
- Trading	20,594	182,308
- Hedging	225,005	
- For sales and services provided		7,368
- For income taxes	59,855	25,368
- Other accrued income	15,990	36,150
	<u>460,155</u>	<u>262,120</u>
	<u>1,091,994</u>	<u>691,510</u>

Until January 1, 2004, all the derivatives were classified as trading and the changes in the fair value until that date were recorded against the profit and loss account. The fair value of **Financial Instruments-Derivatives** is analyzed in Note 39.

The movements in the **Provision for short-term debtors** are analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Balance as at January 1	9,335	13,901
Changes in the consolidation perimeter	5	
Charge for the year	5,035	227
Reclassifications between customers and debtor balances	2,411	-4,793
Write-back	-2,834	
	<u>13,952</u>	<u>9,335</u>
Balance as at December 31	<u>13,952</u>	<u>9,335</u>

**7. Inventories**

This balance is analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Merchandise	12,215	15,794
Purchases and advances on account of purchases	312	2,291
Finished and intermediate products	620	569
Products and work in progress	2,364	3,648
Sub-products, waste, residues and scrap	3,994	1,989
Raw and subsidiary materials and consumables:		
Coal	64,610	35,945
Fuel	24,060	47,530
Maintenance	26,206	21,217
Other consumables	35,169	30,253
	<u>169,550</u>	<u>159,236</u>
Provision for inventories	-983	
	<u>168,567</u>	<u>159,236</u>

The movements in **Provisions for inventories** are analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Balance as at January 1		1,180
Charge for the year	978	
Write-back of provisions		-1,180
Transfers	5	
	<u>983</u>	
Balance as at December 31		<u>983</u>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**8. Long term receivables, net**

This balance is analyzed as follows:

	Group	
	2004 Euro 000	2003 Euro 000
<b>Resident customers:</b>		
Customers - Local government - Debt at December 31, 1988	178,127	181,689
Corporate sector and individuals	5,241	5,017
Trade accounts - Bills receivable		413
	<u>183,368</u>	<u>187,119</u>
Provision for local government at December 31, 1988	88,228	101,322
	<u>95,140</u>	<u>85,797</u>
<b>Other accounts receivable - Medium and long term / Non Current</b>		
Other related companies:		
- Portgás, S.A.	23,639	
- NQF, S.A.	4,202	
- Other	9,935	
Other debtors:		
- Fixed assets in compensated integration	9,270	9,270
- Regulatory assets		
Portugal	447,331	148,352
Brazil	248,872	127,256
- Guarantees and tied deposits	60,347	44,991
- Other debtors and sundry operations	68,508	20,176
	<u>872,104</u>	<u>350,045</u>
Provision for medium/long-term debtors - Non current	21,821	
	<u>850,283</u>	<u>350,045</u>
	<u>945,423</u>	<u>435,842</u>

The balance **Customers - Local government - Debt at December 31, 1988** is presented net of debits related to assets to be transferred to the Group and of the rents owed by the Group on that date.

The balance **Other debtors - Fixed assets in compensated integration** is presented net of the amounts, at integration date, of the debts of local authorities up to December 31, 1988, compensated by means of the respective assets undergoing integration (Tangible fixed assets held under the regime of Decree-law 344-B/82). The transfer of these amounts to tangible fixed assets is awaiting formalization of the concession contracts or debt regularization protocols to be contracted by EDP and the local authorities.

The **Regulatory assets - Portugal** balance corresponds to the costs associated with the 2003 Human Resources Rationalization Plan in EDP Distribuição, which were accepted by the Energy Services Regulatory Entity as an investment amortizable over a period of 20 years, beginning in 2005. This programme was launched to support the restructuring of the human resources of EDP Group and the cost incurred will be recovered through tariff up to a limit of Eur 485.7 million.

The movements in **Provision for local government** are analyzed as follows:

	Group	
	2004 Euro 000	2003 Euro 000
Balance as at January 1	101,322	101,322
Transfers	-13,094	
Balance as at December 31	88,228	101,322

The movements in **Provisions for medium/long-term debtors - Non current** are analyzed as follows:

	Group	
	2004 Euro 000	2003 Euro 000
Balance as at January 1		12,421
Reclassifications between customers and debtor balances	21,761	-12,421
Exchanges differences	60	
Balance as at December 31	21,821	

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**9. Investments**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Equity holdings:</b>		
Subsidiary companies	60	1,305
Associated companies	431,414	441,449
Medium/long-term investments	1,281,374	1,293,517
Other companies	115,047	58,441
	<u>1,827,895</u>	<u>1,794,712</u>
<b>Investment in properties:</b>		
Buildings and other constructions	2,551	1,417
<b>Other financial investments:</b>		
Bank deposits	10,000	
Public debt securities	19	19
Other securities	38,245	70,143
Other financial investments	6,961	4,029
	<u>55,225</u>	<u>74,191</u>
	<u>1,885,671</u>	<u>1,870,320</u>
<b>Provision for financial assets:</b>		
Equity holdings	-267,093	-285,790
Other financial investments	-2,919	-1,391
	<u>-270,012</u>	<u>-287,181</u>
<b>Amortization of investments in properties</b>	-366	-355
	<u>-270,378</u>	<u>-287,536</u>
	<u>1,615,293</u>	<u>1,582,784</u>





**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The breakdown of **Equity holdings** is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Equity:</b>		
<b>Investment in subsidiary companies</b>		
Other	60	1,305
	<u>60</u>	<u>1,305</u>
<b>Investment in associated companies</b>		
DECA - Distribucion Eléctrica Centroamerica, S.A.	49,952	67,894
Companhia de Electricidade de Macau	48,992	65,129
REN - Rede Eléctrica Nacional, S.A.	258,698	254,223
Associated Companies of Hidrocantábrico Group	38,470	29,180
Red Eléctrica de España S.A.		10,218
Portsines - Terminal de Multipurpose de Sines, S.A.	7,381	7,501
Turbogás - Produtora Energética, S.A.	6,026	5,211
Portgás-Soc.de Prod.e Distrib.de Gás, S.A.	15,443	
Setgás-Soc.de Prod.e Distrib.de Gás, S.A.	1,597	
AIST-Administradora de Inmuebles Santo Tomas, S.A.	1,065	
Other	3,790	2,093
	<u>431,414</u>	<u>441,449</u>
<b>Available for sale:</b>		
<b>Medium/long-term investment</b>		
CERJ - Companhia Eléctrica do Estado Rio Janeiro	95,049	97,767
Galp Energia, SGPS, S.A.	328,171	328,211
BCP - Banco Comercial Português, S.A.	522,154	552,789
OPTEP (Optimus, S.A.)	336,000	314,750
	<u>1,281,374</u>	<u>1,293,517</u>
<b>Investments in other companies</b>		
Elcogás, S.A.	4,720	2,166
Tagusparque, S.A.	1,097	1,097
Tejo Energia, S.A.	4,988	4,988
ValorSul, S.A.	3,878	2,469
Efacec, S.A.	3,566	3,566
EDA - Eléctrica dos Açores, S.A.	6,891	6,891

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Costa Rica Energética, Lda.	2,635	2,073
Red Eléctrica de España S.A.	66,959	
Other	20,313	35,191
	<u>115,047</u>	<u>58,441</u>
	<u>1,827,895</u>	<u>1,794,712</u>

On December 13, 2004, EDP Group announced its intention to exercise the call option underlying the Agreement celebrated on October 26, 2004, regarding the acquisition of 20% of Turbogás Produtora Energética, S.A. and 26.667% of Portugen-Energia, S.A., at the reference price of Eur 55,667 thousand. The option exercise was subject to the approval of the operation by the bank syndicate that finances Turbogás. The effective date of the acquisition will be after the referred approval, which should occur during 2005.

During 2004, the mandatorily convertible bonds issued by Banco Comercial Português, in the amount of Eur 30,636 thousand, were transferred from the balance **Medium/long term investments** to the balance **Other financial investments - Other securities**.

In accordance with International Accounting Standard 39 the balance **Available for sale** is analyzed as follows:

	Group			Carrying Value Euro 000
	Book Value Euro 000	Potencial loss (Provisions) Euro 000	Potencial gain Euro 000	
CERJ - Companhia Eléctrica do Estado Rio Janeiro	95,049	-9,144		85,905
Galp Energia, SGPS, S.A.	322,566		5,605	328,171
BCP - Banco comercial Português, S.A.	522,154	-253,592		268,562
OPTEP (Optimus, S.A.)	315,000		21,000	336,000
Red Eléctrica de España S.A.	42,793		24,166	66,959
Other	48,088			48,088
	<u>1,345,650</u>	<u>-262,736</u>	<u>50,771</u>	<u>1,133,685</u>

In accordance with the accounting policy defined in note 2 b), the temporary positive changes in the fair value of an investment are added to its costs, temporary negative changes in the fair value of an investment are recorded through the charge of a provision.

As at December 31, 2004, the investment held in Red Eléctrica de España, S.A. is registered at fair value under **Investments in other companies**.

Resulting from the adoption of IAS 39, the Group has recognized as impairment losses the changes in the fair value of the investment held at BCP until December 31, 2002, in the amount of Eur 247,751 thousand.



**Table of Contents**

## EDP - Energias de Portugal, S.A. and Subsidiaries

## Notes to the Financial Statements

December 31, 2004, 2003 and 2002

OPTEP is a wholly owned company of EDP whose assets include 25.72% of Optimus, S.A. share capital, a company that operates in the telecommunications business. During 2002, OPTEP was sold by EDP, however considering that there is a selling price adjustments mechanism in this transaction, and in accordance with IAS 39, this operation can not be considered as an effective sale and consequently this investment was not derecognized. On this basis, the investment sold in 2002 is registered in full under assets and the respective liability under liabilities, the price fluctuations being recognized against reserves as an investment available for sale for as long as the referred clause remains in force, with maturity on March 22, 2008.

During 2004 the following changes took place in the consolidation perimeter of the EDP Group:

Under the agreement established with Energie Baden-Wurttemberg AG, Caja de Ahorros de Asturias, Caja de Seguros Reunidos and Compañía de Seguros y Reaseguros, S.A., EDP acquired an additional investment of 56.2% in Hidroeléctrica del Cantábrico, S.A., increasing its investment to 95.7%. This position, corrected by the effect of treasury stocks held as at December 31, 2004, corresponds to a shareholding of 95.94% in Hidroeléctrica del Cantábrico, S.A. The global price paid by EDP under this transaction amounted to Eur 1,200.8 million, originating a goodwill of Eur 242.1 million, as referred in Note 11. This operation was financed through an increase in the share capital of EDP in the amount of Eur 1,208 million, corresponding to 656,537,715 new shares with a nominal value of 1 Euro each and with a premium of 0.84 Euro each, reserved for the EDP shareholders.

Under the agreement established between EDP and CGD, on November 25, 2003, CGD exercised the put option regarding the total share capital of NQF - Projectos de Telecomunicações e Energia, S.A. NQF holds, indirectly, investments corresponding to 12.9% and 10.1% of Portgás-Sociedade de Produção e Distribuição de Gás, S.A. and Setgás-Sociedade de Produção e Distribuição de Gás, S.A. share capital, respectively. On the other hand, under the agreement settled, on November 14, 2003, between EDP, Galp Energia SGPS, S.A., GDP, SGPS, S.A., EDP exercised, on December 29, 2004, the call option regarding the acquisition of 46.625% of Portgás share capital.

The movements in **Provisions for Financial assets** are analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Provision for Equity holdings:		
Balance as at January 1	285,790	276,734
Charge for the year		8,585
Changes in investments medium - long term	-18,697	15,967
Write-backs		-15,496
	<u>267,093</u>	<u>285,790</u>
Balance as at December 31	267,093	285,790

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Provision for other financial investments:		
Balance as at January 1	1,391	1,391
Changes in the consolidation perimeter	1,528	
	<u>          </u>	<u>          </u>
Balance as at December 31	2,919	1,391
	<u>          </u>	<u>          </u>
	270,012	287,181
	<u>          </u>	<u>          </u>

The **Subsidiary companies** consolidated under the full consolidated method as at December 31, 2004, are as follows:

<u>Subsidiary companies</u>	<u>Head office</u>	<u>Share capital/ Currency</u>	<u>Shareholders Equity 31-Dec-04 Euro 000</u>	<u>Net Profit 31-Dec-04 Euro 000</u>	<u>% Group</u>	<u>% Company</u>
<b>Group's parent holding company and related activities - Portugal:</b>						
EDP - Energias de Portugal, S.A.	Lisbon	3,656,537,715 EUR	6,401,714	440,152		
EDP Valor - Gestão Integrada de Serviços, S.A.	Lisbon	4,550,000 EUR	8,636	836	100.00%	100.00%
MRH - Mudança e Recursos Humanos, S.A.	Lisbon	750,000 EUR	-908	-586	100.00%	
Sãvida - Medicina Apoiada, S.A.	Lisbon	450,000 EUR	2,588	186	100.00%	
SCS - Serviços Complementares de Saúde, S.A.	Lisbon	50,000 EUR	-843	-215	100.00%	
EDP Estudos e Consultoria, S.A.	Lisbon	50,000 EUR	-108	-190	100.00%	100.00%
EDP Imobiliária, S.A.	Lisbon	5,000,000 EUR	4,458	-463	100.00%	
Edalpro - Imobiliária, Lda.	Lisbon	748,197 EUR	1,065	-390	100.00%	100.00%
EDP Participações S.G.P.S., S.A.	Lisbon	125,000,000 EUR	921,396	25,323	100.00%	100.00%
Balwerk - Consultadoria Económica e Participações, Sociedade Unipessoal, Lda.	Lisbon	5,000 EUR	-1,529	-624	100.00%	
EDP Internacional S.G.P.S., S.A.	Lisbon	37,500,000 EUR	659,802	-420,314	100.00%	100.00%
EDP Finance BV	Holand	20,000 EUR	20	-133	100.00%	100.00%
EDP Finance Company Ltd	Ireland	1,000,000 EUR	651	-7	100.00%	100.00%
EDP Investimento, Gestão de Participações e Assistência Técnica, Lda.	Lisbon	200,000 MOP	44,703	8,885	100.00%	100.00%
EDP Investments and Services, Limited	Cayman Islands	1,000 USD	1,661	-4,999	100.00%	
Internel - Serviços de Consultoria Internacional, S.A.	Lisbon	50,000 EUR	321	344	100.00%	
EDP Trader Internacional - Comércio, Consultoria e Serviços, Sociedade Unipessoal, Lda.	Funchal	5,000 EUR	5		100.00%	

F-19

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

<u>Subsidiary companies</u>	<u>Head office</u>	<u>Share capital/ Currency</u>	<u>Shareholders Equity 31-Dec-04 Euro 000</u>	<u>Net Profit 31-Dec-04 Euro 000</u>	<u>% Group</u>	<u>% Company</u>
<b>Electricity Business - Portugal:</b>						
<b>Electricity Generation:</b>						
EDP Gestão da Produção de Energia, S.A.	Lisbon	1,250,000,000 EUR	1,525,566	325,570	100.00%	100.00%
EDP Produção Bioelétrica, S.A.	Lisbon	4,000,000 EUR	9,375	-1,720	100.00%	100.00%
CPPE - Companhia Portuguesa de Produção de Electricidade, S.A.	Lisbon	1,234,000,000 EUR	2,396,054	371,796	100.00%	
O&M Serviços - Operação e Manutenção Industrial, S.A.	Lisbon	500,000 EUR	947	305	60.00%	
EDP Energia, S.A.	Lisbon	50,100,200 EUR	62,950	-6,518	100.00%	60.00%
Hidrobasto, Lda.	Cabeceiras	100,000 EUR	104	-4	60.00%	
Soporgen, S.A.	Lisbon	50,000 EUR	3,959	3,898	82.00%	
Energim Azóia, S.A.	Lisbon	50,000 EUR	-3,231	-1,176	65.00%	
EDP Produção EM - Engenharia e Manutenção, S.A.	Macao	2,250,000 EUR	7,986	651	100.00%	
Tergen - Operação e Manutenção de Centrais Termoeletricas, S.A.	Carregado	250,000 EUR	262	18	80.00%	
Enerfin - Sociedade de Eficiência Energética, S.A.	Macao	50,000 EUR	564	579	74.88%	
Enernova - Novas Energias, S.A.	Lisbon	7,500,000 EUR	40,486	8,321	100.00%	100.00%
Domus Eólica-Produção de Energia Renováveis, Lda.	Macao	5,000 EUR	2		100.00%	
Eólica da Serra das Alturas, S.A.	Boticas - Oporto	50,000 EUR	50		70.00%	
<b>Electricity Distribution and Supply:</b>						
EDP Distribuição de Energia, S.A.	Lisbon	1,024,500,000 EUR	1,591,145	142,032	100.00%	100.00%
EDP Serviner - Serviços de Energia, S.A.	Lisbon	50,000 EUR	805	531	100.00%	100.00%
EDP - Outsourcing Comercial, S.A.	Lisbon	50,000 EUR	50		100.00%	100.00%
EDP - Powerline, Infraestruturas de Comunicação, S.A.	Lisbon	50,000 EUR	50		100.00%	100.00%
<b>Group's parent holding company and related activities - Spain:</b>						
Hidroeléctrica del Cantábrico, S.A.	Oviedo	425,721,430 EUR	1,721,869	35,847	95.94%	95.94%
Gas Capital S.A.U.	Oviedo	60,110 EUR	-14,305	1,435	95.94%	
Hidrocantábrico Gestión de la Energía S.A.	Oviedo	300,500 EUR	1,178	-765	95.94%	
Hidrocantábrico Servicios S.A.	Oviedo	60,150 EUR	496	230	95.94%	
Inverasturias I Fondo Capital Riesgo	Avilés	6,010,123 EUR	6,090	80	19.19%	
Red Eléctrica de España S.A.	Madrid	270,540,000 EUR	884,805	132,381	2.88%	
Sociedad promotora de las Telecomunicaciones en Asturias S.A.	Oviedo	55,379,523 EUR	36,965	-18,412	44.08%	
Telecable de Asturias S.A.U.	Oviedo	53,786,608 EUR	35,843	470	44.08%	
Canal Energía S.L.	Madrid	4,000 EUR	20		47.95%	
<b>Electricity Business - Spain:</b>						
<b>Electricity Generation:</b>						
Ambitec Laboratorio Medioambiental (ITSEMAP) S.A.	Madrid	1,021,700 EUR	1,071	-47	76.73%	
Asociación Central Producción Térmica S.A.	Cuenca	390,658 EUR	398	111	46.05%	
Biogas y Energía S.A.U.	Madrid	3,125,200 EUR	3,594	71	76.75%	

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Ceprastur AIE	Oviedo	360,607 EUR	404		45.86%
Cerámica Técnica de Illescas Cogeneración S.A.	Madrid	62,247 EUR	49	1	69.07%
Cogeneración del Esla S.A.	Madrid	1,081,800 EUR	1,499	158	69.07%
Desarrollos Energeticos Bahia Cadiz S.A.	Cádiz	60,102 EUR	58	-2	86.34%
Eléctrica de la Ribera del Ebro S.A.	Pamplona	5,000,000 EUR	22,091	8,582	95.94%
Energía e Industria de Toledo S.A.	Madrid	2,139,603 EUR	2,959	68	69.07%
Eneroliva S.A.	Sevilla	300,500 EUR	299	-1	76.75%
Eólica Arlanzón S.A.	Madrid	4,508,980 EUR	6,297	687	59.48%
Eólica Campollano S.A.	Madrid	6,559,994 EUR	8,826	948	57.56%
Eólica Mare Nostrum S.A.	Valencia	60,120 EUR	117	59	46.05%
Eólica Sierra de la Peña S.A.	Madrid	869,250 EUR	1,575		65.16%
Eólica Sierra de la Peña, S.L.	Albacete	868,806 EUR	869		57.56%
Genesa I S.L.	Madrid	10,000,000 EUR	85,419	5,170	76.75%
Hidrocantabrico Explotación Centrales S.A.	Oviedo	60,150 EUR	63	2	95.94%
Hidroeléctrica del Rumblar S.L.	Madrid	276,460 EUR	586	254	61.40%
Hidroeléctrica Fuentesmosa S.L.	Oviedo	77,036 EUR	108	16	69.04%

F-20



**Table of Contents**

## EDP - Energias de Portugal, S.A. and Subsidiaries

## Notes to the Financial Statements

December 31, 2004, 2003 and 2002

<u>Subsidiary companies</u>	<u>Head office</u>	<u>Share capital/ Currency</u>	<u>Shareholders Equity 31-Dec-04 Euro 000</u>	<u>Net Profit 31-Dec-04 Euro 000</u>	<u>% Group</u>	<u>% Company</u>
Hidroeléctrica Gormaz S.A.	Salamanca	60,701 EUR	47	12	57.56%	
Industrias Medioambientales Río Carrión S.A.	Madrid	60,200 EUR	-42		69.07%	
Iniciativas Tecnológicas de Valorización Energética de Residuos S.A.U.	Madrid	95,810 EUR	-232	-174	76.36%	
Mazarrón Cogeneración S.A.	Madrid	70,000 EUR	41	-29	69.07%	
Parque Eólico Belchite S.L.	Zaragoza	3,006 EUR	3		76.75%	
Parque Eólico La Sotonera S.L.	Zaragoza	2,000,000 EUR	2,000		52.39%	
Parques Eólicos del Cantábrico S.A.U.	Oviedo	9,079,680 EUR	13,861	-354	76.75%	
Patrimonial de la Ribera del Ebro S.L.	Pamplona	3,264,000 EUR	3,247	-9	95.94%	
Rasacal Cogeneración S.A.	Madrid	60,200 EUR	60		46.05%	
Renovables Castilla La Mancha S.A.	Albacete	60,102 EUR	60		39.14%	
Renovamed S.A.	Madrid	60,200 EUR	34	1	57.56%	
Sevares Cogeneración S.A.U.	Madrid	475,002 EUR	592	22	76.75%	
Sidergas Energía S.A.U.	Oviedo	2,606,000 EUR	2,718	112	76.75%	
Siesa Renovables Canarias S.L.	Gran Canaria	3,006 EUR	3		76.75%	
Sinae Inversiones Eólicas S.A.U.	Madrid	6,010,000 EUR	7,478	266	76.75%	
Sinova Medoambiental S.A.	Soria	2,687,364 EUR	3,786	477	64.47%	
Sotromal S.A.	Soria	450,800 EUR	171	32	69.07%	
Tratamientos Ambientales Sierra de la Tercia S.A.	Madrid	3,731,202 EUR	4,383	-95	67.15%	
Tratamientos Medioambientales del Norte S.A.	Madrid	60,200 EUR	61	0	61.40%	
Tratamientos Medioambientales Río Sotón S.A.	Madrid	60,200 EUR	60		76.75%	
Uniener S.A.U.	Madrid	940,500 EUR	1,114	12	76.75%	
Bioastur AIE	Gijón	60,101 EUR	374	252	47.97%	
Canal Energía Generación S.L.	Madrid	4,000 EUR	2		23.96%	
Cogneracion La Espina S.L.	Salas	114,192 EUR	107	43	38.37%	
Cogneracion y Matenimiento AIE	Oviedo	604,005 EUR	1,015	536	38.37%	
Desarrollos Energeticos Canarios S.A.	Las Palmas	29,991 EUR	18		38.37%	
Horta Medioambiental S.A.	Madrid	30,100 EUR	30		38.37%	
Proenercam S.L.	Ruiloba	120,200 EUR	247	55	38.37%	
Tébar Eólica S.A.	Cuenca	2,360,200 EUR	2,360		38.37%	
Biomosas del Pirineo S.A.	Huesca	454,896 EUR	407		23.02%	
Cultivos Energéticos de Castilla S.A.	Burgos	300,000 EUR	287	0	23.02%	
Empresa Provincial de Energía S.A.	Sevilla	601,000 EUR	511	-6	15.35%	
Enercem S.L.	Oviedo	210,350 EUR	563	56	15.35%	
Hidraulica de Santilliana S.A.	Madrid	4,763,027 EUR	15,272	2,470	46.87%	
Hidráulica Rio Lena S.A.	Oviedo	752,885 EUR	1,714	-371	6.63%	
Hidroastur S.A.	Oviedo	4,808,000 EUR	7,848	490	19.19%	
Parque Eólico Altos del Voltoya S.A.	Madrid	7,813,157 EUR	9,510	100	23.79%	
Parque Eólico de Belmonte, S.A.	Asturias	120,400 EUR	2,861		22.95%	
Parque Eólico Sierra del Madero S.A.	Soria	7,194,021 EUR	10,504	2,014	32.23%	
Sodecoan S.L.	Sevilla	6,010 EUR	-3		38.37%	
Solar Siglo XXI S.A.	Ciudad Real	80,000 EUR	69		19.19%	

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Yedesa Cogeneración S.A.	Sevilla	234,390 EUR	44		7.67%
<b>Electricity Distribution and Supply:</b>					
Hidrocantábrico Distribucion Eléctrica S.A.U.	Oviedo	44,002,000 EUR	229,923	16,278	95.94%
Hidrocantabrico Energia S.A.U.	Oviedo	60,110 EUR	-22,463	316	95.94%
Hidrocantabrico Energia Verde S.A.U.	Oviedo	60,300 EUR	56	-1	95.94%
Hidrocantábrico Explotación Redes S.A.	Oviedo	70,000 EUR	69	-1	95.94%
Canal Energía Comercialización S.L.	Madrid	4,000 EUR	41	34	23.96%
Canal Energía Distribución S.L.	Madrid	4,000 EUR	1		23.96%
<b>Gas Distribution:</b>					
Gas de Euskadi Transporte de Gas S.A.U.	Bilbao	12,880,200 EUR	53,154	2,478	53.90%
Gas Hernani S.A.	Hernani	60,200 EUR	234	12	29.64%
Gas Pasaia S.A.	Pasajes	60,101 EUR	83	5	29.64%
Naturcorp Participaciones S.L.U.	Bilbao	13,467,000 EUR	14,210	834	53.90%
Naturcorp Redes S.A.U.	Bilbao	100,000,000 EUR	971,406	2,331	53.90%
Naturcorp Transporte de Gas S.A.U.	Bilbao	5,000,000 EUR	4,974	10	53.90%
Naturgas Comercializadora S.A.U.	Bilbao	3,185,300 EUR	3,259	945	53.90%
Naturgas Participaciones S.A.U.	Bilbao	300,500 EUR	394	81	53.90%
Septentrional de Gas S.A.	León	3,800,000 EUR	3,745	-53	37.73%
Bilbogas S.A.	Bilbao	2,788,686 EUR	8,069	1,427	26.95%
Canal Energía Gas Distribución S.L.	Madrid	4,000 EUR	4		23.96%
Gas Natural de Álava S.A.	Vitoria	5,174,390 EUR	11,092	2,074	26.95%
Infraestructuras Gasistas de Navarra S.L.	Pamplona	501,503 EUR	1,573	-32	26.95%
Millenium Energy S.A.	Bilbao	3,250,000 EUR	2,900	12	26.95%
Giroaga AIE	S. Sebastián	300,506 EUR	362	48	5.39%
Inkolan AIE	Bilbao	111,936 EUR	123		25.59%
Kosorkuntza AIE	Bilbao	1,502,500 EUR	2,342	530	13.47%
Tolosa Gasa S.A.	Tolosa	1,021,700 EUR	1,980	383	21.56%
Naturcorp Multiservicios S.A.	Bilbao	316,516,400 EUR	976,951	12,407	53.90%
EDP Energia Ibérica, S.A.	Madrid	60,200 EUR	-1,332	-818	100.00%

F-21

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Subsidiary companies	Head office	Share capital / Currency	Shareholders Equity		Net Profit		% Group	% Company
			31-Dec-04 Euro 000	31-Dec-04 Euro 000				
<b>Group's parent holding company and related activities - Brazil:</b>								
EDP Brasil, S.A.	São Paulo	1,323,839,767 BRL	378,667	29,567	100.00%	46.59%		
Enercorp - Serviços Corporativos, Lda.	São Paulo	12,525,000 BRL	1,792	-1,275	100.00%	23.23%		
Energest, S.A.	São Paulo	52,242,339 BRL	-791	-2,448	100.00%			
Iven, S.A.	São Paulo	322,334,857 BRL	80,487	22,922	100.00%			
Magistra Participações, S.A.	São Paulo	668,482,734 BRL	185,036	6,689	54.76%			
<b>Electricity Business - Brazil:</b>								
<b>Electricity Generation:</b>								
EDP Lajeado Energia, S.A.	São Paulo	100,000,000 BRL	5,925	3,074	100.00%			
Enerpeixe, S.A.	São Paulo	448,045,834 BRL	123,951		60.00%			
Enercoutho, S.A.	São Paulo	1,000 BRL			100.00%			
<b>Electricity Distribution and Supply:</b>								
Escelsa - Espírito Santo Centrais Eléctricas, S.A.	Espirito Santo	153,946,942 BRL	131,056	43,242	54.76%			
Enersul - Empresa Energética de Mato Grosso do Sul, S.A.	Mato Grosso Sul	463,415,296 BRL	143,786	25,945	35.70%			
Bandeirante Energia, S.A.	São Paulo	254,628,684 BRL	193,469	35,914	96.50%			
Enertrade - Comercializadora de Energia, S.A.	São Paulo	26,284,758 BRL	13,632	7,251	100.00%			
<b>Telecommunications Business - Portugal:</b>								
Operadora Nacional de Interactivos S.G.P.S., S.A.	Lisbon	100,000,000 EUR	117,639	-65,376	56.61%	56.61%		
Oni Telecom, S.A.	Lisbon	274,630,000 EUR	5,462	-63,968	56.61%			
Oni Multimédia - Serviços Interactivos, S.A.	Lisbon	50,000 EUR	-27,579	-2,081	56.61%			
U Call - Atendimento a Clientes e Telemarketing, S.A.	Lisbon	50,000 EUR	121	176	73.96%			
Autor Tecnologias Multimédia, S.A.	Aveiro	50,000 EUR	-737	-285	56.61%			
Oni Madeira, S.A.	Funchal	50,000 EUR	-2	76	39.62%			
Oni Açores, S.A.	P.Delgada	250,000 EUR	430	5	33.96%			
Oni Plataformas - Infocomunicações, S.A.	Lisbon	50,000 EUR	42	-5	56.61%			
Oni Web - Infocomunicações, S.A.	Lisbon	50,000 EUR	-10,347	-2,567	56.61%			
FCTE - Forum do Comércio, Transacções Electrónicas e Serviços Empresariais On-Line, S.A.	Lisbon	500,000 EUR	-348	-90	45.29%			
<b>Telecommunications Business - Spain:</b>								
Germinus XXI	Madrid	3,650,000 EUR	-200	-633	56.59%			
Intercom Internet	Barcelona	3,017 EUR	3		56.57%			
Ola Internet, S.A.	Madrid	405,010 EUR	2,608	1,826	56.57%			
TLD	Vigo	1,235,067 EUR	-9	1,443	56.61%			
Comunitel Global, S.A.	Vigo	48,395,604 EUR	5,941	-18,297	56.57%			
<b>Information Technologies Business - Portugal:</b>								
Edinfor - Sistemas Informáticos, S.A.	Lisbon	17,000,000 EUR	103,010	-54,288	100.00%	100.00%		
Onsource - Soluções Informáticas, S.A.	Lisbon	1,250,000 EUR	1,484	-12	59.82%			

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Case/Edinfor II, Sistemas de Informação, S.A.	Lisbon	500,000 EUR	-5,538	-5,934	59.82%
Netion - Gestão e Informática, S.A.	Lisbon	50,000 EUR	223	160	47.86%
Case/Edinfor, ACE	Lisbon	498,798 EUR	499	0	59.82%
Integer - Informática de Telecomunicações e Gestão, S.A.	Lisbon	250,000 EUR	664	-32	59.82%
Inovis - Sistemas de Informação, S.A.	Lisbon	50,000 EUR	317	-5	59.82%
Consulteam II - Consultores de Gestão e Informática, S.A.	Lisbon	60,000 EUR	-2,223	-1,715	59.82%
Acebnet - Business Networking - Sistemas de Informação para Negócio Electrónico, S.A.	Lisbon	250,000 EUR	-598	-663	59.82%
Ace Bi - Soluções para Gestão de Clientes e Apoio à Decisão, S.A.	Lisbon	250,000 EUR	112	-88	59.82%
Ace Sistemas Comerciais Informáticos, S.A.	Lisbon	250,000 EUR	1,988	1,551	59.82%
Ace Qs - Qualidade em Sistemas de Informação, S.A.	Lisbon	250,000 EUR	249	-137	59.82%
Sigmaplano - Consultoria em Sistemas para Apoio à Decisão, S.A.	Lisbon	174,579 EUR	227	-287	59.82%
Onalp - Soluções Informática em Suporte à Decisão, Lda.	Lisbon	5,000 EUR	35	27	59.82%
S-Tecno, Serviços em Tecnologias de Informação, S.A.	Estoril	250,000 EUR	-28	-4	59.82%
Case - Concepção e Arquitectura de Soluções Informáticas Estruturadas, S.A.	Lisbon	250,000 EUR	-772	-4,041	59.82%

F-22

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Subsidiary companies	Head office	Share capital / Currency	Shareholders Equity		Net Profit	
			31-Dec-04 Euro 000	31-Dec-04 Euro 000	% Group	% Company
Centralbiz - Soluções de Sistemas e Tecnologias de Informação, S.A.	Oporto	50,000 EUR	-19	-28	59.82%	
Ace Healthcare - Sistemas de Informação para Apoio à Saúde, S.A.	Paço d Arcos	200,000 EUR	47	-90	59.82%	
Ace Plus - Soluções Informáticas, S.A.	Funchal	250,000 EUR	-2,019	-1,509	47.86%	
Psidoc - Produção de Sistemas de Informação e Tratamento de Documentos, S.A.	Lisbon	150,000 EUR	-152	-41	59.82%	
No Limits Consulting - Serviços em Sistemas de Informação, S.A.	Lisbon	250,000 EUR	665	250	41.88%	
It-Log, Logística e Gestão de Tecnologias de Informação, S.A.	Lisbon	23,600,000 EUR	32,680	7,388	100.00%	
It-Geo, Tecnologias e Informação Georeferenciadas, S.A.	Lisbon	50,000 EUR	3,096	2,263	100.00%	
Copidata Industrial Gráfica e Equipamentos, S.A.	Odivelas	4,491,000 EUR	9,570	53	99.35%	
Copidata Formulários e Sistemas para a Informática, Lda.	Odivelas	598,558 EUR	1,208	6	99.42%	
Escritomática - Racionalização e Segurança, Lda.	Odivelas	44,892 EUR	169	-156	99.61%	
Central E - Informação e Comércio Electrónico, S.A.	Lisbon	5,000,000 EUR	-9,914	-3,020	52.80%	52.80%
Ace Holding S.G.P.S., S.A.	Lisbon	11,683,383 EUR	13,581	-2,874	59.82%	
Ace Global - Serviços de Gestão, S.A.	Lisbon	250,000 EUR	-6,601	-4,158	59.82%	
Primitiva - Artesanato e Turismo, S.A.	Lisbon	87,097 EUR	86	-1	59.82%	
Mecaresopre - Centro Mecanográfico, S.A.	Lisbon	150,000 EUR	267	-80	80.00%	
Digihotel - Sistemas Informáticos de Hotelaria e Turismo, S.A.	Lisbon	249,500 EUR	55	-97	59.82%	
Digigest - Sistemas Informáticos de Gestão Financeira e Produção, S.A.	Lisbon	149,700 EUR	-70	3	59.82%	
Digitec Manutenção - Manutenção de Sistemas Informáticos, S.A.	Lisbon	74,850 EUR	-1	-16	59.82%	
Great Plains Software-Portugal, Sistemas e Suportes de Gestão, S.A.	Lisbon	224,550 EUR	-481	-1	57.83%	
<b>Information Technologies Business - Brazil:</b>						
Ace Sistemas de Informação, Lda.	São Paulo	1,871,713 BRL	-278	-476	59.82%	
Edinfor - Soluções Informáticas, Lda.	São Paulo	10,087,011 BRL	1,354	-1,221	100.00%	
<b>Information Technologies Business - PALOP s:</b>						
Acesi - Sistemas de Informação, Lda.	Maputo	200,000,000 MZM	-225		61.80%	
Ace Consulting - Consultoria, Projectos e Tecnologias de Informação, Lda.	Luanda	45,000 USD	-494	-14	59.82%	
<b>Other :</b>						
EDP Maroc, S.A.R.L.	Marrocos	250,000 MAD	-51	-74	59.82%	
CaseEdinfor Ásia, Sistemas de Informação, Lda.	Macao	25,000 MOP	16	4	59.82%	
Energia RE - Sociedade Cativa de Resseguro	Luxembourg	1,239,468 EUR	1,239		100.00%	100.00%
Labelec - Estudos, Desenvolvimento e Actividades Laboratoriais, S.A.	Sacavém	2,200,000 EUR	7,194	2,190	100.00%	100.00%

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The **Associated companies** included in the consolidation under the proportional consolidation method as at December 31, 2004, are as follows:

Associated companies	Head office	Share capital / Currency	Shareholders Equity		Net Profit	
			31-Dec-04 Euro 000	31-Dec-04 Euro 000	% Group	% Company
Affinis - Serviços de Assistência e Manutenção Global, S.A.	Lisbon - Portugal	3,500,000 EUR	-630	-2,297	45.00%	
Investco, S.A.	São Paulo - Brazil	745,840,273 BRL	197,514	1,722	27.65%	

The **Associated companies** included in the consolidation under the equity method as at December 31, 2004, are as follows:

Associated companies	Head office	Share capital / Currency	Shareholders Equity		Net Profit	
			31-Dec-04 Euro 000	31-Dec-04 Euro 000	% Group	% Company
AIST - Administradora de Inmuebles Sto. Tomas S.A.	Guatemala	54,510,000 GTQ	5,073	-23	21.00%	21.00%
Bioelctrica, SPA	Pisa -Italy	1,200,000 EUR	2,316	-498	24.00%	
Bizfirst - Business First Consulting - Consultoria em Sistemas de Informação, S.A.	Lisbon -Portugal	250,000 EUR	-263	6	25.13%	
Campos Envelopagem, S.A.	Palmela -Portugal	74,850 EUR	698	75	30.00%	
Carriço Cogeração, S.A.	Vila Rei - Portugal	50,000 EUR	-105	-141	35.00%	
CBE - Centro de Biomassa para a Energia	Portugal	643 EUR	660	52	24.60%	24.60%

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Associated companies	Head office	Share capital / Currency	Shareholders Equity		Net Profit	
			31-Dec-04 Euro 000	31-Dec-04 Euro 000	% Group	% Company
CEM, S.A.	Macao - China	580,000,000 MOP	231,207	40,125	21.19%	
DECA - Distribuicion Eléctrica Centroamericana Dos (II), S.A.	Guatemala	2,077,097,000 GTQ	237,865	26,466	21.00%	21.00%
Ecogen - Serviços de Energia Descentralizada, S.A.	Loures - Portugal	100,000 EUR	-608	-304	34.99%	
EDEL - Empresa Editorial Electrotécnica, Lda.	Portugal	1,798 EUR	-74	-17	47.77%	47.77%
Eólica da Alagoa, S.A.	Arcos Val.- Portugal	50,000 EUR	1,490	-60	40.00%	
Exinfor Case, Ltda.	Mozambique	200,000,000 MZM	8		40.14%	
GECA - Generation Electrica CentroAmericana, S.A.	Guatemala	30,000 GTQ	1,197	-2	21.00%	21.00%
Geoterceira - S. Geo. Terceira, S.A.	Azores - Portugal	1,000,000 EUR	998	434	49.90%	
LBC Tanquipor - Movimentação e Armazenagem de Líquidos, S.A.	Barreiro-Portugal	1,350,000 EUR	3,201	264	28.89%	
Portábil - Bases de Dados para a Portabilidade em Telecomunicações, S.A.	Lisbon - Portugal	1,125,000 EUR	1,424	104	20.94%	
PORTGÁS - Soc. de Produção e Distribuição de Gás, S.A.	Oporto - Portugal	7,909,150 EUR	25,933	8	59.55%	46.63%
Portsines - Terminal Multipurpose de Sines, S.A.	Sines - Portugal	10,000,000 EUR	18,638	1,057	39.60%	
REN - Rede Eléctrica Nacional, S.A.	Lisbon - Portugal	534,000,000 EUR	862,328	69,299	30.00%	30.00%
SETGAS - Sociedade de Produção e Distribuição de Gás, S.A.	Charneca da Caparica - Portugal	9,000,000 EUR	16,363	3,210	10.11%	
SOURCE-TECH, Lda.	Macao	100,000 MOP	28	21	20.94%	
Turbogás - Produtos Energéticos, S.A.	Oporto - Portugal	13,308,000 EUR	30,128	24,514	20.00%	

The companies excluded from the consolidation though accounted under the equity method, as at December 31, 2004, are as follows:

Other companies excluded	Registered office	% Group	% Company
Iberenergia, S.A.	Portugal	100.00%	100.00%
Shipec-South China Inter.P.Eng.	China	24.00%	24.00%
Comunedisa	Spain	50.00%	

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Other companies in which there are holdings equal to or greater than 10% as at December 31, 2004, are as follows:

<u>Other companies</u>	<u>Registered office</u>	<u>% Group</u>	<u>% Company</u>
Valorsul, S.A.	Lisbon - Portugal	11.00%	
Tejo Energia, S.A.	Abrantes - Portugal	10.00%	
Galp Energia S.G.P.S., S.A.	Lisbon - Portugal	14.27%	
EDA, S.A.	Azores - Portugal	10.00%	

### 10. Tangible fixed assets

This balance is analyzed as follows:

	<u>Group</u>	
	<u>2004</u>	<u>2003</u>
	<u>Euro 000</u>	<u>Euro 000</u>
<b>Cost:</b>		
Fixed assets under the Decree Law 344-B/82 regime	240,607	240,607
Land and natural resources	121,013	128,169
Buildings and other constructions	418,028	410,982
Plant and machinery:		
Hydroelectric generation	7,428,417	6,952,258
Thermoelectric generation	5,744,530	3,405,254
Renewables generation	455,538	42,795
Electricity distribution	12,407,568	12,675,981
Other plant and machinery	1,298,723	714,415
Transport equipment	80,190	75,761
Office equipment and utensils	395,066	344,250
Other tangible fixed assets	39,924	22,393
Fixed assets in progress	1,199,685	1,187,302
	<u>29,829,289</u>	<u>26,200,167</u>
<b>Accumulated depreciation:</b>		
Depreciation charges for the year	-830,385	-803,091
Other accumulated depreciation	-15,439,579	-13,745,477
	<u>-16,269,964</u>	<u>-14,548,568</u>
	<u>13,559,325</u>	<u>11,651,599</u>



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

As referred in the accounting policy 2 e), tangible fixed assets held under the Decree-Law 344-B/82 regime are those assets allocated to low-tension distribution transferred from the local authorities under the concession regime. These assets, though operated by the Group, continue to be property of the municipalities and are analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Fixed assets held under the DL 344-B/82 regime	240,607	240,607
Accumulated depreciation	-234,133	-231,528
<b>Net amount</b>	<b>6,474</b>	<b>9,079</b>

Part of these assets may be transferred to EDP Group by settlement and by offsetting accounts in respect of outstanding debts of the respective municipalities.

The **Tangible fixed assets** movements during the year of 2004 are analyzed as follows:

	Balance January 1st	Acquisitions / Charge for the year	Disposals	Transfers	Perimeter Variations / Regularizations	Balance December 31st
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Cost :</b>						
Fixed assets held under the DL 344-B/82 regime	240,607					240,607
Land and natural resources	128,169	699	-901	989	-7,943	121,013
Buildings and other constructions	410,982	2,062	-19,442	6,370	18,056	418,028
Plant and machinery	23,790,703	99,809	-300,517	1,002,189	2,742,592	27,334,776
Transport equipment	75,761	9,301	-8,496	2,760	864	80,190
Office equipment and utensils	344,250	8,502	-6,116	21,649	26,781	395,066
Other tangible fixed assets	22,393	1,251	-16	1,448	14,848	39,924
Fixed assets in progress	1,187,302	1,053,380	-528	-1,035,405	-5,064	1,199,685
	<b>26,200,167</b>	<b>1,175,004</b>	<b>-336,016</b>		<b>2,790,134</b>	<b>29,829,289</b>
<b>Accumulated depreciation :</b>						

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Fixed assets held under the DL 344-B/82 regime	231,528	2,604		1	234,133
Buildings and other constructions	166,403	9,682	-8,061	10,953	178,977
Plant and machinery	13,911,573	770,359	-261,860	1,136,823	15,556,895
Transport equipment	54,532	9,570	-6,612	223	57,713
Office equipment and utensils	180,109	33,206	-2,484	19,597	230,428
Other tangible fixed assets	4,423	4,964		2,431	11,818
	<u>14,548,568</u>	<u>830,385</u>	<u>-279,017</u>	<u>1,170,028</u>	<u>16,269,964</u>

As at December 31, 2004, for the **Group**, the cost of **Tangible fixed assets** financed by leasing amount to Eur 15,775 thousand (accumulated depreciation of Eur 4,173 thousand) and the respective lease instalments payable are in the amount of Eur 10,236 thousand.

The Perimeter Variations / Regularizations column includes the consolidation of Hidrocantábrico Group under the full consolidation method at December 31, 2004 and exchange-rate variations during the year.

In accordance with the accounting policy referred in Note 2 e), the following amounts of financing interest were capitalized during the year under Fixed assets in progress:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Electricity generation	14,167	6,166
Electricity distribution	9,533	7,701
Studies and projects	386	10,101
	<u>24,086</u>	<u>23,968</u>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**11. Intangible fixed assets**The balance **Intangible fixed assets** is analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
<b>Cost:</b>		
Set-up costs	86,913	85,157
Research and development costs	69,095	103,302
Industrial property and other rights	264,991	158,057
Intangible assets in progress and other intangible assets	17,496	21,944
Key money on telecommunications business	73,169	40,209
Concession rights in Brazil	846,633	835,366
	<u>1,358,297</u>	<u>1,244,035</u>
<b>Accumulated amortization:</b>		
Amortization of concession rights and key money during the year	-39,306	-30,439
Amortization of intangible fixed assets during the year	-44,753	-42,501
Other accumulated amortization	-305,574	-220,913
	<u>-389,633</u>	<u>-293,853</u>
	<u>968,664</u>	<u>950,182</u>

The **Intangible fixed assets** movements during the year of 2004 are analyzed as follows:

	Balance January 1st	Acquisitions / Charge for the year	Disposals	Transfers	Perimeter Variations / Regularizations	Balance December 31st
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Cost:</b>						
Set-up costs	85,157	366	-6,956	906	7,440	86,913
Research and development costs	103,302	2,814	-7,270	4,744	-34,495	69,095

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Industrial property and other rights	158,057	25,873	-16,903	16,745	81,219	264,991
Intangible assets in progress and other intangible assets	21,944	17,897	-103	-22,395	153	17,496
Key money on telecommunications business	40,209				32,960	73,169
Concession rights in Brazil	835,366	10,571			696	846,633
	<u>1,244,035</u>	<u>57,521</u>	<u>-31,232</u>	<u></u>	<u>87,973</u>	<u>1,358,297</u>
<b>Accumulated amortization:</b>						
Set-up costs	64,855	17,964	-6,495		-4,789	71,535
Research and development costs	44,606	10,437	-5,253		-9,640	40,150
Industrial property and other rights	32,376	16,352	-4,880		32,436	76,284
	<u>141,837</u>	<u>44,753</u>	<u>-16,628</u>	<u></u>	<u>18,007</u>	<u>187,969</u>
Key money on telecommunications business	14,571	8,817			10,332	33,720
Concession rights in Brazil	137,445	30,489			10	167,944
	<u>152,016</u>	<u>39,306</u>	<u></u>	<u></u>	<u>10,342</u>	<u>201,664</u>
	<u>293,853</u>	<u>84,059</u>	<u>-16,628</u>	<u></u>	<u>28,349</u>	<u>389,633</u>

The Perimeter Variations / Regularizations column includes the consolidation of Hidrocantábrico Group under the full consolidation method at December 31, 2004, and exchange-rate variations during the year.

The balance **Concession rights in Brazil**, resulting from the difference between cost and the fair value of the company's assets attributable to the Group on the acquisition date, is analyzed as follows:

	2004			2003		
	Net Amount Euro 000	Accumulated amortization Euro 000	Concession Rights Euro 000	Net Amount Euro 000	Accumulated amortization Euro 000	Concession Rights Euro 000
<b>Electricity Business - Brazil</b>						
<b>Consolidated - Group</b>						
EDP Brazil - Energy Distribution	678,689	-167,944	846,633	697,921	-137,445	835,366
Amortization charge for the year		-30,489			-30,439	

The concession rights over the electric distribution network, namely from S. Paulo State, Espirito Santo State and Mato Grosso do Sul State, are amortized using the straight-line method over the total period of concession, until 2025, 2030 and 2035, respectively.



Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	Amount	amortization	Euro 000	Amount	amortization	Euro 000
	Euro 000	Euro 000		Euro 000	Euro 000	
<b>Electricity Business</b>						
Hidrocantábrico Group	1,162,753	-169,065	1,331,818	461,810	-38,709	500,519
EDP Brazil - Energy generation	3,047	-180	3,227	3,675	-131	3,806
	<u>1,165,800</u>	<u>-169,245</u>	<u>1,335,045</u>	<u>465,485</u>	<u>-38,840</u>	<u>504,325</u>
<b>Gas Distribution Business</b>						
Naturcorp (Hidrocantábrico Group)	591,993	-51,662	643,655	244,547	-7,610	252,157
Portgás/Setgás	107,080		107,080			
	<u>699,073</u>	<u>-51,662</u>	<u>750,735</u>	<u>244,547</u>	<u>-7,610</u>	<u>252,157</u>
<b>Telecommunications Business</b>						
Oni Solutions, S.A.				12,704	-8,399	21,103
Comunitel Global, S.A.	63,235	-32,199	95,434	63,268	-22,889	86,157
Other	5,652	-1,360	7,012	11,394	-1,385	12,779
	<u>68,887</u>	<u>-33,559</u>	<u>102,446</u>	<u>87,366</u>	<u>-32,673</u>	<u>120,039</u>
<b>Information Technology Business</b>						
ACE, SGPS, S.A.	18,982	-11,591	30,573	50,017	-8,827	58,844
Case, S.A.		-1,445	1,445	2,528	-1,084	3,612
Copidata, S.A.				203	-3,861	4,064
S-Tecno, S.A.	2,356	-1,570	3,926	2,748	-1,178	3,926
Other	1,789	-3,366	5,155	6,399	-2,428	8,827
	<u>23,127</u>	<u>-17,972</u>	<u>41,099</u>	<u>61,895</u>	<u>-17,378</u>	<u>79,273</u>
<b>Other Businesses</b>						
Affinis, S.A.	5,129	-1,296	6,425	12,036	-689	12,725
Turbogás, S.A.	16,357	-1,817	18,174	17,266	-908	18,174
Companhia Electricidade Macau	7,660	-7,660	15,320	9,650	-6,893	16,543
Dómus, Lda.	2,728		2,728			
Other	1,062	-1,065	2,127	1,269	-858	2,127
	<u>32,936</u>	<u>-11,838</u>	<u>44,774</u>	<u>40,221</u>	<u>-9,348</u>	<u>49,569</u>
	<u>1,989,823</u>	<u>-284,276</u>	<u>2,274,099</u>	<u>899,514</u>	<u>-105,849</u>	<u>1,005,363</u>
Amortization charges for the year		<u>-56,219</u>			<u>-54,439</u>	

**Goodwill** arising from the acquisition of shareholdings in subsidiaries and associates is amortized by the straight line method over the estimated useful life (10 years in general and 20 years for ACE, Affinis, Turbogás and Hidrocantábrico).

In December 2004, EDP increased its financial position in Hidroeléctrica del Cantábrico, from 39.5% to 95.7% of total shares, achieving the exclusively control of the company. The additional investment of 56.2%, through the acquisition of additional 23.915.637 shares, amounts to Eur 1,200.8 million. After this transaction the goodwill of Hidrocantábrico Group increase in the amount of Eur 1,222.8 million from which Eur 242.1 million results from the above mentioned acquisition and Eur 980.7 million resulting from the goodwill related to Hidrocantábrico Group subsidiaries arising from the full consolidation method applied to this investment as at December 31, 2004. Until June 30, 2004 the Hidrocantábrico Group was consolidated by the proportional method.



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

For the purpose of Hidrocontábrico Group goodwill calculation, regarding the additional investment of 56.2% in December 31, 2004 were considered the shareholders equity at the acquisition date, including the pre-acquisition net income.

During 2004, **Goodwill** decreased in the amount of Eur 35,024 thousand in the Information Technology Business due to the existence of impairment losses on the investments, and Eur 21,103 thousand in the Telecommunication Business due to the sale of Oni Solutions, S.A.

The Hidrocontábrico Group summarized financial information as at December 31, 2004 and 2003 is as follows:

	2004	2003
	Euro 000	Euro 000
Fixed assets	4,412,673	4,385,891
Current assets	487,896	376,429
Non current assets		53,749
<b>Total Assets</b>	<b>4,900,569</b>	<b>4,816,069</b>
Loans	1,621,083	1,969,187
Current liabilities	693,910	472,238
Non current liabilities	398,318	247,977
<b>Total Liabilities</b>	<b>2,713,311</b>	<b>2,689,402</b>
Minority interest	465,389	437,817
Equity	1,721,869	1,688,850
<b>Total Equity</b>	<b>2,187,258</b>	<b>2,126,667</b>
Net Revenue	1,783,588	1,660,055
Operating Costs	-1,429,926	-1,528,064
Other operating income	25,781	25,210
Non operating costs, net	-325,675	-103,847
Minority interest	-17,921	-13,038
<b>Net income</b>	<b>35,847</b>	<b>40,316</b>



**13. Deferred taxes**

EDP Group records in its accounts the tax effect arising from temporary differences between the assets and liabilities determined on an accounting basis point and on a tax basis, and this is broken down by company as follows:

	Deferred tax assets		Deferred tax liabilities	
	Group		Group	
	2004	2003	2004	2003
	Euro 000	Euro 000	Euro 000	Euro 000
EDP S.A. and RETGS (*) companies	225,338	337,961	292,719	474,839
ONI Group	103,298	107,831	629	719
EDP Brazil Group	181,884	131,707	135,880	103,066
Hidrocantábrico Group	57,845	12,814	115,919	37,432
EDP Finance BV	19,808	18,510	754	
Other	921	515		
<b>Total EDP Group</b>	<b>589,094</b>	<b>609,338</b>	<b>545,901</b>	<b>616,056</b>

(\*) - Special Regime of Group's Tax Charge

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The movements in the balance of **Deferred tax assets** and **Deferred tax liabilities** are as follows:

	Deferred tax assets		Deferred tax liabilities	
	Group		Group	
	2004	2003	2004	2003
	Euro 000	Euro 000	Euro 000	Euro 000
Balance as at January 1, 2004	609,338	545,979	616,056	344,122
Charges through the profit and loss account:				
Tax losses	14,315	14,023	331	
Tax benefits				
Provisions	-37,744	970	-123	920
Amortization		3,917	-62,766	-24,036
Accounting revaluations	16,461	12,692	-15,413	-3,014
Tariffs deviation	42,544	1,181	-1,875	23,579
Other	-30,423	9,317	-12,193	930
Income charge	5,153	42,100	-92,039	-1,621
Charges against reserves:				
Revaluation of tangible fixed assets				220,050
Accounting revaluation		24,703		34,637
Other		-3,444		18,868
Reserves charge		21,259		273,555
Transfers / Utilizations	-25,397		21,884	
Balance as at December 31, 2004	589,094	609,338	545,901	616,056

The reconciliation between income taxes and current taxes is analyzed as follows:

Group

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	2004	2003
	Euro 000	Euro 000
Income taxes (effective)	-159,617	-195,534
Costs/(profits) recorded in the year and recognized as deferred taxes in previous years, resulting from:		
- Tax losses	-13,984	-14,023
- Provisions	48,939	-50
- Amortizations	-62,766	-27,953
- Accounting revaluations	-31,911	-15,706
- Tariffs deviation	-44,419	22,398
- Other	18,230	-8,387
	<u>-85,911</u>	<u>-43,721</u>
Costs/(profits) resulting from taxes not previously recorded as deferred taxes:		
- Provisions	-11,318	
- Other	37	
	<u>-11,281</u>	
Deferred taxes	<u>-97,192</u>	<u>-43,721</u>
Current taxes	<u>-256,809</u>	<u>-239,255</u>

**14. Deferred costs**

The balance **Deferred costs** is analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Deferred costs:		
- Rents	13,263	1,771
- Expenditure on concessions	10,653	11,499
- Accrued maintenance	3,513	18,172
- Compensation of fuel costs	3,123	159,716
- Deferred retirement benefit obligation	45,711	50,993
- Advertising and publicity costs		346
- Unamortized debt expenses	20,096	24,537
- Maintenance contracts (thermoelectric production)	11,161	
- Discounts on bond issues	5,435	6,434
- Charges regarding the construction of electricity lines	8,816	
- Other deferred costs	18,295	1,636
	<u>140,066</u>	<u>275,104</u>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**15. Debt - Short and Medium/long term**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Short term loans - Current</b>		
Overdrafts :		
- ONI Group	533,720	592,298
- Other	7,878	3,614
	<u>541,598</u>	<u>595,912</u>
<b>Bank loans:</b>		
- EDP, S.A.	336,628	315,711
- ONI Group	88,818	51,395
- Brazil Group	211,624	225,530
- Hidrocantábrico Group	54,623	24,360
- EDP Finance B.V.		93,524
- Other	35,450	46,977
	<u>727,143</u>	<u>757,497</u>
<b>Bonds loans issued - Non convertible:</b>		
- EDP, S.A.	9,951	10,221
- EDP Finance B.V.		45,500
- Investco	2,738	
	<u>12,689</u>	<u>55,721</u>
<b>Commercial paper:</b>		
- EDP, S.A.	470,000	170,000
- Hidrocantábrico Group	106,400	
	<u>576,400</u>	<u>170,000</u>
	<u>1,857,830</u>	<u>1,579,130</u>

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Medium/long term loans - Non Current</b>		
Bank loans:		
- EDP, S.A.	571,436	631,021
- ONI Group		41,732
- Brazil Group	419,195	237,662
- Hidrocantábrico Group	1,460,060	761,800
- EDP Finance B.V.	635,000	550,000
- Other	49,895	67,032
	<u>3,135,586</u>	<u>2,289,247</u>
Bonds loans issued - Non convertible:		
- EDP, S.A.	2,466,299	2,476,551
- EDP Finance B.V.	963,694	963,694
- Brazil Group	75,435	84,087
	<u>3,505,428</u>	<u>3,524,332</u>
Commercial paper:		
- EDP, S.A.	100,000	100,000
	<u>6,741,014</u>	<u>5,913,579</u>

As of December 31, 2004, the scheduled repayments of the long-term portion of the Group's debt is as follows:

	<b>Euro 000</b>
2006	1,487,033
2007	1,269,433
2008	791,981
2009	1,152,025
2010 and following years	2,040,542
	<u>6,741,014</u>

At the EDP, S.A. level, the Group has short-term credit facilities in the amount of Eur 197 million, indexed to the Euribor rate for the agreed period of use, with margin conditions agreed in advance, of which Eur 177 million have a firm underwriting commitment. There is also a Eur 350 million commercial paper programme with guaranteed placement. As far as medium-term credit facilities are concerned, Eur 1,300 million is available to EDP, S.A. with a firm underwriting commitment, also indexed to Euribor under previously agreed conditions. As at December 31, 2004, these credit facilities have not been used.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Bank loans in euros are associated with floating-rate interest indexed to the three or six month Euribor rates. The bank loans in Brazil involve floating-rate interest on the BRL, mostly indexed to the CDI rate.

The breakdown of **Bonds loans issued** as at December 31, 2004 and 2003 is analyzed as follows:

Issuer	Issue date	Interest rate	Repayment conditions	Group		
				2004 Euro 000	2003 Euro 000	
<b>Issued by EDP, S.A.</b>						
EDP, SA	22nd Issue	May 13, 1996	Euribor 6 months - 0.10%	(i)	13,377	20,636
EDP, SA	23rd Issue	Dec 20, 1996	Euribor 6 months - 0.125%	(ii)	10,332	10,332
EDP, SA	24th Issue	Dec 22, 1997	Euribor 6 months + 0.10%	(iii)	3,262	6,525
EDP, SA	25th Issue	Nov 23, 1998	Euribor 6 months + 0.225%	(iv)	299,279	299,279
EDP, SA	26th Issue	Mar 26, 2003	Euribor 6 months + 0.5%	Mar 26, 2013	150,000	150,000
					<u>476,250</u>	<u>486,772</u>
<b>Issued by EDP, S.A. within the Euro Medium Term Notes Programme</b>						
EDP, SA	1st Issue	Oct 29, 1999	Fixed rate EUR 6.40%	Oct 29, 2009	1,000,000	1,000,000
EDP, SA	2nd Issue	Mar 27, 2001	Fixed rate EUR 5.875%	Mar 28, 2011	1,000,000	1,000,000
EDP Finance BV	3rd Issue	Oct 29, 2001	JYP Libor 3 months +0.20%	Oct 29, 2004		45,500
EDP Finance BV	4th Issue	Nov 26, 2001	Coupon Zero	Nov 27, 2009	22,455	22,455
EDP Finance BV	5th Issue <sup>(*)</sup>	Nov 28, 2001	Fixed rate JPY 0.70%	Nov 28, 2006	27,882	27,882
EDP Finance BV	6th Issue <sup>(*)</sup>	Aug 9, 2002	Fixed rate GBP 6.625%	Aug 9, 2017	320,000	320,000
EDP Finance BV	7th Issue	Dec 16, 2002	Fixed rate EUR 5.00%	Mar 20, 2008	500,000	500,000
EDP Finance BV	8th Issue	Dec 23, 2002	Fixed rate EUR 2.661%	Dec 23, 2022	93,357	93,357
					<u>2,963,694</u>	<u>3,009,194</u>
<b>Issued by Escelsa (Brazil) (International Bond)</b>						
Escelsa	USD 430 Million <sup>(**)</sup>	Jul 28, 1997	Fixed rate USD 10.0%	Jul 15, 2007	54,037	58,041
<b>Issued by Investco (Brazil) (Domestic bond)</b>						
Investco 1st Issue		Nov 1, 2001	IGPM + 12.80%	Nov 1, 2011	17,571	19,721
Investco (FINAM)		Nov 14, 2003	TJLP + 4%	Nov 14, 2011	6,565	6,325
					<u>24,136</u>	<u>26,046</u>
					<u>3,518,117</u>	<u>3,580,053</u>

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

- (i) 4 annual payments beginning in June 2, 2003. It may be repaid early at the request of bondholders.
- (ii) 4 annual payments beginning in December 20, 2008. As from December 20, 2006 it may be repaid in part or in full at the request of EDP to all the bondholders.
- (iii) 4 annual payments beginning in January 5, 2002.
- (iv) 6 semi-annual payments beginning in May 23, 2006.
- (\*) These issues by EDP Finance BV have associated floating-interest-rate euro currency swaps.
- (\*\*) The EDP Group holds 83% of the value of this issue in an intra-group portfolio, as a result of the international takeover bid launched in 2002.

The breakdown of **Loans**, by maturity, is as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Bank loans and overdrafts:</b>		
Up to 1 year	1,845,141	1,523,409
1 to 5 years	2,789,623	2,312,265
Over 5 years	445,963	76,982
	5,080,727	3,912,656
<b>Bond loans:</b>		
Up to 1 year	12,689	55,721
1 to 5 years	1,916,851	877,830
Over 5 years	1,588,577	2,646,502
	3,518,117	3,580,053
	8,598,844	7,492,709

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The analysis of total debt, by interest, is as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Bonds and bank loans</b>		
Below 5%	6,671,463	5,491,216
7.5% and above	709,383	547,279
Variable rates (weighted average rate: 2.845% at 12/31/03)		588,302
<b>Other debt</b>		
Commercial paper (weighted average rate: 2.1629 % at 12/31/03; 2.2% at 12/31/04)	676,400	270,000
Bank overdrafts (weighted average rate: 3.38% at 12/31/03; 3.61% at 12/31/04)	541,598	595,912
	<b>8,598,844</b>	<b>7,492,709</b>

The fair value of the EDP Group's debt, amounting to the market value of the debt, is analyzed as follows:

	<b>2004</b>		<b>2003</b>	
	<b>Carrying Value</b>	<b>Market Value</b>	<b>Carrying Value</b>	<b>Market Value</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Short term loans - Current	1,857,830	1,857,830	1,579,130	1,579,130
Medium/long term loans - Non current	6,741,014	7,160,036	5,913,579	6,251,355
	<b>8,598,844</b>	<b>9,017,866</b>	<b>7,492,709</b>	<b>7,830,485</b>

The market value of the **Medium/long-term loans** is calculated on the basis of the cash flows discounted at the rates ruling on December 31, 2004. In current short-term debt, the book value is considered to be the market value.

**16. Accounts payable - Trade**



This balance is analyzed as follows:

	Group	
	2004 Euro 000	2003 Euro 000
<b>Short term creditors - Current:</b>		
Suppliers	849,513	678,741
Suppliers of fixed assets	223,952	103,885
	1,073,465	782,626

#### 17. Accounts payable - Other

This balance is analyzed as follows:

	Group	
	2004 Euro 000	2003 Euro 000
Other shareholders	31,536	10,541
Advances to customers	5,908	1,204
Other creditors:		
- Employees	12,814	20,625
- Supply of other goods and services	1,620	12,946
- Concession rents	2,200	6,690
- Creditors for collections	16,534	20,115
- For interest and financial credits	12,409	13,960
- INAG/EDP Protocol - Alqueva		35,893
- Taxes referring to regulatory liabilities (Bandeirante)	5,915	
- Furnas advance regarding the increase in Enerpeixe share capital	8,299	
- Amount owed regarding Portgás acquisition (see Note 9)	84,997	
- Regulatory liabilities-Brazil	35,013	6
- Corporate income tax (IRC) - payments on account of the holding company		123
- Other creditors and sundry operations	88,338	65,159
	305,583	187,262

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**18. Accrued cost**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Accrued costs:</b>		
- Holiday pay, bonus and other charges	64,313	68,393
- Interest payable	290,156	67,431
- Revaluation of financial instruments		
- Trading	45,890	54,443
- Hedging	44,450	
- Other accrued costs	85,430	46,267
	<b>530,239</b>	<b>236,534</b>

Until January 1, 2004 all the derivatives were classified as trading and the changes in the fair value until that date were recorded against the profit and loss account. The fair value of **Financial Instruments - Derivatives** is analyzed in note 39.

**19. Taxes payables**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>State and other public entities:</b>		
- Income tax	90,175	173,924
- Withholding tax	8,870	11,686
- Social security contributions	12,588	11,359
- Value added tax	16,054	12,197

- Other taxes	92,719	59,937
	<u>220,406</u>	<u>269,103</u>

## 20. Deferred revenue

This balance is analyzed as follows:

	<u>Group</u>	
	2004	2003
	Euro 000	Euro 000
<b>Deferred revenue:</b>		
- Deferred revenue - EDP Distribuição ( Conta certa )	149,681	101,096
- Other deferred revenue	112,460	134,668
	<u>262,141</u>	<u>235,764</u>

As described in the accounting policy 2 h), the balance **Deferred revenue - EDP Distribuição ( Conta certa )** corresponds to the revenues regarding the energy to be invoiced based on actual consumption not yet metered at the balance sheet date. This revenues are accrued on the same basis of the recent average consumptions.

## 21. Accrued pension and post retirement liabilities

This balance is analyzed as follows:

	<u>Group</u>	
	2004	2003
	Euro 000	Euro 000
Provision for defined benefit pension plan	327,575	149,635
Provision for post retirement medical benefits	468,868	412,627
	<u>796,443</u>	<u>562,262</u>

As at December 31, 2004, the balance **Provison for defined benefit pension plan** includes the amount of Eur 50.8 million resulting from pension benefits of Hidrocantábrico Group employees reflecting the increase in their salaries.

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The movement in **Provisions for defined benefit pension plan** is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
	<u>          </u>	<u>          </u>
Balance as at January 1	149,636	211,543
Changes in the consolidation perimeter	31,681	
Charge for the year	1,977	17,008
Write back of provisions	-156	-35
Provisions charged-off	-1,960	
Transfers and reclassifications	146,398	-78,880
	<u>          </u>	<u>          </u>
Balance as at December 31	<u>327,576</u>	<u>149,636</u>

F-33

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The movement in **Provisions for past retirement medical benefits** is analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Balance as at January 1	412,627	396,713
Charge for the year	54,613	40,014
Write back of provisions		-9,226
Transfers and reclassifications	1,628	-14,874
Balance as at December 31	468,868	412,627

These benefits include pension plans that pay complementary old-age, disability and surviving-relative pension complements, and also early retirement pensions. In some cases medical care is provided during the period of retirement and of early retirement, through mechanisms complementary to those provided by the National Health Service.

The existing plans are presented hereunder, with a brief description of each and of the companies covered by them, as well as of the economic and financial data:

**I. Pension Plans - Defined-Benefit Type**

In Portugal, the companies of the EDP Group resulting from the split of EDP in 1994 have a social benefits plan financed through a restricted Pension Fund, complemented by a specific provision.

This Pension Fund covers liabilities for retirement pension complements (old-age, disability and surviving pension) as well as liabilities for early retirement.

In Brazil, Bandeirante has two defined-benefit plans managed by the CESP Foundation, a restricted complementary welfare entity with its own assets, segregated from those of the Sponsors (Bandeirante and other Brazilian electricity companies) with no common contributions or funding between these funds:

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

- BD Plan in force up to March 31, 1998, a Balance Benefit Plan that grants Balanced Proportional Supplementary Benefit (BSPS) in the form of an annuity payable to participants enrolled until March 31, 1998, of an amount defined in proportion to past services accumulated by the reference date, based on compliance with regulatory granting requirements. The company is totally liable to cover any actuarial insufficiencies of this plan.

- BD plan in force after March 31, 1998, which grants an annuity in proportion to the accumulated past services after March 31, 1998, on the basis of 70% of the average actual monthly wage for the last 36 months in service. In the event of death or disability caused by labour accident, the benefits incorporate the whole of the past service (including that accumulated up to March 31, 1998), and not only the past service accumulated after March 31, 1998. The Company and the participants equally share liability for the coverage of the actuarial insufficiencies of this Plan.

Escelsa and Enersul have a Defined-Benefit Plan that grants a complementary benefit for retirement, disability, and surviving pension. Escelsa also has a special complementary benefit plan for retirement of former combatants.

As at December 31, 2004 and 2003, the Group liabilities for past services associated to these pension plans, are as follows:

	2004			2003		
	Portugal Euro 000	Brazil Euro 000	Group Euro 000	Portugal Euro 000	Brazil Euro 000	Group Euro 000
<b>Evolution of Liabilities</b>						
Liabilities at the beginning of period	1,412,541	64,749	1,477,290	1,394,075	54,658	1,448,733
Current services cost	8,869	899	9,768	11,193	1,047	12,240
Interest Cost	69,553	9,789	79,342	78,843	6,006	84,849
Benefits paid	-142,207	-4,914	-147,121	-139,459	-1,516	-140,975
Curtailements/Settlements	271,908		271,908	847		847
Actuarial losses	395,266	5,773	401,039	67,042	4,147	71,189
Currency fluctuation		907	907		407	407
Plan assets of Brazilian subsidiaries		30,200	30,200			
<b>Liabilities at the end of the period</b>	<b>2,015,930</b>	<b>107,403</b>	<b>2,123,333</b>	<b>1,412,541</b>	<b>64,749</b>	<b>1,477,290</b>

As at December 31, 2004, the balance Plan assets of Brazilian subsidiaries includes the 2004 initial balance of the actuarial liabilities recognized in 2004 on the Defined-Benefit Plan of Escelsa and Enersul, in the amount of Eur 16.8 and 13.4 million, respectively.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

In calculating the liabilities inherent in these pension plans within the EDP Group the following financial and actuarial assumptions were used:

	2004					
	Brazil				2003	
	Portugal	Bandeirante	Escelsa	Enersul	Portugal	Brazil
<b>Assumptions</b>						
Rate of return of the Funds	6.40%	10.76% aa	12.98% aa	12.81% aa	5.70%	10.24%
Discount rate	5.00%	10.76% aa	10.76% aa	10.76% aa	5.20%	10.24%
Wage growth rate	3.50%	7.12% aa	6.08% aa	6.08% aa	3.30%	7.12%
Pension growth rate	3.00%	4% aa	4% aa	4% aa	2.25%	7.12%
Social Security wage appreciation rate	2.20%	4% aa	4% aa	4% aa	2.00%	4.00%
Inflation rate	2.40%	4% aa	4% aa	4% aa	2.00%	4.00%
Mortality table	TV 88/90	GAM-83	GAM-83	AT-2000	TV 88/90	AT-49(qx)
Disability table	50% EKV80	Light-Average	Light-Average	Light-Average	50% EKV 80	Light-Average (ix)
Expected % of subscription by employees eligible for early retirement	(a)	not applicable	not applicable	not applicable	(a)	not applicable

(a) 40% of the eligible population (employees entitled to early retirement in accordance with the Collective Bargaining Agreement: 36 years of service with at least 60 years of age, or 40 years of service and any age).

As mentioned above, only part of the liabilities for the Pension Plan is financed through the Pension Funds, the remainder being recognized in accordance with IAS 19, by means of a provision detailed hereunder:

	2004			2003		
	Portugal	Brazil	Group	Portugal	Brazil	Group
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Provision for Pension Plans</b>						
Liabilities at the end of the period	2,015,930	107,403	2,123,333	1,412,541	64,749	1,477,290
Fund assets at the end of the period	839,669	89,340	929,009	785,147	31,355	816,502
Unfunded liabilities	1,176,261	18,063	1,194,324	627,394	33,394	660,788

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Deferred actuarial losses (i)	872,595	5,846	866,749	506,600	4,553	511,153
Value of the provision at the end of the period	303,666	23,909	327,575	120,794	28,841	149,635

(i) The international accounting standards adopted by EDP allowed deferred actuarial gains/losses to be recognized systematically in the statement of income for the year by amortizing the amount that exceeded, in the previous year, 10% of the value of the greater of the liabilities or assets of the Fund. Such amortizations are calculated for the period corresponding to the average remaining length of service of the active population.

The components of consolidated net cost recognized during the period with these plans are as follows:

	2004			2003		
	Portugal	Brazil	Group	Portugal	Brazil	Group
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Cost for the period</b>						
Service cost	8,869	899	9,768	11,193	1,047	12,240
Interest cost	69,553	9,789	79,342	78,843	6,006	84,849
Return on the Funds assets	-42,877	-8,171	-51,048	-44,286	-5,800	-50,086
Contributions by employees		-473	-473		-552	-552
Amortization of deferred actuarial losses	24,336	-68	24,268	25,718		25,718
<b>Net cost for the period</b>	<b>59,881</b>	<b>1,976</b>	<b>61,857</b>	<b>71,468</b>	<b>701</b>	<b>72,169</b>

The evolution of the consolidated assets of the Pension Funds was as follows:

	2004			2003		
	Portugal	Brazil	Group	Portugal	Brazil	Group
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Pension Funds</b>						
Value of the assets at the beginning of the period	785,147	31,355	816,502	727,258	22,687	749,945
Group contributions	57,930	4,082	62,012	54,340	3,947	58,287
Employees contributions		462	462		552	552
Pensions paid during the period	-51,230	-4,914	-56,144	-50,340	-1,516	-51,856
Return of the Funds	47,822	16,735	64,557	53,889	5,800	59,689
Actuarial losses and gains		10,924	10,924		-413	-413
Currency fluctuation		496	496		298	298
Plan assets of Brazilian subsidiaries		30,200	30,200			
<b>Value of the assets at the end of the period</b>	<b>839,669</b>	<b>89,340</b>	<b>929,009</b>	<b>785,147</b>	<b>31,355</b>	<b>816,502</b>



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

As at December 31, 2004 the balance Plan assets of Brazilian subsidiaries, includes the 2004 initial balance of the actuarial liabilities recognized in 2004 in the Defined-Benefit Plan of Escelsa and Enersul, in the amount of Eur 16.8 million and Eur 13.4 million, respectively.

The assets of the Pension Fund in Portugal are managed by three independent pension fund management companies of recognized merit. As at December 31, 2004 the composition and returns of the fund portfolio are as follows:

	<u>Cash%</u>	<u>Bonds%</u>	<u>Shares%</u>	<u>Real Estate%</u>	<u>Total %</u>
Asset allocation by nature	4.50%	46.50%	25.50%	23.50%	100.00%

**II. Pension Plans - Defined Contribution Type**

Hidrocarbónico in Spain and Bandeirante, Escelsa and Enersul in Brazil, have social benefits plans of defined contribution that complement those granted by the Social Welfare Systems to the companies' employees, under which they pay a contribution to these plans each year, calculated in accordance with the rules established in each case.

**III. Liability for Medical Care Plans - Defined Benefit Type**

In Portugal, Group companies resulting from the split of EDP in 1994 have a Medical Care Plan of the defined-benefit type, supported through a provision that covers the whole of these liabilities.

In Brazil, Escelsa also has a Medical Care Plan for retired employees, supported through a provision that covers the whole of these liabilities.

The evolution of consolidated liabilities for past services inherent in the EDP Group medical care plan has been as follows:

	<u>2004</u>		<u>2003</u>	
	Portugal	Brazil	Group	Group
	Euro 000	Euro 000	Euro 000	Euro 000

<b>Evolution of Liabilities</b>				
Liabilities at the beginning of the period	660,255		660,255	496,201
Current service cost	7,904	140	8,044	5,942
Interest cost	33,646	1,300	34,946	29,049
Benefits paid	-23,397	-724	-24,121	-24,099
Curtailments / Settlements	15,793		15,793	
Actuarial losses and accruals	27,564	1,392	28,956	153,162
Currency fluctuation		3	3	
Other		12,500	12,500	
<b>Liabilities at the end of the period</b>	<b>721,765</b>	<b>14,611</b>	<b>736,376</b>	<b>660,255</b>

As at December 31, 2004, in Brazil, the balance Other includes the 2004 initial balance of the actuarial liabilities recognized in 2004 in the Defined-Benefit Plan of Escelsa in the amount of Eur 12.5 million.

The following financial and actuarial assumptions were used in calculating the liabilities associated with this medical care plan:

	2004		2003
	Portugal	Brazil	Group
<b>Assumptions</b>			
Discount rate	5.00%	10.76% aa	5.20%
Annual growth rate of medical services costs	4.5% (a)	8.16% aa	4.5% (a)
Mortality table	TV 88/90	GAM-83	TV 88/90
Disability table	50% EKV 80	Light-Average	50% EKV 80
Expected % of subscription by employees eligible for early retirement	(b)	Not applicable	(b)

(a) 4.5% during the next 10 years and 4.0% during the remaining years

(b) 40% of the eligible population (employees entitled to early retirement in accordance with the Collective Bargaining Agreement: 36 years of service with at least 60 years of age, or 40 years of service and any age).

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

As mentioned above, the Medical Care Plan liabilities are recognized in the Group's accounts through a provision, which is presented as follows:

	2004		2003	
	Portugal	Brazil	Group	Group
	Euro 000	Euro 000	Euro 000	Euro 000
<b>Provision for Medical Care Plans</b>				
Liabilities at the end of the period	721,765	14,611	736,376	660,255
Deferred actuarial losses (i)	-262,129	-5,379	-267,508	-247,628
Value of the provision at the end of the period	459,636	9,232	468,868	412,627

- (i) The international accounting standards adopted by EDP allow deferred actuarial gains/losses to be recognized systematically in the profit and loss account through amortization of the amount that exceeded, in the previous year, 10% of the value of the greater of liabilities or assets of the Fund. Such amortizations are calculated for the period corresponding to the estimated average remaining length of service of the active population.

The components of net consolidated cost recognized during period with this plan are as follows:

	2004		2003	
	Portugal	Brazil	Group	Group
	Euro 000	Euro 000	Euro 000	Euro 000
<b>Cost for the period</b>				
Cost service cost	7,904	140	8,044	5,942
Interest cost	33,646	1,300	34,946	29,049
Amortization of the deferred transitional obligation (i)	13,063	-304	12,759	5,022
Net cost for the period	54,613	1,136	55,749	40,013

**22. Deferred revenue and other liabilities**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The balance **Deferred revenue and other liabilities** is analyzed as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Subsidies for investment in fixed assets	1,639,986	1,546,101
Provisions for other contingencies and liabilities	461,254	257,312
Regularization account - (Reg. DL 344-B/82)	6,474	9,079
State share in Multipurpose hydroelectric power stations		14,996
Deposits received from customers and other debtors	47,284	39,843
Recognition of liabilities on the sale of OPTEP (Optimus) in 2002 (see Note 9)	315,000	315,000
Suppliers of fixed assets	56,764	74,618
Taxes referring to regulatory liabilities (Bandeirante)	14,047	
Electricity tariff compensations in Brazil	64,792	35,013
Other creditors and sundry operations	83,769	54,393
	2,689,370	2,346,355

The balance **Provisions for other contingencies and liabilities** includes a provision in the amount of Eur 25 million (Brl 90 million) recorded at EDP Brazil, in order to face eventual losses in the investment portfolio, regarding the regulatory uncertainty related with the accounting treatment of sales of energy.

The movements in provisions for **Other contingencies and liabilities** were as follows:

	Group	
	2004	2003
	Euro 000	Euro 000
Balance as at January 1	257,311	198,027
Changes in consolidation perimeter	22,929	
Charge for the year	98,756	136,265
Write back of provisions	-7,746	-170,894
Provisions charged-off	-182,957	
Transfers and exchange differences	272,961	93,913
	461,254	257,311

### 23. Minority interests

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
	<b>_____</b>	<b>_____</b>
ONI Group		-89,141
Edinfor Group	6,989	3,222
Brazil Group	257,250	150,273
Hidrocantábrico Group	535,428	175,336
Other	1,351	-3,205
	<b>_____</b>	<b>_____</b>
	<b>801,018</b>	<b>236,485</b>
	<b>_____</b>	<b>_____</b>

F-37

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Under Portuguese GAAP, there are no specific accounting standards which require the allocation to majority interest of losses attributable to minority interest which exceed the equity capital attributable to minority interest in subsidiaries. This was the basis why no adjustment was made in prior years under Portuguese GAAP for the minority interest deficit.

In prior years, the accumulated losses attributable to minority interest, which exceeded the equity capital attributable to minority interest in the subsidiaries, was recorded in the balance sheet as a negative minority interest, which was presented net against the minority interest liability. In the income statement, the losses attributable to minority interest were charged to the minority interest in proportion of their shareholding. Beginning on January 1, 2004, the EDP Group adopted a new accounting policy by which the accumulated losses attributable to minority interest which exceed the equity capital attributable to minority interest in subsidiaries resulting in negative minority interest are debited against equity whenever there is no binding obligation of the minority interests to cover such losses. In relation to the income statement, losses continue to be attributed to the minority interest in proportion of their shareholding. If the accounting policy adopted in 2004 had been applied in 2003, shareholders' equity at December 31, 2003 would have been lower and minority interest would have been higher by Eur. 86,202,000.

The balance **Other reserves arising on consolidation** include the amount of Eur 193.5 million that reflects the minority interest deficit, with reference to December 31, 2004, which in conformity with the accounting policy described in Note 2.a), are registered against reserves.

	Net income	Balance sheet	Shareholders equity
	Euro 000	Euro 000	Euro 000
ONI Group	67,473		117,326
Edinfor group	6,551	6,989	11,164
Brazil Group	26,825	257,250	58,831
Hidroantábrico Group	7,147	535,428	
Other	1,255	1,351	6,204
	<u>41,307</u>	<u>801,018</u>	<u>193,525</u>

**24. Hydrological correction account**

The movements occurred in this balance are analyzed as follows:

Group

	2004	2003
	Euro 000	Euro 000
Opening balance on January 1	387,506	324,111
Movement for the year	32,617	71,916
Hydrological correction subsidies		19,350
Financial charges	9,308	10,829
Closing balance on December 31	364,197	387,506

The Hydrological Correction Account is a mechanism that was legally instituted (Decree-Law 338/91) to compensate variable electricity production costs. In dry years the thermoelectric system is overused and the spending on fuel or on the import of electricity increases significantly. In wet years the situation is reversed. Electricity supply tariffs for the customers of the SEP cannot be changed according to cost fluctuations caused by hydrological factors.

In accordance with Order-in-Council 987/2000, the hydrological correction account is assigned to the EDP accounts and, consequently, it is carried in an account under liabilities in its balance sheet, and the corresponding movements for the year are detailed in the notes to the financial statements.

The annual amount of the hydrological correction is calculated in accordance with parameters established by law, and includes: (i) The differential between the economic cost of electricity production and the reference economic cost, which is borne by REN as the RNT concessionaire and sole manager of the hydrological correction account. EDP pays REN each month the positive differentials and receives from REN the negative differentials. These payments and revenues are recorded with a contra entry in the hydrological correction account; (ii) the financial costs or income associated with the accumulated balance of this account constitute an EDP cost or income; (iii) the part corresponding to the amount necessary to make the expected value of the balance, within 10 years, equal to an adequate benchmark, when it reflects a debit to the hydrological correction account, constitutes EDP income, when it reflects a credit, the REN is obliged to make the respective payment to EDP. Movements under the hydrological correction account are subject to ministerial approval.

## 25. Share capital

EDP, which began as a state-owned Company, was successively transformed into a *sociedade anónima* (limited liability company under Portuguese law) wholly owned by the public sector and then into a *sociedade anónima* with a majority of its share capital owned by the public sector. Currently the State and other Public Entities have a minority position in the company share capital. The privatisation process began in 1997, and the second and third stages of the privatization took place in 1998 and the fourth stage in 2000, following which the State now holds about 30% of the share capital, directly and indirectly.

The share capital amounts to Eur 3,656,537,715 represented by 3,656,537,715 ordinary shares each of a par value of 1 euro, and is fully paid-up.

Share capital and Share premium are analyzed as follows:

Group

	Share Capital	Share Premium
	Euro 000	Euro 000
Balance as at December 31, 2003	3,000,000	
Issuance of 656,537,715 shares in December 2004	656,538	551,491
Expenses with Share Capital increase		-78,536
Balance as at December 31, 2004	3,656,538	472,955

In accordance with the General Meeting of October 7, 2004, the Board of Directors decided to increase the share capital by Eur 656,537,715, through a public offer reserved for EDP shareholders through the exercise of their preference rights. The new 656,537,715 ordinary, registered and nominative shares have a nominal value of 1 Euro each. The shares were offered at a subscription price of Eur 1.84 per share, the operation being concluded on December 2, 2004.

This increase in share capital took place in order to finance the acquisition of an additional 56.2% stake in Hidrocarburo Group, increasing the investment to 95.7%. The increase in this shareholding allows EDP to exercise, indirectly, the control over Naturcorp, a gas company operating in the Spanish market.



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**26. Legal reserve**

In accordance with Article 295 of the Código das Sociedades Comerciais (Companies Code) and with the EDP articles of association, the Legal reserve must be increased by a minimum of 5% of the annual profits until its value equals 20% of the company's share capital. This reserve can only be used to cover losses or to increase share capital.

**27. Treasury stock**

This balance is analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Book value of EDP, S.A. shares	31,662	49,020
Number of shares	14,287,657	21,430,964
Market price of EDP, S.A. shares	2.23 euros	2.09 euros
Market value of EDP, S.A. shares	31,861	44,791

The treasury shares held by EDP, S.A., are within the limits established by the Company's articles of association and by the Código das Sociedades Comerciais (Companies Code).

**28. Reserves and Retained earnings and consolidated net profit**

This balance is analyzed as follows:

<b>Group</b>	
<b>2004</b>	<b>2003</b>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	<u>Euro 000</u>	<u>Euro 000</u>
Legal reserves	345,446	326,391
Revaluation reserves	57,691	89,449
Cashflow hedge - Fair Value reserve	643	
Other reserves and retained earnings	3,163,099	3,042,648
Currency translation arising on consolidation	-571,564	-572,500
Other reserves arising on consolidation	-1,131,584	-920,070
Consolidated net profit for the year	440,152	381,109
	<u>2,303,883</u>	<u>2,347,027</u>

The balance **Currency translation arising on consolidation** reflects the fluctuation in the value of Shareholders' Equity of foreign Subsidiary and Associated Companies resulting from foreign currency exchange differences. The exchange rates to the Euro used in the preparation of the Financial Statements are as follows:

<u>Currency</u>		<u>Exchange rates in 2004</u>		<u>Exchange rates in 2003</u>	
		<u>Closing Rates</u>	<u>Average exchange-rate</u>	<u>Closing Rates</u>	<u>Average exchange-rate</u>
American dollar	USD	1.362	1.241	1.263	1.131
Brazilian Real	BRL	3.615	3.630	3.664	3.459
Macao Pataca	MOP	10.905	9.956	10.099	9.034

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**29. Revenues**

The balance is analyzed, by sector of activity, as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
<b>Sales by sector of activity/business:</b>			
Electricity	6,450,275	6,296,103	5,876,158
Steam and ashes	23,961	22,061	18,651
Gas	183,977	105,311	
Information systems and technologies	18,746	26,850	50,861
Telecommunications	8,087	3,889	23,701
Other businesses	14,248	2,147	18,769
	<u>6,699,294</u>	<u>6,456,361</u>	<u>5,988,140</u>
<b>Services rendered by sector of activity/business:</b>			
Associated with electricity sales	100,844	80,122	18,996
Thermo/Hydro electricity engineering services	5,978	6,457	5,311
Information systems and technologies	43,602	69,999	65,174
Telecommunications	307,330	312,334	273,780
Consultancy and services	5,530	12,283	4,536
Other businesses	59,112	39,964	30,620
	<u>522,396</u>	<u>521,159</u>	<u>398,417</u>
	<u>7,221,690</u>	<u>6,977,520</u>	<u>6,386,557</u>

The total turnover by business is analyzed as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
	<b>Euro 000</b>		

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

<b>Total turnover by business:</b>			
Electricity	6,551,119	6,376,225	5,895,154
Thermo/Hydro electricity engineering services	5,978	6,457	5,311
Steam and ashes	23,961	22,061	18,651
Gas	183,977	105,311	
Information systems and technologies	62,348	96,849	116,035
Telecommunications	315,417	316,223	297,481
Other businesses	78,890	54,394	53,925
	<b>7,221,690</b>	<b>6,977,520</b>	<b>6,386,557</b>

The breakdown of **Sales** is as follows:

	2004			2003		
	Iberian Market	Brazilian market	Total	Iberian Market	Brazilian market	Total
<b>Electricity:</b>						
To the National Transport network	1,193,236		1,193,236	1,339,411		1,339,411
To final customers:						
-Very high tension	51,504		51,504	9,509		9,509
-High tension	444,176	228,800	672,976	368,126	242,604	610,730
-Medium tension	558,509	334,228	892,737	738,351	289,371	1,027,722
-Low tension (>39,6 KVA)	304,252		304,252	313,193		313,193
-Low tension	2,951,136	429,277	3,380,413	2,424,190	388,807	2,812,997
-Low tension (Public lightning)				95,731		95,731
Embedded generation	78,883		78,883	37,062		37,062
Discounts and tariff difference	-123,726		-123,726	49,748		49,748
	<b>5,457,970</b>	<b>992,305</b>	<b>6,450,275</b>	<b>5,375,321</b>	<b>920,782</b>	<b>6,296,103</b>
<b>Other Sales:</b>						
-Steam and ashes	21,192	2,769	23,961	19,748	2,313	22,061
-Gas	191,800		191,800	105,311		105,311
-Printed forms				10,492		10,492
-Information systems and technologies	18,746		18,746			
-Telecommunications equipment	8,087		8,087	3,711		3,711
-PC equipment				13,409		13,409
-Other	6,425		6,425	5,274		5,274
	<b>246,250</b>	<b>2,769</b>	<b>249,019</b>	<b>157,945</b>	<b>2,313</b>	<b>160,258</b>
	<b>5,704,220</b>	<b>995,074</b>	<b>6,699,294</b>	<b>5,533,266</b>	<b>923,095</b>	<b>6,456,361</b>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

	2002		
	Iberian Market	Brazilian market	Total
<b>Electricity:</b>			
To the National Transport network	1,323,894		1,323,894
To final customers:			
-Very high tension	37,936	5,629	43,565
-High tension	167,222	126,130	293,352
-Medium tension	812,018	172,582	984,600
-Low tension (>39,6 KVA)	271,247		271,247
-Low tension	2,380,945	398,188	2,779,133
-Low tension (Public lightning)	86,614	14,977	101,591
Embedded generation	38,285		38,285
Discounts and tariff difference	45,304	-4,813	40,491
	<u>5,163,465</u>	<u>712,693</u>	<u>5,876,158</u>
<b>Other Sales:</b>			
-Steam and ashes	18,651		18,651
-Gas			
-Printed forms	10,942		10,942
-Telecommunications equipment	23,701		23,701
-Data network equipment	23,236		23,236
-PC equipment	24,470		24,470
-Other	10,982		10,982
	<u>111,982</u>		<u>111,982</u>
	<u>5,275,447</u>	<u>712,693</u>	<u>5,988,140</u>

The breakdown of **Gross margin on Sales** is as follows:

	Group		
	2004 Euro 000	2003 Euro 000	2002 Euro 000
<b>Sales:</b>			
Electricity	6,450,275	6,296,103	5,876,158

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Steam and ashes	23,961	22,061	18,651
Gas	183,977	105,311	
Information systems and technologies	18,746	26,850	50,861
Telecommunications	8,087	3,889	23,701
Other sales	14,248	2,147	18,769
	<u>6,699,294</u>	<u>6,456,361</u>	<u>5,988,140</u>
<b>Cost of sales - Raw materials and consumables :</b>			
Electricity	3,303,146	3,360,268	3,005,526
Fuel, steam and ashes	546,009	398,034	465,527
Information technologies	11,886	19,143	36,207
Telecommunications	7,305	6,571	53,378
Other costs	148,924	137,030	126,459
	<u>4,017,270</u>	<u>3,921,046</u>	<u>3,687,097</u>
<b>Gross margin on sales</b>	<u>2,682,024</u>	<u>2,535,315</u>	<u>2,301,043</u>

F-41

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The breakdown of **Revenues by geographic market** is as follows:

	2004			
	Portugal	Spain	Brazil	Group
Electricity	4,984,137	510,378	1,056,604	6,551,119
Steam and ashes	21,192		2,769	23,961
Gas		183,977		183,977
Thermo/Hydro electricity engineering	5,346		632	5,978
Information systems and technologies	58,020		4,328	62,348
Telecommunications	146,034	169,383		315,417
Other	47,646	11,258	19,986	78,890
	<b>5,262,375</b>	<b>874,996</b>	<b>1,084,319</b>	<b>7,221,690</b>
	2003			
	Portugal	Spain	Brazil	Group
Electricity	4,862,426	557,235	956,564	6,376,225
Steam and ashes	22,061			22,061
Gas		105,311		105,311
Thermo/Hydro electricity engineering	6,457			6,457
Information systems and technologies	80,285		5,991	86,276
Telecommunications	147,050	169,173		316,223
Other	24,978	25,129	14,860	64,967
	<b>5,143,257</b>	<b>856,848</b>	<b>977,415</b>	<b>6,977,520</b>
	2002			
	Portugal	Spain	Brazil	Group
Electricity	4,856,297	321,351	717,506	5,895,154
Steam and ashes	18,651			18,651
Gas				
Thermo/Hydro electricity engineering	5,311			5,311
Information systems and technologies	102,865		13,170	116,035
Telecommunications	166,682	130,799		297,481

Other	53,925			53,925
	<u>5,203,731</u>	<u>452,150</u>	<u>730,676</u>	<u>6,386,557</u>

**30. Personnel costs**

The balance **Personnel costs** is analyzed as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Management remuneration	12,450	15,258	15,988
Employees remuneration	404,681	413,552	411,630
Charges on remuneration	115,769	192,539	156,540
Other costs	109,719	25,287	40,613
	<u>642,619</u>	<u>646,636</u>	<u>624,771</u>



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The breakdown by management positions and professional category of the permanent staff as at December 31, 2004, 2003 and 2002 is as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Board members and senior officers	475	462	621
Senior management	2,248	2,755	3,167
Middle management	1,174	2,484	2,252
Intermediate management	477	247	353
Highly skilled workers	8,919	9,735	8,053
Semi-skilled workers	2,406	927	845
Unskilled workers	28	778	906
	<b>15,727</b>	<b>17,388</b>	<b>16,197</b>

As at December 31, 2004, the number of employees in service, including those on temporary contract, is 16,243 (2003: 17,664). These figures include all the employees of all the companies included in the consolidation perimeter (full and proportional method), regardless of the EDP holding in the share capital and also Management (74 and 11 in Group and EDP S.A., respectively).

The management remuneration of EDP, S.A., is analyzed as follows:

	<b>Company</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Board of Directors	4,277	3,089	2,815
External Auditor	117	82	82
	<b>4,394</b>	<b>3,171</b>	<b>2,897</b>

**31. Depreciation and amortization**

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

This balance is analyzed as follows:

	Group		
	2004	2003	2002
	Euro 000	Euro 000	Euro 000
<b>Tangible fixed assets:</b>			
Fixed assets under concession - Decree-law 344-B/82	2,604	3,229	4,284
Buildings and other constructions	9,682	9,703	6,442
Plant and machinery:			
Hydroelectricity generation	135,163	128,850	129,004
Thermoelectric generation	145,546	103,778	98,101
Electricity distribution	404,447	445,808	385,319
Other plant and machinery	85,203	60,928	48,906
Transport equipment	9,570	10,418	8,189
Administrative equipment	33,206	37,850	24,314
Other	4,964	2,527	1,547
	<u>830,385</u>	<u>803,091</u>	<u>706,106</u>
<b>Intangible fixed assets:</b>			
Start-up costs	17,964	15,145	14,856
Research and development costs	10,437	17,294	15,471
Industrial property and other rights	16,352	7,164	3,108
Other		2,898	
	<u>44,753</u>	<u>42,501</u>	<u>33,435</u>
	<u>875,138</u>	<u>845,592</u>	<u>739,541</u>
<b>Compensation of depreciation of partially-funded fixed assets:</b>			
Partially-funded fixed assets	-79,621		
	<u>795,517</u>	<u>845,592</u>	<u>739,541</u>

The assets partially-funded by third parties are amortized on the same basis and at the same depreciation rates of the remaining assets, the cost being compensated through the amortization of the amounts received. The funded component of the assets is registered under Accrued Costs and Deferred Income - Subsidies for Investment in fixed assets and recognized through the profit and loss account, on the same basis and at the same rates as the partially-funded assets.

As at December 31, 2003 and 2002, the balance **Compensation of depreciation of partially-funded fixed assets** was disclosed as Other non-operating income and amounted to Eur 79,822 thousand and Eur 71,767 thousand, respectively (See Note 37).

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**32. Supplies and services**

This balance is analyzed as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
<b>Subcontracts:</b>			
Subcontracts	176,885	209,239	179,074
Other subcontracts	16,648	5,916	
<b>Supplies and services:</b>			
Water, electricity and fuel	11,711	12,335	8,261
Utensils and office material	4,942	5,066	6,511
Leases and rents	48,636	52,010	51,186
Communications	27,525	30,967	21,246
Insurance	22,086	19,636	18,386
Transport, travel, and lodging	13,697	12,972	12,503
Commissions and fees	17,895	10,887	16,724
Maintenance and repairs	100,331	94,127	99,886
Advertising and propaganda	19,315	12,545	20,970
Specialised work	159,638	130,757	187,548
Other supplies and service	30,195	36,061	52,775
	<b>649,504</b>	<b>632,518</b>	<b>675,070</b>

**33. Own work capitalized**

This balance is analyzed as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Consumption of materials	116,431	99,327	70,695
Direct internal costs and overheads	79,065	105,401	113,220

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Financial charges	24,086	24,005	16,036
Services rendered	31,604	6,216	
Other own work capitalized	7,588	674	41,818
	<u>258,774</u>	<u>235,623</u>	<u>241,769</u>

**34. Provisions**

This balance is analyzed as follows:

	Group		
	2004	2003	2002
	Euro 000	Euro 000	Euro 000
Charge for:			
Doubtful debts	19,587	9,423	24,372
Debtors	2,122	226	
Pension liabilities	1,977	17,008	14,687
Healthcare liabilities	54,613	40,014	57,614
Other liabilities contingencies and liabilities	34,801	9,035	3,972
Stocks depreciation	978		
	<u>114,078</u>	<u>75,706</u>	<u>100,645</u>

**35. Other operating expenses, net**

This balance is analyzed as follows:

	Group		
	2004	2003	2002
	Euro 000	Euro 000	Euro 000
<b>Other operating income:</b>			
Supplementary income	14,755	7,768	8,067
Operating subsidies	1,395	685	453
Other	1,581	9,628	22,094
	<u>17,731</u>	<u>18,081</u>	<u>30,614</u>
<b>Other operating expenses:</b>			
Direct operating taxes	1,175	398	2,811
Indirect taxes	15,564	19,092	13,824
Memberships	2,070	1,916	
Exploitation indemnities	1,838	822	
Land rights	1,109	1,087	1,083

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Penalties	1,657	192	
Other	7,154	4,834	7,218
	<u>30,567</u>	<u>28,341</u>	<u>24,936</u>
Other net operating income / (expenses)	<u>-12,836</u>	<u>-10,260</u>	<u>5,678</u>

F-44

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**36. Financial income / (expense) and amortization of goodwill and concession rights**

This balance is analyzed as follows:

	Group		
	2004 Euro 000	2003 Euro 000	2002 Euro 000
<b>Income arising from financial operations</b>			
Interest income	54,462	65,530	128,599
Income on application of the equity method	44,266	46,464	36,450
Income from other equity investments	30,478	36,740	40,042
Favourable currency exchange differences	60,289	47,559	90,260
Interest on regulatory assets (Brazil)	10,262	30,358	15,731
Derivatives	50,038	29,015	
Other financial gains	25,941	53,359	70,638
<b>Total financial income</b>	<b>275,736</b>	<b>309,025</b>	<b>381,720</b>
<b>Expenses arising from financial operations</b>			
Interest expense	354,279	399,970	329,860
Banking services	15,644	28,372	57,025
Losses on application of the equity method	3,276	13,308	115,184
Unfavourable currency exchange differences	47,897	58,273	22,846
Derivatives	55,223	35,064	
Other financial losses	39,144	40,638	14,218
	<b>515,463</b>	<b>575,625</b>	<b>539,133</b>
<b>Amortization of investments (Goodwill):</b>			
- Concession rights	30,489	30,439	53,535
- Goodwill	56,219	54,439	11,896
- Key money on telecommunications business	8,817	7,542	
	<b>95,525</b>	<b>92,420</b>	<b>65,431</b>
<b>Total financial expenses</b>	<b>610,988</b>	<b>668,045</b>	<b>604,564</b>
<b>Financial income / (expenses)</b>	<b>-335,252</b>	<b>-359,020</b>	<b>-222,844</b>



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**37. Other non-operating income / (expenses)**The balance **Other non-operating income / (expenses)** is analyzed as follows:

	Group		
	2004 Euro 000	2003 Euro 000	2002 Euro 000
<b>Other non-operating income:</b>			
Gains on fixed assets	18,714	44,147	53,264
Debt recovery	607	2,652	168
Write-back of provisions:			
- For customer debt	7,127	1,444	
- For debtors	2,834	36	
- For other contingencies and liabilities	7,902	72,474	76,371
Corrections to estimated amount	8,618	15,147	9,692
Compensation of depreciation of part-funded fixed assets	6,975	79,822	71,767
Residual value of Oniway			70,000
Hidrological correction		19,350	
Customers compensation	10,306	5,661	578
Extraordinary tax return	1,254	8,421	561
Indemnities	3,873	1,856	
Debt recovery	917	2,652	168
<b>Total non-operating income</b>	<b>69,127</b>	<b>253,662</b>	<b>282,569</b>
<b>Other non-operating expenses:</b>			
Losses on stocks	8,158	1,442	2,279
Losses on fixed assets:			
- Impairment on goodwill	35,024		
- Other	33,600	14,850	41,332
Bad debts	13,142	15,086	9,084
Fines and penalties	89	3,228	2,248
Corrections to estimated amount	32,576	46,755	13,934
Non current depreciation:			
- Investments			1,991
- Fixed assets in progress			278,944
Non current provisions:			
- Investments		114,695	
- For customer debt	2,152		
- For other debtors	2,913	3,461	
- For other contingencies and liabilities	63,955	12,535	18,297
Additional income tax assessment in respect of 1995/97/98			15,926



Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Loss on Baixa UTE Campo Grande (Enersul)	3,037	6,950	13,963
Rationalization and restructuring costs	32,357	47,810	
Donations			
Other losses, net	6,856	1,293	23,510
	<u>          </u>	<u>          </u>	<u>          </u>
Total non-operating expenses	233,859	268,105	421,508
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Net Non-Operating Results</b>	<b>-164,732</b>	<b>-14,443</b>	<b>-138,939</b>
	<u>          </u>	<u>          </u>	<u>          </u>

As at December 31, 2003 and 2002, the balance **Compensation of depreciation of part funded fixed assets** gains registers the amount of Eur 79,822 thousand and Eur 71,767 thousand, respectively, related with the values funded by third parties resulting from the change during 2004, of the accounting treatment, as referred in Note 2.e). Therefore, this amount was reclassified to **Depreciation and amortization Compensation of depreciation of partially-funded fixed assets** (see Note 31).

The balance **Rationalization and restructuring costs** includes the charges with non-operating personnel, indemnities resulting from labour contracts termination and compensation given to operating personnel to join the flexible retirement plan promoted by the EDP Group.

### 38. Provisions for income taxes

In accordance with prevailing legislation, tax returns are subject to review and correction by the tax authorities during subsequent years. In Portugal, this period is four years and 2000 was the last year considered to be definitively liquidated by the tax authorities.

Tax losses generated in each year are also subject to inspection and adjustment and may be deductible from taxable profits during subsequent years. The companies of the EDP Group are taxed, whenever possible, on a consolidated basis allowed by the tax law of the respective countries.

The balance **Provisions for income taxes** is analyzed as follows:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
	<u>          </u>	<u>          </u>	<u>          </u>
Provision for income taxes	-256,809	-239,255	-171,168
Provision for deferred income taxes	97,192	43,721	-571
	<u>          </u>	<u>          </u>	<u>          </u>
	-159,617	-195,534	-171,739
	<u>          </u>	<u>          </u>	<u>          </u>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The reconciliation between the nominal and the effective income tax (IRC) rate for the **Group** in December 31, 2004 is analyzed as follows:

	<b>2004</b>		
	<b>Tax Base</b>	<b>Tax</b>	<b>Rate</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>%</b>
Standard tax on profits	558,462	153,577	27.5%
- Main effects at taxation level:			
Net depreciation and provisions	75,227	20,687	3.7 %
Accounting losses disallowed	169,619	46,645	8.4 %
Tariff deviation in electricity business in Portugal	-69,406	-19,087	-3.4 %
Elimination of double economic taxation	-49,620	-13,646	-2.4 %
Employee profit-sharing	-26,243	-7,217	-1.3 %
Tax estimate and tax losses carried forward	-98,903	-27,198	-4.9 %
Gains with treasury stock	8,450	2,324	0.4 %
Other adjustments to taxable income	12,844	3,532	0.6 %
<b>Effective rate and effective tax on profits</b>		<b>159,617</b>	<b>28.6 %</b>

**39. Financial Instruments - Derivatives**

In order to present a more adequate financial position of EDP Group, the Board of Directors decided to adopt, as at 31 December, 2003, the International Accounting Standards 39, complementary to the application of the Portuguese Plan of Accounts (POC), namely in accordance with Portuguese Accounting Directive 18.

The application and implementation of IAS 39 had significant effects in two accounting areas, namely investments (see Note 9) and financial instruments.

In accordance with IAS 39, the Group classifies the financial instruments as fair value hedge of an asset or liability recognized and as cash flow hedge of recorded liabilities and future transactions considered probable, which are analyzed as follows:

**2004****Fair Value Changes**

<u>Hedge Type</u>	<u>Hedging Instrument</u>	<u>Hedging Risk</u>	<u>Instruments</u>	<u>Risk</u>
			<u>Euro 000</u>	<u>Euro 000</u>
- Fair value	Interest rate swap	Interest rate	53,884	53,884
- Fair value	Currency interest rate swap	Interest and exchange rate	4,677	4,677
- Cashflow hedge	Interest rate swap	Interest rate	643	
			<u>59,204</u>	<u>58,561</u>

During 2004, the movements in reserves related with cash flow hedges, were as follows:

	<u>Disposals</u>
	<u>2004</u>
	<u>Euro 000</u>
Balance on January 1, 2004	
Hedging changes	-1,431
Transfers to results	2,074
	<u>643</u>
Balance on December 31, 2004	

Until January 1, 2004 all the derivatives were classified as trading, therefore, the changes in the fair-value until that date were recorded against the profit and loss account.

The estimated net amount of existence gains and losses at December 31, 2004 that is expected to be reclassified into earnings within the next twelve months amounts to Eur 324 thousand. The maximum length of time of which EDP is hedging its exposure to the payment of variable interest on financial instruments is until June 2006.

The valuation of financial instruments is recorded in Accrued Income and Deferred Costs or in Accrued Costs and Deferred Income in accordance with its nature.

The gains and losses resulting from fair value changes on the financial instruments portfolio are analyzed as follows:

	<u>Group</u>	
	<u>2004</u>	<u>2003</u>
	<u>Euro 000</u>	<u>Euro 000</u>
Trading derivatives	-63,382	-3,317
Foreign exchange swaps	20,594	
Fair value hedge		

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

- Derivatives	58,561	
- Covered liabilities	-58,561	
Cash-flow hedge		
- Derivatives	2,074	
	<u>          </u>	<u>          </u>
	-40,714	-3,317
	<u>          </u>	<u>          </u>

F-47

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The maturity of these financial derivatives instruments (expressed in notional amounts) is as follows:

	Group Dec 2004				
	Up to	3	1 year	More than	Total
	3	months	to 1 year	5 years	
	months	to 1 year	to 5 years	5 years	Total
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Interest-rate contracts:</b>					
Interest-rate swaps			1,572,455	1,000,000	2,572,455
Options purchase and sold	250,000	320,000	750,000		1,320,000
	250,000	320,000	2,322,455	1,000,000	3,892,455
<b>Interest-rate and exchange-rate contracts:</b>					
CIRS (currency and interest rate swaps)			27,882	320,000	347,882
	250,000	320,000	2,350,337	1,320,000	4,240,337

The effective interest rates on the various financial derivative instruments (expressed in notional amounts) are as follows:

	Group Dec 2004		
	Currency	EDP Pays	EDP Receives
<b>Interest-rate contracts:</b>			
Interest-rate swaps	EUR	[ 4.50% - 2.17% ]	[ 6.40% - 2.38% ]
<b>Interest-rate and exchange-rate contracts:</b>			
CIRS (currency - interest rate swaps)	EUR/JPY	2.565%	0.700%
CIRS (currency - interest rate swaps)	EUR/GBP	3.566%	6.625%
	Nominal value Euro 000	Group Dec 2004	
<b>Interest-rate contracts:</b>			
Options purchased on interest rates (CAP purchases)	1,320,000	[ 4.82% - 2.81% ]	

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Options sold on interest rates (CAP sale)	1,000,000	[ 5.30% - 4.10%]
Options sold on interest rates (Floor sale)	1,320,000	[ 3.50% - 2.28%]

**40. Commitments**

As at December 31, 2004, the financial commitments not shown in the balance sheet in respect of guarantees provided (no real guarantees have been provided) are analyzed as follows:

<b>Commitments</b>	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Guarantees of a financial nature</b>		
Guarantees provided by Group entities - Portugal		
to domestic banks	67,527	80,672
to foreign banks	187,664	154,521
to other domestic entities		68,231
to other foreign entities	71,823	7,942
Guarantees provided by Group entities - Spain		
to foreign banks		38,363
to other foreign entities	79,255	9,198
Guarantees provided by Group entities - Brazil		
to foreign banks	30,238	52,211
to other foreign entities	22,685	
	<b>459,192</b>	<b>411,138</b>
<b>Guarantees of an operational nature</b>		
Guarantees provided by group entities - Portugal		
to other domestic entities	57,568	59,246
to foreign banks	15,216	16,976
to other foreign entities	43,000	32,434
Guarantees provided by group entities - Spain		
to foreign banks		63,925
to other foreign entities		577
	<b>115,784</b>	<b>173,158</b>
	<b>574,976</b>	<b>584,296</b>

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The part of guarantees with an operational nature presented by financial institutions, are as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
	<u>          </u>	<u>          </u>
Domestic banks	12,827	16,356
Foreign banks	35,000	87,757
	<u>47,827</u>	<u>104,113</u>

**41. Segmental reporting**

The segmental reporting disclosed was prepared in accordance with Portuguese Accounting Directive 27.

The segmental reporting provides financial information by geographical and activity segment.

Each company develops an activity which contributes to a different segment and aggregates according to it, namely: Generation, Special Regime, Electricity Distribution, Gas Distribution, Supply, Trading, Telecommunications, Information Technologies, Services and Other Adjustments (where intra group operations between segments are eliminated). An aggregation of different segments does not eliminate intra group operations between those segments.

**Table of Contents****EDP Group Activity by Business Segment****Information by business segment - 2004**

(Amounts expressed in thousands of euros)

	Portugal		Spain			Brazil		Telecoms	Information Technology	Services and Other Adjustments	EDP Group
	Generation <sup>(a)</sup>	Distribution + Supply	Generation	Distribution + Supply	Gas <sup>(b)</sup>	Generation	Distribution + Supply				
Turnover											
Sales of electricity	1,481,265	3,842,842	250,114	266,082		28,250	1,038,359			(456,637)	6,450,275
Other sales	21,227	2,734	7,085	6,952	183,977	2,769		8,090	23,419	(7,234)	249,019
Services rendered	38,386	26,412	3,473	14,820	14,557	10,532	73,886	317,334	151,185	(128,189)	522,396
	<u>1,540,878</u>	<u>3,871,988</u>	<u>260,672</u>	<u>287,854</u>	<u>198,534</u>	<u>41,551</u>	<u>1,112,245</u>	<u>325,424</u>	<u>174,604</u>	<u>(592,060)</u>	<u>7,221,690</u>
Raw materials and consumables											
Purchase of electricity	51,417	2,635,880	26,594	233,155	135,532	5,879	699,281			(484,592)	3,303,146
Fuel costs	417,116		122,835	796	869	2,306				2,086	546,008
Other materials	3,987	124,230	2,055	358	1,099	105	8,462	7,305	20,299	216	168,116
	<u>472,520</u>	<u>2,760,110</u>	<u>151,484</u>	<u>234,309</u>	<u>137,500</u>	<u>8,290</u>	<u>707,743</u>	<u>7,305</u>	<u>20,299</u>	<u>(482,290)</u>	<u>4,017,270</u>
Gross Margin	<u>1,068,358</u>	<u>1,111,878</u>	<u>109,188</u>	<u>53,545</u>	<u>61,034</u>	<u>33,261</u>	<u>404,502</u>	<u>318,119</u>	<u>154,305</u>	<u>(109,770)</u>	<u>3,204,420</u>
Other operating income / (costs)											
Supplies and services	(85,303)	(225,098)	(23,554)	(21,435)	(9,066)	(14,368)	(57,658)	(241,815)	(62,972)	91,765	(649,504)
Personnel costs	(118,522)	(358,775)	(19,794)	(11,639)	(6,993)	(1,048)	(62,487)	(54,045)	(60,070)	50,754	(642,619)
Own work capitalized	31,148	196,808	6,653	1,409	239			4	1,012	21,501	258,774
Concession and power-generating rents	(4,083)	(186,111)									(190,194)
Other operating income / (costs)	3,693	8,218	4,282	6,921	(579)	(1,081)	(8,542)	(139)	3,222	(28,831)	(12,836)
	<u>(173,067)</u>	<u>(564,958)</u>	<u>(32,413)</u>	<u>(24,744)</u>	<u>(16,399)</u>	<u>(16,497)</u>	<u>(128,687)</u>	<u>(295,995)</u>	<u>(118,808)</u>	<u>135,189</u>	<u>(1,236,379)</u>
Gross Operating Margin	895,291	546,920	76,775	28,801	44,635	16,764	275,815	22,124	35,497	25,419	1,968,041
	<u>250,386</u>	<u>356,228</u>	<u>43,137</u>	<u>14,081</u>	<u>12,400</u>	<u>4,562</u>	<u>55,410</u>	<u>64,162</u>	<u>27,825</u>	<u>46,948</u>	<u>875,139</u>



Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Depreciation and amortization											
Compensation of depreciation	(5,007)	(72,402)	(137)	(704)	(607)				(765)	(79,622)	
Provisions	11,787	48,629	330	147	186		38,352	3,866	3,648	7,133	114,078
Operating Margin	638,125	214,465	33,445	15,277	32,656	12,202	182,053	(45,904)	4,024	(27,897)	1,058,446
Financial income / (expense)	(97,813)	(35,985)	(8,607)	(5,302)	293	(9,928)	(47,272)	(35,565)	(5,682)	6,131	(239,729)
(Amortization of goodwill and concession rights)			(18,616)		(13,168)	(72)		(18,827)	(4,651)	(40,188)	(95,523)
Current results	540,312	178,480	6,222	9,975	19,781	2,202	134,781	(100,296)	(6,309)	(61,954)	723,194
Other non-current gains / (losses)	(22,544)	(993)	16,382	(134)	934	734	(26,679)	(50,539)	(43,356)	(45,512)	(171,707)
Compensation of depreciation	4,310	2,604							25	36	6,975
Profit before taxes	522,078	180,091	22,604	9,841	20,715	2,936	108,102	(150,835)	(49,640)	(107,430)	558,462
Income taxes	144,147	44,863	1,845	3,218	6,199	1,619	(3,781)	4,628	2,876	(45,997)	159,617
Minority interests	200		196		(3)			104	(7,369)	(34,435)	(41,307)
<b>Net attributable profit</b>	<b>377,731</b>	<b>135,228</b>	<b>20,563</b>	<b>6,623</b>	<b>14,519</b>	<b>1,317</b>	<b>111,883</b>	<b>(155,567)</b>	<b>(45,147)</b>	<b>(26,998)</b>	<b>440,152</b>
<b>Other information :</b>											
Tangible fixed assets	4,316,916	4,584,863	740,377	216,242	165,701	373,320	694,008	216,283	68,993	2,182,622	13,559,325
Intangible fixed assets	13,108	9,819	(186)	1,888	(15,065)	47	38,622	199,406	5,147	715,878	968,664
Current assets	478,528	950,050	122,447	32,958	69,784	48,041	494,137	200,453	112,207	273,028	2,781,633
Shareholders equity	1,894,675	1,653,569	1,190,669	83,023	409,327	182,254	481,476	(253,921)	113,427	647,215	6,401,714
Current liabilities	427,201	993,949	360,202	124,745	48,319	41,525	508,317	812,617	63,875	868,914	4,249,664

(a) The electricity generation includes the renewables segment

(b) The commercial activity of the Gas segment is aggregated with the Distribution and Supply

F-50

**Table of Contents****EDP Group Activity by Business Segment****Information by business segment - 2003**

(Amounts expressed in thousands of euros)

	Portugal		Spain			Brazil		Telecoms	Information Technology	Services and Other Adjustments	EDP Group
	Generation <sup>(a)</sup>	Distribution + Supply	Generation	Distribution + Supply	Gas <sup>(b)</sup>	Generation	Distribution + Supply				
Turnover											
Sales of electricity	1,318,853	3,610,621	256,791	287,655		27,414	928,963			(134,194)	6,296,103
Other sales	19,748	1,946	1,990	28,948	75,867	2,314		7,290	27,023	(4,868)	160,258
Services rendered	26,629	60,246	1,116	12,357	10,108	11,536	37,609	323,820	159,323	(121,585)	521,159
	<u>1,365,230</u>	<u>3,672,813</u>	<u>259,897</u>	<u>328,960</u>	<u>85,975</u>	<u>41,264</u>	<u>966,572</u>	<u>331,110</u>	<u>186,346</u>	<u>(260,647)</u>	<u>6,977,520</u>
Raw materials and consumables											
Purchase of electricity	65,344	2,412,534	50,113	262,196	48,153	5,597	650,926			(134,595)	3,360,268
Fuel costs	312,346		84,078	1,438			265			(93)	398,034
Other materials	3,453	111,336	454	15,862	52	2,294	7,897	6,571	24,453	(9,628)	162,744
	<u>381,143</u>	<u>2,523,870</u>	<u>134,645</u>	<u>279,496</u>	<u>48,205</u>	<u>7,891</u>	<u>659,088</u>	<u>6,571</u>	<u>24,453</u>	<u>(144,316)</u>	<u>3,921,046</u>
Gross Margin	<u>984,087</u>	<u>1,148,943</u>	<u>125,252</u>	<u>49,464</u>	<u>37,770</u>	<u>33,373</u>	<u>307,484</u>	<u>324,539</u>	<u>161,893</u>	<u>(116,331)</u>	<u>3,056,474</u>
Other operating income / (costs)											
Supplies and services	(74,960)	(210,632)	(16,969)	(14,614)	(5,352)	(16,677)	(45,550)	(265,307)	(70,053)	87,596	(632,518)
Personnel costs	(120,339)	(397,060)	(17,971)	(14,902)	(4,227)	(517)	(63,441)	(50,973)	(66,431)	89,225	(646,636)
Own work capitalized	38,232	184,816	2,508	1,266	222			8	8,397	174	235,623
Concession and power-generating rents	(3,894)	(171,749)									(175,643)
Other operating income / (costs)	(6,152)	(778)	1,232	912	(1,186)	(777)	(17,821)	886	294	13,129	(10,261)
	<u>(167,113)</u>	<u>(595,403)</u>	<u>(31,200)</u>	<u>(27,338)</u>	<u>(10,543)</u>	<u>(17,971)</u>	<u>(126,812)</u>	<u>(315,386)</u>	<u>(127,793)</u>	<u>190,124</u>	<u>(1,229,435)</u>
Gross Operating Margin	<u>816,974</u>	<u>553,540</u>	<u>94,052</u>	<u>22,126</u>	<u>27,227</u>	<u>15,402</u>	<u>180,672</u>	<u>9,153</u>	<u>34,100</u>	<u>73,793</u>	<u>1,827,039</u>
	<u>234,351</u>	<u>348,926</u>	<u>27,416</u>	<u>25,156</u>	<u>7,529</u>	<u>4,311</u>	<u>53,954</u>	<u>72,744</u>	<u>24,301</u>	<u>46,904</u>	<u>845,592</u>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Depreciation and amortization

Provisions	12,742	42,793	295	766	19		11,039	5,076	508	2,468	75,706
Operating Margin	569,881	161,821	66,341	(3,796)	19,679	11,091	115,679	(68,667)	9,291	24,421	905,741
Financial income / (expense)	(76,188)	(37,468)	(18,847)	(9,964)	(5,586)	(15,363)	(14,226)	(38,858)	(7,134)	(42,966)	(266,600)
(Amortization of goodwill and concession rights)		(11)	(20,379)	(11)	(7,600)	(71)	(1)	(19,461)	(5,360)	(39,526)	(92,420)
Current results	493,693	124,342	27,115	(13,771)	6,493	(4,343)	101,452	(126,986)	(3,203)	(58,071)	546,721
Extraordinary gains / (losses)	(4,075)	80,226	(1,118)	1,344	437	(26,414)	14,350	(21,745)	(4,069)	(53,379)	(14,443)
Profit before taxes	489,618	204,568	25,997	(12,427)	6,930	(30,757)	115,802	(148,731)	(7,272)	(111,450)	532,278
Income taxes	164,130	51,065	4,820	(4,350)	2,426	1,190	36,857	(17,658)	2,967	(45,913)	195,534
Minority interests	(164)		181		5,034	(2,172)	22,825	(58,055)	(4,041)	(7,973)	(44,365)
<b>Net attributable profit</b>	<b>325,652</b>	<b>153,503</b>	<b>20,996</b>	<b>(8,077)</b>	<b>(530)</b>	<b>(29,775)</b>	<b>56,120</b>	<b>(73,018)</b>	<b>(6,198)</b>	<b>(57,564)</b>	<b>381,109</b>

**Other information :**

Tangible fixed assets	4,367,736	4,477,925	711,682	219,064	157,618	259,135	665,181	233,623	95,401	464,234	11,651,599
Intangible fixed assets	6,663	756	139,837	199,870	14,567	978	29,403	181,814	8,878	367,417	950,183
Current assets	1,108,217	1,072,971	76,661	81,144	43,894	38,933	781,218	170,896	110,993	(420,111)	3,064,816
Shareholders equity	4,101,294	1,658,780	368,534	194,150	113,526	108,043	428,732	(204,018)	53,835	(1,524,869)	5,298,007
Current liabilities	3,423,871	3,502,151	105,685	80,416	33,229	127,582	618,986	854,089	207,351	(4,130,949)	4,822,411
Investment in fixed assets	281,812	405,211	37,874	20,736	11,918	59,091	74,215	28,564	58,784	25,069	1,003,274

- (a) The electricity generation includes the renewables segment
- (b) The commercial activity of the Gas segment is aggregated with the Distribution and Supply

**Table of Contents****EDP Group Activity by Business Segment****Information by business segment - 2002**

(Amounts expressed in thousands of euros)

	Portugal		Spain			Brazil		Information Technology	Services and Other Adjustments	EDP Group
	Generation	Distribution + Supply	Generation	Distribution	Gas <sup>(a)</sup>	Distribution	Telecoms			
<b>Turnover</b>										
Sales of electricity	1,425,432	3,503,395	145,063	150,126		668,597			(16,454)	5,876,158
Other sales	18,651	1,738	2,501	7,587	10,477		46,729	35,510	(11,210)	111,983
Services rendered	18,212	33,075	773	6,262	1,062		274,057	188,494	(123,518)	398,417
	<u>1,462,295</u>	<u>3,538,208</u>	<u>148,337</u>	<u>163,975</u>	<u>11,539</u>	<u>668,597</u>	<u>320,786</u>	<u>224,004</u>	<u>(151,183)</u>	<u>6,386,558</u>
<b>Raw materials and consumables</b>										
Purchase of electricity	37,277	2,386,353	33,600	120,511		486,530			(58,745)	3,005,526
Fuel costs	465,527		38,270	1,056					(39,326)	465,527
Other materials	4,377	80,121	190	1,128	3,314	3,979	53,378	31,640	37,917	216,044
	<u>507,182</u>	<u>2,466,474</u>	<u>72,060</u>	<u>122,695</u>	<u>3,314</u>	<u>490,509</u>	<u>53,378</u>	<u>31,640</u>	<u>(60,155)</u>	<u>3,687,097</u>
<b>Gross Margin</b>	<u>955,114</u>	<u>1,071,734</u>	<u>76,277</u>	<u>41,280</u>	<u>8,225</u>	<u>178,088</u>	<u>267,408</u>	<u>192,364</u>	<u>(91,028)</u>	<u>2,699,461</u>
<b>Other operating income / (costs)</b>										
Supplies and services	(72,963)	(209,157)	(14,491)	(26,859)	(1,538)	(36,038)	(293,736)	(75,121)	54,833	(675,070)
Personnel costs	(119,559)	(380,554)	(9,358)	(8,013)	(954)	(39,569)	(89,691)	(75,470)	98,398	(624,771)
Own work capitalized	26,183	161,777	(385)	2,866	173	793	30,225	12,633	7,503	241,769
Concession and power-generating rents	(3,664)	(154,008)							(504)	(158,176)
Other operating income / (costs)	5,393	8,832	42	433	92	(6,293)	5,685	862	(9,368)	5,678
	<u>(164,610)</u>	<u>(573,110)</u>	<u>(24,193)</u>	<u>(31,574)</u>	<u>(2,227)</u>	<u>(81,107)</u>	<u>(347,516)</u>	<u>(137,096)</u>	<u>150,862</u>	<u>(1,210,570)</u>
<b>Gross Operating Margin</b>	<u>790,504</u>	<u>498,624</u>	<u>52,084</u>	<u>9,705</u>	<u>5,999</u>	<u>96,981</u>	<u>(80,108)</u>	<u>55,268</u>	<u>59,833</u>	<u>1,488,890</u>
	<u>228,231</u>	<u>333,619</u>	<u>17,103</u>	<u>7,515</u>	<u>2,251</u>	<u>34,227</u>	<u>66,852</u>	<u>18,924</u>	<u>30,819</u>	<u>739,541</u>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Depreciation and amortization										
Provisions	11,612	65,331	2,283	291	279	1,393	7,881	781	10,793	100,645
Operating Margin	550,661	99,674	32,697	1,899	3,468	61,362	(154,841)	35,563	18,221	648,704
Financial income / (expense)	(90,135)	(47,164)	(16,184)	(5,497)	(1,718)	2,755	(26,579)	(8,503)	35,611	(157,413)
(Amortization of goodwill and concession rights)			(5,692)	(6,326)	(2,325)		(16,012)	(5,353)	(29,724)	(65,431)
Current results	460,526	52,510	10,822	(9,924)	(574)	64,117	(197,432)	21,707	24,108	425,860
Extraordinary gains / (losses)	7,066	85,660	(3,366)	(1,739)	(90)	(23,688)	(259,328)	(6,890)	63,436	(138,939)
Profit before taxes	467,592	138,170	7,456	(11,663)	(664)	40,429	(456,760)	14,817	87,544	286,921
Income taxes	170,643	41,836	1,558	(2,711)	(618)	(29,772)	(33,483)	6,617	17,668	171,739
Minority interests			(391)			24,338	(230,066)	394	(14,309)	(220,034)
<b>Net attributable profit</b>	<b>296,949</b>	<b>96,334</b>	<b>6,289</b>	<b>(8,951)</b>	<b>(47)</b>	<b>45,862</b>	<b>(193,212)</b>	<b>7,806</b>	<b>84,185</b>	<b>335,216</b>
<b>Other information :</b>										
Tangible fixed assets	4,324,116	4,329,978	721,619	212,378	49,647	673,956	242,869	85,464	564,210	11,204,237
Intangible fixed assets	5,877	143	148,667	209,204	569	12,403	219,646	9,259	498,395	1,104,164
Current assets	842,134	811,182	96,099	76,259	11,440	812,274	347,794	169,594	(530,905)	2,635,871
Shareholders equity	3,862,590	1,519,190	412,067	195,503	56,786	344,281	(86,287)	67,779	(877,727)	5,494,182
Current liabilities	726,865	2,477,066	198,193	105,604	26,785	294,985	1,076,689	183,107	(231,822)	4,857,472
Investment in fixed assets	238,365	384,823	55,216	33,258	13,880	25,382	228,619	28,199	47,911	1,055,653

- (a) The commercial activity of the Gas segment is aggregated with the Distribution and Supply
- (b) Profit and loss account of Hidrocantábrico Group included in EDP Group's accounts by the proportional method with a 40% interest shareholding

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**42.i Reconciliation to accounting principles generally accepted in the United States of America**

The consolidated financial statements of EDP Group have been prepared in accordance with Portuguese GAAP which varies in certain significant aspects from U.S. GAAP. Differences that have a significant effect on the Group consolidated results of operations and shareholders equity are as follows:

**a) Revaluation of fixed assets**

The Group's fixed assets that were acquired prior to 1994 are stated at revalued amounts as permitted under Portuguese GAAP. The revalued fixed assets are being depreciated over their estimated useful lives on their revalued basis. Under U.S. GAAP, fixed assets may not be stated at more than their historical acquisition cost. Accordingly, in the accompanying reconciliation, the increases in shareholders' equity and the related increase in depreciation expense occurring as a result of such revaluations have been reversed for all periods presented. Depreciation for corporate income tax purposes is based on the original acquisition cost and 60% of the additional revaluation increment. Therefore, the adjustments also reflect the remaining deferred tax benefit arising from the revaluation increments. The effect of the revaluation on the gains and losses on disposals is not significant.

**b) Capitalized overhead**

Under Portuguese GAAP, general and administrative overhead costs associated to assets under construction are capitalized and amortized on a straight line basis considering the useful life of the referred assets. Under U.S. GAAP, those overheads are expensed in the period incurred.

**c) Foreign exchange differences**

As permitted under Portuguese GAAP, prior to 1995, the EDP Group capitalized gains and losses related to net foreign exchange differences, that resulted from loans contracted to fund capital expenditures denominated in foreign currencies. Under U.S. GAAP, foreign exchange gains and losses were considered as expenses.

**d) Deferred costs**

Under Portuguese GAAP, set-up costs, research and development expenses and other deferred costs are capitalized and amortized. Under U.S. GAAP, such costs are expensed in the period incurred. Subsidies received with respect to research and development costs, which are also deferred under Portuguese GAAP, were recognized as an income under U.S. GAAP, as the related research and development costs were expensed.

**e) Hydrological correction account**

The hydrological correction account, or hydro account, was established by Decree law no. 338/91 and constitutes a legally mandated mechanism for compensating the variable costs of electricity generation. This accrual was set up mainly in 1994 through a charge against income during the period that EDP was owned by the Portuguese state. Despite the separation of REN from EDP in 2000, further regulation (through Decree law no. 98/2000) maintained the requirement to keep this account on the balance sheet.

The main objective of the hydro and account is to avoid imbalances in the electricity sector due to changes in variable costs incurred as a result of hydrological conditions. Accordingly, since the tariffs cannot be modified immediately to reflect the changes in variable costs incurred as a result of hydrological conditions, this account is used to compensate the volatility in variable operating costs of power generators in the PES for unfavorable hydrological conditions, such as when thermal generation increases and, consequently, expenditures on fuel and electricity imports increase substantially. In years with abundant rainfall, the opposite occurs. In this context, and with a view toward avoiding major distortions in operating results due to favorable or unfavorable hydrological conditions, the hydro account is adjusted upwards or downwards based upon average hydrological conditions.

As mentioned above until 2000 REN was part of the EDP Group and therefore the movements of the hydro account were within the EDP Group. Since the separation of REN in June 2000, EDP (at the holding company level) pays or receives cash from REN, which is booked against the hydro account. The net movement in the hydro account between December 31, 2000 and December 31, 2004 was approximately 1 million. EDP records a charge for the financing cost associated with the amount of the accumulated balance of this account, which is recognized in earnings under Portuguese GAAP. REN uses the amount received or paid to compensate the operators in the PES (a significant majority of which are EDP's subsidiaries) in accordance with the objectives of the hydro account as described above. As such, REN is effectively a flow-through entity for purposes of the hydro account. For Portuguese GAAP purposes, the operators in the PES who receive or pay cash to REN account for it against earnings.

The Portuguese government approves the amount of the accumulated balance and the movements during the year on an annual basis. REN is engaged to calculate the amounts to be received or paid by us in relation to the hydro account.

In prior years, for Portuguese GAAP purposes, the balance continued to be reported as a liability in accordance with local legislation. For U.S. GAAP purposes, the portion of the liability established through 1994 was eliminated with an offsetting increase to shareholders' equity. In essence, this increase to shareholders' equity was equivalent to accounting for accrued income. Thus, in periods up to December 2003, it was considered that the amount recorded as an asset would be recoverable through future benefits flowing to the EDP Group. Subsequent to 1994, payments and receipts by EDP to REN are treated as increases or decreases of the liability under both Portuguese and U.S. GAAP.

During 2004, Decree law no. 240/2004 was issued, with the purpose of regulating the early termination of the PPAs, a step toward the liberalization of the energy market within the Iberian Peninsula. This decree law states that with the introduction of the free trading market, which is currently expected to occur within the next twelve months, the government will be required to introduce a new regulation regarding the purpose and scope of the hydro account as well as the mechanisms to compensate producers for their increased risks resulting from the early termination of PPAs.

As a result of the introduction of this regulation mandated by the above-mentioned decree law, and in light of the above-mentioned government announcement, EDP's board of directors and management consider that it is probable that the hydrological correction mechanism will be terminated. At such date the liability recorded for the hydro account, including the balance relating to pre-1994 activity, will be payable to a third party to be nominated by the regulator. Moreover, since this regulation can only be introduced simultaneously with the effective liberalization of the energy market in the Iberian Peninsula, EDP's board of directors and management consider that the accrued income accounted as an asset will cease to have any future economic benefits. Therefore, at the end of 2004, EDP recorded a full valuation allowance against the asset recorded in its U.S. GAAP accounts in the amount of 315 million as at December 31, 2004.

**f) Distribution of bonus to management and employees**

In accordance with the by-laws of certain subsidiaries, shareholders are required to approve at the annual general meetings any percentage of profits to be paid to management and employees. These amounts payable to the managers and employees are considered to be a distribution of profits on the same basis as dividends payable to the shareholders because they are legally a reallocation of entitlements from shareholders to managers and employees. Under local accounts, this attribution of bonus is charged to retained earnings in the year that it is paid and is deductible for tax purposes from the profits of the year to which it relates. Under U.S. GAAP, bonuses distributed as a result of rendered services are recognized as an expense in the period to which they relate.

**g) Minority interests**

Under Portuguese GAAP, in prior years, the accumulated losses attributable to minority interests that exceeded the equity capital attributable to minority interests in the subsidiaries has been recorded in the balance sheet as negative minority interests. In the income statement, the losses attributable to minority interests were charged to the minority interest in the proportion of their shareholding. Beginning on January 1, 2004, the EDP Group adopted a new accounting policy by which the accumulated losses attributable to minority interest which exceed the equity capital attributable to minority interest in subsidiaries resulting in negative minority interest are debited against the equity of the EDP Group. In the income statement, losses continue to be attributed to the minority interest in the proportion of their shareholding.

Under U.S. GAAP, as there is no binding obligation of minority interests to cover such losses, losses exceeding the equity attributable to minority interest are charged to the majority interest in the income statement. If future earnings do materialize, the majority interest will be credited to the extent of such losses previously absorbed (see restatement of prior years under note 42.ii).



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**h) Employee retirement benefits and additional minimum pension liability**

The Company and some of its subsidiaries have pension obligations, both defined benefit and contribution plans and also medical benefits for retired employees. Costs for defined contribution are expensed when incurred. Both under Portuguese GAAP and U.S. GAAP, unrecognized actuarial gains and losses are amortized under the corridor method. Under the corridor method, actuarial net gains or losses up to 10 per cent of the greater of the projected benefit obligation or the value of plan assets are not to be recognized or amortized as part of the net pension cost of the year. The value of the unrecognized actuarial net gains or losses that exceeds the value of 10 per cent as defined above shall be amortized over the average remaining service period of the employees. Obligations and annual expenses for medical benefits and defined benefit pension plans are determined on actuarial basis. The adjustment required for U.S. GAAP purposes reflects the difference between the unrecognized actuarial gains and losses deferred due to the difference dates of adoption of the corridor method. Additionally, for U.S. GAAP purposes an additional minimum liability is calculated.

**i) Accounts receivable municipalities**

Historically EDP had outstanding receivables, with several Portuguese Municipalities. In prior years, EDP reached agreements on the terms of the future settlement of the outstanding debts, with some of these municipalities, and reversed the correspondent bad debt provision in the accounts under Portuguese GAAP. Under U.S. GAAP, the collection of the receivables had previously been considered not probable and consequently had been fully provided. Management has reassessed the likelihood of collecting these debts and has written back the provision for doubtful debts under U.S. GAAP, based on the actual collections and on the estimated recoverable amount of outstanding receivables.

**j) Power purchase agreements**

Under Portuguese GAAP, fixed assets used by binding producers are recorded as tangible fixed assets in the financial statements of each company, and are recorded at acquisition cost except for those that were acquired prior to 1994, which are stated at their revalued amount. The referred tangible assets are amortized on a straight line basis, over the estimated useful life in accordance with Decree-law 2/90. The remain useful life of PPAs is from 9 to 20 years for hydro power plants and 3 to 13 years for thermal power plants.

EDP Group celebrated several contracts with REN, which are treated as leases, under U.S. GAAP. The evaluation of whether an arrangement contains a lease within the scope of Statement 13 and EITF 01-8 is based on the substance of the arrangements. Those contracts include agreements that, although not nominally identified as leases, meet the definition stated in the referred statements, that a lease transfers substantially all of the benefits and risks related to the property to the lessee. In substance, those contracts explicitly identified the group of assets (power plants) under which EDP produces power exclusively to be provided to the lessee and cannot use any other power plant to supply the referred power to the referred lessee.

Additionally, those contracts convey the right to use those power plants and require that the total production is acquired by REN, who is the lessee. Those contracts are being considered as capital leases for U.S. GAAP purposes, due to the fact that those contracts transfer the risks and the rewards of the usage to the lessee during the period of the lease term and the ownership of the property to the lessee (REN) at the end of the

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

lease term and the lease terms are the same as the useful lives of power plants. As permitted under Portuguese GAAP, these assets are classified as tangible fixed assets and amortized on straight-line basis at rates accepted by the tax authorities or for general purposes business, which reflects the economic useful lives of each category of fixed assets.

On January 27, 2005, in accordance with Decree-Law 240/2004, of December 27, the EDP Group signed the early termination contracts of PPAs related to the Binding Electricity Producers centers. The termination agreements effects are suspended until a set of conditions is met which includes the start up of the spot market that assures the sales of generated electric energy and the attribution of Non-Binding production licences. When the conditions set out above allow for the effective termination of PPAs under U.S. GAAP, the power plants will be accounted in a similar manner as the current accounting under Portuguese GAAP.

### **k) Investments**

Under Portuguese GAAP, investments in publicly traded equity securities, other than those of subsidiaries and those that are accounted for under the equity method, were carried at historical cost until 2001. From January 1, 2002 under Portuguese GAAP these investments are classified as available for sale, recognized at its fair value and the changes therein, net of income taxes, are recorded in shareholders' equity. Impairment losses are recognized in earnings when occur.

Under U.S. GAAP, these investments are recognized as available for sale securities, recognized at its fair value and the changes therein, net of income taxes, would be recorded in a separate component of shareholders' equity and included in the determination of comprehensive income. Any other than temporary impairment are recognized in earnings. In 2002 an amount of Eur 247,751 thousand was recognized as impairment loss.

### **l) Equity accounting on investments**

The Group's equity investments are affected by certain accounting differences between U.S. GAAP and Portuguese GAAP. The main differences are related with revaluation of fixed assets, overheads capitalized, deferred costs, distribution to management and employees, PPAs and deferred income taxes. These differences are of a similar nature as described in paragraphs a) to i) above.

### **m) Concession subsidies**

Under Portuguese GAAP, the amount classified as deferred income related to assets under concession in Brazil is not amortized. However, the assets under concession are amortized on a straight line basis over the concession period. Under U.S. GAAP, the amortization of the accrued income, should be recorded using the same period as the assets amortization. As this amount was not amortized in prior years under U.S. GAAP, EDP made a restatement to correct this issue in the income statement and in shareholders' equity of each reported period.

### **n) Derivative instruments**

The EDP Group uses derivatives in the normal course of business, to hedge exposures to exchange rate risk and interest rate risk. Derivatives are not generally held by EDP for speculative trading purposes. FAS 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended by FAS 137 and FAS 138, was adopted by EDP with effect from January 1, 2001 under U.S. GAAP. FAS 133 requires that an entity recognize all derivatives at fair value and prescribes requirements for designation, documentation of hedging relationships and ongoing assessments of effectiveness in order to qualify for hedge accounting.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

From January 1, 2003 onwards, EDP adopted IAS 39 in local accounts. EDP Group decided to formalize hedge accounting starting January 1, 2004 for Portuguese GAAP. Considering that, there are no accounting differences between IAS 39 and U.S. GAAP, regarding hedge accounting models applied by EDP (Fair value and cash-flow models), no adjustment was considered for U.S. GAAP purposes after January 1, 2003.

F-54

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**o) Depreciation of goodwill**

Under Portuguese GAAP, goodwill arising from acquisitions of shareholdings in subsidiaries and associates, resulting from the difference between the cost of acquisition and the proportional fair value of net assets acquired, is amortized over the estimated useful life not exceeding 20 years.

As of January 1, 2002 U.S. GAAP requires that goodwill, including previously existing goodwill, is not amortized but is tested for impairment annually. EDP reviews the value of the goodwill periodically for other than temporary impairment and during 2004, impairment losses related to information technologies business were identified, and recognized in earnings.

**p) Equity Method vs Proportional consolidation**

Until 2003, EDP owned 40% of share capital in Hidroeléctrica del Cantábrico (HC). This investment under Portuguese GAAP was consolidated under the proportional method. Under U.S. GAAP, HC was accounted for by the equity method.

In December, 2004 EDP acquired an additional investment of 56.2% in Hidroeléctrica del Cantábrico, increasing its investment to 95.7%. Consequently, at December 31, 2004, the referred subsidiary was consolidated under the full consolidated method, under Portuguese GAAP. At December 31, 2004, no differences exist between the local and U.S. GAAP.

**q) Tariff adjustments and accounting for rate regulated entities**

In activities subject to regulation, the criteria of allocation of income and expense to each accounting period may be different from the criteria applicable to non-regulated activities. For accounting purposes, when the regulator establishes a criteria of allocating income and expense to future years, then a regulatory asset or liability is recognized in the financial statements, which otherwise would be booked as profit or loss of the year.

Regulatory assets relate to deferred costs defined and regulated by the regulator, which should be recovered through the increase of electricity tariffs during subsequent periods. Regulatory liabilities relate to future decreases in income defined and regulated by the regulator, which should have an impact on customers through the decrease of electricity tariffs during the subsequent periods.

In Portugal, the tariffs of electricity supplied to clients in the Binding Sector are determined by the regulator. Tariffs for clients outside the Binding Sector are negotiated and contracted on an individual basis. Tariffs in the electricity distribution business are subject to a price cap

mechanism. These earnings are subject to a gross profit restriction and after being subject to confirmation or approval by the regulator are adjusted in future tariffs revenues. We estimate those future tariff revenue or adjustments and defer or accrue the recognition of the revenues until future periods in our Portuguese GAAP accounts. Even though the tariff adjustments are subject to formal approval by the regulator, these amounts are recorded under other assets or other liabilities in the accompanying balance sheet prepared under Portuguese GAAP. In the U.S. GAAP financial statements, these assets or liabilities recorded for the regulated activities in Portugal are eliminated because, in substance, we believe that the tariff adjustments regulation does not meet in full the criteria set out in SFAS 71. Even though the scope criterion of SFAS 71 is met with respect to the regulated activities in Portugal, due to the uncertainty in relation to future income being in an amount at least equal to the capitalized cost or a situation of a permanent roll forward of cost with current year costs being deferred and prior cost being recovered in each period, the asset recognition criteria as defined in SFAS 71 is not met. As a result, tariff adjustments related to Portuguese activities are not reflected in U.S. GAAP accounts and therefore are included as a reconciling item in the reconciliation from local to U.S. GAAP. However, the assets or liabilities resulting from the tariff adjustments mechanism set out by the regulator regarding our activities in Brazil meets the requirements of SFAS 71 and therefore are accounted for on that basis. The assets and liabilities considered by the Companies in Brazil as regulatory assets are fully compliant with the regulator (ANEEL - Agência Nacional de Energia Elétrica). Eligible costs are specifically determined by the regulator and are recoverable through the recovery rates. Resulting from measures taken by the Brazilian government and by the regulator in 2001, our companies in Brazil are subject to the application of SFAS 71. In December 2001, in order to compensate the companies, an agreement with the Brazilian government was reached for all the entities operating in the sector, which allows the increase of regulated rates for a period of six years. Considering SFAS 71 and EITF 92-7, Energias do Brasil only considered regulatory assets based on two years projections of current level consumption.

**r) Regulatory assets on restructuring costs**

During 2003 and 2004, EDP set up a restructuring plan that consisted of a reduction of employees, most of them through pre-retirements, early retirements or indemnities schemes. These costs were accepted by the Energy Services Regulatory Entity as a deferred cost (regulatory asset) amortizable over a period of 20 years, beginning in 2005.

For U.S. GAAP purposes, the regulatory assets were reversed.

**s) Income taxes**

Both under U.S. GAAP and Portuguese GAAP, income taxes are provided using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amount of assets and liabilities and their tax bases. A valuation allowance is provided based on the expected realization of the deferred tax assets. Additionally, any deferred tax effect of other U.S. GAAP adjustment is reflected.

**t) Operating income**

Under U.S. GAAP, except for losses resulting from discontinued operations which would be presented separately, substantially all the amounts in Note 37 would be included in the determination of operating income.

**u) Other comprehensive income**

In relation to other comprehensive income, in prior years, a reconciliation between the opening and closing balance of other comprehensive income was not presented in the notes to the financial statements in accordance with SFAS No. 130. SFAS No. 130 requires that the total of other comprehensive income should be disclosed separately from retained earnings. The Group has included the information required for the total of other comprehensive income for each of the reported periods and has restated the balances to comply with the requirements of SFAS No. 130. Whilst this restatement had an impact on the total value of other comprehensive income, it had no impact on the total value of shareholders

equity as at December 31, 2003 and 2002.

**v) Impact of Recently Issued Accounting Standards**

**Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections (SFAS No. 145)**

In April 2002, the FASB issued SFAS No. 145, Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections (SFAS No. 145). SFAS No. 145 rescinds SFAS No. 4, Reporting Gains and Losses from Extinguishment of Debt (SFAS No. 4) and an amendment of that statement, SFAS No. 64, Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements (SFAS No. 64). SFAS No. 145 also amends SFAS No. 13, Accounting for Leases (SFAS No. 13), to eliminate an inconsistency between the required accounting for sale-leaseback transactions and the required accounting for certain lease modifications that have economic effects that are similar to sale-leaseback. The adoption of SFAS No. 145 did not have a material impact on the Group's financial position, results of operations or cash flows.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Accounting for Costs Associated with Exit or Disposal Activities (SFAS No. 146)**

In June 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities (SFAS No. 146), which requires companies to recognize costs associated with exit or disposal activities when they are incurred, rather than at the date of a commitment to an exit or disposal plan. In addition, SFAS No. 146 requires that the liability be measured at fair value and be adjusted for changes in estimated cash flows. Examples of costs covered by the standard include lease termination costs and certain employee severance costs that are associated with a restructuring, discontinued operations, a plant closing or other exit or disposal activity. The adoption of SFAS No. 146 did not have a material impact on the Group's financial position, results of operations or cash flows.

**Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities (EITF 02-3)**

In November 2002, the EITF released Issue No. 02-3, Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities (EITF 02-3). In EITF 02-3 the FASB staff clarified that, in the absence of (a) quoted market prices in an active market, (b) observable prices of other current market transactions or (c) other observable data supporting a valuation technique, the transaction price represents the best information available with which to estimate fair value at the inception of the arrangement for all derivatives. The adoption of EITF 02-3 did not have a material impact on the Group's financial position, results of operations or cash flows.

**Guarantor's Accounting and Disclosure Requirements for Guarantees (FIN No. 45)**

In November 2002, the FASB issued FIN No. 45 Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others – an Interpretation of FASB Statements No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34 (FIN No. 45). FIN No. 45 requires certain disclosures to be made by a guarantor in its financial statements for periods ending after December 15, 2002 about its obligations under certain guarantees it has issued. It also requires a guarantor to recognize, at the inception of a guarantee issued or amended after December 31, 2002, a liability for the fair value of the obligation undertaken in issuing the guarantee. The adoption of FIN No. 45 did not have a material impact on the Group's financial position, results of operations or cash flows.

**Amendment of Statement 133 on Derivative Instruments and Hedging Activities (SFAS No. 149)**

In April 2003, the FASB issued SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities (SFAS No. 149), which amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS No. 133, Accounting for Derivatives and Hedging Activities (SFAS No. 133). Specifically, SFAS No.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

149 clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative and when a derivative contains a financing component that warrants special reporting in the consolidated statement of cash flows. Certain derivative instruments entered into or modified after June 30, 2003 and that the Group has determined contain a financing element at inception and where the Group is deemed the borrower, are now included as a separate component within Cash flows from financing activities. Prior to July 1, 2003, these derivative instruments were included within Cash flows from operating activities.

The adoption of SFAS No. 149 did not have a material impact on the Group's financial position, results of operations or cash flows.

### **Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity (SFAS No. 150)**

In May 2003, the FASB issued SFAS No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity (SFAS No. 150). SFAS No. 150 establishes standards for an issuer's classification of certain financial instruments that have both liability and equity characteristics and imposes additional disclosure requirements. Effective September 30, 2003 the Group adopted SFAS No. 150 for financial instruments entered into or modified after May 31, 2003. The adoption of SFAS No. 150 did not have a material impact on the Group's financial position, results of operations or cash flows.

### **Determining Whether an Arrangement contains a Lease (EITF 01-8)**

In May 2003, the EITF reached a consensus on EITF 01-8, Determining Whether an Arrangement contains a Lease. EITF 01-8 clarifies certain provisions of SFAS No. 13, Accounting for Leases, with respect to the identification of lease elements in arrangements that do not explicitly include lease provisions. Any lease element identified under EITF 01-8 should be accounted for under current lease accounting literature by lessors and lessees. The Company was required to apply the provisions of EITF 01-8 prospectively to arrangements newly agreed to, modified, or acquired in a business combination beginning January 1, 2004. The adoption of EITF 01-8 did not have a significant impact on the Company's consolidated financial statements.

### **The Meaning of Other-than-Temporary Impairment and Its Application to Certain Investments (EITF 03-1)**

In November 2003, the Emerging Issues Task Force reached a consensus on certain additional quantitative and qualitative disclosure requirements in connection with its deliberations of Issue 03-1, The Meaning of Other-than-Temporary Impairment and Its Application to Certain Investments, which also discussed the impairment model for available for sale and held to maturity securities under SFAS No. 115 (EITF 03-1). The Group has adopted the new disclosure requirements of EITF 03-1.

### **Consolidation of Variable Interest Entities (FIN No. 46-R)**

In December 2003, FASB released a revision of FIN (FIN No. 46-R), which includes substantial changes from the original. The calculation of expected losses and expected residual returns have both been altered to reduce the impact of decision maker and guarantor fees in the calculation of expected residual returns and expected losses. In addition, FIN No. 46-R changes the definition of a variable interest. The interpretation permits adoption of either the original or the revised versions of FIN No. 46 until the first quarter of 2004, at which time FIN No. 46-R must be adopted. The adoption of FIN No. 46 did not have any impact on the Group's financial position, results of operations or cash flows.



**Postretirement Benefits (SFAS No. 106-1)**

In January 2004, FASB issued FASB Staff Position FASB SFAS No. 106-1, Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (FSP SFAS No. 106-1), in response to the December 2003 enactment of the Medicare Drug, Improvement and Modernization Act of 2003 (the Act). The Act introduces a prescription drug benefit for individuals under Medicare (Medicare Part D) as well as a federal subsidy equal to 28% of prescription drug claims for sponsors of retiree health care plans with drug benefits that are at least actuarially equivalent to those to be offered under Medicare Part D. FSP SFAS No. 106-1 allows plan sponsors the option of accounting for the effects of the Act in financial statements for periods that cover the date of enactment or making a one-time election to defer the accounting for the effects of the Act.

As the Act is only applicable to US resident companies, it is not expected to have any effect on the Group's Consolidated Financial Statements.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Employers' Disclosures about Pensions and Other Postretirement Benefits (SFAS No. 132) – an amendment of FASB Statements No. 87, 88, and 106 (Issued 12/03)**

This Statement revises employers' disclosures about pension plans and other postretirement benefit plans. It does not change the measurement or recognition of those plans required by FASB Statements No. 87, Employers' Accounting for Pensions, No. 88, Employer's Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits, and No. 106, Employers' Accounting for Postretirement Benefits Other than Pensions. This statement retains the disclosure requirements contained in FASB Statement No. 132, Employer's Disclosures about Pension and Other Postretirement Benefits, which it replaces. It requires additional disclosures to those in the Original Statement.

SFAS No. 132R is effective for years ending after December 15, 2003. The Group has adopted the new disclosure requirements of this standard.

**Equity method of accounting (EITF 02-14)**

On July 16, 2004, the FASB ratified the Emerging Issues Task Force (EITF) consensus on Issue No. 02-14, Whether the Equity Method of Accounting Applies When an Investor Does Not Have an Investment in Voting Stock of an Investee but Exercises Significant Influence through Other Means (EITF 02-14). The consensus concludes that an investor should apply the equity method of accounting when it can exercise significant influence over an entity through a means other than holding voting rights. The consensus is effective for reporting periods beginning after September 15, 2004. The adoption of EITF 02-14 will not have a material impact on the Group's financial position, results of operations or cash flows.

**Accounting for Preexisting relationships between the Parties to a Business Combination (EITF 04-1)**

In October 2004, the EITF reached a consensus on EITF 04-1, Accounting for Preexisting relationships between the Parties to a Business Combination. EITF 04-1 addresses various elements connected to a business combination between two parties that have a pre-existing relationship and the settlement of the pre-existing relationship in conjunction with the business combination. The Company will be required to apply the provisions of EITF 04-1 to business combinations consummated and goodwill impairment tests performed beginning January 1, 2005.

**Inventory Costs (SFAS No. 151)**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs*, which is an amendment of Accounting Research Bulletin No. 43, *Inventory Pricing*. SFAS No. 151 clarifies that abnormal amounts of idle facility expense, freight, handling costs and wasted materials (spoilage) should be recognized as current period charges. The provisions of SFAS No. 151 are effective for inventory costs incurred beginning January 1, 2006, and are applied on a prospective basis. The Company does not expect the adoption of SFAS No. 151 to have a significant impact on the Company's consolidated financial statements.

### **Determining Whether to Report Discontinued Operations (EITF 03-13)**

In November 2004, the EITF reached a consensus on EITF 03-13, *Applying the Conditions in Paragraph 42 of FASB No. 144 in Determining Whether to Report Discontinued Operations*. EITF 03-13 addresses how an ongoing entity should evaluate whether the operations and cash flows of a disposed component have been or will be eliminated from the ongoing operations of the entity, and the types of continuing involvement that constitute significant continuing involvement in the operations of the disposed component. If continuing cash flows are determined to be direct, then the cash flows have not been eliminated and the operations of the component should not be presented as discontinued operations. If continuing cash flows are determined to be indirect, then the cash flows are considered to be eliminated and the operations of the component should be presented as discontinued operations. In order to determine the significance of the continuing involvement, consideration must be given to the ability to influence the operating and or financial policies of the disposed component, as well as the retention of risk or the ability to obtain benefits. The Company will be required to apply the provisions of EITF 03-13 to a component of an enterprise that is either disposed of or classified a held for sale beginning January 1, 2005.

### **Share-Based Payment (SFAS No. 123R)**

In December 2004, the FASB issued SFAS No. 123 (Revised 2004), *Share-Based Payment (SFAS No. 123R)*, SFAS No. 123R is effective for annual reporting periods beginning after June 15, 2005. The application of this standard will imply the accounting of the fair value of the unvested stock options held by the Group employees. However, the Group does not expect that SFAS No. 123R will have a material impact on its consolidated financial statements.

### **Exchanges of Nonmonetary Assets (SFAS No. 153)**

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Nonmonetary Assets*, which becomes effective for financial statements for fiscal years beginning after June 15, 2005. According to Accounting Principles Board Opinion No. 29 (APB 29), exchanges of nonmonetary assets are generally measured based on the fair value of the assets exchanged, with certain exceptions. SFAS No. 153 amends APB 29 to eliminate the exception for nonmonetary exchanges of similar productive assets, which were exchanged at carrying values, and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. The adoption of SFAS No. 153 is not expected to have a material impact on the Group's financial position, results of operations or cash flows.

### **Accounting for Conditional Asset Retirement Obligations (FIN No. 47)**

In March 2005, the FASB issued FASB Interpretation (FIN) No. 47 *Accounting for Conditional Asset Retirement Obligations*, which clarifies that a liability (at fair value) must be recognized for asset retirement obligations when it has been incurred if the amount can be reasonably estimated, even if settlement of the liability is conditional on a future event. FIN No. 47 is effective as of December 31, 2005. The Company is reviewing its asset retirement obligations to determine the need to record a liability to cover any conditional obligation. The Company is still evaluating the impact of the adoption of FIN No. 47.

**Accounting Changes and Error Corrections (SFAS No. 154)**

In May 2005, the FASB issued SFAS No. 154, Accounting Changes and Error Corrections - a Replacement of APB Opinion No. 20 and FASB Statement No. 3. SFAS No. 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS No. 154 also redefines restatement as the revising of previously issued financial statements to reflect the correction of an error. This statement is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. The Company does not believe that the adoption of SFAS No. 154 will have a material impact on the consolidated financial statements.

F-57

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The effect on net income and shareholders' equity is as follows:

**Net income**

	2004 US\$	2004 Euro 000	Restated 2003 Euro 000	Restated 2002 Euro 000
Net income as reported under Portuguese GAAP	529,767	440,152	381,109	335,216
U.S. GAAP adjustments increase (decrease) due to:				
a. Revaluation of fixed assets	214,004	177,803	191,257	200,973
b. Capitalized overheads	9,705	8,063	-14,473	-35,650
c. Foreign exchange differences	27,531	22,874	17,707	19,297
d. Deferred costs	-42,926	-35,665	78,586	20,870
e. Hydrological correction account	-379,844	-315,590	10,892	12,685
f. Distribution of bonus to management and employees	-27,542	-22,883	-24,592	-22,989
g. Minority interests	-58,366	-48,493	-48,759	-37,443
h. Employee retirement benefits	-9,545	-7,930	-41,738	-61,876
i. Accounts receivable - municipalities	82,886	68,865	3,654	3,082
j. Power purchase agreements	-14,225	-11,819	-12,198	-15,507
k. Investments				-247,751
l. Equity accounting on investments	76,167	63,283	23,112	-26,283
m. Concession subsidies	3,542	2,943	2,900	2,900
n. Derivative instruments				99,890
o. Depreciation of goodwill	49,194	40,872	54,439	11,896
q. Tariff adjustments	102,798	85,409	-77,919	-49,996
r. Regulatory assets	-389,625	-323,716	-39,451	
s. Income taxes	108,808	90,402	-56,277	62,410
Other	4,849	4,029	2,913	-7,265
Net adjustments	-242,589	-201,553	70,053	-70,757
Net income in accordance with U.S. GAAP	287,178	238,599	451,162	264,459
Basic and diluted net income per share	0.09	0.08	0.15	0.09

**Shareholders' equity**

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	2004	2004	Restated 2003
	US\$	Euro 000	Euro 000
Shareholders' equity as reported under Portuguese GAAP	7,705,103	6,401,714	5,298,007
U.S. GAAP adjustments increase (decrease) due to:			
a. Revaluation of fixed assets	-917,457	-762,261	-940,063
b. Capitalized overheads	-835,261	-693,969	-702,033
c. Foreign exchange differences	-300,191	-249,411	-272,289
d. Deferred costs	-102,020	-84,762	-49,047
e. Hydrological correction account			315,590
f. Distribution of bonus to management and employees	-29,705	-24,680	-22,519
g. Minority interests	70,808	58,830	-86,202
h. Employee retirement benefits	14,826	12,318	20,990
h. Additional minimum pension liability	-326,788	-271,509	-293,814
i. Accounts receivable - municipalities			-68,865
j. Power purchase agreements	-282,232	-234,490	-222,671
l. Equity accounting on investments	-62,585	-51,998	-115,281
m. Concession subsidies	36,375	30,222	27,873
o. Depreciation of goodwill	121,680	101,097	66,335
q. Tariff adjustments	-51,160	-42,506	-127,915
r. Regulatory assets	-436,471	-362,638	-39,451
s. Income taxes	908,220	754,586	655,379
Other	2,891	2,402	-4,379
Net adjustments	-2,189,070	-1,818,769	-1,858,362
Shareholders' equity in accordance with U.S. GAAP	5,516,033	4,582,945	3,439,645

F-59

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Changes in consolidated statements of Shareholders' Equity in accordance with U.S. GAAP are as follows:

	Total Shareholders Equity	Share capital	Share premium	Reserves and retained earnings	Accumulated other comprehensive income	Treasury stock
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
<b>Balances as at December 31, 2001 (restated)</b>	<b>4,456,015</b>	<b>3,000,000</b>		<b>1,589,575</b>	<b>-100,465</b>	<b>-33,095</b>
Dividends paid	-337,675			-337,675		
Purchase and sale of treasury stock	-10,399					-10,399
Net profit for the year restated	264,459			264,459		
Exchange differences arising on consolidation	-300,028				-300,028	
Other reserves arising on consolidation	1,358			1,358		
Additional minimum pension liability (net of tax)	-145,000				-145,000	
Fair Value of investments available for sale (net of tax)	7,076				7,076	
Deferred Income Taxes	-70,503			-70,503		
<b>Balances as at December 31, 2002 (restated)</b>	<b>3,865,303</b>	<b>3,000,000</b>		<b>1,447,214</b>	<b>-538,417</b>	<b>-43,494</b>
Dividends paid	-268,275			-268,275		
Purchase and sale of treasury stock	-5,526					-5,526
Net profit for the year restated	451,162			451,162		
Fair Value of investments available for sale (net of tax)	23,225				23,225	
Exchange differences arising on consolidation	-193,032				-193,032	
Other reserves arising on consolidation	3,717			3,717		
Additional minimum pension liability (net of tax)	-56,112				-56,112	
Deferred Income Taxes	-380,817			-380,817		
<b>Balances as at December 31, 2003 (restated)</b>	<b>3,439,645</b>	<b>3,000,000</b>		<b>1,253,001</b>	<b>-764,336</b>	<b>-49,020</b>
Dividends paid	-268,008			-268,008		
Treasury stock	15,034					15,034
Net profit for the year	238,599			238,599		
Increase in capital with the issue of 656,537,715 new shares in Dec 2004	1,208,029	656,538	551,491			
Expenses with share capital increase (net of tax)	-64,937		-64,937			
Fair Value of investments available for sale (net of tax)	-5,999				-5,999	
Exchange differences arising on consolidation	936				936	
Cash flow hedge - Fair value reserve (net of tax)	466				466	
Additional minimum pension liability (net of tax)	16,171				16,171	
Other reserves	3,009			3,009		
<b>Balances as at December 31, 2004</b>	<b>4,582,945</b>	<b>3,656,538</b>	<b>486,554</b>	<b>1,226,601</b>	<b>-752,762</b>	<b>-33,986</b>



F-59



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Certain significant line items of the balance sheets as presented on a Portuguese GAAP basis would be as follows after application of U.S. GAAP differences:

	<b>Group</b>	
	<b>2004</b>	<b>Restated 2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Fixed assets	9,721,775	7,172,209
Total Assets	23,525,081	17,730,012
Total current liabilities	6,919,644	3,269,671
Total long-term liabilities	11,230,463	10,873,342
Total Liabilities	18,150,108	14,143,013
Shareholders' Equity	4,582,945	3,439,645
Total Liabilities and Shareholders' Equity	23,525,081	17,730,012

**Accounts receivable**

The amount of accounts receivable, trade and long-term receivables in accordance with U.S. GAAP are as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Accounts receivable, trade</b>		
Accounts receivables	1,200,561	765,936
PPA receivables, short-term (less than 1 year)	133,680	121,527
	<b>1,334,241</b>	<b>887,463</b>
<b>Long-term receivables</b>		
Long-term receivables	945,423	435,842
PPA receivables, long-term (over 1 year)	3,056,474	3,190,154
	<b>4,001,897</b>	<b>3,625,996</b>

The amounts received from the PPA agreements are analyzed as follows:

	2004	2003	2002
	Euro 000	Euro 000	Euro 000
Rents received	452,695	453,347	457,570
Interest received	331,168	342,275	352,756
Capital reimbursement	121,527	111,072	104,814

### Income taxes

The components of the income tax provision and deferred income tax assets and liabilities in accordance with U.S. GAAP, before minority interest, are as follows:

	Group		
	2004	Restated 2003	Restated 2002
	Euro 000	Euro 000	Euro 000
<b>Current</b>			
- Portugal	-216,919	-178,821	-172,407
- Other	-39,890	-60,434	1,239
	-256,809	-239,255	-171,168
<b>Deferred</b>	191,104	-11,570	62,825
Income tax as reported	-65,705	-250,825	-108,343
Effect of restatement		-1,700	-1,700
Income tax as restated		-252,525	-110,043

Of the Eur 191.1 million of deferred tax expense for 2004, Eur 149.2 million relates to activities in Portugal and the balance of Eur 41.9 million relates to activities abroad.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

Components of deferred income tax assets and liabilities are analyzed as follows:

	<b>Group</b>	
	<b>2004</b>	<b>Restated 2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Deferred tax assets:</b>		
Tangible fixed assets	259,663	267,938
Intangible fixed assets and deferred costs	29,517	14,948
Accrued pension and post retirement liabilities	207,197	201,853
Power purchase agreements	64,485	61,234
Investments	57,106	11,811
Other provisions	84,626	95,438
Provision for doubtful accounts	22,544	42,278
Regulatory assets	102,052	12,765
Tax losses carried forward and tax credits	388,134	335,185
Investments in associates	38,563	41,053
Others		23,976
<b>Total deferred tax assets</b>	<b>1,253,887</b>	<b>1,108,479</b>
<b>Deferred tax liabilities:</b>		
Tangible fixed assets	106,998	77,952
Hydrological correction account		86,787
Tariff deviations	7,669	20,771
Concession subsidies	17,009	
Derivative instruments	19,134	31,624
Goodwill	138,045	40,874
Investments	11,211	1,712
Others	24,899	
<b>Total deferred tax liabilities</b>	<b>324,965</b>	<b>259,720</b>
<b>Total net deferred tax assets</b>	<b>928,922</b>	<b>848,759</b>
Valuation allowance	-131,851	-157,133
<b>Total net deferred tax assets as reported</b>	<b>797,071</b>	<b>691,626</b>
<b>Effect of restatement</b>		
Concession subsidies		-15,616

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Total net deferred tax assets as restated	676,010
---	---------

The change in deferred tax assets, for the year, was recognized as follows:

	<b>Group</b>
	<b>2004</b>
	<b>Euro 000</b>
Changes in equity	11,608
Other comprehensive income	-12,785
Business combination	-63,218
Other charges	-5,648
Net income	191,104
	<b>121,061</b>

F-61

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

The reconciliation of the expected income tax provision computed using the company's portuguese statutory income tax rate to the actual income tax provision for the years 2004, 2003 and 2002, is as follows:

	<b>Group</b>		
	<b>Restated</b>	<b>Restated</b>	
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Net income before minority interest and taxes under U.S. GAAP as reported	314,836	696,356	190,460
Effect of restatement		5,001	5,001
Net income before minority interest and taxes under U.S. GAAP as restated	314,836	701,357	195,461
Expected income tax expense at the statutory rate	78,709	210,407	58,638
Municipal income taxes	7,871	21,041	5,864
Change in tax rate and in estimates	7,534	-13,069	-22,863
Investments in associates, taxed at lower rates	-16,134	-10,419	-25,985
Goodwill amortization		115,113	71,945
Other	-12,275	-70,548	22,444
	<b>65,705</b>	<b>252,525</b>	<b>110,043</b>

An additional reconciliation of the expected income tax provision computed using the Company's Portuguese statutory income tax rate of 27.5% in 2004 to the actual income tax provision, is as follows:

	<b>Group</b>
	<b>2004</b>
	<b>Euro 000</b>
Net income in accordance with U.S. GAAP	238,599
Minority interest	10,532
Income tax for the year	
Current	256,809
Deferred	-191,104

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

	65,705
<hr/>	
Income before minority interest and tax in accordance with U.S. GAAP	
Portugal	201,073
Other	113,763
	<hr/>
	314,836
<hr/>	
Income tax rate for the year	27.5%
Income tax using the domestic corporate tax rate	86,580
Tax exempt revenues	-9,083
Tax credits in the year	-11,471
Tax incentives	-209
Change in previous years estimates	7,534
Change in valuation allowance	-25,282
Foreign tax rate difference	-1,552
Non-deductible depreciation on fixed assets	1,111
Non-deductible pension costs	4,164
Other non-deductible costs	30,047
Investments in associates taxed at lower rates	-16,134
	<hr/>
	65,705
	<hr/>

The total tax losses carried forward can be analyzed as follows:

	<b>Group</b>
	<b>2004</b>
	<b>Euro 000</b>
	<hr/>
<b>Expiration date:</b>	
2005	60,418
2006	153,443
2007	248,236
2008	413,149
2009	323,805
2010	169,428
2011	230,075
	<hr/>
	1,598,554
	<hr/>

Additionally, the Group has tax credits in the amount of Eur 80.7 million, generated by its Spanish subsidiary, Hidrocantábrico. These tax credits can be used until 2025.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Pensions**

EDP uses a December 31, 2004 measurement date for all of its plans. The components of the net periodic pension cost under U.S. GAAP include the following:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Service cost	9,768	12,240	13,222
Interest cost	79,342	84,849	88,824
Expected return on plan assets	-51,048	-50,086	-56,031
Worker s contributions	-473	-552	
Amortization of net actuarial losses	33,563	19,892	72,431
Amortization of transition obligation	5,826	5,826	6,130
<b>Net periodic pension cost</b>	<b>76,978</b>	<b>72,169</b>	<b>124,576</b>

The following table sets forth the changes and the funded status of the pension plan under U.S. GAAP:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Change in benefit obligation</b>		
Benefit obligation at the beginning of the year	1,477,290	1,448,733
Service cost	9,768	12,240
Interest cost	79,342	84,849
Estimated benefits paid	-147,121	-140,975
Curtailments/Settlements	271,908	847
Actuarial losses/(gains)	401,039	71,189
Exchange losses/(gains)	906	407
Benefit obligation of Brazilian subsidiaries	30,200	
Other fluctuations	-1,654	

Benefit obligation at the end of the year	<u>2,121,678</u>	<u>1,477,290</u>
---	------------------	------------------

The benefit obligation of Brazilian subsidiaries are covered with plan assets.

F-63



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Change in plan assets</b>		
Fair value of plan assets at the beginning of the year	816,502	749,945
Actual company contributions	62,012	58,287
Worker s contributions	462	552
Benefits paid	-56,144	-51,856
Actual return on plan assets	75,481	59,277
Exchange losses/(gains)	495	297
Plan assets of Brazilian subsidiaries	30,200	
	<b>929,008</b>	<b>816,502</b>
Funded status of plan (underfunded)	-1,192,670	-660,788
Unrecognized net actuarial losses/(gains)	878,749	532,458
Unrecognized transition obligation	38,883	50,678
	<b>-275,038</b>	<b>-77,652</b>
Prepaid/(accrued) benefit cost	-275,038	-77,652
Additional minimum pension liability recognized in OCI	-271,509	-293,814
Additional minimum pension liability recognized as intangible asset	-38,883	-50,678
	<b>-585,430</b>	<b>-422,144</b>
Prepaid/(accrued) benefit cost / pension liability	<b>-585,430</b>	<b>-422,144</b>

The accumulated benefit obligation in excess of plan assets, is as follows:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Projected benefit obligation	2,121,678	1,477,290
Accumulated benefit obligation	1,479,114	1,207,234
Fair value of plan assets	929,008	816,502

As of December 31, 2003 and 2004 plan assets consisted of:

	Group	
	2004	2003
	Euro 000	Euro 000
Portuguese State bonds	75,701	51,248
Foreign public bonds	224,700	133,380
<b>Bonds</b>	<b>168,115</b>	<b>201,452</b>
Investment fund units	158,463	138,139
Shares	105,986	90,522
Own Shares	1,059	627
<b>Buildings</b>	<b>185,757</b>	<b>185,894</b>
Cash and equivalents	42,032	41,921
Commercial paper		3,994
	<hr/>	<hr/>
	961,813	847,177
Plan assets relating to others (REN)	-32,805	-30,675
	<hr/>	<hr/>
	929,008	816,502
	<hr/>	<hr/>

EDP Group considered the target asset allocation mentioned below to be the appropriate for the stability and security of Pension Fund assets, level of periodic contributions and of the financing of the projected liabilities, taking into account investments restrictions, a risk profile and a level of returns:

- a) Investment strategy for three years, except actual property in the amount of 186 million Euros, currently rented to the Associates that should be reduced:

Bonds : 70% (min. 50%, max. 85%)

Equities: 30% (min. 15%, max. 40%)

Property: max. 5%.

- b) Asset returns measures against strategic benchmark.

- c) Risk diversification policies.

A summary of the assets of the plan, classified into its major assets classes, is shown below as at December 31, 2003 and 2004:

	Group	
	2004	2003
	<hr/>	<hr/>

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Total Bonds	49.70%	45.60%
Total Cash	4.40%	5.60%
Total Equities	24.60%	23.70%
Property	21.30%	25.10%
	<u>100.00%</u>	<u>100.00%</u>

F-64

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

In calculating the liabilities inherent in pension and other benefits within the EDP Group the following financial and actuarial assumptions were used:

	2004					
	Pension Benefits				Other benefits	
	Brazil					
	Portugal	Bandeirante	Escelsa	Enersul	Portugal	Brazil
<b>Assumptions</b>						
Discount rate	5.00%	10.76% aa	10.76% aa	10.76% aa	5.00%	10.76%
Long term rate of return on assets	6.40%	10.76% aa	12.98% aa	12.81% aa	n.a.	n.a.
Wage growth rate	3.50%	7.12% aa	6.08% aa	6.08% aa	n.a.	n.a.
Pension growth rate	3.00%	4% aa	4% aa	4% aa	n.a.	n.a.
Inflation rate	2.40%	4% aa	4% aa	4% aa	n.a.	n.a.
Medical trend rate	n.a.	n.a.	n.a.	n.a.	4.50%	8.16%

	2003		
	Pension Benefits		Other benefits
	Portugal	Brazil	Portugal
<b>Assumptions</b>			
Discount rate	5.20%	10.24%	5.20%
Long term rate of return on assets	5.70%	10.24%	n.a.
Wage growth rate	3.30%	7.12%	n.a.
Pension growth rate	2.25%	7.12%	n.a.
Inflation rate	2.00%	4.00%	n.a.
Medical trend rate	n.a.	n.a.	4.50%

The assumptions to determine the overall expected, Rate of return on assets, was determined with reference to EDP's target allocation and the best expectations for the long term returns on each of the following assets classes:

2004			Expected rate of return on assets
Weight	Real return	Weight return	Weight

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

					<b>Expected return on year</b>	<b>Long term expected return <sup>(4)</sup></b>
<b>Bonds <sup>(1)</sup></b>						
Government bonds	31.00%	2.30%	0.70%	18.00%	3.80%	5.00%
Corporate bonds <sup>(2)</sup>	21.00%	3.40%	0.30%	32.00%	4.80%	5.50%
<b>Equities</b>						
Global equities <sup>(3)</sup>	22.00%	7.60%	1.70%	30.00%	6.00%	7.00%
<b>Alternatives</b>						
Property	26.00%	5.00%	1.20%	5.00%	5.50%	5.00%
Private equity	n.a.	n.a.	n.a.	5.00%	15.00%	20.00%
Hedge funds	n.a.	n.a.	n.a.	10.00%	7.00%	10.00%
<b>Cash</b>						
Money market & short term funds	n.a.	n.a.	n.a.	0.00%	2.50%	4.00%
<b>Euro inflation</b>	n.a.	1.80%	1.80%	n.a.	n.a.	n.a.
<b>Total</b>	<b>100.00%</b>		<b>5.70%</b>	<b>100.00%</b>	<b>5.70%</b>	<b>7.00%</b>

(1) Includes euro and international bonds hedged into Eur.

(2) Includes fixed and floating rate bonds.

(3) Includes international equities hedged into Eur.

(4) Time horizon is 5 years.

The following is a summary of the significant assumptions used in the determination of the pension obligation:

	<b>2004 Rates</b>	<b>2003 Rates</b>	<b>2002 Rates</b>
Weighted average discount rate	5.0%	5.2%	6.0%
Rate of increase in compensation	3.5%	3.3%	3.3%
Expected rate of return on plan assets	6.4%	5.7%	6.5%
Expected percentage of eligible staff electing early retirement	*	*	*

\* During 2002 it was estimated that employees applying for early retirement would be 70% of the eligible employees. From 2003 and on, it was estimated that only 40% of eligible employees will apply for early retirement.

#### Other post-retirement benefits

EDP provides comprehensive medical coverage, in addition to that provided by the Portuguese national health system, for retired employees (including those who have taken early retirement) and their dependents. Additionally, the Company provides a death benefit to its retirees survivors. The Company manages the program internally and assumes the full cost of funding the program net of employee contributions

amounting to approximately 10% of the total medical expenses covered.

F-65

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

A summary, of the components of the net periodic post-retirement benefit cost under U.S. GAAP, is presented in the following table:

	<b>Group</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Service cost	8,044	5,942	6,540
Interest cost	34,946	29,049	30,095
Amortization of transition obligation	12,759	5,022	4,873
<b>Net periodic post-retirement benefit cost</b>	<b>55,749</b>	<b>40,013</b>	<b>41,508</b>

The following table sets forth the changes and the funded status of the plan under U.S. GAAP as of December 31, 2003 and 2004:

	<b>Group</b>	
	<b>2004</b>	<b>2003</b>
	<b>Euro 000</b>	<b>Euro 000</b>
<b>Change in benefit obligation</b>		
Benefit obligation at the beginning of the year	660,255	496,201
Service cost	8,044	5,942
Interest cost	34,946	29,049
Actuarial losses	29,837	153,162
Curtailments / Settlements	15,793	
Currency fluctuation	3	
Other	12,500	
Benefit paid	-24,121	-24,099
<b>Benefit obligation at the end of the year</b>	<b>737,257</b>	<b>660,255</b>
Unfunded status of plan	-737,257	-660,255
Unrecognized (gains)/losses	224,625	205,251
Unrecognized transition obligation	37,892	42,377
<b>Accrued benefit cost</b>	<b>-474,740</b>	<b>-412,627</b>

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

In accordance with FAS 87, EDP has performed a sensitivity analysis regarding Other post-retirement benefits, in accordance with the growth assumptions used as at December 31, 2004 for the projected increased in percentage terms of medical expenses:

	%		Obligations projected Euro 000
	2005 to 2012	after 2012	
Assumptions at December 31, 2004	4.5%	4%	737,257
Increase of 1%	5.5%	5%	837,985
Decrease of 1%	3.5%	3%	627,468

The assumed discount rate and salary growth rate used in determining the accumulated post-retirement benefit obligation was 5% and 3.5%, respectively, as of December 31, 2004 and 5.2% and 3.3%, respectively as of December 31, 2003.

FAS 106 allows recognition of the cumulative effect of the liability in the year of adoption or the amortization of the obligation over a period of up to 20 years. The Company has elected to recognize the initial post-retirement benefit obligation of Eur 101,455 thousand as of January 1, 1995, over a period of 17.7 years, the average remaining service period of the employee group.

The table below shows the expected benefit payments projections for the next ten years, based on the same assumptions used in the current year in accordance with FAS 132:

	Expected benefit payments	
	Pension	Other
2005	173,658	28,529
2006	170,699	29,544
2007	166,472	30,589
2008	161,390	31,669
2009	156,603	32,723
2010	152,022	33,798
2011	146,688	34,913
2012	141,377	36,039
2013	136,111	37,390
2014	132,152	38,711
2015	127,767	40,223

The estimated contributions for 2005 amount to Eur 57,636 thousand.



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Defined Contribution Plans**

Hidroantábrico in Spain, Bandeirante, Escelsa and Enersul in Brazil have social benefits defined contribution plans that complement those benefits granted by the Social Welfare Systems to the companies' employees, under which they pay a contribution to these plans each year, calculated in accordance with the rules established in each case. The payments in 2004 and 2003 were as follows:

	Social Welfare System		Defined Contribution plan		Total payments	
	2004	2003	2004	2003	2004	2003
Hidroantábrico Group	18,452	16,941	2,885	3,628	21,337	20,569
Bandeirante	3,629	4,177	146	142	3,775	4,319
Escelsa	6,081	6,089	100	107	6,181	6,196
Enersul	4,145	3,982			4,145	3,982

**Research and development expenses**

Under U.S. GAAP the Research and development expenses were totally adjusted during 2004. In 2003 and 2002, the amount of Research and development expenses under U.S. GAAP was Eur 15,523 thousand and Eur 44,180 thousand, respectively.

**Comprehensive income**

For purposes of presenting its reconciliation of shareholders' net equity and net income from Portuguese GAAP to U.S. GAAP, in 1998 the Company adopted FAS 130, "Reporting Comprehensive Income". This standard requires reporting the components of comprehensive income, the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, and the components thereof in an entity's financial statements. The non-owner changes in equity that have not been included in income include accounts such as foreign currency translation adjustments and unrealized gains and losses on available-for-sale securities and additional minimum pension liabilities. The adoption of FAS 130 resulted in revised and additional disclosures for U.S. GAAP reporting purposes, but had no effect on the financial position, results of operations, or liquidity of the Company.

The comprehensive income for each of the three years in the period ended December 31, 2004, 2003 and 2002 is as follows:

	Group		
		Restated 2003	Restated 2002
	2004		
	Euro 000	Euro 000	Euro 000
Net income in accordance with U.S. GAAP (restated)	238,599	451,162	264,459
Change in currency translation adjustment	936	-193,032	-300,028
Unrealized gains (losses) on investments	475	31,980	10,560
Tax effect of unrealized gains (losses) on investments	-6,474	-8,755	-3,484
Cash-flow hedge	643		
Tax effect on cash-flow hedge	-177		
Additional minimum pension liability	22,305	-77,396	-216,418
Tax effect on additional minimum liability	-6,134	21,284	71,418
<b>Comprehensive income</b>	<b>250,173</b>	<b>225,243</b>	<b>-173,493</b>

Accumulated Comprehensive Income as at December 31, 2004, 2003 and 2002 is analyzed as follows:

	Group		
		Restated 2003	Restated 2002
	2004		
	Euro 000	Euro 000	Euro 000
Change in currency translation adjustment	-571,565	-572,501	-379,469
Unrealized gains (losses) on investments	11,231	10,756	-21,224
Tax effect of unrealized gains (losses) on investments	-7,953	-1,479	7,276
Cash-flow hedge	643		
Tax effect on cash-flow hedge	-177		
Additional minimum pension liability	-271,509	-293,814	-216,418
Tax effect on additional minimum liability	86,568	92,702	71,418
	<b>-752,762</b>	<b>-764,336</b>	<b>-538,417</b>

In relation to other comprehensive income, in prior years, a reconciliation between the opening and closing balance of accumulated other comprehensive income was not presented in the notes to the financial statements in accordance with SFAS No. 130. SFAS No. 130 requires that the total of accumulated other comprehensive income should be disclosed separately from retained earnings. The Group has included the information required for the total of accumulated other comprehensive income for each of the reported periods and has restated the balances to comply with the requirements of SFAS No. 130. While this restatement had an impact on the total value of accumulated other comprehensive income, it had no impact on the total value of shareholders' equity as at December 31, 2003 and 2002.

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Earnings per ordinary share**

Basic earnings per share is based upon the weighted average number of Ordinary Shares outstanding during the year. Diluted earnings per share is computed on the basis of the weighted average number of Ordinary Shares outstanding during the year plus the effect of Ordinary Shares issuable upon the exercise of employee stock options using the treasury stock method. During 1999, the Company established two employee stock option plans. The shares issued under these plans had no effect on the weighted average Ordinary Shares outstanding, for the periods presented because the effect of such options was anti-dilutive. Ten Ordinary Shares equal one American Depository Share (ADS).

		<b>Group</b>		
		<b>2004</b>	<b>2003</b>	<b>2002</b>
		<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
Net income	Portuguese GAAP	440,152	381,109	335,216
Net income	U.S. GAAP	238,599	451,162	264,459
Net income from continuing operations:				
Net income	Portuguese GAAP	440,152	381,109	779,216
Net income	U.S. GAAP	238,599	451,162	708,459
Weighted average Ordinary Shares outstanding		3,039,526,910	2,978,569,036	2,982,571,074
Weighted average ADS outstanding		303,952,691	297,856,904	298,257,107

		<b>Group</b>		
		<b>2004</b>	<b>2003</b>	<b>2002</b>
		<b>Euro</b>	<b>Euro</b>	<b>Euro</b>
Net income per Ordinary Share:				
Basic and diluted	Portuguese GAAP	0.14	0.13	0.11
Basic and diluted	U.S. GAAP	0.08	0.15	0.09
Net income from continuing operations:				
Basic and diluted	Portuguese GAAP	0.14	0.13	0.26
Basic and diluted	U.S. GAAP	0.08	0.15	0.24
Net income per ADS:				
Basic and diluted	Portuguese GAAP	1.45	1.28	1.12
Basic and diluted	U.S. GAAP	0.78	1.51	0.89
Net income from continuing operations:				
Basic and diluted	Portuguese GAAP	1.45	1.28	2.61
Basic and diluted	U.S. GAAP	0.78	1.51	2.38

The consolidated net income for the years ended December 31, 2003 and 2002 and

the corresponding net income per ordinary share have been restated.

F-68

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Goodwill**

For U.S. GAAP purposes, the goodwill for each reportable segment is as such:

	Group					TOTAL
	Electricity Spain	Electricity Brazil	Telecom	IT	Other business	
<b>December 31, 2002 (Net)</b>	582	1,948	113,177	63,803	19,002	198,511
Acquisitions/Disposals	184,245	1,933	1,064	241	29,648	217,131
Transfers	552,339					552,339
<b>December 31, 2003 (Net)</b>	737,166	3,881	114,241	64,044	48,650	967,981
Acquisitions/Disposals	1,329,877	58,251	-17,593	-9,903	-4,795	1,355,837
Transfers	-136,028		9,124	4,058	637	-122,209
Impairment		-253	-9,475	-34,749		-44,476
<b>December 31, 2004 (Net)</b>	1,931,015	61,880	96,297	23,450	44,492	2,157,133

From January 1, 2002, goodwill is no longer amortized under U.S. GAAP but reviewed annually for impairment under FAS 142 Goodwill and Other Intangible Assets. Goodwill amortization of Eur 54,439 thousand in 2003 and Eur 56,219 thousand in 2004 are charged against Portuguese GAAP earnings and reversed in the U.S. GAAP reconciliation.

Group EDP's primary strategic focus is on consolidating and expanding its position in energy activities in the Iberian Peninsula. Accordingly, it is positioning itself for the Iberian electricity market that will develop in the future, particularly following the implementation of MIBEL. In this context, Group EDP acquired operating control of Hidroelectrica del Cantábrico in 2001, the fourth largest electricity operator in Spain, which, in turn, acquired Naturcorp, the second largest gas operator in Spain, in 2003.

In December, 2004 EDP increased its financial position in Hidroelectrica del Cantábrico from 39.5% to 95.7% of total shares gaining control of the company. The additional investment of 56.2% through the acquisition of additional 23,915,657 shares amounts to Eur 1,200.8 million.

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

EDP Group entered into a shareholders' agreement with CajAstur and Caser, which retained an aggregate stake in Hidrocontábrico of 3.1%. The shareholders' agreement gives CajAstur and Caser certain veto rights, which will preserve Hidrocontábrico's links with the region of Asturias. In addition, CajAstur has a long-term put option entitling it to sell its interest in Hidrocontábrico to EDP at a price indexed to the value of EDP's ordinary shares. As at December 31, 2004, the referred put option has a residual fair value as the strike price approximates the market price of the underlying entity.

For Portuguese GAAP the resulting goodwill from this transaction was in the amount of Eur 242.1 million based on the shareholders' equity of Hidrocontábrico as at December 31, 2004.

For U.S. GAAP purposes, this goodwill was adjusted considering the U.S. GAAP adjustments related to Hidrocontábrico Group, resulting in a reduction in goodwill of Eur 6.2 million, net of deferred taxes. The goodwill for U.S. GAAP purposes amounts to Eur 235.9 million.

### Proportional consolidation

Until June 30, 2004, the Company consolidates interests in jointly controlled entities, using the proportional method, namely Hidrocontábrico (HC). For U.S. GAAP purposes, investments in jointly controlled entities must be accounted for using the equity method. The differences in accounting treatment between proportional consolidation and the equity method of accounting have no impact on reported stockholders' equity or net income. Rather, they relate solely to matters of classification and disclosure. Following the acquisition of 56.2% of Hidrocontábrico Group in December 31, 2004, Hidrocontábrico group was consolidated under the full consolidation method.

Condensed financial information relating to the Company's pro rata interest in Hidrocontábrico is as follows:

	HC 2003	HC 2002 (*)
	Euro 000	Euro 000
<b>Balance sheet information</b>		
Tangible and intangible fixed assets	1,870,271	1,657,112
Current assets	150,572	168,582
Non current assets	21,500	248
<b>Total assets</b>	<b>2,042,343</b>	<b>1,825,942</b>
Loans	787,675	816,634
Current Liabilities	188,895	128,679
Non-current liabilities	99,191	95,442
<b>Total liabilities</b>	<b>1,075,761</b>	<b>1,040,755</b>
Minority interests	175,127	4,916
EDP's investment	791,455	780,271
<b>Statement of income information</b>		
Net revenue	664,022	321,351
Operating costs, net	-601,142	-295,194
Other operating income (costs)	-41,539	-29,257

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Minority interests	-5,215	391
Net income	16,126	-2,709

(\*) For 2002, HC was proportionally consolidated since June 1, 2002.

F-69

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Intangible assets**

For concession rights and other intangible assets, subject to amortization under U.S. GAAP, the aggregate amortization expense for the current year and estimated aggregate amortization expense for each of the five succeeding fiscal years are:

<b>Agregate amortization expense</b>	
2004	55,658
<b>Estimated amortization expense</b>	
2005	67,416
2006	67,416
2007	67,416
2008	64,757
2009	61,888

**Unrealized losses in investments available for sale, defined as temporary losses**

The temporary unrealized losses in investments available for sale are analyzed as follows:

	<b>Book Value</b>	<b>Market Value</b>	<b>Temporary losses</b>
	<b>Euro 000</b>	<b>Euro 000</b>	<b>Euro 000</b>
CERJ - Companhia Eléctrica do Rio de Janeiro	95,049	85,905	-9,144
BCP - Banco Comercial Português, S.A.	305,039	295,939	-9,100
	<b>400,088</b>	<b>381,844</b>	<b>-18,244</b>

The book value of BCP is net of impairment losses in the amount of Eur 247,751 thousand. Both of the above investments have been in an unrealized loss position for more than 12 months. At June 30, 2005 the market value of BCP shares increased to Eur 2.12 per share compared with December 31, 2004 (Eur 1.89 per share).



**Fair value of financial assets and liabilities**

The carrying amount of the financial assets and liabilities and the respective fair value is analyzed as follows:

	2004		2003	
	Carrying Value	Market Value	Carrying Value	Market Value
	Euro 000	Euro 000	Euro 000	Euro 000
<b>Accounts receivable</b>				
Accounts receivable - Trade, net (see Note 5)	1,243,067	1,243,067	1,108,064	1,108,064
Accounts receivable - Other, net (see Note 6)	846,395	846,395	509,202	509,202
Long term receivables, net (see Note 8)	945,423	945,423	435,842	435,842
	<u>3,034,885</u>	<u>3,034,885</u>	<u>2,053,108</u>	<u>2,053,108</u>
<b>Investments</b>				
Equity holdings (see Note 9)	1,560,802	1,560,802	1,508,922	1,508,922
Investments in properties (see Note 9)	2,185	2,185	1,062	1,062
Other financial investments (see Note 9)	52,306	52,306	72,800	72,800
	<u>1,615,293</u>	<u>1,615,293</u>	<u>1,582,784</u>	<u>1,582,784</u>
<b>Debt - Short and Medium/long term</b>				
Short term loans - Current (see Note 15)	-1,857,830	-1,857,830	-1,579,130	-1,579,130
Medium/long-term loans (see Note 15)	-6,741,014	-7,160,036	-5,913,579	-6,251,355
	<u>-8,598,844</u>	<u>-9,017,866</u>	<u>-7,492,709</u>	<u>-7,830,485</u>
<b>Accounts payable</b>				
Accounts payable - Trade (see Note 16)	-1,073,465	-1,073,465	-782,626	-782,626
Accounts payable - Other (see Note 17)	-305,583	-305,583	-187,262	-187,262
	<u>-1,379,048</u>	<u>-1,379,048</u>	<u>-969,888</u>	<u>-969,888</u>
<b>Financial instruments - Derivatives (*)</b>				
Trading (see Note 6 and 18)	-25,296	-25,296	127,865	127,865
Hedging (see Note 6 and 18)	180,555	180,555		
	<u>155,259</u>	<u>155,259</u>	<u>127,865</u>	<u>127,865</u>

(\*) The fair value presented corresponds to the clean price of the derivatives portfolio.

The market value of accounts receivable and short term loans is equal to carrying amount considering that they are short term in nature. The market value of long terms receivables is equivalent to the carrying amount, because carrying amount is presented at the net present value of future estimated discounted cash flows. Investments are accounted at the market value (carrying amount is equal to market).



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Equity investments**

EDP's investments in associates accounted for under the equity method are presented in note 9 of these consolidated financial statements. The summarized financial information of the most relevant are presented below:

	2004			2003		
	REN	HC (*)	Other	REN	HC	Other
	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000	Euro 000
Fixed assets	1,480,618		995,923	1,422,362	4,385,891	1,290,596
Current assets	721,668		414,317	221,993	376,429	161,511
Non current assets	422,427		572,890	696,422	53,749	10,465
<b>Total Assets</b>	<b>2,624,713</b>		<b>1,983,130</b>	<b>2,340,777</b>	<b>4,816,069</b>	<b>1,462,572</b>
Loans	747,373		883,270	280,000	1,969,187	722,184
Current liabilities	1,014,023		388,850	1,193,071	472,238	161,788
Non current liabilities	990		135,414	20,297	247,977	123,808
<b>Total Liabilities</b>	<b>1,762,386</b>		<b>1,407,534</b>	<b>1,493,368</b>	<b>2,689,402</b>	<b>1,007,780</b>
Minority interest					437,817	
Equity	862,328		575,597	847,409	1,688,850	454,792
<b>Total Equity</b>	<b>862,328</b>		<b>575,597</b>	<b>847,409</b>	<b>2,126,667</b>	<b>454,792</b>
Net revenue	2,462,582		1,041,223	2,359,587	1,660,055	559,545
Operating costs	-2,183,507		-674,881	-2,004,361	-1,528,064	-299,052
Other operating income	-160,321		-194,765	-227,287	25,210	-90,441
Non operating costs, net	-49,455		-74,280	-34,451	-103,847	-127,789
Minority interest					-13,038	
<b>Net income</b>	<b>69,299</b>		<b>97,297</b>	<b>93,488</b>	<b>40,316</b>	<b>42,263</b>
Percentage owned by EDP:	30%			30%	40%	

(\*) After the additional acquisition of 56.2% of Hidrocontábrico Group in December 31, 2004 the consolidation method applied was the full consolidated method on the balance sheet.

	2002		
	REN	HC	Other
	Euro 000	Euro 000	Euro 000
Fixed assets	1,380,797	3,852,993	1,281,738
Current assets	222,323	421,456	81,375
Non current assets	342,901	619	61,661
<b>Total Assets</b>	<b>1,946,021</b>	<b>4,275,068</b>	<b>1,424,774</b>
Loans	326,667	2,041,585	642,535
Current liabilities	523,443	321,698	165,540
Non current liabilities	308,024	238,606	115,588
<b>Total Liabilities</b>	<b>1,158,134</b>	<b>2,601,889</b>	<b>923,663</b>
Minority interest		12,290	
Equity	787,887	1,660,889	501,111
<b>Total Equity</b>	<b>787,887</b>	<b>1,673,179</b>	<b>501,111</b>
Net revenue	2,302,868	1,462,082	579,489
Operating costs	-2,278,753	-1,316,361	-311,652
Other operating income	92,423		-133,543
Non operating costs, net	-51,113	-133,291	-92,740
Minority interest		2,135	
<b>Net income</b>	<b>65,425</b>	<b>14,565</b>	<b>41,554</b>
Percentage owned by EDP:	30%	40%	

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**Employee stock option plans**

The Company has two fixed option plans. Under the 1999 option plan for members of the Board of Directors of EDP, the Company may grant options for up to 2,450,000 shares of common stock. Under the 1999 option plan for members of the boards of directors of the EDP's operating companies and senior officers of EDP and its subsidiaries, the Company may grant options for up to 16,250,000 shares of common stock. Under both plans, the exercise price of each option equals the market price of the Company's stock on the date of grant and an option's maximum term is 5 years. Options are granted at the discretion of the board of directors of EDP and vest over a two year service period.

A summary of the status of the Company's two fixed stock option plans as of December 31, 2003 and 2004, and changes during the years then ended on those dates is presented below:

	<u>Shares available for grant under 1999 option plans</u>	<u>Option activity</u>	<u>Weighted average exercise price</u>
Balance December 31, 2002	16,413,750	2,286,250	3.43
Options forfeited <sup>(1)</sup>		-353,992	
Options granted	-980,000	490,000	
Balance December 31, 2003	15,433,750	2,422,258	3.36
Options forfeited <sup>(1)</sup>		-2,299,533	
Options granted <sup>(2)</sup>		490,000	
Balance December 31, 2004	15,433,750	612,725	2.44

<sup>(1)</sup> Option forfeited includes options not exercised within the required period and option forfeited by departing plan participants.

<sup>(2)</sup> The number of options to be granted for 2005 has not yet been determined.

There was no compensation expenses regarding the options forfeited.

The following table summarizes information about stock options outstanding and exercisable as of December 31, 2004.

<u>Options outstanding</u>	<u>Weighted average exercise price</u>	<u>Weighted average remaining contractual life</u>	<u>Options exercisable</u>	<u>Options fair value</u>
				Eur '000

612,725	2.44	2.62 Years	283,111	71.3
---------	------	------------	---------	------

F-72

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**EDP Group pro-forma profit and loss account considering the acquisition of Hidrocantábrico Group as at January 1, 2004**

As at December 31, 2004 and resulting from an additional investment of 56.2%, the Hidrocantábrico Group is consolidated under the full consolidation method in the balance sheet.

EDP Group pro-forma profit and loss account for the year ended December 31, 2004, considering the impact of the acquisition of the referred 56.2% in Hidrocantábrico Group as if it had occurred on January 1, 2004, is analyzed as follows:

	Consolidated income statement as reported Euro 000	Adjustments Euro 000	Consolidated pro-forma income statement Euro 000
Sales	6,699,294	1,035,752	7,735,046
Cost of sales	-4,017,270	-731,150	-4,748,420
<b>Gross margin</b>	<b>2,682,024</b>	<b>304,602</b>	<b>2,986,626</b>
<i>Other operating income</i>			
Services rendered	522,396	34,401	556,797
Own work capitalized	258,774	9,204	267,978
Other operating income	97,353	6,264	103,617
	878,523	49,869	928,392
	3,560,547	354,471	3,915,018
<i>Other operating expenses</i>			
Supplies and services	-649,504	-55,086	-704,590
Personnel costs	-642,619	-58,627	-701,246
Other operating expenses	-220,762	-13,092	-233,854
	-1,512,885	-126,805	-1,639,690
<b>Gross operating margin</b>	<b>2,047,662</b>	<b>227,666</b>	<b>2,275,328</b>
Provisions	-114,078	-422	-114,500
Depreciation and amortization	-875,138	-104,158	-979,296
<b>Operating margin</b>	<b>1,058,446</b>	<b>123,086</b>	<b>1,181,532</b>
Financial income/(expenses)	-239,728	-45,497	-285,225
(Financial investments amortization)	-95,524	-48,687	-144,211

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

<b>Current income</b>	723,194	28,902	752,096
Non-operating gains/(losses)	-164,732	16,869	-147,863
<b>Profit before taxes</b>	558,462	45,771	604,233
Provision for income taxes	-256,809	-13,832	-270,641
Provision for deferred taxes	97,192		97,192
<b>Profit after taxes</b>	398,845	31,939	430,784
Minority interests	41,307	-11,915	29,392
<b>Attributable net income</b>	440,152	20,024	460,176

F-73



**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**42.ii Restatement of prior years**

The Company has restated its 2003 and 2002 previously reported U.S. GAAP amounts to correct the following errors:

During 2003, the Company had established a liability related to certain guarantee arrangements through a direct charge to shareholders equity. After further reconsideration, the Company realized the liability had been established in error.

The Company determined that accrued income related to certain concession arrangements was not being amortized as it should have been for U.S. GAAP purposes.

Under both Portuguese GAAP and U.S. GAAP, in prior years, the losses attributable to minority interests that exceeded the equity capital attributable to minority interests in subsidiaries had been recorded as negative minority interests in the balance sheet. In the income statement, the referred losses attributable to minority interest were charged to the minority interest in the proportion of their shareholding. Under Portuguese GAAP, and beginning January 1, 2004, the EDP Group adopted a new accounting policy, by which the negative minority interest in the balance sheet resulting from the accumulated losses attributable to minority interests which exceed the equity capital attributable to minority interests in subsidiaries are debited against equity when there is no binding obligation of the minority interests to cover such losses. In the income statement, under Portuguese GAAP, losses continue to be attributed to minority interest in the proportion of their shareholding. Under U.S. GAAP, as there is no binding obligation of the minority interest to cover such losses, such losses which exceed the equity attributable to the minority interest are charged to the majority interest, therefore the net income of the prior years has been restated to allocate the losses attributable to minority interests in 2002 and 2003 to the majority interest (EDP). If future earnings do materialize, the majority interest will be credited to the extent of such losses previously absorbed.

The reconciliation between the previously reported and restated net income and shareholders equity in accordance with U.S. GAAP for the years December 31, 2003 and 2002, is as follows:

**Net income**

	<b>Group</b>	
	<b>2003</b>	<b>2002</b>
	<b>Euro 000</b>	<b>Euro 000</b>
Net income in accordance with U.S. GAAP, as previously reported	498,007	299,988
Losses attributable to minority interest charged against majority interest	-48,759	-37,443
Accrued subsidies income	2,900	2,900
Deferred tax related	-986	-986

Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

Net income in accordance with U.S. GAAP, restated	451,162	264,459
---	---------	---------

**Shareholders equity**

	<b>Group</b>	
	<b>2003</b>	
	<b>Euro 000</b>	
Shareholders equity in accordance with U.S. GAAP, as at December 31, 2002 as previously reported	3,886,264	
Losses attributable to minority interest charged against majority interest	-37,443	
Accrued subsidies income	24,973	
Deferred tax related	-8,491	
Shareholders equity in accordance with U.S. GAAP, as at December 31, 2002 as restated	3,865,303	
Shareholders equity in accordance with U.S. GAAP, as at December 31, 2003 as previously reported	3,497,337	
Impact of restatement on shareholders equity as at December 31, 2002	-20,961	
Guarantees	10,114	
Losses attributable to minority interest charged against majority interest	-48,759	
Accrued subsidies income	2,900	
Deferred tax related	-986	
Shareholders equity in accordance with U.S. GAAP, as at December 31, 2003 as restated	3,439,645	

---

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**43. Relevant and subsequent events**

**EDP signs an agreement for the sale of a 60% stake in Edinfor share capital**

In January 2005, EDP signed a Sale and Purchase Agreement for the sale of a 60% stake of the share capital of Edinfor Sistemas Informáticos, S.A. ( Edinfor ) with LogicaCMG Corporate Holdings Limited ( LogicaCMG ). Simultaneously, Edinfor has acquired 40% of the share capital of Ace Holding, SGPS, S.A. ( Ace ), resulting in the full control of the share capital by Edinfor. The transaction value of the above mentioned 60% stake in Edinfor (including the shares and the respective shareholders' loans) is Eur 81 million, based on a total enterprise value of Eur 135 million. The value assumes that the consolidated financial accounts of Edinfor will be debt free, by the completion date, and therefore the final transaction value may be adjusted as a result of the final debt position of the company. The agreement provides EDP with an option, for a period of two years, to buyback the shares and shareholders' loans that are being sold. This option can be exercised if certain exceptional conditions are met, notably in the case of a breach by Edinfor of the Outsourcing Contracts, and with an exercise price based on the current transaction value. The agreement also provides EDP with an option to sell the remaining 40% of the share capital of Edinfor (including the remaining shareholders' loans) to LogicaCMG, starting from the end of the second year of partnership.

With the completion of this transaction, EDP now holds 40% of Edinfor's share capital and LogicaCMG 60%. As of December 31, 2004, the book value of EDP's 60% stake in Edinfor amounted to Eur 82.6 million. From the date of the signature of the share purchase agreement, EDP started accounting for its investment in Edinfor through the equity method.

**EDP signs PPAs early termination agreements with concessionary of the Portuguese transmission grid**

Following the information conveyed to the financial markets related with the process of early termination of the electricity Power Purchase Agreements ( PPAs ), EDP's fully owned subsidiary CPPE Companhia Portuguesa de Produção de Electricidade, S.A. ( CPPE ) and REN Rede Eléctrica Nacional, S.A. ( REN ), acting as the concessionary of the Portuguese electricity transmission grid, has signed the PPA's termination agreements for all CPPE's power plants operating in the Public Electricity System as foreseen in the Decree-Law 240/2004 of December 27, 2004. The agreements set the global amount of the compensation to be granted to EDP as a result of the early termination of all of its PPAs, at present value, in Eur 3.36 billion. This compensation, aimed at ensuring economic benefits equivalent to those delivered by the PPAs to all parties involved in these contracts, was calculated based on a number of economic assumptions and parameters comprised in the above mentioned diploma namely the present value of the existing PPAs, the forecasted revenues of these power plants operating under market conditions and a discount rate that, at present, is of 3.78%. Completion of the early termination agreements signed between CPPE and REN is subject to the start of an integrated Iberian electricity spot market and the grant of non-binding generation licenses. As such, the value of the compensation to be received by EDP will still be subject to a revision to adjust for the effective termination date of the PPAs as well as to the prevailing sovereign debt interest rate (to determine discount rate) at the time of such termination. The compensation value for the early termination of the PPAs was deemed by two independent entities Rothschild and Deloitte based upon the applicable legal framework, market valuation and a set of data and assumptions provided by, among others, EDP.

**Early reimbursement of EDP's 22nd Issue**

In accordance with the EDP 22nd issue initial terms, as of August 9, 2005, 35,547,848 bonds had been redeemed.

#### **Portugal's Economy Ministry grants licenses for new combined cycle gas turbine plants**

The Portuguese Economy Ministry, through the Direcção Geral de Geologia e Energia ( DGGE ), informed EDP about the new licenses granted for the connection to the public electricity network of new CCGT plants to be built in Portugal totaling approximately 2,870 MW. The EDP Group was granted one license of approximately 395 MW in the region of Figueira da Foz and, together with Endesa, a license of approximately 790 MW in the region of Sines, consisting of two 395 MW Groups. The start of operations of the second of these Groups is subject to some technical restrictions in the connection to the grid which are expected to be sorted out by 2010. The other licenses were attributed to GalpPower in Sines (app. 395 MW), to Iberdrola in Figueira da Foz (app. 420 MW) and to Tejo Energia in Pego (app. 865 MW). These licenses will be provisional until all the mandatory Environmental Impact Studies are conducted and delivered for appreciation by the relevant authorities, a process that must be completed within one year from the moment the licenses are granted.

#### **EDP appeals the decision by the European Commission to block the acquisition of joint control of GDP**

EDP received notice of the European Commission's decision on the concentration by which EDP and ENI S.p.A. would acquire joint control over GDP Gás de Portugal, SGPS, S.A. ( the Decision ). In this Decision the Commission considered that such acquisition is incompatible with the common market, in accordance with Article 8(3) of Council Regulation no. 4064/89, of December 21, on the control of concentrations between undertakings ( Merger Regulation ) and, as a consequence, not permitted. Given its opposition to the Decision, and following a detailed analysis made by entities not involved in the initial notification, EDP, within the legally defined period, filed a judicial appeal with the Court of First Instance of the European Communities ( CFI ), pursuant to Art. 230 (4) of the EC Treaty, requesting the annulment of such Decision.

On September 21, 2005, the CFI rendered a judgement that rejected the appeal brought by EDP. Consequently, the European Commission's decision continues to be applicable. EDP has decided not to present an appeal with the Court of Justice of the European Communities in relation to this judgement.

EDP will continue to implement the necessary measures, at an Iberian level, aimed at strengthening its electricity and gas business portfolio.

#### **EDP purchases shareholdings in Turbogás and Portugen**

EDP announced that, through the exercise of a call option, EDP Participações S.G.P.S., S.A. ( EDPP ) a fully owned subsidiary of EDP has acquired on March 2005 from National Power International Holdings BV ( IPBV ), for a total consideration of Eur 51,985 thousand, a shareholding of 20% in Turbogás Productora Energética, S.A. ( Turbogás ) and of 26.667% in Portugen Energia, S.A. ( Portugen ). Upon completion of this transaction, EDPP now holds a shareholding of 40% in Turbogás, which other shareholder is IPBV with a shareholding of 60%. In addition, EDPP has become a shareholder of Portugen with a 26.667% shareholding, while the other shareholder is International Power Portugal Holdings S.G.P.S., S.A. with a 73.333% shareholding. Turbogás was incorporated in 1994 with the sole purpose of carrying out the development, construction and operation of a combined-cycle gas fired power station at Tapada do Outeiro, in Portugal, with a total installed capacity of 990 MW. Turbogás currently sells the whole of its production to REN Rede Eléctrica Nacional S.A., within the Portuguese public supply system, under a long term power purchase agreement. Portugen is the entity in charge of the operation and maintenance of this power station.

**Hidrocantábrico sells 3% on REE**

Under the terms of Article 248 of CMVM, EDP announced that, in accordance with the Spanish legislation, namely the Regulation 5/2005, from March 11 regarding the investments in Red Eléctrica de España, S.A. ( REE ), Hidroeléctrica del Cantábrico, S.A. ( Hidrocantábrico ), a subsidiary of EDP Group, sold for the amount of Eur 76 million the investment of 3% held at REE. This transaction has originated a gain for Hidrocantábrico in the amount of Eur 33 million.

F-75

---

**Table of Contents**

EDP - Energias de Portugal, S.A. and Subsidiaries

Notes to the Financial Statements

December 31, 2004, 2003 and 2002

**EDP completes debt exchange offer on the Eurobonds 2008 and 2011 and issues 500,000,000 Eurobond 3.750% maturing in 2015**

EDP has completed the Exchange Offer on its Eur 500,000,000 5.000% Eurobond due 2008 issued by EDP Finance B.V. and the Eur 1,000,000,000 5.875% Eurobond issued by EDP due 2011 for a new Euro denominated 3.750% fixed rate Notes due 2015 issued by EDP Finance B.V. The New Eurobond will be issued under EDP's and EDP Finance B.V.'s Eur 5,000,000,000 Programme for the Issuance of Debt Instruments and application will be made for the New Eurobond to be admitted to official listing on the London Stock Exchange. Through this transaction, EDP has achieved its principal objectives in respect of its debt portfolio management, namely extending the average life of the debt portfolio and managing efficiently the refinancing risk of the Group.

**Execution of the reorganization process of EDP - Energias do Brasil's corporate structure**

EDP - Energias do Brasil, S.A. (Energias do Brasil) a fully owned subsidiary of EDP signed on April 7, 2005 an agreement concerning the reorganization of its subsidiaries Bandeirante Energia S.A. (Bandeirante), Iven S.A. (Iven), Espírito Santo Centrais Elétricas S.A. - Escelsa (Escelsa), Magistra Participações S.A. (Magistra) e Empresa Energética de Mato Grosso do Sul S.A. (Enersul). The current reorganization consists, fundamentally, in the roll-up of the above mentioned companies minority shareholders into Energias do Brasil share capital. Following the completion of the process, EDP Brasil now has full ownership of these companies and their minority shareholders hold approximately 30.7% in Energias do Brasil.

This reorganization process - which results in a more transparent and straightforward shareholding structure for the Energias do Brasil Group pursues four main objectives: (i) to allow the concentration of the share capital of Energias do Brasil's subsidiaries into one single entity thus providing increased liquidity to those company's shareholders; (ii) to facilitate the implementation of management decisions directed at improving efficiency at the operating companies and reducing operational costs; (iii) to optimize tax efficiency throughout the Energias do Brasil Group; and (iv) to create the conditions for the fulfilment of ANEEL's regulatory requirements regarding the unbundling of the generation, transmission and distribution activities of vertically integrated electricity companies in Brazil.

The exchange ratios associated to this reorganization were, under the legally applicable terms, subject to independent valuations undertaken by specialized companies of national and international recognition.

The reorganization process was submitted for approval at the Extraordinary Shareholders' Meetings of the respective companies, which was held on April 29, and was approved by the regulatory entity of the Brazilian electricity sector (ANEEL). This reorganization process was completed prior to the listing of Energias do Brasil shares in Bovespa (São Paulo stock exchange market).

**Energias do Brasil starts trading in the Novo Mercado of the Bovespa following initial public offering**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

On July 13, 2005, shares of Energias do Brasil were admitted for the first time to the Novo Mercado of the Bovespa (São Paulo, Brasil) following an initial public offering (the IPO) of 24,161,000 ordinary shares at a price of R\$18 per share, corresponding to a total amount of R\$434.9 million (excluding the exercise of the Greenshoe).

The IPO had an effective demand corresponding to 2.5 times the total number of shares on offer, with approximately 50% of the subscription orders coming from the USA and approximately 40% from Brazil.

Simultaneously with this transaction, EDP converted into Energias do Brasil ordinary shares the equivalent of R\$670 million in respect of the Senior Notes of Escelsa owned by EDP, through the issuance of 37,222,222 ordinary shares at the same price as those of the IPO (the Capitalization).

Prior to the IPO, to the Capitalization and to the roll-up of the minority shareholders of our subsidiaries Escelsa, Enersul and Bandeirante into Energias do Brasil share capital in April 2005, EDP owned 100% of Energias do Brasil. Following the roll-up, accepted by nearly 100% of the minority shareholders, EDP's stake in the company was of 69%. As a result of the IPO and the Capitalization, EDP will now own 66% of the share capital of Energias do Brasil.

The main objective of this operation, from the point of view of Energias do Brasil, was to (i) establish the beginning of a long term partnership with the Brazilian capital market, giving greater visibility to the assets held by the company; (ii) supply the resources to finance expansion projects, particularly investments in the generation of electricity; and (iii) confer greater financial autonomy to Energias do Brasil.

The conclusion of the IPO allows the EDP Group to achieve the following main objectives:

position Energias do Brasil as one of the leaders of the Brazilian energy market by developing a long term growth strategy on a self-sustainable basis - it is not anticipated that there will be any need for new investments by EDP into Energias do Brasil in the foreseeable future;

control a vehicle that will be able to take advantage of new opportunities in the Brazilian electricity sector - namely the need to expand the country's installed generation capacity;

substantially strengthen the capital structure of Energias do Brasil and reduce the potential volatility associated with the foreign currency denominated debt it owned namely that related with the Escelsa bonds.

Finally, EDP demonstrates its commitment to the highest standards of corporate governance, through the fair and transparent manner in which it has conducted the process, including the listing of Energias do Brasil in the Novo Mercado of the Bovespa.

**ANEEL revises Enersul's 2003 tariff increase from 43.59% to 50.81%**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

The Brazilian Electricity Regulator, defined the final average tariff increase granted to Enersul in the revision of April 2003, amending the previous increase from 43.59% to 50.81%.

This review impacts the tariff base defined in April 2003, which is the starting date of the regulatory period ending in April 2008. The retroactive impact of this review on Enersul's operating results, between April 2003 and April 2005, amounts to R\$75 million (Eur 22 million), which will be recovered through the tariffs until April 2008.

In addition, on April 8, 2005, ANEEL granted to Enersul a 20.69% average tariff increase, within the scope of the annual tariff adjustment that reflects the change in non-controllable costs and the adjustment of controllable costs to inflation. This increase already reflects the amendment to the 2003 tariff revision.

### **ANEEL revises Escelsa's 2004 tariff increase and approves 2005 tariff adjustment**

ANEEL has approved Escelsa's final average 2004 tariff increase - previously defined, on a provisional basis, within the scope of the triennial tariff revision for that company on August 7, 2004 - amending the previous increase from 6.33% to 8.58%.

This final review results from the amendment of Escelsa's regulated asset base, depreciation rate and operating costs of the reference company and impacts the tariff base defined in August 2004, which is the starting date of the regulatory period ending August 2007. The retroactive impact of this review on Escelsa's operating results, between August 2004 and August 2005, amounts to R\$17.2 million (Eur. 6 million), and will be recovered through the tariffs until August 7, 2006.

In addition, within the scope of the annual tariff adjustment, that reflects the pass-through of some costs components incurred by the company for the twelve months ended August 7, 2005, namely in non-controllable costs and the adjustment of controllable costs to inflation (IGPM adjusted by an X factor), ANEEL granted Escelsa a 6.93% average tariff increase, starting August 7, 2005. This increase already reflects the amendment to the 2004 tariff revision.

### **EDP transfers to its pension fund 65,473,757 shares representative of 2.01% of BCP share capital**

EDP announced on June 30, 2005 the transfer, to its Pension Fund, as a contribution in kind, of part of the 142,096,224 shares representative of 4.36% of Banco Comercial Português, S.A. ( BCP ) share capital, owned by its fully-owned subsidiary EDP Participações SGPS, S.A.. Through this operation, 65,473,757 shares, representative of 2.01% of BCP share capital, were transferred to EDP's Pension Fund at Eur. 2.12 per share, the closing price of BCP stock on June 30th, 2005.

Following this transaction EDP holds, through its subsidiary EDP Participações S.G.P.S., S.A., a 2.35% stake in BCP share capital and an equal percentage of the total voting rights. EDP's Pension Fund also holds a qualified shareholding in this company's share capital.

EDP was also informed by BCP that it has transferred to the BCP Pension Fund, as a contribution in kind, 78,956,008 EDP shares corresponding to 2.16% of the company's share capital and 2.17% of the total voting rights. With this operation, BCP now holds a direct stake of 2.90% of EDP share capital and 2.92% of the total voting rights (106,039,594 shares of EDP).



These cross-shareholdings result from a strategic alliance established in March 2000, aimed at exploring business opportunities by taking advantage of the leading position of both companies in their respective sectors. The above-mentioned transactions are part of the financial management and capital allocation initiatives undertaken by EDP and BCP. EDP reiterates its intention to pursue the analysis and development of joint opportunities and business initiatives, which could enable both institutions to extract value from the existing partnership. No changes to the current shareholdings currently held by both institutions are foreseen.

**ONI S.G.P.S. sells its Spanish telecommunications operations to TELE2 Telecommunication Services, S.L.**

On July 14, 2005, Oni SGPS ( Oni ), a wireline telecommunications service provider 56.61% owned by the EDP Group, signed a Sale and Purchase Agreement for the sale of its 99.93% stake in the share capital of Comunitel Global S.A. ( Comunitel ), along with all its subsidiaries and affiliated companies, to Tele2 Telecommunication Services, S.L. ( Tele2 ).

Comunitel, the Spanish arm of ONI's fixed line business, is a telecommunications operator specialized in providing voice and data communication services to small and medium size corporate clients, large enterprises, single owner - home office customers (SoHos) and more recently the top end of the residential market.

The transaction value of the above-mentioned 99.93% stake in Comunitel is based on a total enterprise value of Eur. 257 million and net financial debt of Eur. 42 million. The consideration to be received in cash on completion is Eur. 215 million (including shareholders' loans in the amount of Eur. 100 million). The book value of the Comunitel stake object of the Sale and Purchase Agreement now entered into by Oni and Tele2 is of Eur. 164 million and the company is expected to register a Eur. 51 million accounting gain resulting from this transaction. The successful completion of this transaction is conditional on a non-opposition decision by the Spanish competition authority.

This transaction is in line with the decision taken by Oni and its shareholders to completely focus the company's activities on the Portuguese broadband fixed line telecommunications business where it has a relative competitive advantage by virtue of the strong backing of its shareholders, national leaders in their respective economic sectors. In addition, the proceeds from the transaction will enable Oni to significantly reduce its financial debt.

**Caixa Geral de Depósitos reduces holding in EDP's share capital from 9.796 to 4.890%**

Caixa Geral de Depósitos, S.A. ( CGD ) notified EDP that, on September 23, 2005, it sold to Parpública - Participações Públicas, S.G.P.S., S.A. 179,372,198 of unprivatised shares which represents 4.906% of EDP share capital.

CGD also informed EDP of the following:

1. Following this transaction, CGD reduced its direct and indirect shareholding in EDP from 358,176,841 shares, representing 9.796% of EDP share capital, to 178,804,643 shares, representing 4.890% of EDP share capital. Considering that EDP holds 19,857,109 own shares, CGD's holding represents 4.917% of the total voting rights;

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

2. The current direct shareholding of CGD in EDP amounts to 175,495,171 of privatized shares which represent 4.799% of EDP share capital and 4.826% of the total voting rights;

3. The indirect shareholding of CGD s in EDP amounts to 3,309,472 shares corresponding to 0.091% of EDP share capital. The companies to which these holdings respect, in accordance with no. 1 of article 20 of the Portuguese Securities Market Code, are as follows:

CGD holds 100% of the share capital and corresponding voting rights of Caixa Seguros, SGPS, S.A., which in turn holds 100% of the share capital and corresponding voting rights of Companhia de Seguros Fidelidade-Mundial, S.A. and also 70% of the share capital and corresponding voting rights of Império Bonança, S.G.P.S., S.A., which in turn holds 100% of the share capital and corresponding voting rights of Império Bonança - Companhia de Seguros, S.A.

Fidelidade-Mundial owns 317,289 of EDP common stock, representing 0.009% of EDP share capital and 0.009% of the total voting rights of EDP. Império Bonança - Companhia de Seguros, S.A. owns 2,992,183 of EDP common stock, representing 0.082% of EDP share capital and 0.082% of the total voting rights of EDP.

### **EDP enters into an agreement for the increase of its indirect shareholding in Portgás and Setgás**

In the context of the implementation of EDP s strategy for the Iberian gas market, the company concluded on September 5, 2005 negotiations with Endesa Gas, S.A. ( Endesa ) for the acquisition of a 49% shareholding in NQF Gás, S.A. ( NQF Gás ) and the respective shareholders loans, for a reference global consideration of Eur. 56.5 million (accrued of the corresponding financial costs). NQF Gás directly holds a 25.348% shareholding in Portgás - Sociedade de Produção e Distribuição de Gás, S.A. ( Portgás ) and, indirectly, a 19.8% shareholding in Setgás - Sociedade de Produção e Distribuição de Gás, S.A. ( Setgás ).

Upon completion of this transaction (which is subject to the required authorizations, in particular the decision of non-opposition by the Competition Authority), EDP will be the sole shareholder of NQF Gás, thus increasing its direct and indirect shareholdings in Portgás and Setgás to 72.0% and of 19.8%, respectively.

Portgás is the second largest distributor of natural gas in Portugal, operating in a concession area which includes 29 municipalities within the Oporto, Braga and Viana do Castelo districts.

Gaz de France and Elyo remain shareholders of Portgás, with a joint shareholding position of 25.34%.

Setgás operates on the Setúbal peninsula districts. The company s major shareholders are Galp (45%), Eni (21.9%) and Koch (13.2%).

### **EDP s statement on sector consolidation movements in the Iberian Market**

## Edgar Filing: EDP ENERGIAS DE PORTUGAL SA - Form 20-F

EDP has been strongly committed to contribute to, and prepare itself for, the construction and operation of the Iberian Energy Market, which precedes the Internal Market in Electricity created by the Directive 2003/54/CE from the European Parliament and the Council, dated June 26, 2003.

The market, as well as the Portuguese and Spanish authorities, have witnessed the effort undertaken by EDP in the prosecution of the above-mentioned objective through several initiatives developed - some successfully, other unsuccessfully due to administrative hurdles - to improve efficiency. EDP considers that market integration in Europe demands the existence of large and efficient operators and that competition is increasingly less limited to local and national markets. In this regard, EDP believes that operators should have the freedom, in a competitive market environment and in compliance with the prevailing regulatory framework, to prepare and strengthen themselves for this competition, to the benefit of consumers, shareholders and the sector as a whole.

In light of these principles, EDP is closely monitoring the ongoing concentration movement in the Iberian Market, following the Gas Natural bid over ENDESA.

Within the legal framework available to it at the national level (in Portugal and Spain) and at the EU level, EDP will resort to every means at its reach to block discriminatory treatments (taking into consideration its own recent experience) and behaviours or agreements that distort the market by unduly benefiting any party, protecting or strengthening them through less transparent methods that are eventually non-compatible with market rules.

EDP is available to discuss and cooperate with other operators, in Portugal, Spain - including the target and the bidder companies involved in the aforementioned tender offer - or even outside the Iberian Market, in order to ensure the fulfilment of legal and regulatory market rules and to cooperate in the balanced rationalization of the sector, assuring effective competition in the context of the Iberian Market.