

ACORN ENERGY, INC.  
Form 10-Q  
May 10, 2012  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 10-Q  
QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2012

Commission file number: 0-19771

ACORN ENERGY, INC.  
(Exact name of registrant as specified in charter)

Delaware  
(State or other jurisdiction of incorporation or  
organization)

22-2786081  
(I.R.S. Employer Identification No.)

4 West Rockland Road, Montchanin, Delaware  
(Address of principal executive offices)

19710  
(Zip Code)

302-656-1707  
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

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Yes  No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at May 3, 2012
Common Stock, \$0.01 par value per share	17,890,250 shares

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ACORN ENERGY, INC.  
 Quarterly Report on Form 10-Q  
 for the Quarterly Period Ended March 31, 2012

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Certain statements contained in this report are forward-looking in nature. These statements are generally identified by the inclusion of phrases such as “we expect”, “we anticipate”, “we believe”, “we estimate” and other phrases of similar meaning. Whether such statements ultimately prove to be accurate depends upon a variety of factors that may affect our business and operations. Many of these factors are described in our most recent Annual Report on Form 10-K as

filed with Securities and Exchange Commission.

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## PART I

ACORN ENERGY, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)  
 (IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

	As of December 31, 2011	As of March 31, 2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$34,280	\$21,401
Short-term deposits	18,000	18,000
Restricted deposit	2,223	1,901
Funds held in escrow	5,961	5,961
Accounts receivable	4,965	4,443
Unbilled revenue	3,778	3,210
Inventory	2,144	2,922
Other current assets	922	1,509
Total current assets	72,273	59,347
Property and equipment, net	635	797
Severance assets	2,620	2,778
Restricted deposit	271	274
Intangible assets, net	4,780	10,023
Goodwill	4,637	6,815
Deferred taxes	440	404
Other assets	149	217
Total assets	\$85,805	\$80,655
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term bank credit and current maturities of long-term debt	\$677	\$464
Accounts payable	2,052	1,981
Accrued payroll, payroll taxes and social benefits	1,907	1,821
Other current liabilities	7,420	5,833
Total current liabilities	12,056	10,099
Long-term liabilities:		
Accrued severance	3,837	4,054
Long-term debt	141	117
Other long-term liabilities	204	236
Total long-term liabilities	4,182	4,407
Commitments and contingencies		
Equity:		
Acorn Energy, Inc. shareholders		
Common stock - \$0.01 par value per share:		
Authorized – 30,000,000 shares; Issued – 18,325,529 and 18,688,837 shares at December 31, 2011 and March 31, 2012, respectively	183	186



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Additional paid-in capital	84,614	85,973	
Warrants	427	153	
Accumulated deficit	(13,022	) (17,200	)
Treasury stock, at cost – 801,920 shares at December 31, 2011 and March 31, 2012	(3,036	) (3,036	)
Accumulated other comprehensive income	485	680	
Total Acorn Energy, Inc. shareholders' equity	69,651	66,756	
Non-controlling interests	(84	) (607	)
Total equity	69,567	66,149	
Total liabilities and equity	\$85,805	\$80,655	

The accompanying notes are an integral part of these consolidated financial statements.

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ACORN ENERGY, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)  
 (IN THOUSANDS, EXCEPT NET INCOME (LOSS) PER SHARE DATA)

	Three months ended March 31,	
	2011	2012
Revenues:		
Projects	\$2,348	\$3,036
Products	620	980
Services	127	219
Total revenues	3,095	4,235
Cost of sales:		
Projects	1,467	2,246
Products	357	654
Services	97	124
Total cost of sales	1,921	3,024
Gross profit	1,174	1,211
Operating expenses:		
Research and development expenses, net of credits	490	1,318
Selling, general and administrative expenses	2,743	4,229
Total operating expenses	3,233	5,547
Operating loss	(2,059)	(4,336)
Finance expense, net	(117)	(23)
Gain on sale of HangXing	492	—
Loss from continuing operations before taxes	(1,684)	(4,359)
Income tax benefit (expense)	(65)	(75)
Net loss from continuing operations	(1,749)	(4,434)
Loss from discontinued operations, net of income taxes	(836)	—
Non-controlling interest share of loss from discontinued operations	232	—
Net loss	(2,353)	(4,434)
Net loss attributable to non-controlling interests	136	256
Net loss attributable to Acorn Energy, Inc. shareholders	\$(2,217)	\$(4,178)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders:		
From continuing operations	\$(0.10)	\$(0.24)
From discontinued operations	\$(0.03)	\$—
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	\$(0.13)	\$(0.24)
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	17,449	17,680
Dividends declared per common share	\$—	\$0.035

The accompanying notes are an integral part of these consolidated financial statements.



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ACORN ENERGY, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS  
 (IN THOUSANDS)

	Three months ended March 31,	
	2011	2012
Net loss attributable to Acorn Energy, Inc. shareholders	\$(2,217 )	\$(4,178 )
Other comprehensive income (loss), net of income taxes:		
Foreign currency translation adjustments	107	201
Comprehensive loss, net of income taxes	(2,110 )	(3,977 )
Comprehensive loss attributable to non-controlling interests	(4 )	(6 )
Comprehensive loss attributable to Acorn Energy, Inc. shareholders	(2,114 )	(3,983 )

The accompanying notes are an integral part of these consolidated financial statements.

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ACORN ENERGY, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)  
(IN THOUSANDS)

	Acorn Energy, Inc. Shareholders					Total Acorn Energy, Inc. Shareholders				
	Number of Shares	Common Stock	Additional Paid-In Capital	Warrants	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Shareholders' Equity	Non-controlling Interests	Total Equity
As of December 31, 2011	18,326	\$ 183	\$ 84,614	\$ 427	\$ (13,022 )	\$ (3,036)	\$ 485	\$ 69,651	\$ (84 )	\$ 69,567
Net loss	—	—	—	—	(4,178 )	—	—	(4,178 )	(256 )	(4,434 )
Differences from translation of subsidiaries' financial statements	—	—	—	—	—	—	195	195	6	201
Comprehensive income	—	—	—	—	—	—	—	(3,983 )	(250 )	(4,233 )
Dividends	—	—	(620 )	—	—	—	—	(620 )	—	(620 )
Adjustment of non-controlling interests in USSI following additional investment by the Company	—	—	273	—	—	—	—	273	(273 )	—
Stock option compensation	—	—	142	—	—	—	—	142	—	142
Exercise of warrants and options	363	3	1,564	(274 )	—	—	—	1,293	—	1,293
Balances as of March 31, 2012	18,689	\$ 186	\$ 85,973	\$ 153	\$ (17,200 )	\$ (3,036)	\$ 680	\$ 66,756	\$ (607 )	\$ 66,149

\* Less than \$1

The accompanying notes are an integral part of these consolidated financial statements.

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ACORN ENERGY, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)  
(IN THOUSANDS)

	Three months ended March	
	31,	
	2011	2012
Cash flows used in operating activities:		
Net loss before non-controlling interests	\$ (2,585)	) \$ (4,434)
Less net loss from discontinued operations	(836)	) —
Net loss from continuing operations	(1,749)	) (4,434)
Adjustments to reconcile net loss to net cash used in operating activities (see Schedule A)	1,414	) (280)
Net cash used in operating activities – continuing operations	(335)	) (4,714)
Cash flows provided by (used in) investing activities:		
Acquisitions of property and equipment	(111)	) (228)
Restricted deposits	(520)	) (62)
Release of restricted deposits	343	) 386
Amounts funded for severance assets	(49)	) (84)
Proceeds from the sale of HangXing	492	) —
Acquisition of OmniMetrix, net of cash acquired (see Schedule C)	—	) (7,835)
Net cash provided by (used in) investing activities – continuing operations	155	) (7,823)
Cash flows provided by (used in) financing activities:		
Proceeds from employee stock option and warrant exercises	193	) 1,293
Short-term bank credit, net	(529)	) (208)
Proceeds from borrowings of long-term debt	76	) 16
Repayments of long-term debt	(163)	) (52)
Dividends paid	—	) (1,496)
Other	12	) —
Net cash used in financing activities – continuing operations	(411)	) (447)
Discontinued operations:		
Operating cash flows	(945)	) —
Investing cash flows	408	) —
Financing cash flows	194	) —
Net cash used in discontinued operations	(343)	) —
Effect of exchange rate changes on cash and cash equivalents	35	) 105
Net decrease in cash and cash equivalents	(899)	) (12,879)
Cash and cash equivalents at beginning of the year of discontinued operations	807	) —
Cash and cash equivalents at beginning of year of continuing operations	6,549	) 34,280
Cash and cash equivalents at the end of the period	\$ 6,457	) 21,401
Cash and cash equivalents of discontinued operations at end of period	\$ (675)	) —
Cash and cash equivalents held by continuing operations at end of the period	\$ 5,782	) 21,401

The accompanying notes are an integral part of these consolidated financial statements.



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ACORN ENERGY, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)  
(IN THOUSANDS)

	Three months ended	
	March 31, 2011	March 31, 2012
A. Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	\$203	\$294
Increase in accrued severance	84	112
Stock-based compensation	132	142
Deferred taxes	(163	) (221
Gain on the sale of HangXing	(492	) —
Other	(2	) 34
Change in operating assets and liabilities:		
Decrease in accounts receivable, unbilled work-in process, other current and other assets	2,299	1,035
Increase in inventory	(189	) (537
Increase in accounts payable, accrued payroll, payroll taxes and social benefits, advances from customers, other current liabilities and other liabilities	(458	) (1,139
	\$1,414	\$(280
B. Non-cash investing and financing activities:		
Adjustment of additional paid-in-capital and non-controlling interests from exercise of option by Acorn in USSI	\$600	\$273
Value of shares issued as compensation	101	
C. Assets/liabilities acquired in the acquisition of OmniMetrix		
Accounts receivable		(328
Inventory		(234
Other current assets		(10
Property and equipment		(26
Intangible assets		(5,403
Goodwill		(2,109
Current liabilities		275
		(7,835

The accompanying notes are an integral part of these consolidated financial statements.

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NOTE 1— BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements of Acorn Energy, Inc. and its subsidiaries (the “Company”) have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete consolidated financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Operating results for the three-month period ended March 31, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012. These unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011.

In August 2011 we sold our interest in CoaLogix whose results are reflected as discontinued operations. Accordingly, certain reclassifications have been made to the Company's condensed consolidated financial statements for the three month period ended March 31, 2011 to conform to the current period's consolidated financial statement presentation.

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NOTE 2—RECENT AUTHORITATIVE GUIDANCE

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income (ASC Topic 220): Presentation of Comprehensive Income," ("ASU 2011-05") which amends current comprehensive income guidance. This accounting update eliminates the option to present the components of other comprehensive income as part of the statement of shareholders' equity. Instead, the Company must report comprehensive income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. ASU 2011-05 will be effective for public companies during the interim and annual periods beginning after Dec. 15, 2011 with early adoption permitted. The adoption of ASU 2011-05 by the Company did not have a material impact on the Company's consolidated results of operation and financial condition.

Other recent authoritative guidance issued by the FASB (including technical corrections to the Codification), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not, or are not expected to have a material effect on the Company's consolidated financial statements.

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## NOTE 3—ACQUISITION OF OMNIMETRIX

On February 15, 2012, the Company entered into a definitive agreement pursuant to which it acquired, through its XYZ Holdings, Inc. wholly-owned Georgia subsidiary ("Holdings" which has been renamed OMX Holdings, Inc.), all of the issued and outstanding limited liability company membership interests (the "Interests") in OmniMetrix, LLC, a Georgia limited liability company ("OmniMetrix"). OmniMetrix is in the business of designing, manufacturing, marketing and selling (i) wireless remote systems that monitor standby power generation, backup power generators, remote powered equipment, cellular towers, emergency towered communications and remote tower sites (the "Power Generator Monitoring" segment - see Note 11), and (iii) cathodic protection products to monitor pipeline integrity (the "Cathodic Protection" segment - included in the Company's "Other" segment - see Note 11). Holdings purchased the Interests in OmniMetrix from its three individual holders (the "Sellers") in consideration for an aggregate cash payment of \$8,500. The Company incurred approximately \$300 of transaction costs in connection with the acquisition of OmniMetrix which are included in Selling, general and administrative expense in the Condensed Consolidated Statement of Operations. The acquisition of OmniMetrix adds to the Company's growing product lines of remote monitoring systems for aging energy infrastructure.

The transaction was accounted for as a purchase business combination. OmniMetrix's results from operations for the period from acquisition (February 15, 2012) to March 31, 2012 have been included in the Company's consolidated statement of comprehensive income. In the period since our acquisition, the Company recorded \$155 of revenues and a net loss of \$166 associated with OmniMetrix's activities. Pro forma information with respect to the acquisition of OmniMetrix are not included in these financial statements as the information is not material.

In accordance with generally accepted accounting principles, the fair value of OmniMetrix is allocated to OmniMetrix's identifiable tangible and intangible assets and liabilities assumed based on their fair values as of the date of the transaction. Based upon a preliminary third-party valuation of intangible assets as of that date, the Company allocated the \$8,500 consideration to the fair value to assets and liabilities as follows:

Cash	\$665	
Accounts receivable	328	
Inventory	234	
Other current assets	10	
Property and equipment	26	
Intangible assets	5,403	
Goodwill (see Note 7 for allocation to segments)	2,109	
Total assets acquired	8,775	
Current liabilities	(275	)
Fair value acquired	\$8,500	

Intangible assets with estimated useful lives are amortized over that period. The acquired intangible assets with useful lives include approximately \$2,320 for the estimated market value of OmniMetrix technologies, (weighted average estimated useful life of 10 years), \$3,049 for the estimated market values of acquired customer relationships (weighted average estimated useful life of 14 years) and \$34 for the estimated market value on non-compete agreements (estimated useful life of six years). The goodwill is not amortized for financial statement purposes in accordance with generally accepted accounting principles.



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NOTE 4—US SEISMIC SYSTEMS, INC.

On February 6, 2012, the Company entered into a new Stock Purchase Agreement (the “USSI Purchase Agreement”) with USSI pursuant to which the Company converted advanced funds into additional shares of USSI common stock (“USSI Common Stock”) and shares of USSI’s new Series A-1 Preferred Stock (“USSI Preferred Stock”). The Company also made a further payment to USSI of \$2,250 on February 6, 2012 to purchase additional shares of USSI Preferred Stock. The USSI Preferred Stock provides that upon any future liquidation of USSI, to the extent funds are available for distribution to USSI’s stockholders after the satisfaction of any USSI liabilities at that time, USSI would first repay the Company for the purchase price of our USSI Preferred Stock. Thereafter, the Company would receive a further payment for such shares ratably with all other USSI Common Stock holders as though the Company’s shares of USSI Preferred Stock were the same number of shares of USSI Common Stock.

At March 31, 2012, the Company owned approximately 87% of USSI, which amount was increased to approximately 92% subsequent to March 31, 2012 (see Note 12 - Subsequent Events). In connection with the USSI Purchase Agreement, the Company established a new 2012 Stock Plan (the “USSI 2012 Plan”) under which key employees, directors and consultants of USSI may receive options to purchase up to an aggregate of 1,180,000 shares of USSI Common Stock on such terms as the USSI 2012 Plan provides and as determined by USSI’s board of directors or by such committee designated by USSI’s board to administer the USSI 2012 Plan, if any. If options to purchase all shares of USSI Common Stock available under the USSI 2012 Plan are granted and exercised, and taking into account the additional \$2,500 USSI Preferred Stock purchase as described in Note 12 - Subsequent Events, the Company would own approximately 81% of USSI on a fully diluted basis.

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NOTE 5—NON-CONTROLLING INTERESTS

The composition of the net income (loss) attributable to non-controlling interests (“NCI”) is as follows:

	Three months ended March 31,	
	2011	2012
Net income attributable to NCI in DSIT	\$1	\$8
Net loss attributable to NCI in USSI	(137	) (264
Net loss attributable to NCI	\$(136	) \$(256

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NOTE 6—INVENTORY

	As of December 31, 2011	As of March 31, 2012
Raw materials	\$1,663	\$1,358
Work-in-process	481	1,051
Finished goods	—	513
	\$2,144	\$2,922

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## NOTE 7—GOODWILL AND INTANGIBLE ASSETS

## (a) Goodwill

The changes in the carrying amounts of goodwill by segment from December 31, 2011 to March 31, 2012 were as follows:

	Energy & Security Sonar Solutions segment	GridSense segment	USSI segment	Power Generation Monitoring segment	Cathodic Protection segment*	Total
Balance as of December 31, 2011	\$527	\$2,708	\$1,402	\$—	\$—	\$4,637
Goodwill recorded in the acquisition of OmniMetrix (see Note 3)	—	—	—	1,650	459	2,109
Translation adjustment	15	54	—	—	—	69
Balance as of March 31, 2012	\$542	\$2,762	\$1,402	\$1,650	\$459	\$6,815

\* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 11).

## (b) Intangibles

The changes in the carrying amounts of and accumulated amortization of intangible assets from December 31, 2011 to March 31, 2012 were as follows:

	Energy & Security Sonar Solutions segment		GridSense segment		USSI segment		Power Generation Monitoring segment Technologies, Customer Relationships and Non-Compete Agreements		Cathodic Protection segment** Technologies and Customer Relationships Agreements		Total
	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	
Balance as of December 31, 2011	\$519	\$(274)	\$2,748	\$(543)	\$2,565	\$(235)	\$—	\$—	\$—	\$—	\$4,780
Intangibles recorded in the acquisition of OmniMetrix (see Note 3)	—	—	—	—	—	—	4,227	—	1,176	—	5,403
Amortization	—	(20 )	—	(82 )	—	(32 )	—	(43 )	—	(17 )	(194 )
Cumulative translation adjustment	16	(9 )	33	(6 )	—	—	—	—	—	—	34
	\$535	\$(303)	\$2,781	\$(631)	\$2,565	\$(267)	\$4,227	\$(43 )	\$1,176	\$(17)	\$10,023

Balance as of March  
31, 2012

Weighted average estimated useful lives	6 years	10 years	20 years	13 years	9 years
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\* Accumulated amortization

\*\* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 11).

Amortization expense for each of the three months ended March 31, 2011 and 2012 amounted to \$132 and \$194, respectively. Amortization expense with respect to intangible assets is estimated to be \$1,007, \$943, \$923, \$820 and \$820 for each of the years ending March 31, 2013 through 2017.

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## NOTE 8—EQUITY

## (a) Dividends

On February 7, 2012, the Company announced that its Board of Directors approved a dividend of \$0.035 per share to be paid on March 1, 2012 to common stockholders of record on February 20, 2012. The dividend is a continuation of the Company's policy to pay a regular quarterly per share dividend of \$0.035 per quarter. On March 1, 2012, the total dividend payment was \$620. See Note 12 - Subsequent Events.

## (b) Acorn Stock Options

A summary of stock option activity for the three months ended March 31, 2012 is as follows:

	Number of Options (in shares)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2011	1,388,333	\$4.17		
Granted	90,000	\$6.54		
Exercised	(130,000 )	\$1.88		
Forfeited or expired	(5,000 )	\$2.96		
Outstanding at March 31, 2012	1,343,333	\$4.55	3.5 years	\$8,181
Exercisable at March 31, 2012	1,170,415	\$4.37	4.4 years	\$7,303

The weighted average grant date fair value of the 90,000 stock options granted during the first three months of 2012 was \$3.03 per share. The fair value of the options granted was estimated on the grant date using the Black-Scholes option-pricing model with the following weighted average assumptions:

Risk-free interest rate	1.4	%
Expected term of options, in years	6.5	
Expected annual volatility	58	%
Expected dividend yield	2.1	%

## (c) Stock-based Compensation Expense

Stock-based compensation expense included in the Company's Condensed Statements of Operations was \$132 and \$142 for the three months ended March 31, 2011 and 2012, respectively and was included in Selling, general and administrative expense. In 2011, stock-based compensation expense includes \$13 with respect to stock granted to a consultant.

## (d) Warrants

The Company has issued warrants at exercise prices equal to or greater than market value of the Company's common stock at the date of issuance. A summary of warrant activity follows:

Number of Warrants (in shares)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life
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Outstanding at December 31, 2011	313,806	\$4.29	
Granted	—		
Exercised	(233,306	) \$4.50	
Forfeited or expired	—		
Outstanding at March 31, 2012	80,500	\$3.68	3.7 years

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NOTE 9—WARRANTY PROVISION

	Gross Carrying Amount
Balance at December 31, 2011*	\$188
Warranties issued	21
Adjustment of warranty provision	—
Warranty claims	—
Balance at March 31, 2012*	\$209

\* The balance at December 31, 2011 is included in other current liabilities (\$37) and other long-term liabilities (\$151). At March 31, 2012, the balance is included in other current liabilities (\$37) and other long-term liabilities (\$172).



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## NOTE 10—FAIR VALUE MEASUREMENTS

Financial items measured at fair value are classified in the table below in accordance with the hierarchy established in applicable accounting principles.

	As at March 31, 2012			Total
	Level 1	Level 2	Level 3	
Short-term deposits	\$18,000	\$—	\$—	\$18,000
Restricted deposits – current and non-current	2,175	—	—	2,175
Funds held in escrow	5,961	—	—	5,961
Derivative assets	39	—	—	39
Total	\$26,175	\$—	\$—	\$26,175

	As at December 31, 2011			Total
	Level 1	Level 2	Level 3	
Short-term deposits	\$18,000	\$—	\$—	\$18,000
Restricted deposits – current and non-current	2,494	—	—	2,494
Funds held in escrow	5,961	—	—	5,961
Derivative liabilities	(18	) —	—	(18 )
Total	\$26,437	\$—	\$—	\$26,437

Derivative assets and liabilities are forward contracts for the purchase of New Israeli Shekels for which market prices are readily available. Unrealized gains or losses from forward contracts are recorded in Finance expense, net.

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## NOTE 11—SEGMENT REPORTING AND GEOGRAPHIC INFORMATION

The Company currently operates in four operating segments:

(1) Energy & Security Sonar Solutions whose activities are focused on the following areas – sonar and acoustic related solutions for energy, defense and commercial markets and includes other real-time and embedded hardware & software development and production. Energy & Security Sonar Solutions activities are provided through the Company's DSIT Solutions Ltd. subsidiary.

(2) The Company's GridSense segment provides Smart Grid Distribution Automation products and services through its GridSense subsidiaries.

(3) The Company's USSI segment's focus is to develop and produce fiber optic sensing systems for the energy and security markets. These activities are performed through the Company's USSI subsidiary.

(4) The Company's Power Generation Monitoring segment provides products and services which deliver critical, real-time machine information to customers, while its Smart Service™ software provides remote diagnostics that give users real control over their equipment. These activities are performed through the Company's OmniMetrix subsidiary. As these activities were acquired in February 2012 (see Note 3), there are no comparative results reported for these activities for the three month period ended March 31, 2011.

Other operations include various operations in DSIT and OmniMetrix that do not meet the quantitative thresholds under applicable accounting principles.

	Energy & Security Sonar Solutions	GridSense	USSI	Power Generation Monitoring	Other	Total
Three months ended March 31, 2012						
Revenues from external customers	\$2,763	\$918	\$121	\$129	\$304	\$4,235
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	960	344	(211 )	46	72	1,211
Depreciation and amortization	58	96	70	43	25	292
Segment net income (loss) before income taxes	160	(1,199 )	(1,715 )	(9 )	(62 )	(2,825 )
Three months ended March 31, 2011						
Revenues from external customers	\$2,026	\$641	\$43	\$—	\$385	\$3,095
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	713	270	(9 )	—	200	1,174
Depreciation and amortization	50	89	57	—	7	203
Segment net income (loss) before income taxes	(31 )	(822 )	(516 )	—	119	(1,250 )

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## Reconciliation of Segment Income (Loss) to Consolidated Net Loss

	Three months ended March 31,	
	2011	2012
Total net loss before income taxes for reportable segments	\$ (1,369	) \$ (2,763
Other operational segment net income (loss) before income taxes	119	(62
Total segment net income (loss) before income taxes	(1,250	) (2,825
Unallocated cost of corporate, DSIT and OmniMetrix headquarters*	(926	) (1,534
Income tax benefit (expense)	(65	) (75
Non-controlling interests (see Note 5)	136	256
Gain on sale of HangXing	492	—
Loss from discontinued operations, net of income taxes	(836	) —
Non-controlling interest share of loss from discontinued operations	232	—
Consolidated net loss attributable to Acorn Energy, Inc. shareholders	\$ (2,217	) \$ (4,178

\* Includes stock compensation expense of \$132 and \$142 for the three month periods ending March 31, 2011 and 2012, respectively.

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NOTE 12—SUBSEQUENT EVENTS

Additional Investment in USSI

In April 2012, the Company conducted a second closing for the purchase of additional USSI Preferred Stock in accordance with the USSI Purchase Agreement and invested an additional \$2,500 in USSI. Following this investment, the Company owns approximately 92% of USSI.

Dividends

On April 19, 2012, the Company's Board of Directors has approved a dividend of \$0.035 per share to be paid on June 1, 2012 to common stockholders of record on May 15, 2012.

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ACORN ENERGY, INC.

ITEM MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF  
2. OPERATIONS

The following discussion includes statements that are forward-looking in nature. Whether such statements ultimately prove to be accurate depends upon a variety of factors that may affect our business and operations. Certain of these factors are discussed in this report and in our Annual Report on Form 10-K for the year ended December 31, 2011.

## REVENUES BY COMPANY

The following table shows, for the periods indicated, the dollar amount (in thousands) of the consolidated revenues attributable to each of our consolidated companies. The financial results of OmniMetrix are included in our consolidated financial statements effective February 15, 2012. Accordingly, there are no comparative results reported for these activities for the three month period ended March 31, 2011.

	Three months ended March 31,	
	2011	2012
DSIT Solutions	\$2,411	\$3,041
GridSense	641	918
OmniMetrix	—	155
USSI	43	121
Total	\$3,095	\$4,235

## BACKLOG

As of March 31, 2012, our backlog of work to be completed was as follows (amounts in millions of U.S. dollars):

DSIT Solutions	\$ 11.1
GridSense	0.6
OmniMetrix	0.4
USSI	1.4
Total	\$ 13.5

## RECENT DEVELOPMENTS

## (1) Acquisition of OmniMetrix

In accordance with applicable accounting standards, we began consolidating the results of OmniMetrix, LLC ("OmniMetrix") beginning February 15, 2012, the date we acquired OmniMetrix. OmniMetrix is a Georgia limited liability company based in Buford, Georgia which was established in August 1998. We acquired 100% of the membership interests in OmniMetrix through our wholly-owned, newly formed subsidiary, OMX Holdings, Inc. ("Holdings"). Holdings is a Georgia corporation that we formed in January 2012 for the sole purpose of completing the acquisition of OmniMetrix and holding our membership interest going forward.

OmniMetrix provides expert capabilities in the design and development of wireless field devices and internet-connected data management systems. This includes microprocessor-based, miniature, on-machine field equipment, fully redundant SQL-based data management, and web-delivered equipment status pages (our "Power Generator Monitoring" segment). While most OmniMetrix systems are used in electric power applications, it also builds systems for monitoring pipeline corrosion protection



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systems, the results of which are included in our “Other” segment.

### Power Generation Products and Services

In 1998, OmniMetrix introduced the world's first cellular wireless remote monitoring system designed specifically for emergency power generators (gensets). Since that time, it has grown the product feature set, creating interfaces for all major brands of gensets. OmniMetrix's products deliver critical, real-time machine information to customers, while its Smart Service™ software provides remote diagnostics that give users real control over their equipment - no matter where it is located. OmniMetrix's solutions are also easy to install, easy to operate, and provide users with the data that can result in a better knowledge of their equipment's history. That translates into higher reliability, quicker repairs, and potential cost savings.

#### Generator Monitoring

OmniMetrix's power generation (PG) products include:

- The OmniMetrix G8500 series monitors are the company's most popular wireless engine monitors. Their compact size and ease of wiring provides versatility for a wide variety of engine monitoring applications in the electric power and telecommunications markets. The G8500 series units are typically used to monitor engine performance and conditions such as engine running, accumulated run times, fuel and coolant levels, battery voltage, fault conditions and exercise intervals. Upon detection of critical events such as low battery voltage or failure to start, the monitor delivers the specific information to designated recipients, via e-mail and web display.
- The G8600 series monitor is a simple solution for multiple gensets that are located near each other on a site. Instead of purchasing a monitor for each of these generators, a single OmniMetrix G8600 monitor can provide the remote monitoring for the group. If the gensets are close enough to be either networked or wired together, the G8600 monitor is a very cost-effective solution. The G8600 monitors are used in a wide variety of complex engine monitoring applications in the electric power, telecommunications, and health care industries. Like the G8500, this compact monitoring system is typically used to monitor critical operational parameters of each networked engine. The system is fast, reliable, and does not require complicated set-up.
- OmniMetrix recently released its latest in the G-Series Remote Generator Monitors, the G9000 Monitor. With all the features of its predecessor, the G8600, the G9000 adds an LCD display feature on the front, plus the broadest array of inputs, controls and diagnostics available inside. As with the other products in the G-Series, the G9000 can be configured for cellular, satellite or Ethernet/LAN applications.

#### Tower Site Monitors

Other power generation products include tower site monitors (TSM). The OmniMetrix TSM accommodates a wide range of remote tower site needs such as:

- temperature measurement
- fighting alerts
- intrusion alarming
- air conditioner utilization
- utility power monitoring
- standby generator monitoring

The TSM is designed to provide easy remote access to site conditions, in an affordable and expandable way. The design point is global, offering choices in connectivity, including cellular, satellite, and ethernet options. While the majority of sites may utilize the cellular version, even the most remote sites are accessible with the Iridium satellite version. The TSM collects and analyzes data from sensors or equipment at the site, and automatically passes that data to the OmniMetrix web data center. The information is converted into alert messages, indicating changes of conditions at the site, along with regularly scheduled measurement data for archiving equipment performance. As a result, users may access historical information and view graphical displays of site performance, worldwide.

#### Cathodic Protection Products and Services

Cathodic Protection ("CP") is a method of applying voltage to underground steel structures to slow corrosion. This protection is essential, and commonly mandated, for the continued safe transportation of flammable gases through all steel pipelines buried below the surface of the soil. CP monitoring allows pipeline operators to confirm that an

appropriate protection voltage is applied to the pipeline, throughout its length. If the protection voltage is too low, the pipe will rust, eventually resulting in dangerous leaks. If the protection voltage is too high, the insulating coatings applied to the pipe will break down, causing electrical leakage paths. OmniMetrix offers rectifier monitors, pipe-to-soil monitors, and coupon monitors for the most complete CP pipeline monitoring solution available today. Any changes to the CP are reported daily and can be dealt with immediately. Historically,



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the pipeline operator technicians might only confirm the measurements every few months, so the OmniMetrix process can reduce pipe damage by shortening the duration of improper conditions. OmniMetrix's solutions help customers all over the world prevent losses associated with pipeline corrosion. Critical current and historic test-point information is available 24 hours a day in an easy-to-read format, delivered directly to a desktop, laptop, or phone. Beyond the obvious safety issues, proper CP will extend the useful life of these billion dollar pipelines.

**Rectifier Monitor**

A rectifier is a simple electrical device that converts utility voltage to a safe, DC voltage that is applied to the pipe to provide the cathodic protection. The OmniMetrix Rectifier Monitor measures and reports the voltage and current that is being directly applied to customers' steel pipelines by the rectifier. With easy installation and an array of options, the OmniMetrix rectifier monitors can be configured to meet customer needs and quickly installed anywhere in the world. The Rectifier Monitor measures rectifier output voltage, rectifier output current and utility AC voltage. The Rectifier Monitor also provides a GPS-synchronized interruption function that is used in a field test called a close interval survey. In addition, the OmniMetrix Rectifier Monitor offers a unique, and patent pending process called "ScopeView™", which acquires high speed samples of electrical waveforms present on the pipeline. In some cases, ScopeView™ proves that the rectifier is working, and in some cases it provides a view of interfering electrical current that can diminish the protection. This oscilloscope-like data presentation allows conclusive diagnostic opportunity to distinguish between the common ripple voltage found on traditional rectifiers, and excessive AC voltage resulting from damaged rectifier diodes, induced voltage from utility power lines, and adjacent structures with cathodic protection applied.

**Pipeline Protection Measurement**

The OmniMetrix Pipe-to-Soil Monitoring System (PSM) measures the voltage that is present at any given location along a steel pipeline. By taking measurements at various points on the pipeline, engineers can target specific locations that could be vulnerable to a breach in the pipeline itself. The PSM is designed literally from the ground up for this application, and employs a lithium battery, with a design point of 10 years of unattended service. It is intended for direct burial at the location of a pipe riser for easy installation of the in-soil reference cell and pipeline connection. The system periodically measures DC pipe-to soil (desired protection) voltage, along with AC voltage (undesired interference) on the pipe, and the status of the internal batteries. These measured values are stamped with the time and date while also being stored for transmission to the OmniMetrix server for analysis. Deviations from predetermined standards can be reported and alarmed.

**Computer Automated Test Station**

The OmniMetrix Computer Automated Test Station (CATS) is a self-contained wireless remote monitoring unit for pipe-to-soil and potential-to-structure measurements. The CATS monitor construction is a test station enclosure, and employs a two-coupon measurement system, in conjunction with a copper/copper sulfate reference electrode. One coupon is normally connected to the structure, to duplicate a protected holiday (pinhole in the protective coating). The other coupon is unprotected (rusting as an unprotected pipe would). The monitor first takes a potential measurement from reference electrode to unprotected coupon. Then the protected coupon is automatically disconnected from the structure and its "instant off" potential is measured with respect to the reference electrode (revealing characteristics of the soil and protection interaction). The monitor performs scheduled data reports and alarm notifications can be sent in the event of a deviation beyond preset standards. The CATS features wide area connectivity via digital cellular radio, transmitting wireless data to the OmniMetrix secure internet site.

All OmniMetrix's CP products feature SmartStation™ options, including automated notification and reporting, historic data for analysis, auto-updates, and remote reprogramming. Additionally, the Rectifier Monitor offers lightning sensors with auto-protect modes. The components of its SmartStation™ solution are the following:

- SmartService™ - web-based diagnostics and control for remote equipment. By studying the current and historic data, customers are able to pinpoint areas that need to be serviced. The secure web interface allows users to send commands directly to their CP test station equipment without having to leave the office. Streamlining service saves time, money, and can help maintain pipeline integrity.
- StormSense™ - an exclusive OmniMetrix feature that monitors the ionosphere for lightning, and then isolates itself from the rectifier, the reference electrode, and the AC control power, to protect itself from lightning damage. The unit

will put itself back online when the storm has passed. The Rectifier Monitor also monitors the AC power line, and will go into isolation mode when AC power line disturbances are detected.

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· OmniUpdate™ - another OmniMetrix exclusive feature, allowing over-the-air software updates, the same way it allows equipment control. The firmware for the entire line of OmniMetrix CP monitors can be automatically and remotely updated to accommodate future requirements.

### Customers and Markets

OmniMetrix helps businesses across a wide spectrum of industries accurately monitor their remote equipment, resulting in greater confidence that their equipment will function as needed. Every business that relies on remote equipment - from gas pipelines to medical centers, financial institutions, data centers, transportation, city governments and infrastructure, retail and manufacturing industries - benefits from the data a wireless remote equipment monitoring system can provide.

OmniMetrix currently sells its monitoring units across a wide range of industries and concurrently charges a monthly monitoring fee which is generally billed one year in advance. OmniMetrix's primary source of revenues is from the sale of monitors and associated monitoring revenue related to its Power Generation segment. A majority of OmniMetrix's revenue is expected to be derived from its monitoring services where the company historically has had a retention rate of renewing monitoring revenue in excess of 95%.

**Power Generation.** Over the last twenty years, the wireless telecommunications industry has simply exploded, and has created one of the largest market segments for emergency power generation. As a result, this segment represents one of OmniMetrix's fastest growing applications. The OmniMetrix G-Series generator monitors, along with the newer Tower Site Monitor (TSM) were designed specifically to meet the demanding needs of this application, with long term expandability. In addition, other users of back-up generators include governmental agencies (fire, police, etc.), healthcare, retail and manufacturing facilities, and homeowners. We believe the addressable market for the OmniMetrix power generation products exceeds \$2 billion.

**Cathodic Protection.** US regulations mandate that every steel-coated pipeline operator maintain a CP system. Nonetheless, it is reported that less than 5% are digitally monitored. With large, as well as regional, liquid operators and gas customers running over 2.5 million miles of pipe (e.g., gathering, transmission and distribution lines) in the US alone.

### Competition

**Power Generation.** OmniMetrix faces competition for PG customers from a small number of competitors who offer battery-operated tracking systems as well as wireless remote products. OmniMetrix products are distinguished from the field in terms of their remote capabilities (including remote configuring, resetting and firmware) and their ability to interface with cellular, LAN, and satellite configurations. Due to the fact that OmniMetrix has been in the market longer than any competitor, the company has a much broader array of products, and a strong customer list representing all of the major brand channels in the emergency power marketplace. Many of the features incorporated in the OmniMetrix products came from project partnerships with those brands years ago, and the design information is simply not available to new competitors. Competitors in the Power Generation market include Generator Solutions, Inc., Ayantra, Inc. and AutoCache, Inc.

**Cathodic Protection.** OmniMetrix faces competition from a small number companies, who collectively offer measurement and control systems with some similarity to those offered by OmniMetrix. None of the competitors offer the full range of features offered by OmniMetrix, but some of those companies sell other products related to the cathodic protection business. Due to the fact that protection failures are not typically urgent (rust is a slow process), the perceived value of instantaneous measurements is lower than in the power generation market. Thus, there is more competitive price pressure in the CP market, while the market supports a higher price point for the monitoring devices. For the most part, the competitors in this market have similar pricing, and primary differentiators are associated with service and quality. OmniMetrix is generally well regarded in these measures. Competitors in the Cathodic Protection market include American Innovations, Elecsys Corporation, and Abriox Ltd.

## Intellectual Property

OmniMetrix engages in on-going product development and research in order to protect its future competitiveness in the marketplace. Keeping proprietary information safe from unauthorized use or disclosure is an important objective. In order to protect its proprietary know-how and technology, OmniMetrix uses a combination of patents, trade secrets, contracts, and trademarks. However, some of OmniMetrix's know-how and technology may not be patentable. To protect its rights, OmniMetrix requires employees, as well as select consultants, advisors and collaborators to enter into confidentiality agreements. While these agreements will provide some level of protection, they cannot provide absolute assurance that OmniMetrix's trade secrets, know-how or other proprietary information are fully safeguarded. Whenever intellectual property is developed internally or acquired,

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OmniMetrix evaluates and determines the desired mix of controls to protect itself. OmniMetrix currently has three patent applications pending in the U.S.

Facilities

OmniMetrix's activities are conducted in approximately 6,000 square feet of office and production space in Buford, Georgia (a suburb north of Atlanta, GA) under a lease that expires in December 2013. We believe OmniMetrix's facilities are sufficient for production requirements for the foreseeable future and expect we will be able to renew the lease prior to its scheduled termination. Whether that will be the case or whether any alternative space will be available at such time, location and on terms acceptable to OmniMetrix cannot yet be determined. Any inability to maintain adequate facilities as required to meet customer demand could result in loss of, or a delay in fulfilling, orders and loss of associated revenue.

(2) Additional Investment in USSI

In April 2012, Acorn and USSI conducted a second closing for the purchase of additional USSI Preferred Stock in accordance with the USSI Purchase Agreement and invested an additional \$2.5 million in USSI. Following this investment, Acorn owns approximately 92% of USSI.

(3) Dividends

On April 19, 2012, Acorn's Board of Directors has approved a dividend of \$0.035 per share to be paid on June 1, 2012 to common stockholders of record on May 15, 2012.

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### OVERVIEW AND TREND INFORMATION

Acorn Energy, Inc. ("Acorn" or "the Company") is a holding company focused on technology driven solutions for energy infrastructure asset management.

Through our majority or wholly-owned operating subsidiaries we provide the following services and products:

- **Energy & Security Sonar Solutions**. We provide sonar and acoustic related solutions for energy, defense and commercial markets with a focus on underwater site security for strategic energy installations and other advanced acoustic systems and real-time embedded hardware and software development and production through our DSIT Solutions Ltd. ("DSIT") subsidiary.
- **Smart Grid Distribution Automation**. These products and services are provided by our GridSense subsidiaries (GridSense Inc. in the United States and GridSense Pty Ltd. and CHK GridSense Pty Ltd. in Australia - collectively "GridSense") which develop, market and sell remote monitoring and control systems to electric utilities and industrial facilities worldwide.
- **Energy and Security Sensor Systems**. These products and services are provided by our US Seismic Systems, Inc. subsidiary ("USSI") which develops and produces "state of the art" fiber optic sensing systems for the energy, commercial security and defense markets worldwide.
- **Power Generation (PG) Monitoring**. These products and services are provided by our newly acquired OmniMetrix subsidiary. OmniMetrix's PG products and services deliver critical, real-time machine information to customers and provide remote diagnostics that give users real control over their equipment.

During 2012, each of the four abovementioned activities represented a reportable segment. In addition, our "Other" segment represents IT and consulting activities at our DSIT subsidiary as well as Cathodic Protection activities in our newly acquired OmniMetrix subsidiary. As OmniMetrix's activities were acquired in February 2012, there are no comparative results reported for these activities for the three month period ended March 31, 2011.

The following analysis should be read together with the segment information provided in Note 11 to the interim unaudited condensed consolidated financial statements included in this quarterly report.

#### DSIT Solutions

DSIT reported increased revenues in the first quarter of 2012 as compared to the first quarter of 2011 as well as increased gross profit and net income. DSIT's revenues of \$3.0 million for the quarter represents an increase of approximately \$0.6 million or 26% as compared to the first quarter of 2011. First quarter 2012 revenues however, reflected a decrease (\$0.8 million or 20%) compared to fourth quarter 2011 revenues of \$3.8 million. The increase in revenues from the first quarter of 2011 was due to increased revenues in our Energy & Sonar Security Solutions segment which reported first quarter 2012 revenues of \$2.8 million compared to \$2.0 million in the first quarter of 2011. The increase in revenues was due to the receipt of a major AquaShield™ Diver Detection Sonar ("DDS") project (valued at \$12.3 million) in the end of 2011 and the subsequent work on that project. The decrease in revenues as compared to the fourth quarter of 2011 was due to a slowdown of revenues recognized in the aforementioned project due to dependencies on third parties for installation of the DDS systems as well as the completion of certain non-Naval projects combined with delays in the receipts of orders for new projects.

DSIT's gross profit in the first quarter of 2012 increased by approximately \$0.1 million or 12% compared to first quarter 2011 gross profit. The increase in gross profit was attributable to the abovementioned increase in revenues which was partially offset by reduced gross margins. Gross margins decreased in the first quarter of 2012 to 34% as

compared to 38% in the first quarter of 2011. The decrease in gross margin was attributable to increased personnel allocated to two major projects; one to pass a time sensitive acceptance test and another in connection with the installation of DDS systems.

During the first quarter of 2012, DSIT recorded approximately \$0.7 million of selling, general and administrative (SG&A) expense; virtually unchanged from the \$0.7 million recorded in the first quarter of 2011 and the \$0.7 million SG&A expense recorded in the fourth quarter of 2011. DSIT anticipates future SG&A to increase as it plans to increase resources allocated to marketing costs.

At December 31, 2011, DSIT had a backlog of approximately \$13.6 million. During the quarter, we received new orders totaling approximately \$0.2 million and at the end of March 2012 had a backlog of approximately \$11.1 million. DSIT expects to show revenue growth in 2012 compared to 2011 and expects 2012 to be profitable as well. The level of profitability, however,

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is expected to be dependent upon anticipated increased levels of marketing and development costs planned for the balance of 2012.

GridSense

In the first quarter of 2012, GridSense reported revenues of \$0.9 million, an increase of \$0.3 million (43%) compared to first quarter 2011 revenues and a decrease of \$1.5 million (62%) compared to fourth quarter 2011 revenues. The increase first quarter 2012 revenues compared to first quarter 2011 revenues was primarily attributable to a general improvement in the overall business environment in the utility industry. GridSense expects utility spending to continue to improve in future quarters. The decrease in first quarter 2012 revenues compared to fourth quarter 2011 revenues was primarily to normal seasonality as utilities typically increase spending or complete projects in the last quarter of their fiscal year which typically corresponds to the calendar year. GridSense also completed the fulfillment of an order of over 2,000 transformers monitors to a southeastern US electric utility in the fourth quarter of 2011 that had been received earlier in that year .

GridSense's gross profit in the first quarter of 2012 increased by approximately \$0.1 million or 27% compared to first quarter 2011 gross profit. The increase in gross profit was attributable to the abovementioned increase in revenues which was partially offset by reduced gross margins. Gross margins decreased in the first quarter of 2012 to 37% as compared to 42% in the first quarter of 2011. The decrease in gross margin was attributable to higher shipping costs, both outbound and inbound, and raw materials purchases in smaller lot sizes. GridSense is in the final stages of implementing a resource planning system which will help the company manage inventory more efficiently, improve forecasting for purchasing and procurement, and reduce production cycle times. First quarter 2012 gross profit was also well below fourth quarter 2011 gross profit of \$1.1 million (a decrease of 68%) due to the abovementioned decrease in revenues and decreased gross margins. The decrease in gross margins from 45% in the fourth quarter of 2011 to 38% in the first quarter of 2012 was due to the completion of the large project at the end of 2011 which provided higher than normal margins combined with certain fixed costs being spread over a larger revenue base in 2011.

During the first quarter of 2012, GridSense recorded approximately \$1.2 million of SG&A expense representing an increase of approximately \$0.3 million (39%) compared to the first quarter of 2011 and an increase of \$0.4 million (56%) compared to SG&A expense recorded in the fourth quarter of 2011. The increased SG&A costs are primarily due to increasing the employee count by seven full-time positions. Also, in response to improving industry conditions, GridSense expects to continue to expand its sales and support capabilities. We expect further increases in SG&A costs as additional employee positions (primarily in sales) are expected to be filled during the remainder of 2012.

GridSense is also augmenting its engineering team in order to accelerate the development of some key projects that GridSense believe will lead to the generation of new revenues and anticipates increased research and developments expenses going forward (approximately \$0.2 million in the first quarter of 2012).

We expect that GridSense will continue to require working capital support while it focuses on increasing its sales, particularly in the first half of 2012. Acorn continues to provide funds for GridSense's working capital needs and expects to do so in the future. Since January 1, 2012, Acorn has provided GridSense \$1.3 million for its working capital needs and has committed an additional \$0.7 million which we expect to provide GridSense over the balance of 2012. We have no assurance that GridSense will increase its sales and be able to reduce its need for additional financing to support its working capital needs for the balance of 2012 and beyond. This support may be in the form of a bank line, new investment by others, additional investment or loan by Acorn, or a combination of the above. GridSense is currently in discussions with a bank to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in GridSense may be limited by



the working capital needs of our corporate activities and other operating companies.

#### USSI

In the first quarter of 2012, USSI reported revenues of \$121,000, an increase of \$78,000 (181%) compared to first quarter 2011 revenues of \$43,000 and a decrease of \$312,000 (72%) compared to fourth quarter 2011 revenues of \$433,000. The increase first quarter 2012 revenues compared to first quarter 2011 revenues was primarily attributable to progress on Oil & Gas proof-of-concept contracts as well as a delivery of a perimeter security system in Canada. The decrease in first quarter 2012 revenues compared to fourth quarter 2011 revenues was primarily attributable to the time involved in the initial development of high temperature downhole systems as well as the contemporaneous development of seismic streamers and a project for a leading defense company. Significant progress was made toward the completion of each of these contracts and these projects expect to ship out in the second quarter of 2012.

In the first quarter of 2012, gross profit continued to be negative (\$211,000) as it was in the first quarter of 2011 (\$9,000). The negative gross profit is the result of increased engineering and production costs as USSI transitions from development of its

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products to production. USSI is continuing to develop cost cutting measures for the manufacturing of its commercial products, including investment in equipment that will make manufacturing more efficient and improving the production process that will ultimately result in less man-hours required for each product sold. USSI expects that its gross margin will improve over the balance of 2012 as it benefits from allocating its fixed costs over a larger revenue base and as it begins to utilize lower cost personnel in its production.

During the first quarter of 2012, USSI recorded approximately \$0.9 million of research and development ("R&D") expense as compared to \$0.2 million in the first quarter of 2011. The increased R&D expense is due to an increase in engineering headcount as well as an increase in R&D materials used in product development. We expect R&D expense to continue to increase from the levels seen in the first quarter of 2012 as USSI continues to internally develop more efficient production versions of its current products and adds additional engineering headcount to continue its development of multiple product offerings.

During the first quarter of 2012, USSI recorded approximately \$0.6 million of SG&A expense representing an increase of approximately \$0.3 million (82%) compared to the first quarter of 2011 and an increase of \$0.1 million (29%) compared to SG&A expense recorded in the fourth quarter of 2011. The increased SG&A costs are due to increased sales and marketing activities combined with the costs of additional personnel (including the addition of a full-time controller in the first quarter as well as additional Human Resources functions and a full-time administrative manager). For the balance of the year, we expect SG&A costs to remain consistent with levels seen for the first quarter of 2012.

We continue to anticipate significant growth in orders and revenues in 2012, particularly from new customers related to our 4D reservoir and shale gas monitoring systems following the numerous demonstrations performed during the year as well as follow-on projects from our existing "proof-of-concept" projects, each of which has the potential for annual multi-million dollar follow-up orders. We also anticipate significantly increased costs as we have grown our employee base from 28 full-time employees (inclusive of consultants) at the end of 2011 to 38 full-time employees (inclusive of consultants) as of April 30, 2012.

We expect that USSI will continue to require working capital support while it works on transitioning from development to production and as it works on refining its manufacturing capabilities. USSI currently has no other sources of financing other than its internally generated sales and investments by Acorn. On February 6, 2012, we entered into the USSI Purchase Agreement with USSI pursuant to which we converted previously advanced funds (\$2.5 million during the period from May 2011 to January 2012) into additional shares of USSI Common Stock and shares of USSI Preferred Stock. We also made a further payment to USSI of \$2.25 million February 6, 2012 to purchase additional shares of USSI Preferred Stock, and on April 6, 2012 we purchased additional shares of USSI Preferred Stock for an aggregate purchase price of \$2.5 million (see Recent Developments). As of April 30, 2012, USSI had cash on hand of approximately \$2.3 million. We have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs. Additional financing for USSI may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in USSI may be limited by the working capital needs of our corporate activities and other operating companies.

### OmniMetrix

In accordance with applicable accounting standards, we began consolidating the results of OmniMetrix beginning February 15, 2012, the date we acquired OmniMetrix. Accordingly, there are no comparative results reported for OmniMetrix for the three month period ended March 31, 2011.

During the period following our acquisition, we reported revenues of approximately \$155,000 and a net loss of \$170,000 with respect to OmniMetrix activities. OmniMetrix is currently engaged in developing a major marketing and promotion program to increase the penetration rate of its PG monitoring products into the market. Since our acquisition, OmniMetrix has hired additional personnel growing from 11 employees to 18 employees at April 30, 2012. We expect that OmniMetrix will continue to expand its sales and marketing team in the coming months.

OmniMetrix currently has no other sources of financing other than its internally generated sales and investments by Acorn. As of April 30, 2012, OmniMetrix had cash on hand of approximately \$0.6 million. We expect that OmniMetrix will require working capital support for its marketing and promotion program in the coming months. Financing for OmniMetrix may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in OmniMetrix may be limited by the working capital needs of our corporate activities and other operating companies.

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## Corporate

Corporate general and administrative expense in the first quarter of 2012 reflected a \$0.6 million increase to \$1.5 million as compared to \$0.9 million of expense in the first quarter of 2011. The increase is due primarily to professional fees and costs incurred associated with our acquisition of OmniMetrix (approximately \$300,000) in February 2012 as well as increased investor relation activities and personnel costs. First quarter 2012 corporate general and administrative expense was also approximately \$0.1 million greater than fourth quarter 2011's expense of \$1.4 million which included certain bonuses of approximately \$0.5 million. In coming quarters, we expect our corporate general and administrative costs to stay near its current level as we anticipate increasing our level of investor relation activities.

## Results of Operations

The following table sets forth certain information with respect to the consolidated results of operations of the Company for the three months ended March 31, 2011 and 2012, including the percentage of total revenues during each period attributable to selected components of the operations statement data and for the period to period percentage changes in such components. For segment data see Note 11 to the Unaudited Condensed Consolidated Financial Statements included in this quarterly report.

The financial results of OmniMetrix are included in our condensed consolidated financial statements effective February 15, 2012. Accordingly, there are no comparative results reported for these activities for the three month period ended March 31, 2011. In addition, in August 2011, we sold our interests in CoaLogix. Those results are reflected below as discontinued operations.

	Three months ended March 31,				Change From 2011 to 2012
	2011		2012		
	(\$,000)	% of revenues	(\$,000)	% of revenues	
Revenues	\$3,095	100%	\$4,235	100%	37%
Cost of sales	1,921	62%	3,024	71%	57%
Gross profit	1,174	38%	1,211	29%	3%
R&D expenses	490	16%	1,318	31%	169%
SG&A expenses	2,743	89%	4,229	100%	54%
Operating loss	(2,059)	(67)%	(4,336)	(102)%	111%
Finance expense, net	(117)	(4)%	(23)	(1)%	(80)%
Gain on sale of HangXing	492	16%	—	—%	(100)%
Loss before taxes on income	(1,684)	(54)%	(4,359)	(103)%	159%
Taxes on income	(65)	(2)%	(75)	(2)%	15%
Loss from continuing operations	(1,749)	(57)%	(4,434)	(105)%	154%
Loss from discontinued operations, net of income taxes	(836)	(27)%	—	—%	(100)%
Non-controlling interest share of loss from discontinued operations	232	7%	—	—%	(100)%
Net loss	(2,353)	(76)%	(4,434)	(105)%	88%
Net loss attributable to non-controlling interests	136	4%	256	6%	88%
Net loss attributable to Acorn Energy Inc.	\$(2,217)	(72)%	\$(4,178)	(99)%	88%

Revenues. Revenues in the first quarter of 2012 increased by \$1.1 million or 37% from \$3.1 million in the first quarter of 2011 to \$4.3 million in the first quarter of 2012. All companies recorded increased revenues in the first quarter of 2012 as compared to the first quarter of 2011. DSIT revenues increased by \$0.6 million (26%) to \$3.0 million compared to first quarter 2011 revenues of \$2.4 million. GridSense revenues increased by \$0.3 million (43%) to \$0.9 million compared to first quarter 2011 revenues of \$0.6 million. USSI revenues increased by \$78,000 (181%) to \$121,000 compared to first quarter 2011 revenues of

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\$43,000. In addition, we recorded approximately \$155,000 of revenues associated with our newly acquired OmniMetrix subsidiary.

The increase in DSIT revenues was primarily due to progress on a major AquaShield™ DDS order (valued at \$12.3 million) which was received in the end of 2011. The increase in GridSense revenues was primarily due to increased sales activity from prior quarters materializing in fulfilled orders in the current quarter.

Gross profit. Gross profit in the first quarter of 2012 reflected a slight increase of \$37,000 (3%) as compared to the first quarter of 2011. DSIT's first quarter 2012 gross profit increased by \$113,000 (12%) over first quarter 2011 gross profit. The increase in DSIT's gross profit was attributable to increased revenues which were partially offset by reduced gross margins which deteriorated from to 34% in 2012 from 38% in 2011. DSIT's decreased gross margins in 2012 was due to increased personnel costs allocated to two major projects. GridSense's first quarter 2012 gross profit increased by \$74,000 (28%) over first quarter 2011 gross profit. The increase in GridSense's gross profit was also attributable to increased revenues which were also partially offset by reduced gross margins which deteriorated from to 42% in 2012 from 37% in 2011. GridSense's decreased gross margins in 2012 was attributable to higher shipping costs, both outbound and inbound, and raw materials purchases in smaller lot sizes. USSI continued to show a negative gross profit (\$211,000, an increase of \$202,000 compared to the negative gross profit in the first quarter of 2011) as it incurs increased engineering and production costs as it transitions from development of its products to production. In addition, we recorded approximately \$51,000 of gross profit associated with our newly acquired OmniMetrix subsidiary.

Research and development (“R&D”) expenses. R& D expenses increased from \$0.5 million the first quarter of 2011 to \$1.3 million in the first quarter of 2012 due primarily to increased R&D expense recorded at USSI resulting from an increase in its engineering headcount as well as an increase in R&D materials used in product development.

Selling, general and administrative expenses (“SG&A”). SG&A costs in the first quarter of 2012 increased by \$1.5 million as compared to the first quarter of 2011. DSIT's SG&A was unchanged (\$0.7 million in both the first quarter of 2012 and 2011). Both GridSense and USSI recorded increases in SG&A expenses. GridSense recorded an increase of \$0.3 million (39%) while USSI recorded an increase of \$0.3 million (82%). GridSense's increased SG&A expense was attributable to increased personnel costs as it increased its employee count by seven full-time employees. USSI's increased SG&A expense was attributable to increased sales and marketing activities combined with the costs of additional personnel. Corporate general and administrative costs increased by \$0.6 million from \$0.9 in the first quarter of 2011 to \$1.5 million in the first quarter of 2012 primarily due to professional fees and costs incurred in the acquisition of OmniMetrix (approximately \$300,000) as well as increased investor relations and personnel costs. Additionally, \$0.2 million of the increase in SG&A costs is due to the inclusion of OmniMetrix SG&A costs in the first quarter of 2012.

Gain on sales of HangXing. In March 2011, we sold our 25% interest in HangXing International Automation Engineering Co. Ltd. (“HangXing”) back to the majority owner, China Aero-Polytechnology Establishment for \$492,000.

Loss from discontinued operations. In August 2011, we sold our entire investment in CoaLogix. Accordingly, all of CoaLogix' activity for the first quarter of 2011 (a loss of \$0.8 million prior to attribution of \$0.2 million to non-controlling interests) is presented as a loss from discontinued operations.

Net loss. We had a net loss of \$4.2 million in the first quarter of 2012 compared with net loss of \$2.2 million in the first quarter of 2011. Our loss in 2012 was primarily due to GridSense, USSI and OmniMetrix (in the period since our acquisition) losses of \$1.2 million, \$1.7 million and \$0.2 million, respectively with corporate expenses contributing an additional \$1.5 million. These losses were offset by DSIT's a profit of approximately \$60,000 for the quarter and the non-controlling interest's share of our losses in USSI of approximately \$260,000.

## Liquidity and Capital Resources

As of March 31, 2012, we had working capital of \$49.2 million. Our working capital includes \$21.4 million of cash and cash equivalents, \$18.0 million of short-term deposits, \$6.0 million of funds held in escrow which are expected to be released in August 2012 and restricted deposits of approximately \$1.9 million. Net cash decreased during the three months ended March 31, 2012 by \$12.9 million, of which approximately \$4.7 million was used in operating activities. The primary use of cash in operating activities during the first three months of 2012 was the cash used in operations by our subsidiaries (\$2.2 million and \$1.0 million used by USSI and GridSense, respectively) in their operations combined with the \$1.5 million of cash used in our corporate operating activities. During the three month period, DSIT and OmniMetrix (since the date of our acquisition) were effectively cash flow neutral. Cash used in investment activities of \$7.8 million was primarily due to the net cash used in the acquisition of OmniMetrix

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(\$7.8 million). The release, net of \$0.3 million of restricted deposits during the quarter was partially offset by the \$0.2 million used for the acquisition of property and equipment.

Net cash of \$0.4 million was used in financing activities, primarily from the payment of dividends during the quarter (\$1.5 million) and the repayment of short and long-term debt, net of new borrowings (\$0.2 million) which was partially offset by the proceeds from the exercise of options (\$1.3 million).

At March 31, 2012, DSIT had approximately \$0.2 million of unrestricted cash in banks and \$1.1 million in Israeli credit lines available to it from two Israeli banks (approximately \$540,000 from each bank), of which approximately \$300,000 was then being used. The lines-of-credit are subject to maintaining certain financial covenants. At March 31, 2012, DSIT was in compliance with its financial covenants.

As at March 31, 2012, DSIT also has an outstanding term loan from an Israeli bank in the amount of approximately \$248,000. The loan is denominated in NIS and bears interest at the rate of the Israeli prime rate per annum plus 0.9%. The loan is to be repaid in equal payments of approximately \$12,000 per month (principal and interest) through December 2013.

As collateral for the term-loan, DSIT has deposited with an Israeli bank approximately \$81,000 as a non-current restricted deposit. In addition to this restricted deposit, DSIT has also deposited with two Israeli banks approximately \$2.1 million as collateral for various performance and bank guarantees for various projects as well as for its credit facilities at the banks. DSIT expects that these deposits will be released during the next twelve months, but expects to redeposit a majority of these funds again as collateral for new guarantees for new projects and for renewing its credit facilities.

On April 30, 2012, DSIT had approximately \$2.4 million of cash of which \$2.2 million was restricted (\$1.9 million current and \$0.3 million non-current) and was utilizing approximately \$0.8 million of its lines-of-credit. We believe that DSIT will have sufficient liquidity to finance its current level of activities from cash flows from its own operations over the next 12 months. This is based on continued utilization of its line-of-credit and its operating results. However, from time to time, DSIT encounters cash flow difficulties arising from the timing of its milestones which triggers a billing. In addition, DSIT may require additional financing for a planned expansion of its marketing and development programs for the balance of 2012 and into 2013. This financing may be in the form of an expansion of a bank line, new investment by others, additional investment or loan by Acorn, or a combination of the above. The availability and amount of any additional investment from us in DSIT may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies. On May 1, 2012, we transferred \$1.0 million to DSIT for working capital support and to help finance the beginning of the expansion of its marketing and development programs.

As at April 30, 2012, GridSense had approximately \$160,000 of cash on hand. We expect that GridSense will continue to require working capital support while it works on increasing its sales, particularly in the first half of 2012. Acorn continues to provide funds for GridSense's working capital needs and expects to do so in the future. Since January 1, 2012, Acorn has provided GridSense \$1.3 million for its working capital needs and has committed an additional \$700,000 which we expect to provide GridSense over the balance of 2012. We have no assurance that GridSense will increase its sales and be able to reduce its need for additional financing to support its working capital needs for the balance of 2012 and beyond. This support may be in the form of a bank line, new investment by others, additional investment or loan by Acorn, or a combination of the above. GridSense is currently in discussions with a bank to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in GridSense may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies.

We expect that USSI will continue to require working capital support while it works on transitioning from development to production and as it works on refining its manufacturing capabilities. USSI currently has no other sources of financing other than its internally generated sales and investments by Acorn. In February 2012, we purchased additional USSI Preferred Stock in accordance with the USSI Purchase Agreement and invested an additional \$2.5 million in USSI (see Recent Developments). This followed an earlier transfer in 2012 of \$250,000. As



of April 30, 2012, USSI had cash on hand of approximately \$2.4 million. We have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs. Additional financing for USSI may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. USSI has begun discussions with a number of banks to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in USSI may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies.

OmniMetrix currently has no other sources of financing other than its internally generated sales and investments by Acorn. As of April 30, 2012, OmniMetrix had cash on hand of approximately \$0.6 million. We expect that OmniMetrix will require working capital support for its marketing and promotion program in the coming months. Financing for OmniMetrix may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. There is no

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assurance that such support will be available from such sources in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in OmniMetrix may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies. As at May 1, 2012, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately \$15.5 million in cash and cash equivalents reflecting a decrease of approximately \$4.3 million from the balance as of March 31, 2012. The decrease in corporate cash is due primarily to our additional investment in USSI of \$2.5 million and of \$0.3 million to GridSense, the \$1.0 million transfer to DSIT and corporate expenses during the period.

We believe that our current cash plus the cash generated from operations and borrowing from available lines of credit, if necessary, will provide more than sufficient liquidity to finance the operating activities of Acorn and the operations of its operating subsidiaries at their current level of operations for the foreseeable future and for the next 12 months in particular.

## Contractual Obligations and Commitments

The table below provides information concerning obligations under certain categories of our contractual obligations as of March 31, 2012.

## CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

	Years Ending March 31, (in thousands)				
	Total	2013	2014 - 2015	2016 - 2017	2018 and thereafter
Bank and other debt, utilized lines-of-credit and capital leases	\$581	\$464	\$117	\$—	\$—
Operating leases	1,826	830	882	114	—
Potential severance obligations (1)	4,053	—	967	326	2,760
Total contractual cash obligations	\$6,460	\$1,294	\$1,966	\$440	\$2,760

We expect to finance these contractual commitments from cash currently on hand and cash generated from operations.

(1) Under Israeli law and labor agreements, DSIT is required to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by the Israeli Severance Pay Law, is based upon length of service and last salary. These obligations are substantially covered by regular deposits with recognized severance pay and pension funds and by the purchase of insurance policies. As of March 31, 2012, we accrued a total of \$4.1 million for potential severance obligations to our Israeli employees of which approximately \$2.8 million was funded.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

## Foreign Currency Risk

In the normal course of business, we are exposed to fluctuations in interest rates on lines-of-credit incurred to finance our operations in Israel, whose net utilization at March 31, 2012 stood at approximately \$0.3 million. Our non-US dollar monetary assets and liabilities (net liabilities of approximately \$2.1 million) in Israel at our DSIT subsidiary are exposed to fluctuations in exchange rates. In addition, our non-US dollar monetary assets and liabilities (net liability of approximately \$0.3 million) in Australia at our GridSense subsidiary are also exposed to fluctuations in exchange

rates. Our DSIT subsidiary enters into various hedging contracts which do not qualify as hedging instruments under accounting principles to try to mitigate its foreign currency exposure risks. GridSense does not employ specific strategies, such as the use of derivative instruments or hedging, to manage its foreign currency exchange rate exposures.

#### Concentrations of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist principally of cash and cash equivalents, short-term deposits, escrowed funds, restricted deposits and trade receivables. The counterparty to a large majority

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of our cash and cash equivalents (\$12.6 million) is a money market of a major financial institution. We do not believe there is significant risk of non-performance by this counterparty. The counterparty to our restricted deposits (\$2.2 million) and approximately \$7.2 million of our cash and equivalents are two major Israeli banks. We do not believe there is significant risk of non-performance by these counterparties. Short-term deposits (\$18.0 million) are in FDIC insured certificates of deposit through the Certificate of Deposit Account Registry Service. The Company does not believe there is significant risk of non-performance by the counterparties. The counterparty to our escrowed funds is a major financial institution. We do not believe there is significant risk of non-performance by this counterparty. Approximately 30% (\$1.4 million) of the trade accounts receivable at March 31, 2012 was due from two customers that pay their trade receivables over usual credit periods. Credit risk with respect to the balance of trade receivables is generally diversified due to the number of entities comprising our customer base. Approximately 69% of the balance in unbilled revenue at March 31, 2012 was due from two customers that when billed, pay their trade receivables over usual credit periods. Credit risk with respect to the balance of unbilled revenue is generally diversified due to the number of entities comprising our customer base.

Fair Value of Financial Instruments

Fair values of financial instruments included in current assets and current liabilities are estimated to approximate their book values due to the short maturity of such investments. Fair value for long-term debt and long-term deposits are estimated based on the current rates offered to us for debt and deposits with similar terms and remaining maturities. The fair value of our long-term debt and non-current restricted deposits are not materially different from their book values.

Interest Rate Risk

In the normal course of business, we are exposed to fluctuations in interest rates on our lines-of-credit (\$1.1 million available) and term loan (\$248,000 balance at March 31, 2012) to finance our operations in Israel. Such lines-of-credit and loans bear interest at interest rates that are linked to the Israeli prime rate (4.0% at March 31, 2012).

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ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Report, we carried out an evaluation, under the supervision and with the participation of our management, including the Chief Executive Officer and the Chief Financial Officer, of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level at end of the period covered by this report to ensure that the information required to be disclosed by us in the reports we file or submit under the Exchange Act is (i) accumulated and communicated to our management (including our Chief Executive Officer and Chief Financial Officer) in a timely manner, and (ii) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART II

PART II – OTHER INFORMATION

ITEM 1A. RISK FACTORS

RISKS RELATED TO OMNIMETRIX

OmniMetrix is a relatively small company with limited resources compared to some of its current and potential competitors, which may hinder its ability to compete effectively.

Some of OmniMetrix's current and potential competitors have significantly greater resources and broader name recognition than it does. As a result, these competitors may have greater credibility with OmniMetrix's existing and potential customers. They also may be able to adopt more aggressive pricing policies and devote greater resources to the development, promotion and sale of their products which would allow them to respond more quickly to new or emerging technologies or changes in customer requirements.

OmniMetrix may not be able to access sufficient capital to support growth.

OmniMetrix is dependent on Acorn's ability and willingness to provide funding to support its business and growth strategy. OmniMetrix will be competing with other Acorn subsidiaries for access to Acorn capital and credit support. Whether Acorn will have the resources necessary to provide funding, or whether alternative funds, such as third-party loans, will be available at the time and on terms acceptable to Acorn and OmniMetrix cannot be determined.

OmniMetrix is dependent on the services of certain key personnel.

OmniMetrix's success is largely dependent on the skills, experience and efforts of its senior management team and other key personnel. In particular, its success depends on the continued efforts of Deena Redding, its CEO, and Harold Jarrett, a founder and its most experienced engineer. The loss of the services of either of these key employees could materially harm OmniMetrix's business, financial condition, future results and cash flow. OmniMetrix does not maintain "key person" life insurance policies on its employees other than for Mr. Jarrett. Although to date OmniMetrix has been successful in retaining the services of senior management and has entered into employment agreements with Ms. Redding and Mr. Jarrett, they may terminate their employment agreements without cause and with various notice periods. OmniMetrix may also not be able to locate or employ on acceptable terms qualified replacements for its senior management or key employees if their services were no longer available.

OmniMetrix has a very small sales force and whether it can recruit a successful sales team cannot be determined. Failure to do so will adversely affect its ability to grow revenues and introduce new products to the marketplace.

OmniMetrix is in the process of increasing its sales staff, but presently retains a very small sales force. This limits its ability to reach existing and potential customers. Whether it will be able to attract, employ and retain sales personnel who can successfully grow revenues cannot be determined and failure to do so will negatively impact future revenues.

OmniMetrix sells equipment and services which monitor third-party products, thus its revenues are dependent on the continued sales of such third-party products.

OmniMetrix's end-user customer base is comprised exclusively of parties who have chosen to purchase either generators or cathodic protection systems. OmniMetrix has no ability to control the rate at which new generators or CP protection systems are acquired. When purchases of such products decline, the associated need for OmniMetrix's products and services is expected to decline as well.

If OmniMetrix is unable to keep pace with changing market or customer-mandated product and service improvements, OmniMetrix's results of operations and financial condition may suffer.

Many of OmniMetrix's existing products may require ongoing engineering and upgrades in conjunction with market developments as well as specific customer needs. There can be no assurance that OmniMetrix will continue to be successful in its engineering efforts regarding the development of its products and future technological difficulties could adversely affect its

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business, results of operations and financial condition.

The cellular networks used by OmniMetrix are also subject to periodic technical updates that may require corresponding updates to, or replacement of, OmniMetrix's monitoring equipment.

Cellular networks have evolved over time to offer more robust technical capabilities in both voice and data transmission. At the present time, the changes from the so-called "2G" to "3G" and "4G" service have resulted in only limited service interruptions. OmniMetrix anticipates, however, that as these new capabilities come online, it will be necessary to have equipment that can readily interface with the newer cellular networks to avoid negative impacts on customer service. Not all of the costs associated with OmniMetrix's corresponding equipment upgrades can be passed on to customers and the increased expenses are expected to have a negative impact on OmniMetrix's operating results.

A substantial portion of OmniMetrix's revenues are generated not from product sales, but from periodic monitoring fees and thus it is continually exposed to risks associated with its customers' financial stability.

OmniMetrix sells on-going monitoring services to both PG and CP customers. It is therefore dependent on these customers continuing to timely pay service fees on an on-going basis. If a significant portion of these fees are not renewed from year-to-year, OmniMetrix can expect to experience deterioration in its financial condition.

OmniMetrix's ability to provide, and to collect revenues from, monitoring services is dependent on the reliability of cellular networks not controlled by OmniMetrix.

OmniMetrix provides monitoring services through the use of cellular technology utilizing the networks of third-party providers. These providers generally do not warrant their services to either OmniMetrix or the end users and any dropped transmissions could result in the loss of customer renewals and potential claims against OmniMetrix. While OmniMetrix uses contractual measures to limit its liability to customers, there is no assurance that such limitations will be enforced or that customers will not cancel monitoring services due to network issues.

OmniMetrix's business is dependent on its ability to reliably store and manage data, but there can be no guarantee that it has sufficient capabilities to mitigate potential data loss in all cases.

The efficient operation of OmniMetrix's business is dependent on its information technology systems. In addition, OmniMetrix's ability to assist customers in analyzing data related to the performance of such customers' power and cathodic protection monitoring systems is an important component of its customer value proposition. OmniMetrix utilizes off-site data servers, housed within a commercial data center utilizing standard state-of-the-art data and power processes, but whether a data loss can be avoided cannot be assured in every case. OmniMetrix's information technology systems are vulnerable to damage or interruption from natural disasters, sabotage (including theft and attacks by computer viruses or hackers), power outages; and computer systems, Internet, telecommunications or data network failure. Any interruption of OmniMetrix's information technology systems could result in decreased revenue, increased expenses, increased capital expenditures, customer dissatisfaction and potential lawsuits, any of which could have a material adverse effect on its results of operations and financial condition.

OmniMetrix is currently dependent on a single subcontractor for the assembly of its products.

OmniMetrix's ability to deliver its products to its customers on a timely basis is dependent on the production processes of its sole subcontractor. Financial or production difficulties by this subcontractor could have a negative impact on OmniMetrix's ability to deliver its products timely and cause a loss of customer confidence. While OmniMetrix believes that it can ultimately find a substitute contractor to make its assemblies on acceptable terms, it may not be able to successfully do this in a timely manner. Any difficulties OmniMetrix encounters as a result of its reliance on its subcontractor could have a material adverse effect on its operations and financial condition.





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ITEM 6. EXHIBITS.

- #10.1 Limited Liability Company Interest Purchase Agreement by and among OmniMetrix, LLC, XYZ Holdings, Inc. and the other parties listed therein dated February 15, 2012
- #10.2 Third Amendment to Employment Agreement by and between Registrant and John A. Moore dated March 1, 2012\*
- #10.3 Letter Agreement between the Registrant and George Morgenstern dated March 31, 2012\*
- #10.4 Employment Agreement by and between Registrant and Heather K. Mallard dated January 24, 2012\*
- #10.5 2012 Stock Plan for US Seismic Systems, Inc.\*
- #10.6 Form of US Seismic Systems, Inc. 2012 Stock Plan Notice of Incentive Stock Option Grant\*
- #10.7 Form of US Seismic Systems, Inc. 2012 Stock Plan Notice of Non-Statutory Stock Option Grant\*
- #10.8 Amended and Restated Stockholders' Agreement by and among US Seismic Systems, Inc., Registrant and the other parties named therein dated March 19, 2012
- #10.9 Stock Purchase Agreement by and between Registrant and US Seismic Systems, Inc. dated February 6, 2012
- #10.10 At Will Employment, Confidential Information, Non-Competition and Invention Assignment Agreement by and between OmniMetrix, LLC and Deena P. Redding dated February 15, 2012\*
- #10.11 At-Will Employment, Confidential Information, Non-Competition and Invention Assignment Agreement by and between Registrant and Heather K. Mallard dated January 24, 2012\*
- #31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- #31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- #32.1 Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- #32.2 Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- #101.1 The following financial statements from Acorn Energy's Form 10-K for the year ended December 31, 2011, filed on March 15, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Changes in Equity (iv) Consolidated Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text.

\* This exhibit includes a management contract, compensatory plan or arrangement in which one or more directors or executive officers of the Registrant participate.

# This exhibit is filed or furnished herewith.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by its principal financial officer thereunto duly authorized.

ACORN ENERGY, INC.

Dated: May 10, 2012

By: /s/ MICHAEL BARTH  
Michael Barth  
Chief Financial Officer