Ascent Solar Technologies, Inc. Form DEF 14A May 15, 2008

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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		SCHEDULE 14A (RULE 14a-101) SCHEDULE 14A INFORMATION
		Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.
File	d by Re	egistrant ý
File	d by a l	Party other than the Registrant o
Che	ck the	appropriate box:
o	Prelin	ninary Proxy Statement
o	Confi	idential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
ý	Defin	itive Proxy Statement
o	Defin	itive Additional Materials
o	Solici	ting Material Pursuant to §240.14a-12
		ASCENT SOLAR TECHNOLOGIES, INC.
		(Name of Registrant as Specified In Its Charter)
		(Name of Person(s) Filing Proxy Statement, if other than the Registrant)
Pay	ment of	Filing Fee (Check the appropriate box):
ý	No fe	e required.
0	Fee c (1)	omputed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11. Title of each class of securities to which transaction applies:
	(2)	Aggregate number of securities to which transaction applies:
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0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

	(4)	Proposed maximum aggregate value of transaction:
	(5)	Total fee paid:
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	filing	box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the for which the offsetting fee was paid previously. Identify the previous filing by registration ment number, or the Form or Schedule and the date of its filing.
	(1)	Amount Previously Paid:
	(2)	Form, Schedule or Registration Statement No.:
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	(4)	Date Filed:

May 15, 2008

Dear Stockholders:

You are cordially invited to attend Ascent Solar's Annual Meeting of Stockholders to be held on July 1, 2008. The meeting will be held at the Denver Marriott West, 1717 Denver West Blvd., Golden, Colorado 80401 beginning at 9:00 a.m. local time. The formal meeting notice and proxy statement for the meeting are attached.

Whether or not you plan to attend the annual meeting, it is important that your shares be represented and voted at the meeting. This year, for the first time, we are voluntarily furnishing proxy materials to our stockholders on the Internet rather than mailing printed copies to all stockholders. This serves our environmental goals and also saves us significant postage, printing and processing costs. Whether or not you plan to attend the annual meeting, please cast your vote as promptly as possible by returning a paper proxy card, following the instructions in the Notice of Internet Availability of Proxy Materials, via the Internet or by telephone. Casting your vote using any one of these methods will ensure your representation at the annual meeting. If you attend the annual meeting in person, you may vote your shares in person even though you have previously given your proxy.

Sincerely,

Matthew Foster

President and Chief Executive Officer

ASCENT SOLAR TECHNOLOGIES, INC.

8120 Shaffer Parkway Littleton, Colorado 80127 (303) 285-9885

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD JULY 1, 2008

TO OUR STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of Ascent Solar Technologies, Inc., a Delaware corporation (the "Company"), will be held on July 1, 2008, at 9:00 a.m. local time at the Denver Marriott West, 1717 Denver West Blvd., Golden, Colorado 80401, for the following purposes, as more fully described in the proxy statement accompanying this notice:

- ELECTION OF CLASS 1 DIRECTORS. To elect two Class 1 directors to serve until the 2009 annual meeting of stockholders and until their successors have been elected and qualified.
- ELECTION OF CLASS 3 DIRECTORS. To elect two Class 3 directors to serve until the 2011 annual meeting of stockholders and until their successors have been elected and qualified.
- APPROVAL OF RESTRICTED STOCK PLAN. To approve the Company's 2008 Restricted Stock Plan for issuance of incentive restricted stock awards to employees, consultants and directors.
- 4.
 APPROVAL OF AMENDED AND RESTATED STOCK OPTION PLAN. To approve an amendment and restatement of the Company's 2005 Stock Option Plan that, among other things, increases the number of shares authorized for issuance under that plan by 500,000 shares.
- 5.

 ANY OTHER BUSINESS that may properly come before the annual meeting or any adjournments or postponements thereof

Our stockholders of record at the close of business on May 2, 2008 are entitled to receive notice of and to vote at the annual meeting and any adjournment or postponement thereof.

Our stockholders are cordially invited to attend our annual meeting in person.

Sincerely,

Matthew Foster

President and Chief Executive Officer
Littleton, Colorado
May 15, 2008

Your vote is very important to us.

We urge you to vote via the Internet or by telephone, or by marking, signing, dating and returning a proxy card as soon as possible. You may vote in person at the meeting whether or not you previously have returned your proxy.

For those stockholders receiving proxy materials via the Internet, our proxy materials, including this proxy statement and our annual report on Form 10-K for the year ended December 31, 2007, are available at www.proxyvote.com.

ASCENT SOLAR TECHNOLOGIES, INC.

8120 Shaffer Parkway Littleton, Colorado 80127 (303) 285-9885

PROXY STATEMENT

The enclosed proxy is solicited on behalf of Ascent Solar Technologies, Inc., a Delaware corporation, by its Board of Directors (the "Board") for use at its Annual Meeting of Stockholders to be held at 9:00 a.m. local time on July 1, 2008, or at any adjournment thereof, for the purposes set forth in this proxy statement and in the accompanying notice. The meeting will be held at the Denver Marriott West, 1717 Denver West Blvd., Golden, Colorado 80401.

These proxy solicitation materials were first sent or given on or about May 15, 2008 to stockholders entitled to vote at the meeting. Only one copy of this proxy statement, notice and annual report on Form 10-K is being delivered to stockholders who share an address, unless we have received contrary instructions from those stockholders. Upon written or oral request, we will deliver a separate copy of this proxy statement, notice and annual report on Form 10-K. Requests for such additional copies this year or in future years should be directed to our Corporate Secretary at the address or telephone number above. If two or more stockholders sharing an address are receiving multiple copies and wish to receive only a single copy, they can submit a request to the same address and telephone number above.

This proxy statement is being furnished to you with a copy of our annual report on Form 10-K for our fiscal year ended December 31, 2007 (the "Annual Report"), which was filed with the Securities and Exchange Commission (the "SEC") on March 14, 2008. We will provide, without charge, additional copies of our Annual Report. Any exhibits listed in the Annual Report also will be furnished upon request at the actual expense we incur in furnishing such exhibit. Any such requests should be directed to the Company's Corporate Secretary at our executive offices set forth above.

References to the "Company," "Ascent Solar," "our," "us" or "we" mean Ascent Solar Technologies, Inc.

VOTING AND RELATED MATTERS

Voting Securities and Voting Rights

Stockholders of record at the close of business on May 2, 2008 are entitled to receive notice and vote at the meeting. On the record date, there were 14,050,102 issued and outstanding shares of our common stock. Each holder of common stock voting at the meeting, either in person or by proxy, may cast one vote per share of common stock held on all matters to be voted on at the meeting.

The presence, in person or by proxy, of the holders of a majority of the total number of shares of common stock entitled to vote constitutes a quorum for the transaction of business at the meeting. Assuming that a quorum is present:

- (1) the affirmative vote of a majority of the shares entitled to vote at the meeting and present in person or by proxy will be required to elect each Class 1 director nominee;
- (2) the affirmative vote of a majority of the shares entitled to vote at the meeting and present in person or by proxy will be required to elect each Class 3 director nominee;
- the affirmative vote of a majority of the shares for which votes are properly cast in person or by proxy on the proposal will be required to approve the Company's 2008 Restricted Stock Plan (the "Restricted Stock Plan");
- the affirmative vote of a majority of the shares for which votes are properly cast in person or by proxy on the proposal will be required to approve the amendment and restatement of our 2005 Stock Option Plan (the "Option Plan") that, among other things, increases the number of shares authorized for issuance under the Option Plan by 500,000 shares; and
- unless otherwise required by our Bylaws or by applicable law, the affirmative vote of a majority of the shares entitled to vote at the meeting and present in person or by proxy will be required to approve any other matter properly presented for a vote at the meeting; provided that if any stockholders are entitled to vote thereon as a class, such approval will require the affirmative vote of a majority of the shares entitled to vote as a class who are present in person or by proxy.

Votes cast in person or by proxy at the meeting will be tabulated by the election inspectors appointed for the meeting, who will determine whether a quorum is present. The election inspectors will treat abstentions as shares that are present and entitled to vote for purposes of determining the presence of a quorum, but as unvoted for purposes of determining the approval of any matter submitted to the stockholders for a vote. If a broker indicates on the proxy that it does not have discretionary authority as to certain shares to vote on a particular matter, those shares will be treated as present and entitled to vote for purposes of determining the presence of a quorum but not entitled to vote with respect to that matter.

Voting of Proxies

When a proxy is properly executed and returned, the shares it represents will be voted at the meeting as directed. If no specification is indicated, the shares will be voted:

- (1)
 "for" the election of each Class 1 director nominee set forth in this proxy statement;
- (2) "for" the election of each Class 3 director nominee set forth in this proxy statement;
- (3)
 "for" the approval of the Restricted Stock Plan;
- "for" the approval of the amendment and restatement of the Option Plan that, among other things, increases the number of shares authorized for issuance under the Option Plan by 500,000 shares; and

(5) at the discretion of your proxies on any other matter that may be properly brought before the meeting.

Revocability of Proxies

Any person giving a proxy may revoke the proxy at any time before its use by: (1) delivering to us either a written notice of revocation or a duly executed proxy bearing a later date; or (2) attending the meeting and voting in person.

Voting via the Internet and by Telephone

Registered stockholders may vote electronically via the Internet or by telephone by following the instructions included with their proxy card. A stockholder not wishing to vote electronically via the Internet or by telephone or whose form does not reference Internet or telephone voting information should complete and return the enclosed paper proxy card. Signing and returning the proxy card or submitting the proxy via the Internet or by telephone does not affect the right to vote in person at the annual meeting.

Internet and Electronic Availability of Proxy Materials

As permitted by the SEC, the Company is sending a Notice of Internet Availability of Proxy Materials (the "Notice") to stockholders who hold shares in "street name" through a bank, broker or other holder of record. All such shareholders will have the ability to access this proxy statement and the Company's Annual Report on a website referenced in the Notice or to request a printed set of these materials at no charge. Instructions on how to access these materials over the Internet or to request a printed copy may be found in the Notice.

In addition, any stockholder may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis. Choosing to receive future proxy materials by email will save the Company the cost of printing and mailing documents to stockholders and will reduce the impact of annual meetings on the environment. A stockholder's election to receive proxy materials by email will remain in effect until the stockholder terminates it.

Solicitation

We will bear the cost of this solicitation. In addition, we may reimburse brokerage firms and other persons representing beneficial owners of shares for reasonable expenses incurred in forwarding solicitation materials to such beneficial owners. Proxies also may be solicited by our directors, officers or employees, personally, by telephone or by facsimile, without additional compensation.

EXECUTIVE OFFICERS AND DIRECTORS

Our executive officers and directors and their ages and positions with the Company as of March 31, 2008, are as follows:

Name	Age	Position
Matthew Foster	50	President and Chief Executive Officer
Gary Gatchell	50	Chief Financial Officer
Janet Casteel	47	Chief Accounting Officer and Treasurer
Prem Nath, Ph.D.	59	Senior Vice President of Manufacturing
Ashutosh Misra	42	Senior Vice President of Operations and Corporate Affairs
Joseph Armstrong, Ph.D.	50	Vice President and Chief Technology Officer
Joseph C. McCabe	47	Vice President of Business Development
Mohan S. Misra, Ph.D.(1)	63	Chief Strategy Officer and Chairman of the Board
Stanley A. Gallery	50	Director
Einar Glomnes(1)	38	Director
Amit Kumar, Ph.D.(2)	43	Director
Joel S. Porter(2)	60	Director
T.W. Fraser Russell, Ph.D.	73	Director
Richard J. Swanson	72	Director

- (1) Nominee for election as Class 3 director.
- (2) Nominee for election as Class 1 director.

Matthew Foster has served as our President and Chief Executive Officer since October 2005. From March 2004 until Ascent's formation in October 2005, Mr. Foster served as Executive Vice President of ITN Energy Systems, Inc. ("ITN"), where he developed and implemented plans to commercialize other ITN technologies such as thin-film battery systems and microsatellites, which developed into companies Infinite Power Solutions, Inc. and MicroSat Systems, Inc., respectively. From January 2001 until March 2004, he served as President and Chief Executive Officer of Infinite Power Solutions. Mr. Foster has over 25 years of experience in the aerospace industry and previously served as Vice President of Business Development and Advanced Programs at the Lockheed Martin Corporation. Mr. Foster holds a B.S. degree from Rensselaer Polytechnic Institute.

Gary Gatchell has served as our Chief Financial Officer since March 2008. From June 2005 until February 2008, Mr. Gatchell served as the chief financial officer of Carrier Access Corporation ("Carrier Access"), a telecommunications equipment provider. Mr. Gatchell had joined Carrier Access, a Nasdaq listed company, in June 2005, to reorganize that company's finance and administration infrastructure. Prior to joining Carrier Access, from 1999 until 2004, Mr. Gatchell served as the chief financial officer of Voyant Technologies, Inc. ("Voyant"), a provider of audio conferencing equipment. Voyant, a private venture backed company, was acquired by Polycom, Inc. in 2004. Mr. Gatchell also has served as an audit manager at KPMG. Mr. Gatchell is a registered Certified Public Accountant and has a Master's degree in Accountancy from the University of Denver.

Janet Casteel has served as our Chief Accounting Officer and Treasurer since February 2006. She served on a part-time basis as our Treasurer and Controller between October 2005 and February 2006, during which time she also served as the part-time business manager of ITN. From 1996 until February 2006, Ms. Casteel served in the capacity of controller and business manager of ITN. At ITN, she supervised the financial and accounting staffs and was responsible for negotiation and administration of ITN's government and commercial contracts, as well as its agreements with subcontractors. She is a member of the American Institute of Certified Public Accountants and is a Certified Public Accountant

(inactive) in Colorado. Ms. Casteel holds an Associate Degree in Business Administration from Nebraska College of Business and a B.S. degree in Accounting from Metropolitan State College in Denver.

Prem Nath, Ph.D. has served as our Senior Vice President of Manufacturing since July 2006. From 1998 until July 2006, he served as Vice President of Product Manufacturing and Development at United Solar Ovonic ("Uni-Solar") and as Chief Operating Officer of Uni-Solar's Mexican subsidiary. Dr. Nath has over 25 years of professional experience in the development, testing and manufacture of thin-film PV technology and is a named inventor on over 50 U.S. patents covering processes, products and materials. Dr. Nath holds a M.S. degree in Physics from Punjab University in India, a Master of Technology degree in Solid State Physics from the Indian Institute of Technology ("IIT") and a Ph.D. in Materials Science from IIT. Dr. Nath also worked as a post-doctoral fellow at the University of California at Los Angeles.

Ashutosh Misra has served as our Senior Vice President of Operations and Corporate Affairs since April 2007. Until that time, Mr. Misra served as a member of our Board of Directors from our inception in October 2005 and participated actively as corporate advisor in guiding the management team with day-to-day operations. Mr. Misra also served as Executive Vice President at ITN, where he was responsible for day to day business operations. From November 2002 until March 2005, Mr. Misra served as the president and chief executive officer of Data Access America, a wholly owned subsidiary of Data Access India, Limited, a telecommunications carrier based in India. Prior to joining ITN in 1998, Mr. Misra worked for MTI International for over 8 years as Operations Manager and was responsible for setting up electronic manufacturing and related facilities in the United States, Mexico, Singapore, Indonesia, and India. Mr. Misra holds a Bachelor of Engineering Degree in Electronics and Telecommunications from Bangalore University in India, and a M.S. degree in Electrical Engineering from the University of Wisconsin, Milwaukee. Mr. Misra is the nephew of Dr. Mohan Misra, our Chairman.

Joseph Armstrong, Ph.D. has served as our Vice President and Chief Technology Officer since October 2005. Dr. Armstrong worked at ITN beginning in 1995, and served as the Manager of ITN's Advanced PV Division from 1995 until joining Ascent in October 2005. While at ITN, Dr. Armstrong led its advancement into thin-film flexible PV products for space and near-space applications and started its development of thin-film battery technologies, a complement to Ascent's thin-film PV technology. Prior to joining ITN, Dr. Armstrong was employed for 10 years by Martin Marietta Corporation, where he managed PV research projects. He is a named inventor on four U.S. patents in areas including shape memory alloys, thin-film PV technology and electronic circuit assembly. Dr. Armstrong holds a B.S. degree in Physics from Lewis University in Illinois and a M.S. degree and Ph.D. in Solid State Physics from the University of Denver.

Joseph C. McCabe has served as our Vice President of Business Development since January 2007. From 1985 until November 2006, Mr. McCabe was the owner and principal of an energy technology consulting firm. In that capacity, he served as a consultant or contractor on projects for the California Energy Commission, the Sacramento Municipal Utility District, Shell Oil and various architecture and engineering firms, and he possesses experience in the area of BIPV products and technologies. Mr. McCabe is a licensed professional engineer and holds a B.S. degree in Mechanical Engineering degree from the University of Dayton, an M.S. degree in Nuclear and Energy Engineering from the University of Arizona, and an M.B.A. from Regis University in Denver, Colorado.

Mohan S. Misra, Ph.D. has served as Chairman of our Board of Directors since October 2005, and as our Chief Strategy Officer since April 2007. He founded and has served as chief executive officer of ITN since 1994. Before founding ITN, Dr. Misra spent 19 years with Martin Marietta Corporation (now Lockheed Martin Corporation) in the areas of material research, development and manufacturing. While at Martin Marietta, Dr. Misra worked first as manager of Research and Technology, and then

led the company's development of long term technology strategies. Dr. Misra has helped develop and implement several key technologies for aerospace applications including thin-film PV products, smart materials, advanced composites and lightweight structures. Dr. Misra holds a B.S. degree in Metallurgical Engineering from Benaras Hindu University in India, an M.S. degree in Metallurgical Engineering from the University of Washington and a Ph.D. in Metallurgical Engineering from the Colorado School of Mines. Dr. Misra is the uncle of Ashutosh Misra, our Senior Vice President of Operations and Corporate Affairs.

Stanley A. Gallery has served on our Board of Directors since October 2005. Since 1984, Mr. Gallery has been the chief executive officer of Carts of Colorado, Inc., a provider of mobile merchandising for the food service industry. He also has served as the managing partner of G3 Holdings LLC since 1997, which makes real estate and other investments. He also is a co-founder of Bluegate Creek JV and Bluegate Creek II, which are oil and gas ventures in Wyoming. Prior to joining Ascent, Mr. Gallery served on the board of directors of ITN from 2001 until joining our Board in October 2005.

Einar Glomnes has served on our Board of Directors since March 2007. Since April 2007, Mr. Glomnes has served as the head of Hydro Solar, a division of Norsk Hydro ASA. Norsk Hydro Produksjon AS, a subsidiary of Norsk Hydro ASA, is our largest shareholder. Prior to heading Hydro Solar, Mr. Glomnes served as a Vice President in the business development arm of Norsk Hydro Oil & Energy from 2006 until 2007, and as a lawyer in the legal department of Norsk Hydro ASA from 2004 to 2006. From 2001 until 2004, Mr. Glomnes served as a lawyer with the Schjødt Law Firm in Norway. Since 2004, Mr. Glomnes also has served as a member of the board of directors of Norson AS, a PV ingot and wafer company based in Norway, and as the chairman of Verdane Capital, a private equity investment firm. Mr. Glomnes holds a law degree from the University of Oslo, and an L.L.M. degree from Columbia University School of Law.

Amit Kumar, Ph.D. has served on our Board of Directors since June 2007. Dr. Kumar has served as the President and Chief Executive Officer of CombiMatrix Corporation, a developer of DNA microarrays, since September 2001. He also serves on the board of directors of Aeolus Pharmaceuticals, Inc. Dr. Kumar holds a B.S. degree in Chemistry from Occidental College. After joint studies at Stanford University and the California Institute of Technology ("Caltech"), he received his Ph.D. from Caltech before completing a post-doctoral fellowship at Harvard University.

Joel S. Porter has served on our Board of Directors since June 2007. Mr. Porter is the President of Centennial Consulting Services, Inc., a consulting firm created after Mr. Porter's retirement from Lockheed Martin in the spring of 2004 as Vice President for International Program Development and Systems Analysis. Mr. Porter had served for approximately 28 years at Lockheed Martin in a variety of management roles. He holds a Bachelor of Aerospace Engineering degree and an M.S. degree in Industrial Management from the Georgia Institute of Technology. He also is a graduate of the Program for Management Development at the Harvard Business School.

T.W. Fraser Russell, Ph.D. has served on our Board of Directors since October 2005. Dr. Russell has served as the Allan P. Colburn Professor in the Department of Chemical Engineering at the University of Delaware since 1981. Dr. Russell is a member of the National Academy of Engineering, a fellow of the American Institute of Chemical Engineers and a registered professional engineer in the State of Delaware. He is the co-inventor of four U.S. patents for the continuous deposition of PV material on moving substrates and is the author of over 100 engineering and scientific papers. He has an industrial background in process design, and he has served as a consultant to a number of firms in the chemical processing industries. Dr. Russell holds a B.Sc. degree and an M.Sc. degree from the University of Alberta in Canada and a Ph.D. from the University of Delaware.

Richard J. Swanson has served on our Board of Directors since January 2007. Since 1991, Mr. Swanson has been a consultant with Vistage International, Inc. (formerly TEC), which focuses on

strategic coaching for chief executive officers of public and private companies. Since 1980, he has served as the founder and president of Investment Partners, Inc., which engages in the restructuring and recapitalization of troubled companies, and of Real Estate Associates, Inc., which focuses on real estate acquisition and development. He served as a director and chair of the audit committee of AHPC Holdings, Inc., a publicly-traded Illinois-based company in the health care supply field from 1998 until 2007, and serves as a director and chair of the audit committee of ADA-ES, LLC, a publicly-traded industrial technology company in Colorado. Mr. Swanson holds a B.A. in History from the University of Colorado and an M.B.A. from the Harvard Business School.

BOARD OF DIRECTORS

Overview

Our bylaws, as amended ("Bylaws"), provide that the size of our Board is to be determined from time to time by resolution of the Board, but shall consist of at least two and no more than eight members. Our Board currently consists of seven members, five of whom are independent under the rules of the Nasdaq Stock Market. Our certificate of incorporation, as amended ("Certificate of Incorporation"), provides that the Board will be divided into three classes as nearly equal in number of directors as possible. Our Class 1 directors are Dr. Amit Kumar, Joel S. Porter and Richard J. Swanson. Our Class 2 directors are Stanley A. Gallery and Dr. T.W. Fraser Russell. Our Class 3 directors are Einar Glomnes and Dr. Mohan S. Misra. The term of our Class 3 directors expires at our 2008 annual meeting of stockholders, and our Board has nominated Mr. Glomnes and Dr. Misra for re-election by our stockholders. Furthermore, Dr. Kumar and Mr. Porter were appointed by our Board to fill two vacancies in June 2007; consequently, pursuant to our Bylaws, Dr. Kumar and Mr. Porter are standing for election by our stockholders to serve the remainder of the scheduled term of Class 1 directors (i.e., until the 2009 annual meeting).

The Board has determined that the following directors are "independent" as required by applicable laws and regulations, by the listing standards of The Nasdaq Stock Market and by our corporate governance guidelines: Mr. Gallery, Dr. Kumar, Mr. Porter, Dr. Russell and Mr. Swanson.

Committees of the Board of Directors

Our Board has three standing committees: an Audit Committee, a Compensation Committee and a Nominating and Governance Committee. Each committee operates pursuant to a charter than can be found at our website *www.ascentsolar.com*.

Audit Committee. Our Audit Committee oversees our accounting and financial reporting processes, internal systems of accounting and financial controls, relationships with independent auditors, and audits of financial statements. Specific responsibilities include the following:

selecting, hiring and terminating our independent auditors;

evaluating the qualifications, independence and performance of our independent auditors;

approving the audit and non-audit services to be performed by our independent auditors;

reviewing the design, implementation, adequacy and effectiveness of our internal controls and critical accounting policies;

overseeing and monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters;

reviewing, with management and our independent auditors, any earnings announcements and other public announcements regarding our results of operations;

review all transactions between the Company and any of its directors, officers or members of their immediate families; and

preparing the report that the SEC requires in our annual proxy statement.

Our Audit Committee is comprised of Mr. Gallery, Dr. Kumar and Mr. Swanson. Mr. Swanson serves as Chairman of the Audit Committee. The Board has determined that all members of the Audit Committee are independent under the rules of the Nasdaq Stock Market, and that Mr. Swanson qualifies as an "audit committee financial expert," as defined by the rules of the Securities and Exchange Commission.

Compensation Committee. Our Compensation Committee assists our Board in determining the development plans and compensation of our officers, directors and employees. Specific responsibilities include the following:

approving the compensation and benefits of our executive officers;

reviewing the performance objectives and actual performance of our officers; and

administering our stock option and other equity compensation plans.

Our Compensation Committee is comprised of Mr. Gallery, Dr. Russell and Mr. Swanson. Mr. Gallery serves as Chairman of the Compensation Committee. Our Board has determined that all members of the Compensation Committee are independent under the rules of the Nasdaq Stock Market.

Nominating and Governance Committee. Our Nominating and Governance Committee assists our Board by identifying and recommending individuals qualified to become members of our Board, reviewing correspondence from our stockholders, and establishing, evaluating and overseeing our corporate governance guidelines. Specific responsibilities include the following:

evaluating the composition, size and governance of our Board and its committees and making recommendations regarding future planning and the appointment of directors to our committees;

establishing a policy for considering stockholder nominees for election to our Board; and

evaluating and recommending candidates for election to our Board.

Our Nominating and Governance Committee is comprised of Mr. Gallery, Dr. Kumar and Dr. Russell. Dr. Kumar serves as Chairman of our Nominating and Governance Committee. Our Board has determined that all members of the Nominating and Governance Committee are independent under the rules of the Nasdaq Stock Market.

When considering potential director candidates for nomination or election, the following characteristics are considered:

high standard of personal and professional ethics, integrity and values;

training, experience and ability at making and overseeing policy in business, government and/or education sectors;

willingness and ability to keep an open mind when considering matters affecting interests of the Company and its constituents;

willingness and ability to devote the time and effort required to effectively fulfill the duties and responsibilities related to Board and its committees:

willingness and ability to serve on the Board for multiple terms, if nominated and elected, to enable development of a deeper understanding of the Company's business affairs;

willingness not to engage in activities or interests that may create a conflict of interest with a director's responsibilities and duties to the Company and its constituents; and

willingness to act in the best interests of the Company and its constituents, and objectively assess Board, committee and management performances.

In addition, in order to maintain an effective mix of skills and backgrounds among the members of our Board, the following characteristics also may be considered when filling vacancies or identifying candidates:

independence;
diversity (e.g., age, geography, professional, other);
professional experience;
industry knowledge (e.g., relevant industry or trade association participation);
skills and expertise (e.g., accounting or financial);
leadership qualities;
public company board and committee experience;
non-business-related activities and experience (e.g., academic, civic, public interest);
continuity (including succession planning);
size of the Board;
number and type of committees, and committee sizes; and
legal and other applicable requirements and recommendations, and other corporate governance-related guidance regarding Board and committee composition.

The Nominating and Governance Committee will consider candidates recommended by stockholders. To recommend director candidates, stockholders should submit their suggestions in writing to the Chairperson of the Nominating and Governance Committee, c/o the Corporate Secretary of the Company, providing the candidate's name, biographical data and other relevant information together with a consent from the suggested candidate to serve on the Company's Board if nominated and elected. Since our annual report for the fiscal year ended December 31, 2006, there have been no material changes to the procedures by which stockholders may recommend nominees to our Board.

Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee is an officer or employee of the Company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board or Compensation Committee.

Number of Meetings

The Board held a total of 11 meetings during our fiscal year ended December 31, 2007. Our Audit Committee held 4 meetings, our Compensation Committee held 5 meetings, and our Nominating and Governance Committee held 2 meetings during our fiscal year ended December 31, 2007. Each incumbent director attended at least 75% of the aggregate of the total number of meetings of the Board and the Board committees on which he served (during the periods that he served).

Board Member Attendance at Annual Stockholder Meetings

Although the Company does not have a formal policy regarding director attendance at annual stockholder meetings, directors are encouraged to attend these annual meetings absent extenuating circumstances.

Director Compensation

In 2007, each of our directors received an annual fee of \$5,000 for his service on our Board, plus \$1,000 for each meeting of our Board that the director attended in person and \$250 for each meeting attended by telephone or videoconference. In addition, directors serving on a Committee of the Board received \$500 for each meeting that the director attended in person and \$250 for each meeting attended by telephone or videoconference. Each non-employee director also received reimbursement of travel and other expenses incurred to attend a meeting in person. In November 2005, each of our directors serving at the time was granted an option to purchase 20,000 shares of our common stock as compensation for service on our Board, and each of our non-employee directors received an additional option to purchase 12,000 shares for service on the committees of our Board. Each option vests annually in four equal parts beginning December 31, 2005. Board of Directors members appointed or elected after November 2005 generally received options to purchase a lesser and proportionate number of shares.

The following Director Compensation Table summarizes the compensation of our directors for services rendered to us during the year ended December 31, 2007:

Director Compensation Table (for the fiscal year ended December 31, 2007)

Name		Fees Earned or Paid in Cash		Option Awards(1)		Total	Options Outstanding
Mohan S. Misra	\$	16,500			\$	16,500	50,000
Stanley A. Gallery	\$	20,500			\$	20,500	32,000
Ashutosh Misra	\$	13,500			\$	13,500	
T.W. Fraser Russell	\$	18,750			\$	18,750	16,000
Richard J. Swanson	\$	13,750	\$	35,237	\$	48,987	16,000
Amit Kumar	\$	6,250	\$	48,666	\$	54,916	8,000
Joel S. Porter	\$	5,000	\$	33,959	\$	38,959	5,000
Einar Glomnes	\$	4,750			\$	4,750	

(1)

Represents fair market value of options granted during the year ended December 31, 2007, calculated using the Black-Scholes option pricing model and related assumptions as disclosed in Note 9, "Stock Based Compensation," of our financial statements in our Annual Report.

In addition to the fees listed above, we reimburse the directors for their travel expenses incurred in attending meetings of the Board or its committees. The directors did not receive any other compensation or personal benefits.

Code of Ethics

We have adopted a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer and other senior finance and accounting staff. The code is designed to, among other things, deter wrongdoing and to promote the honest and ethical conduct of our officers and employees. The text of our code of ethics can be found on our Internet website at www.ascentsolar.com. If we effect an amendment to, or waiver from, a provision of our code of ethics,

we intend to satisfy our disclosure requirements by posting a description of such amendment or waiver on that Internet website or via a Form 8-K current report.

Communication with the Board of Directors

Stockholders may communicate with the Board by sending correspondence to our Chairman, c/o the Corporate Secretary of the Company, at our corporate address above. It is our practice to forward all such correspondence to our Chairman, who is responsible for determining whether to relay the correspondence to the other members of the Board.

EXECUTIVE COMPENSATION

Compensation Philosophy and Processes

We seek to provide a level of compensation for our executive officers that is competitive with publicly-traded companies similar in both size and industry. We hope to attract, retain, and reward executive officers who contribute to our success, to align executive officer compensation with our performance, and to motivate executive officers to achieve our business objectives. We compensate our senior management through a mix of base salary, bonus and equity compensation.

Our Compensation Committee determines and recommends to our Board the compensation of our executive officers. The Compensation Committee also administers our stock option plan. The Compensation Committee reviews base salary levels for our executive officers at the end of each fiscal year and recommends raises and bonuses based upon our achievements, individual performance, and competitive and market conditions. The Compensation Committee may delegate certain of its responsibilities, as it deems appropriate, to other committees or to our officers, but it has not elected to do so. The Compensation Committee has engaged management consultants to provide a market analysis of cash, equity and short term incentives for comparisons to our current compensation package and based on that analysis provide recommendations of compensation adjustments and overall compensation philosophy to the Compensation Committee.

Executive Officer Compensation

The following Summary Compensation Table sets forth certain information regarding the compensation of our principal executive officer and our two other most highly compensated executive officers (together, the "named executive officers") at the end of our last fiscal year for services rendered in all capacities to us during the fiscal years ended December 31, 2007 and 2006.

Summary Compensation Table (for the fiscal years ended December 31, 2007 and 2006)

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$)(1)	All Other Comp. (\$)(2)	Total (\$)
Matthew Foster President & CEO	2007 2006	180,891 175,238	67,922 21,000	118,170 213,000		366,983 409,238
Ashutosh Misra Senior VP Operations(3)	2007 2006	104,611	28,800	128,289	34,750	296,450
Prem Nath Senior VP Manufacturing	2007 2006	162,274 64,741	48,710 20,160	157,560 210,000	51,408 24,489	419,952 319,390

- (1)

 Represents fair market value of options granted during the years ended December 31, 2007 and 2006, calculated using the Black-Scholes option pricing model and related assumptions as disclosed in Note 9, "Stock Based Compensation," of our financial statements in our Annual Report.
- (2)
 All other compensation for 2007 and 2006 consists of relocation costs for Prem Nath and consulting fees of \$21,250 and director fees of \$13,500 for Ashutosh Misra prior to his employment by us.
- (3) Ashutosh Misra began employment with us on April 30, 2007. Salary represents eight months of annual salary for 2007. All other compensation represents approximately \$21,250 in consulting fees.

Executive Employment Agreements

We have executive employment agreements with Matthew Foster, our Chief Executive Officer, Gary Gatchell, our Chief Financial Officer and Secretary, Janet Casteel, our Chief Accounting Officer and Treasurer, Prem Nath, our Senior Vice President of Manufacturing, Joseph Armstrong, our Vice President and Chief Technology Officer, Joseph McCabe, our Vice President of Business Development, Mohan Misra, our Chief Strategy Officer, and Ashutosh Misra, our Senior Vice President of Operations and Corporate Affairs.

Except for Mr. Gatchell, each executive employment agreement has a term of three years and expires: in December 2008 in the case of Mr. Foster and Dr. Armstrong; in February 2009 in the case of Ms. Casteel; in July 2009 in the case of Dr. Nath; in January 2010 in the case of Mr. McCabe; and in April 2010 in the cases of Dr. Misra and Mr. Misra. Our executive employment agreement with Mr. Gatchell has a term of four years and expires in March 2012. Under the terms of each agreement, in addition to each of their base salaries: Mr. Foster may receive a discretionary bonus of up to 50% of his base salary based upon his individual performance and our performance as a company; Mr. Gatchell may receive a discretionary bonus of up to 30% of his base salary based upon her individual performance and our performance and our performance as a company; Dr. Armstrong may receive a discretionary bonus of up to 15% of his base salary based upon his individual performance and our performance as a company; Dr. Nath may receive a discretionary bonus of up to 50% of his base salary based upon his individual performance;

Mr. McCabe may receive a discretionary bonus of up to 15% of his base salary based upon his individual performance; Dr. Misra who works on a part-time basis may receive a discretionary bonus of up to 50% of his base salary based upon his individual performance and our overall performance as a company; and Mr. Misra may receive a discretionary bonus of up to 30% of his base salary based upon his individual performance and our overall performance as a company. Base salary is subject to increase from time to time in the normal course of business. Bonuses are not ensured and are awarded at the discretion of the Board. Each agreement may be terminated without notice if for cause, but 30 days' advance notice is required for termination without cause. Further, if either Mr. Foster, Dr. Nath, Dr. Misra or Mr. Misra is terminated without cause during the term of his employment agreement, he will be entitled to receive his base salary for a period of twelve months after termination. If either Dr. Armstrong, Mr. McCabe or Ms. Casteel is terminated without cause during the term of his or her agreement, he or she will be entitled to receive his or her base salary for a period of six months after termination; and if he is terminated without cause after March 31, 2009, he will be entitled to receive his base salary for a period of twelve months after termination. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, all outstanding unvested stock options granted to these executive officers under our Amended and Restated 2005 Stock Option Plan shall become exercisable in full, unless assumed or substituted for by the successor corporation or a parent or subsidiary of the Company, and all unvested shares of restricted stock awarded to Mr. Gatchell in connection with his employment package shall become immediately vested.

Consulting Agreement

On February 19, 2007, we entered into a consulting agreement with Mr. Misra. Pursuant to the terms of the agreement, Mr. Misra was to expend a minimum of twenty hours per week assisting us with financial matters, financial and business strategies and investor and investment banking relations. In consideration for these services, we had agreed to pay Mr. Misra a monthly consulting fee of \$8,500. The agreement terminated on April 30, 2007, when Mr. Misra become an employee of the Company.

Option Awards

Option awards are granted pursuant to our Amended and Restated 2005 Stock Option Plan, as amended (the "Option Plan"). The term of incentive stock options granted under the Option Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of our voting stock. Generally speaking, options granted vest in equal amounts over a three to four year period. The exercise price of an option granted under the Option Plan must be equal to or greater than the fair market value of the shares of our common stock on the date the option is granted. An incentive stock option granted to an optionee owning more than 10% of our voting stock must have an exercise price equal to or greater than 110% of the fair market value of our common stock on the date the option is granted.

The following table sets forth information concerning the outstanding equity awards granted to the named executive officers as of December 31, 2007.

Outstanding Equity Awards at Fiscal Year-End 2007

Option Awards

		nrities Underlying d Options(#)				
Name	Exercisable		Option Exercise Price(\$/sh)		Option Expiration Date	
Matthew Foster(1)	10,000 42,144	10,000 42,856 9,000	\$ \$ \$	0.10 4.25 17.75	11/18/2015 02/27/2016 12/03/2017	
	52,144	61,856				
Ashutosh Misra(2)	5,000 20,000	5,000 9,000	\$ \$ \$	0.10 8.33 17.75	11/18/2015 07/30/2017 12/03/2017	
	25,000	14,000				
Prem Nath(3)	3,333	66,667 12,000	\$ \$	2.73 17.75	07/31/2016 12/03/2017	
	3,333	78,667				

Vesting dates of securities underlying unexercised options as of December 31, 2007:

- (1) \$0.10 options 10,000 vest 12/31/08; \$4.25 options 14,286 vest 3/31/08, 14,286 vest 9/30/08, 14,284 vest 3/31/09; \$17.75 options 4,500 vest 12/03/08, 4,500 vest 12/03/09
- (2) \$0.10 options 5,000 vest 12/31/08; \$17.75 options 4,500 vest 12/03/08, 4,500 vest 12/03/09
- (3) \$2.73 options 33,333 vest 7/31/08, 33,334 vest 7/31/09; \$17.75 options 6,000 vest 12/03/08, 6,000 vest 12/03/09

2005 Stock Option Plan

Our Option Plan approved by our Board and stockholders provides for the grant of incentive or non-statutory stock options to our employees, directors and consultants. A total of 1,000,000 shares of common stock are authorized for issuance under the Option Plan. Our Board has approved an amendment and restatement of the Option Plan that, among other things, would increase the number of shares authorized for issuance under the Option Plan by 500,000 shares.

The Option Plan is administered by the Compensation Committee of our Board. Subject to the provisions of the Option Plan, the Committee determines who will receive the options, the number of options granted, the manner of exercise and the exercise price of the options. The term of incentive stock options granted under the Option Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of our voting stock. The exercise price of an option granted under the Option Plan must be equal to or greater than the fair market value of the shares of our common stock on the date the option is granted. An incentive stock option granted to an optionee owning more than 10% of our voting stock must have an exercise price equal to or greater than 110% of the fair market value of our common stock on the date the option is granted.

As of December 31, 2007, there were outstanding options to purchase 686,837 shares of common stock under the Option Plan. The following table sets forth information as of December 31, 2007 relating to all of our equity compensation plans:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	exercis outstand	ed-average se price of ing options, s and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plan approved by security holders	686,837	\$	5.07	112,000
Equity compensation plans not approved by security holders				
TOTAL	686,837	\$	5.07	112,000

Compliance with Internal Revenue Code Section 162(m)

Section 162(m) of the Internal Revenue Code of 1986, as amended, generally disallows a tax deduction to a publicly traded company for compensation in excess of \$1 million paid to each of that company's chief executive officer and the three other most highly compensated officers (other than the principal executive officer or the principal financial officer). Qualifying performance-based compensation is not subject to the deduction limit if certain requirements are met. In the fiscal year ended December 31, 2007, none of our executive officers received compensation in excess of \$1 million.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows information regarding the beneficial ownership of our common stock as of March 31, 2008.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes any shares over which a person exercises sole or shared voting or investment power. Shares of common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of the March 31, 2008 are considered outstanding and beneficially owned by the person holding the options for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned. The address for each director or named executive officer is c/o Ascent Solar Technologies, Inc., 8120 Shaffer Parkway, Littleton, Colorado 80127.

This table assumes 14,049,352 shares of common stock outstanding as of March 31, 2008.

Name of Beneficial Owner	No. of Shares Beneficially Owned	Percentage
Officers and Directors		
Matthew Foster(1)	162,090	1.2%
Gary Gatchell(2)	40,000	*
Janet Casteel(3)	31,002	*
Prem Nath, Ph.D	0	*
Ashutosh Misra(4)	60,000	*
Joseph Armstrong, Ph.D.(5)	60,691	*
Joseph C. McCabe(6)	14,200	*
Mohan S. Misra, Ph.D.(7)	1,211,000	8.6%
Stanley A. Gallery(8)	106,900	*
Einar Glomnes(9)	0	*
Amit Kumar, Ph.D.	0	*
Joel S. Porter	0	*
T.W. Fraser Russell, Ph.D.(10)	16,000	*
Richard J. Swanson(11)	8,000	*
All directors and executive officers as a group (13 persons)	1,709,883	12.0%
5% Stockholders(12)		
ITN Energy Systems, Inc.(13)	806,000	5.7%
Norsk Hydro Produksjon AS(14)	4,939,303	35.0%
Quercus Trust(15)	1,705,293	12.1%

Less than 1.0%.

- (1) Includes 105,015 shares of common stock and options to purchase 56,430 shares of common stock that are vested within 60 days of March 31, 2008. Also includes 215 shares of common stock that are held by Mr. Foster's spouse, and 430 Class B warrants that are held by Mr. Foster's spouse and are immediately exercisable.
- (2) Includes an award of 40,000 restricted shares, which, although not included in the number of shares issued and outstanding, are scheduled to vest annually through 2011 upon achievement of various performance criteria set forth in Mr. Gatchell's employment agreement.
- Includes 17,000 shares of common stock and options to purchase 14,002 shares of common stock that are vested within 60 days of March 31, 2008.

- (4) Includes 36,000 shares of common stock and options to purchase 20,000 shares of common stock that are vested within 60 days of March 31, 2008, and 4,000 Class B warrants that are immediately exercisable.
- (5) Includes 49,333 shares of common stock and options to purchase 11,358 shares of common stock that are vested within 60 days of March 31, 2008.
- (6) Includes 7,700 shares of common stock and options to purchase 6,500 shares of common stock that are vested within 60 days of March 31, 2008.
- (7) Includes options to purchase 25,000 shares of common stock that are vested within 60 days of March 31, 2008. Also includes 806,000 shares of common stock that are held by ITN because ITN is wholly-owned by Inica, Inc., which is owned by Dr. Misra and an immediate family member. Also includes 380,000 shares over which Dr. Misra has sole voting and dispositive power.
- (8) Includes 98,900 shares of common stock and options to purchase 8,000 shares of common stock that are vested within 60 days of March 31, 2008.
- (9)

 Does not include securities held by Norsk Hydro Produksjon AS, our largest stockholder. Mr. Glomnes is the head of Hydro Solar, an affiliate of Norsk Hydro Produksjon AS, and disclaims beneficial ownership of our securities held by Norsk Hydro Produksjon AS.
- (10) Includes 16,000 shares of common stock.
- (11) Includes options to purchase 8,000 shares of common stock that are vested within 60 days of March 31, 2008.
- (12) Information regarding these stockholders is based solely upon filings made by them with the Securities and Exchange Commission.
- The reported address of ITN Energy Systems, Inc. is 8130 Shaffer Parkway, Littleton, Colorado 80127. ITN is wholly-owned by Inica, Inc. Dr. Mohan Misra, Chairman of our Board of Directors, and an immediate family member of his own all of the outstanding shares of Inica, Inc. This information is pursuant to a Schedule 13G filed by ITN, Inica, Inc. and Dr. Misra on February 14, 2008 and a Form 4 filed by ITN on March 19, 2008.
- The reported address of Norsk Hydro Produksjon AS is Drammensveien 264, N-0240, Oslo, Norway. Assumes the exercise by Norsk Hydro Produksjon AS of its entire Tranche 2 Option to acquire 62,944 shares of common stock and 32,321 Class B warrants in addition to the 4,876,359 shares of common stock and 3,655,595 Class B warrants it currently holds. Until June 2009, Norsk Hydro Produksjon AS may only exercise that number of Class B warrants necessary to maintain ownership up to 35.0% of our outstanding common stock. This table assumes further exercise by Norsk Hydro Produksjon AS of its Tranche 2 Option in order to obtain ownership of 35.0% of our common stock.
- (15)
 The reported address of Quercus Trust is 2309 Santiago Drive, Newport Beach, California 92660. This information is pursuant to a Schedule 13D filed by Quercus Trust, David Gelbaum (trustee) and Monica Chavez Gelbaum (trustee) on October 1, 2007 and a Form 4 filed by Quercus Trust, David Gelbaum (trustee) and Monica Chavez Gelbaum (trustee) on February 26, 2008.

CERTAIN TRANSACTIONS

Transactions Involving ITN Energy Systems, Inc.

We were formed in October 2005 to commercialize certain technologies developed by ITN. ITN is wholly owned by Inica, Inc., a Colorado corporation ("Inica"). Dr. Mohan Misra, Chairman of our Board of Directors, and an immediate family member of his own all of the outstanding shares of Inica.

Sublease Agreement. In 2006, we subleased approximately 9,500 square feet of office and manufacturing space at cost from ITN. As of January 1, 2007, we increased our sublease to approximately 14,200 square feet of office and manufacturing space at cost from ITN. The sublease expires in June 2010. In 2007, we paid \$17,211 per month of rent through June 30, 2007, and \$18,991 per month from July 1, 2007 through December 31, 2007, plus pass-through expenses such as taxes, insurance, water and utilities. Total costs incurred under the Sublease Agreement for the year ended December 31, 2007 were approximately \$291,000. In 2008, we expect to pay \$18,991 per month in rent to ITN, plus pass-through expenses.

Administrative Services Agreement. ITN has agreed to perform administrative services for us at cost, including services such as facilities management, equipment maintenance, procurement, information technology and technical support. The cost for those services in 2007 was approximately \$1,200,000. Although we expect to pay ITN approximately the same amount for those services in 2008, the costs may increase due to commencement of commercial operations and our planned expansion.

Service Center Agreement. From time to time, we may find our own facilities inadequate or unsuitable to handle specific or special tasks or processes, but discover that ITN has such capability. Under a Service Center Agreement, we have the right to use, on an as needed and as available basis, certain of ITN's laboratories, equipment and research and development tools. When we have made periodic use of the laboratories, equipment and tools, we have paid ITN in accordance with ITN's costs. Although the Service Center Agreement expires in December 2009, it is automatically renewable on a month-to-month basis. In 2007, we paid ITN approximately \$443,000 under the Service Center Agreement. Although we expect to pay ITN approximately the same amount under the Service Center Agreement in 2008, the costs may increase if we more actively pursue R&D activities.

License Agreement. ITN has granted us a perpetual, royalty-free, worldwide license to use certain trade secrets and other patents, inventions, and trade secrets that ITN may develop or have the right to license that are necessary for use in our PV business. This license is exclusive to us for use in the PV business. The license is perpetual and may only terminated by ITN in the event of a material breach by us that we fail to cure within thirty days notice of such breach.

Also in 2007, we issued a purchase order to ITN for \$1.5 million to develop the CIGS deposition and source box that is located inside the CIGS vacuum chamber of our 1.5 MW production line. Costs billed to us for this work in 2007 were approximately \$1.2 million. We expect ITN to complete its work on this purchase order in the first quarter of 2008.

In connection with our formation, in early 2006, ITN assigned to us its CIGS PV-specific technologies, and granted to us a perpetual, exclusive, royalty-free, worldwide license to use certain of ITN's existing and future proprietary process and control technologies that, although non-specific to CIGS PV, we believe will be useful in our production of PV modules for our target markets. After obtaining necessary approvals and pursuant to a novation, ITN also transferred several government-sponsored CIGS PV research and development contracts to us. At the time the contracts were transferred to us in early 2007, the contracts had a remaining contract value of approximately \$1.6 million.

Transactions Involving Norsk Hydro Produksjon AS

In March 2007, we sold 1,600,000 restricted shares of our common stock to Norsk Hydro Produksjon AS in a private placement pursuant to Rule 506 of Regulation D and Section 4(2) of the Securities Act. We also granted two options to Norsk Hydro:

An option (the "Initial Warrants Option") to purchase restricted Class A warrants (or if the Class A warrants are redeemed, common stock) and restricted Class B warrants that are otherwise identical to the Class A warrants formerly traded, and Class B warrants currently traded, on Nasdaq under the symbols ASTIW and ASTIZ, respectively. Norsk Hydro exercised this option in August 2007 to purchase 934,462 additional shares of common stock and 1,965,690 Class B warrants.

An option (the "Tranche 2 Option") to purchase additional restricted shares of common stock and Class B warrants that would result in Norsk Hydro owning up to 35% of our issued and outstanding common stock and Class B warrants. Norsk Hydro exercised this option in March 2008 to purchase 2,341,897 additional restricted shares of common stock and 1,689,905 Class B warrants. Until June 15, 2009, Norsk Hydro may purchase from us additional restricted shares of common stock and Class B warrants to maintain its ownership of up to 35% of our issued and outstanding common stock and Class B warrants. The purchase price of each security obtained will be equal to the average of the closing bids of security in the five consecutive trading days ending on and including the trading day that is one day prior to the date of exercise, as reported by Nasdaq.

In connection with the sale of these securities, Norsk Hydro received: piggyback registration rights that enable them to require us to register for resale the shares held by them if we engage in a registered public offering; and demand registration rights that become effective in March 2008. Norsk Hydro has waived these piggyback and demand registration rights in connection with a follow-on public offering pursuant to a Form S-3 registration statement that we filed on March 14, 2008. Norsk Hydro also holds pre-emptive rights with respect to certain equity issuances by us (on terms no less favorable than any such issuance) in order to maintain its percentage ownership in our common stock, but the pre-emptive rights do not apply to bona fide underwritten public offerings by us.

Future Transactions

Future transactions with our officers, directors or greater than five percent stockholders will be on terms no less favorable to us than could be obtained from independent third parties, and all such transactions will be reviewed and subject to approval by members of our Audit Committee, which will have access, at our expense, to our or independent legal counsel.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, officers, and persons that own more than 10 percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Officers, directors, and greater than 10 percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Based solely upon our review of the copies of such forms received by us during the fiscal year ended December 31, 2007, we believe that each person who, at any time during such fiscal year, was a director, officer, or beneficial owner of more than 10 percent of our common stock complied with all Section 16(a) filing requirements during such fiscal year, except that Matthew Foster filed one late Form 4 describing a change in ownership of our securities.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Principal Accountant Fees and Services

Fees for audit and related services by our accounting firm, Hein & Associates LLP, for the years ended December 31, 2007 and 2006 were as follows:

		2007	2006		
			_		
Audit fees	\$	98,000	\$	63,000	
Audit related fees		14,000		104,000	
			_		
Total audit and audit related fees	\$	112,000	\$	167,000	
Tax fees					
All other fees					
	_				
Total Fees	\$	112,000	\$	167,000	

Audit fees of Hein & Associates LLP for fiscal 2007 and 2006 were incurred during the examination of the financial statements and for interim reviews of the quarterly financial statements. Audit related fees were incurred in connection with our initial public offering in 2006 and other SEC filings in 2007.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee charter provides that the Audit Committee will pre-approve all audit services and non-audit services to be provided by our independent auditors before the accountant is engaged to render these services. The Audit Committee may consult with management in the decision-making process, but may not delegate this authority to management. The Audit Committee may delegate its authority to pre-approve services to one or more committee members, provided that the designees present the pre-approvals to the full committee at the next committee meeting. All audit and non-audit services performed by our independent accountants have been pre-approved by our Audit Committee to assure that such services do not impair the auditors' independence from us.

Attendance at Annual Meeting

Representatives of Hein & Associates LLP are expected to be present at the annual meeting, will have the opportunity to make a statement if they desire to do so, and are expected to be available to respond to appropriate questions.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee has reviewed and discussed the audited financial statements with management. The Audit Committee has discussed with the independent accountants the matters required to be discussed by Statement on Accounting Standards No. 61. The Audit Committee also has received the written disclosures and the letter from the independent accountants required by Independence Standards Board Standard No. 1 and has discussed with the independent accountants the accountants' independence. Based on the reviews and discussions referred to above, the Audit Committee recommended to the Company's Board of Directors that the audited financial statements be included in the Company's Annual Report.

Respectfully submitted,

AUDIT COMMITTEE Richard Swanson, Chairman Stanley Gallery Amit Kumar

PROPOSAL NOS. 1 AND NO. 2

ELECTION OF DIRECTORS

Overview

There currently are seven members of our Board. Our Certificate of Incorporation provides that the Board will be divided into three classes as nearly equal in number of directors as possible. Our Class 1 directors are Dr. Amit Kumar, Joel Porter and Richard Swanson. Our Class 2 directors are Stanley Gallery and Dr. T.W. Fraser Russell. Our Class 3 directors are Einar Glomnes and Dr. Mohan Misra. The terms of our Class 1 directors are scheduled to expire at our 2009 annual meeting. However, Dr. Kumar and Mr. Porter were appointed by the Board to fill vacancies resulting from an increase in the size of the Board; consequently, pursuant to our Bylaws, Dr. Kumar and Mr. Porter are standing for election by the stockholders to serve the remainder of the scheduled Class 1 term (i.e., until the 2009 annual meeting). The terms of our Class 3 directors are scheduled to expire at this annual meeting, at which both Mr. Glomnes and Dr. Misra will stand for re-election. The term of our Class 2 directors is scheduled to expire at our 2010 annual meeting.

Nominees

Upon the recommendation of the Company's Nominating and Governance Committee, the Board has nominated:

DR. AMIT KUMAR AND JOEL PORTER CLASS 1 DIRECTORS, to serve until the 2009 annual meeting of stockholders and until their respective successors are duly elected and qualified.

EINAR GLOMNES AND DR. MOHAN MISRA CLASS 3 DIRECTORS, to serve until the 2011 annual meeting of stockholders and until their respective successors are duly elected and qualified.

Vote Required

The affirmative vote of a majority of shares present in person or by proxy will be required to elect each director nominee.

Recommendation

The Board recommends that stockholders vote FOR the election of Dr. Kumar and Mr. Porter as Class 1 directors, and FOR the re-election of Mr. Glomnes and Dr. Misra as Class 3 directors.

Unless marked otherwise, proxies received will be voted FOR the election of each of these director nominees.

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PROPOSAL NO. 3

APPROVAL OF 2008 RESTRICTED STOCK PLAN

Overview

The Board adopted the Ascent Solar Technologies, Inc. 2008 Restricted Stock Plan, subject to stockholder approval. The Restricted Stock Plan reserves up to 750,000 shares of our common stock for restricted stock awards to eligible employees, consultants and directors of the Company.

We believe that stock-based awards motivate high levels of performance and provide an effective means of recognizing contributions by employees and other service providers to the success of the Company. Moreover, we believe that stock-based awards align the interests of our management, employees and consultants with the interests of our stockholders. We also believe that stock-based awards are of great value in recruiting and retaining highly qualified technical and other key personnel who are in great demand. The Board believes that the ability to make stock-based awards will be important to the Company's future success by allowing it to remain competitive in attracting and retaining such key personnel.

Proposal

The stockholders are asked to approve the Ascent Solar Technologies, Inc. 2008 Restricted Stock Plan. If approved, the Company will be permitted to make restricted stock awards to eligible employees, consultants and directors of the Company under the Restricted Stock Plan. The Board believes that the ability to make stock-based awards will be important to the Company's future success by aligning the interests of eligible employees, consultants and directors with those of the Company, and by allowing the Company to remain competitive in attracting and retaining key personnel. The Restricted Stock Plan will not become effective if the stockholders do not approve it.

Vote Required

The affirmative vote of a majority of the shares for which votes are properly cast in person or by proxy on the proposal will be required to approve the Restricted Stock Plan.

Recommendation

The Board recommends that stockholders vote FOR approval of the Restricted Stock Plan.

Unless marked otherwise, proxies received will be voted FOR approval of the Restricted Stock Plan.

Summary of the Restricted Stock Plan

The following summary of the Restricted Stock Plan is qualified in its entirety by the terms of the Restricted Stock Plan, a copy of which is attached to this proxy statement as *Appendix A*.

Purpose. The purposes of the Restricted Stock Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to the Company's employees, consultants and directors and to promote the success of the Company's business.

Awards. The Restricted Stock Plan provides for awards of the Company's common stock, par value \$0.0001 per share.

Stock Subject to the Restricted Stock Plan. The aggregate number of shares of common stock that may be subject to future awards under the Restricted Stock Plan, subject to adjustment upon a change in capitalization, is 750,000 shares. Such shares of common stock may be authorized, but unissued, or reacquired shares of common stock. Shares of common stock that were subject to Restricted Stock Plan

awards that expire or are forfeited shall become available for future awards under the Restricted Stock Plan. No more than 200,000 shares may be awarded to any individual grantee under the Restricted Stock Plan in any calendar year.

Administration. The Restricted Stock Plan may be administered by the Board of Directors or one or more committees of the Board (the "Administrator"). The Board may require that the Administrator be constituted to comply with Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Section 162(m) of the Internal Revenue Code (the "Code"), or both. Subject to the other provisions of the Restricted Stock Plan, the Administrator has the power to determine the terms of each award granted, including the number of shares subject to the award and the forfeitability thereof.

Eligibility. The Restricted Stock Plan provides that the Administrator may grant restricted stock awards to eligible employees, consultants and directors of the Company and any subsidiary of the Company. A grantee who has received a grant of an award may, if he is otherwise eligible, receive additional award grants. The Administrator selects the grantees and determines the number of shares of common stock to be subject to each award. Each award granted under the Restricted Stock Plan will be evidenced by a written agreement between the grantee and the Company. As of March 31, 2008, approximately 43 persons would be eligible to participate in the Restricted Stock Plan if it is approved.

Termination of Service. If a grantee's status as an employee or service as a director terminates for any reason, then the grantee's stock award shall be forfeited to the extent it is forfeitable immediately before the date of such termination, or settled by delivery of the appropriate number of unrestricted shares to the extent it is nonforfeitable, except as described in "Change of Control" below.

Nontransferability of Awards. Until such time as an award under the Restricted Stock Plan becomes nonforfeitable and vested pursuant to the terms of the Restricted Stock Plan and any applicable award agreement, the award is not transferable by the grantee, other than by will or the laws of descent and distribution or to the Company; provided, however, that the designation of a beneficiary shall not constitute a prohibited transfer.

Code Section 162(m) Provisions. Section 162(m) of the Code imposes a \$1 million annual deduction limit on the compensation paid to the chief executive officer and the three other most highly compensated officers (other than the principal executive officer or the principal financial officer) of a publicly traded company. Section 162(m) provides an exception to this deduction limit for "performance-based compensation" that meets certain requirements. To the extent the Compensation Committee of the Board considers it desirable for compensation delivered pursuant to a stock award to be eligible to qualify for an exemption from the limit on tax deductibility of compensation under Section 162(m) of the Code, the Compensation Committee may provide that the lapsing of restrictions on the stock award and the distribution of shares, as applicable, shall be subject to satisfaction of one, or more than one, objective performance targets. The Compensation Committee shall determine the performance targets that will be applied with respect to each such stock award at the time of grant, but in no event later than 90 days after the commencement of the period of service to which the performance target(s) relate. The performance criteria applicable to such stock awards will be one or more of the following: stock price; market share; sales; earnings per share, core earnings per share or variations thereof; return on equity; costs; revenue; cash to cash cycle; days payables outstanding; days of supply; days sales outstanding; cash flow; operating income; profit after tax; profit before tax; return on assets; return on sales; inventory turns; invested capital; net operating profit after tax; return on invested capital; total shareholder return; earnings; return on equity or average shareowners' equity; total shareowner return; return on capital; return on investment; income or net income; operating income or net operating income; operating profit or net operating profit; operating margin; return on operating revenue; contract awards or backlog; overhead or other expense reduction; growth in shareowner value relative to the moving average of the S&P 500 Index or a peer group index; credit

rating; strategic plan development and implementation; net cash provided by operating activities; gross margin; economic value added; customer satisfaction; financial return ratios; market performance; production capacity; production volume; achievement of photovoltaic conversion efficiency; production yields; EBITDA; EBIT; market capitalization; liquidity; strategic partnerships; production agreements and relationships; and product certifications.

The Compensation Committee may appropriately adjust any evaluation of performance under the criteria set forth above to exclude certain items or events or in such other manner and to such extent as the Compensation Committee deems appropriate under the applicable circumstances. The Compensation Committee may not increase the number of shares granted pursuant to any such stock award, nor may it waive the achievement of any performance target. Prior to the payment of any such stock award, the Compensation Committee shall certify in writing that the applicable performance target(s) was met.

Adjustment upon Changes in Capitalization. In the event of changes in the outstanding stock of the Company by reason of any stock splits, reverse stock splits, stock dividends, combination or reclassification or any change in the capital structure of the Company, an appropriate adjustment shall be made by the Board in: (i) the number of shares of common stock subject to the Restricted Stock Plan and (ii) the number and class of shares of common stock subject to any award outstanding under the Restricted Stock Plan. The determination of the Board to which adjustments shall be made shall be conclusive.

Change in Control. In the event of a change in control of the Company, half of the shares subject to an award outstanding on the date of such change in control that are not yet vested shall become vested and nonforfeitable. However, if an employee is terminated in connection with a change of control, then all of his or her award(s) outstanding on the date of such change in control that are not yet vested shall become fully vested and nonforfeitable.

Liquidation or Dissolution. In the event of liquidation or dissolution of the Company, all outstanding awards not yet vested shall become fully vested and nonforfeitable.

Amendment and Termination of the Restricted Stock Plan. The Board may at anytime amend, alter, suspend or terminate the Restricted Stock Plan; provided, however, that the Company shall obtain stockholder approval of any amendment to the Restricted Stock Plan to the extent necessary to comply with applicable law. No amendment or termination of the Restricted Stock Plan shall impair the rights of any grantee, unless mutually agreed otherwise between the grantee and the Administrator, which agreement must be in writing and signed by the grantee and the Company. In any event, the Restricted Stock Plan shall terminate on May 2, 2018, the tenth anniversary of adoption of the Restricted Stock Plan by the Board. Any awards outstanding under the Restricted Stock Plan at the time of its termination shall remain outstanding until they expire by their terms.

Other Information. A "new plan benefits" table, as described in the SEC's proxy rules, is not provided because all awards made under the Restricted Stock Plan are discretionary.

Federal Income Tax Consequences

The following discussion summarizes the material United States federal income tax consequences to the Company and to participants in the Restricted Stock Plan. This summary is based on the Code and the United States Treasury regulations promulgated thereunder as in effect on the date of this proxy statement, all of which may change with retroactive effect. This summary is not intended to be a complete analysis or discussion of all potential tax consequences that may be important to participants in the Restricted Stock Plan.

With respect to stock awards that may be settled either in cash or in shares of common stock that are either transferable or not subject to a substantial risk of forfeiture under Section 83 of the Code, the grantee will realize ordinary taxable income, subject to tax withholding, equal to the amount of the cash or the fair market value of the shares of common stock received. The Company will be entitled to a deduction in the same amount and at the same time as the compensation income is received by the grantee.

With respect to shares of common stock that are both nontransferable and subject to a substantial risk of forfeiture, the grantee will realize ordinary taxable income equal to the fair market value of the shares of common stock at the first time the shares of common stock are either transferable or not subject to a substantial risk of forfeiture. The Company will be entitled to a deduction in the same amount and at the same time as the ordinary taxable income realized by the grantee.

All of the above-described deductions are subject to the limitations on deductibility described in Section 162(m) of the Code. It is the Company's intention that the plan be construed and administered in a manner that maximizes the deductibility of compensation under Section 162(m) of the Code.

The foregoing is only a summary of the effect of federal income taxation upon the grantee and the Company with respect to the grant and exercise of awards under the Restricted Stock Plan, and the summary does not purport to be complete and does not discuss the tax consequences of the grantee's death or the income tax laws of any municipality, state or foreign country in which a grantee may reside.

PROPOSAL NO. 4

APPROVAL OF AMENDMENT AND RESTATEMENT OF 2005 STOCK OPTION PLAN

Overview

Subject to stockholder approval, the Board approved an amendment and restatement of our 2005 Stock Option Plan that, among other things, increases the number of shares of common stock authorized for issuance under the Option Plan by 500,000 shares. The amendment and restatement also addresses vesting provisions, including in the event the Company undergoes a liquidation, dissolution or change of control.

The Option Plan was adopted by the Board in October 2005 and approved by the stockholders in November 2005. The stockholders subsequently approved amendments to the Option Plan in June 2007.

We believe that the Option Plan provides meaningful performance incentives to our directors, officers, employees and other service providers, which, in turn, are expected to improve the Company's long-term performance. We are asking our stockholders to approve an increase in the number of shares issuable under the Option Plan in order to continue this company-wide compensation strategy and to provide resources to recruit and retain qualified personnel to support our planned strategic growth. Under the Option Plan, the number of shares of common stock currently authorized by our stockholders for issuance is 1,000,000 shares. As of March 31, 2008, about 117,000 shares remained available for grant under the Option Plan, and approximately 43 persons were eligible to participate in the Option Plan. We expect the number of persons eligible to participate in the Option Plan to increase as we embark on our planned expansion of operations. If the stockholders approve the amendment and restatement of the Option Plan, 500,000 additional shares will be available for issuance under the Option Plan.

Proposal

The stockholders are asked to approve an amendment and restatement of the Option Plan that, among other things, increases the number of shares of common stock authorized for issuance under the Option Plan by 500,000 shares. If approved, the number of shares of our common stock authorized for issuance under our Option Plan will be increased from 1,000,000 to 1,500,000. The Board believes that its continued ability to make stock option grants will be important to the Company's future success by providing meaningful performance incentives to our directors, officers, employees and other service providers, and by allowing the Company to remain competitive in attracting and retaining qualified personnel. The amendment and restatement also addresses vesting provisions, including in the event the Company undergoes a liquidation, dissolution or change of control. The proposed amendment and restatement will not become effective if the stockholders do not approve it.

Vote Required

The affirmative vote of a majority of the shares for which votes are properly cast in person or by proxy on the proposal will be required to approve the amendment and restatement of the Option Plan.

Recommendation

The Board recommends that stockholders vote FOR approval of the amendment and restatement of the Option Plan.

Unless marked otherwise, proxies received will be voted FOR approval of the amendment and restatement of the Option Plan.

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Summary of the Option Plan

The following summary of the Option Plan is qualified in its entirety by the terms of the Second Amended and Restated Option Plan, a copy of which is attached to this proxy statement as *Appendix B*.

Purpose. The purpose of the Option Plan is to provide a means to allow grants of stock options to selected employees, directors and consultants in order to attract and retain the best available personnel and to promote the success of the Company's business.

Administration. The Option Plan may be administered by the Board or any of its committees (the "Plan Administrator"). The Plan Administrator, subject to the terms and conditions of the Option Plan, has the authority to determine all matters related to the Option Plan in its discretion, including the authority to select the individuals to receive awards and to determine the number of shares to be subject to each award, the exercise price of options, the forms to be used under the Option Plan and all other terms and conditions of the award.

Stock Subject to the Option Plan. The Option Plan, if amended as proposed, will authorize the issuance of up to 1,500,000 shares of our common stock. Shares of common stock covered by an award granted under the Option Plan will not be counted as used unless and until they are actually issued and delivered to a participant. Shares relating to awards granted under the Option Plan that lapse, are canceled or forfeited, or are settled for cash revert to and are available for grant under the Option Plan. The shares of stock deliverable under the Option Plan may consist in whole or in part of authorized and unissued shares or shares now held or subsequently acquired by the Company. The aggregate number of shares available for issuance under the Option Plan will be adjusted in the event of a change affecting our capitalization, such as stock splits, reverse stock splits, stock dividends, combinations or reclassifications or the like.

Awards. The Plan Administrator is authorized to grant incentive stock options and nonqualified stock options under the Option Plan. Awards may consist of one or both of these grant types.

Eligibility. Awards may be granted to employees, officers, directors, agents, consultants, advisors or independent contractors of the Company or a parent or subsidiary of the Company, except that only employees of the Company may receive incentive stock options.

Terms and Conditions of Stock Option Grants. At the discretion of the Plan Administrator, options granted under the Option Plan may be either nonqualified stock options or incentive stock options as defined in Code Section 422. The exercise price for each option is determined by the Plan Administrator, but may not be less than 100% of fair market value on the date of grant, except pursuant to a merger or other corporate transaction.

The exercise price for shares purchased under an option must be paid in a form acceptable to the Plan Administrator, which form may include cash, checks, shares of stock, cashless exercise pursuant to a Company implemented plan, a reduction in the amount of liability owed to the Company, or such other consideration as the Plan Administrator may permit.

Unless the Plan Administrator determines otherwise in a particular option agreement, the term of each option will be ten years from the date of grant and each option will vest and become exercisable as follows: one-third of the option will vest on each of the first, second and third anniversaries of the date of grant.

The vested portion of options may be exercised at any time in whole or in part in accordance with their terms. The unvested portion terminates upon termination of an optionee's employment or service relationship with the company for any reason and reverts to the Option Plan. In the event of termination for a reason other than death or total and permanent disability, and unless otherwise provided by the Plan Administrator in an option agreement, the vested portion of options will generally be exercisable for 90 days after the date of termination. In the event of termination by reason of death or total and

permanent disability, and unless otherwise provided for by the Plan Administrator in an option agreement, the option will generally be exercisable for one year from the date of such termination.

Unless determined otherwise by the Plan Administrator, options may not be sold, pledged, assigned, hypothecated, transferred or disposed of other than by will or by the applicable laws of descent and distribution.

Capital Adjustments. In the event of a stock split, reverse stock split, stock dividend, combination, reclassification or any increase or decrease in the number of issued shares of common stock effected without receipt of consideration by the Company, the number of shares covered by each outstanding option and the number of shares which have been authorized for issuance under the Option Plan but as to which no options have yet been granted or which have reverted to the Option Plan upon cancellation or expiration of an option, as well as the exercise price of each outstanding option, shall be proportionately adjusted.

Code Section 162(m) Provisions. Section 162(m) of the Code imposes a \$1 million annual deduction limit on the compensation paid to the chief executive officer and the three other most highly compensated officers (other than the principal executive officer or the principal financial officer) of a publicly traded company. Section 162(m) provides an exception to this deduction limit for "performance-based compensation" that meets certain requirements. Stock option-based compensation that qualifies as performance-based compensation under Section 162(m) includes stock option awards granted under a stockholder-approved plan that specifies a maximum number of shares that may be awarded to an employee during a specified period of time. In order to comply with Section 162(m), under the terms of the amended and restated Option Plan, an employee may not receive awards in any one fiscal year with respect to more than 100,000 shares. The foregoing limits are subject to automatic adjustment in the event of a stock split, reverse stock split, stock dividend, combination, reclassification or similar event. An option also may vest according to certain performance targets and criteria established by the Compensation Committee at the time of grant.

Corporate Transactions. In the event of a proposed dissolution or liquidation of the Company, the Plan Administrator may permit an optionee to exercise all vested and unvested options until 10 days prior to the dissolution or liquidation. In the event of a change of control of the Company, one-half of any unvested options then held by an optionee shall vest and become exercisable, unless otherwise provided in an option agreement. However, if an optionee's employment is terminated in connection with a change of control, then all of that optionee's options shall vest and become exercisable.

Term, Termination and Amendment. Unless earlier terminated by the Board of Directors, the amended and restated Option Plan will terminate on November 18, 2015. The Board of Directors may at any time amend the Option Plan, subject to stockholder approval to the extent required by applicable law, regulation, or stock exchange rules. The amendment, suspension or termination of the Option Plan or a portion thereof or the amendment of an outstanding award cannot, without the participant's consent, materially adversely affect any rights under any outstanding award. No amendment that would constitute a "modification" to an outstanding incentive stock option that would cause the option to fail to continue to qualify as an incentive stock option under Code Section 422 will be made without the consent of the optionee.

Other Information. A "new plan benefits" table, as described in the SEC's proxy rules, is not provided because all awards made under the amended and restated Option Plan are discretionary. However, please refer to "Executive Compensation" in this proxy statement, which provides information on the grants made in the last fiscal year, and please refer to the description of grants made to our non-employee directors in the last fiscal year under the heading "Board of Directors Director Compensation" in this proxy statement.

Federal Tax Consequences

The following discussion summarizes the material United States federal income tax consequences to the Company and to participants in the Option Plan. This summary is based on the Internal Revenue Code and the United States Treasury regulations promulgated thereunder as in effect on the date of this proxy statement, all of which may change with retroactive effect. This summary is not intended to be a complete analysis or discussion of all potential tax consequences that may be important to participants in the Option Plan.

Incentive Stock Options. The incentive stock options granted under the Option Plan are intended to qualify for favorable federal income tax treatment accorded "incentive stock options" under the Code. Generally, the grant or exercise of an incentive stock option does not result in any federal income tax consequences to the participant or to the Company. However, the optionee generally will have taxable income for alternative minimum tax purposes at the time of exercise as if the option were a nonqualified stock option.

The federal income tax consequence of a disposition of stock acquired through the exercise of an incentive stock option will depend on the period such stock is held prior to disposition. If a participant holds stock acquired through exercise of an incentive stock option for at least two years from the date on which the option is granted and at least one year from the date of exercise of the option, the participant will recognize long-term capital gain or loss in the year of disposition, equal to the difference between the amount realized on the disposition of the stock and the amount paid for the stock on exercise of the option.

Generally, if a participant disposes of the stock before the expiration of either the statutory holding periods described above (a disqualifying disposition), the participant will recognize ordinary income equal to the lesser of (i) the excess of the fair market value of the stock on the date of exercise over the exercise price and (ii) the excess of the amount realized on the disposition of the stock over the exercise price. Subject to certain limitations, to the extent the participant recognized ordinary income by reason of a disqualifying disposition, the Company generally will be entitled to a corresponding business expense deduction in the taxable year during which the disqualifying disposition occurs. Generally, in the taxable year of a disqualifying disposition, the participant will also recognize capital gain or loss equal to the difference between the amount realized on the disposition of such stock over the sum of the amount paid for such stock plus any amount recognized as ordinary income by reason of the disqualifying disposition. Such capital gain or loss will be characterized as short-term or long-term depending on how long the stock was held.

Nonqualified Stock Options. Generally, the grant of a nonqualified stock option will not result in any federal income tax consequences to the Company or the participant. Upon exercise of a nonqualified stock option, the participant generally will recognize ordinary income equal to the excess of the fair market value of the stock on the date of exercise over the amount paid for the stock upon exercise of the option. Subject to certain limitations, the Company will be generally entitled to a corresponding business expense deduction equal to the ordinary income recognized by the participant.

Upon disposition of stock, the participant will recognize capital gain or loss equal to the difference between the amount realized on the disposition of such stock over the sum of the amount paid for such stock plus any amount recognized as ordinary income upon exercise of the option. Such capital gain or loss will be characterized as short-term or long-term, depending on how long the stock was held.

Potential Limitations on Deductions. Section 162(m) of the Code precludes a deduction for compensation paid to our chief executive officer and our three other most highly compensated officers (other than the principal executive officer or the principal financial officer) to the extent that such compensation exceeds \$1 million for a taxable year. If certain requirements are met, qualified performance-based compensation is disregarded for purposes of the \$1 million limitation.

ANNUAL REPORT ON FORM 10-K

On March 14, 2008, the Company filed its Annual Report on Form 10-K for the fiscal year ended December 31, 2007. A copy of the Annual Report has been sent concurrently with this proxy statement to all stockholders entitled to notice of and to vote at the annual meeting. Our financial statements and management's discussion and analysis of financial condition and results of operations are incorporated by reference to our Annual Report.

HOUSEHOLDING

We are sending only one Annual Report and proxy statement to certain street-name stockholders who share a single address, unless we received contrary instructions from any stockholder at that address. This practice, known as "householding," is designed to reduce our printing and postage costs. However, if you are residing at such an address and wish to receive a separate Annual Report or proxy statement in the future, you may telephone our Corporate Secretary at (303) 285-9885 or write to him at Ascent Solar Technologies, Inc., 8120 Shaffer Parkway, Littleton, Colorado 80127. If you are receiving multiple copies of our Annual Report and proxy statement, you may request householding by contacting the Corporate Secretary in the same manner.

STOCKHOLDER PROPOSALS

Proposals of stockholders intended to be presented at the 2009 annual meeting of stockholders must be received by the Company at its principal offices by January 15, 2009 in order to be considered for inclusion in the Company's proxy statement and form of proxy relating to that meeting. Furthermore, that proxy may confer discretionary authority to vote on any matter not submitted to us by March 31, 2009. A stockholder's notice to the Corporate Secretary must set forth for each matter proposed to be brought before the annual meeting (a) a brief description of the matter the stockholder proposes to bring before the meeting and the reasons for conducting such business at the meeting, (b) the name and address of the stockholder proposing such business, (c) the number of shares of the Company's common stock which are beneficially owned by the stockholder, and (d) any material interest of the stockholder in such business.

OTHER BUSINESS

The Company knows of no other matters to be submitted to the stockholders at the annual meeting. If any other matters properly come before the stockholders at the annual meeting, the persons named on the enclosed proxy card intend to vote the shares they represent as the Board may recommend.

BY ORDER OF THE BOARD OF DIRECTORS

Matthew Foster

President and Chief Executive Officer

May 15, 2008 Littleton, Colorado 30

Appendix A

ASCENT SOLAR TECHNOLOGIES, INC. 2008 RESTRICTED STOCK PLAN

- 1. Purposes of the Plan. The purposes of this 2008 Restricted Stock Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentives to Eligible Employees, Consultants and Directors, and to promote the success of the Company's business.
 - 2. *Definitions*. As used herein, the following definitions shall apply:
 - a. "Applicable Law" means the legal requirements relating to the administration of the Plan under applicable federal, state, local and foreign corporate, tax and securities laws, and the rules and requirements of any stock exchange or quotation system on which the Common Stock is listed or quoted.
 - b. "Award" means an award of Covered Shares to a Grantee pursuant to Section 5 of the Plan.
 - c. "Award Agreement" means the agreement, notice and/or terms or conditions by which an Award is evidenced, documented in such form (including by electronic communication) as may be approved by the Committee.
 - d. "Board" means the Board of Directors of the Company.
 - e. "Change in Control" means the happening of any of the following:
 - i.

 any one person, or more than one person acting as a group, acquires ownership of stock of the Company that, together with stock held by such person or group, possesses more than 50 percent of the total fair market value or total voting power of the stock of the Company; provided, however, that if any one person, or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the stock of the Company, the acquisition of additional stock by the same person or persons will not be considered a Change in Control. Notwithstanding the foregoing, an increase in the percentage of stock of the Company owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires its stock in exchange for property will be treated as an acquisition of stock of the Company for purposes of this subsection (i);
 - ii.

 during any period of 12 consecutive months, individuals who at the beginning of such period constituted the Board (together with any new or replacement directors whose election by the Board, or whose nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of the directors then in office; or
 - any one person, or more than one person acting as a group, acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by the person or persons) assets from the Company, outside of the ordinary course of business, that have a gross fair market value equal to or more than 50 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), "gross fair market value" means the value of the assets of the Company, or the value of the assets being disposed

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of, determined without regard to any liabilities associated with such assets. Notwithstanding anything to the contrary in this Agreement, the following shall not be treated as a Change in Control under this subsection (iii):

(A) a transfer of assets from the Company to a shareholder of the Company (determined immediately before the asset transfer); (B) a transfer of assets from the Company to an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company; (C) a transfer of assets from the Company to a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding stock of the Company; or (D) a transfer of assets from the Company to an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in (iii)(C) above.

- f. "Code" means the Internal Revenue Code of 1986, as amended.
- g. "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 of the Plan.
- h. "Common Stock" means the Common Stock, \$0.0001 par value, of the Company.
- i. "Company" means Ascent Solar Technologies, Inc., a Delaware corporation.
- j. "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity
 - k. "Covered Share" means a Share that is subject to an Award.
- 1. "Date of Grant" means the date on which the Committee makes the determination granting the Award, or such other later date as is determined by the Committee.
- m. "Date of Termination" means the date on which a Grantee's employment or service as a Director, whichever is applicable, terminates.
 - n. "Director" means a member of the Board.
 - o. "Eligible Employee" means any person who is employed by the Company or any Parent or Subsidiary of the Company.
 - p. "Exchange Act" means the Securities Exchange Act of 1934, as amended.
 - q. "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:
 - i. If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Market or The Nasdaq Capital Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system for the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;
 - ii.

 If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or
 - iii.

 In the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Committee.
 - r. "Grantee" means an individual to whom an Award has been granted.

- s. "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
- t. "Parent" means a corporation, whether now or hereafter existing, in an unbroken chain of corporations ending with the Company if each of the corporations other than the Company holds at least 50 percent of the voting shares of one of the other corporations in such chain.
 - u. "Plan" means this 2008 Ascent Solar Technologies, Inc. Restricted Stock Plan, as it may be amended from time to time.
- v. "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
 - w. "Section 16(b)" means Section 16(b) of the Exchange Act.
 - x. "Share" means a share of the Common Stock, as adjusted in accordance with Section 7 of the Plan.
- y. "Subsidiary" means a corporation, domestic or foreign, of which not less than 50 percent of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.
- 3. Shares Subject to the Plan. Subject to the provisions of Section 7 of the Plan and except as otherwise provided in this Section 3, the maximum aggregate number of Shares that may be subject to Awards is initially 750,000 Shares. The Shares may be authorized, but unissued, or reacquired Common Stock. If an Award expires without having been vested in full the remaining Shares that were subject to the Award shall become available for future Awards under the Plan (unless the Plan has terminated). The Board may from time to time determine the appropriate methodology for calculating the number of Shares issued pursuant to the Plan. No more than 200,000 Shares may be granted pursuant to Awards to an individual Grantee in any calendar year.
 - 4. Administration of the Plan.
 - a. *Multiple Administrative Bodies*. The Plan may be administered by different Committees with respect to different groups of Grantees.
 - i. Section 162(m). To the extent that the Committee determines it to be desirable to qualify Awards granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more "outside directors" within the meaning of Section 162(m) of the Code.
 - ii.
 Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.
 - iii.

 Other Administration. Other than as provided above, the Plan shall be administered by (A) the Board or (B) a Committee, which committee shall be constituted to satisfy Applicable Laws.
 - iv.
 Binding Effect. The Committee's decisions, determinations and interpretations shall be final and binding on all Grantees and any other holders of Awards.
 - b. Subject to the provisions of the Plan, the Committee shall have the authority, in its sole and absolute discretion:
 - i. to determine the Fair Market Value of the Common Stock, in accordance with Section 2(p) of the Plan;

- ii.to select the Eligible Employees, Consultants and Directors to whom Awards will be granted under the Plan;
- iii.
 to determine whether, when, to what extent and in what amounts Awards are granted under the Plan;
- iv.

 to determine the number of Shares to be covered by each Award granted under the Plan;
- v.

 to determine the forms of Award Agreements, which need not be the same for each grant or for each Grantee, for use under the Plan;
- vi.

 to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted under the Plan. Such terms and conditions, which need not be the same for each grant or for each Grantee, include, but are not limited to, any waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Committee shall determine;
- vii. to construe and interpret the terms of the Plan and Awards;
- viii.

 to prescribe, amend and rescind rules and regulations relating to the Plan, including, without limiting the generality of the foregoing, rules and regulations relating to the operation and administration of the Plan to accommodate the specific requirements of local and foreign laws and procedures;
- ix.
 to modify or amend each Award (subject to Section 9 of the Plan);
- x.

 to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Committee;
- xi. to determine the terms and restrictions applicable to Awards;
- xii.

 to provide any notice or other communication required or permitted by the Plan in either written or electronic form; and
- xiii.

 to make all other determinations deemed necessary or advisable for administering the Plan.
- 5. Eligibility and General Conditions of Awards.
 - a. *Eligibility*. Awards may be granted to Eligible Employees, Consultants and Directors. If otherwise eligible, an Eligible Employee, Consultant or Director who has been granted an Award may be granted additional Awards.
 - b. *Committee Action*. The Committee acting in its sole and absolute discretion shall have the right to grant Awards to Eligible Employees, Consultants and Directors under the Plan from time to time. Subject to the terms of the Plan, the Committee may grant Awards to any Eligible Employee, Consultant or Director, in such amount and upon such terms and conditions as shall be determined by the Committee in its sole and absolute discretion. Each Award shall be evidenced by an Award Agreement, and to the extent not set forth in the Plan, the terms and conditions of each Award, which need not be the same for each grant or for each Grantee, shall be set forth in an Award Agreement. Each Award Agreement shall set forth the conditions, if any, under which the Grantee's interest in the Covered Shares will be forfeited.

c. Forfeiture Conditions. The Committee may make each grant of an Award (if, when and to the extent that the grant becomes effective) subject to one, or more than one, objective employment, performance or other forfeiture condition which the Committee acting in its sole and absolute discretion deems appropriate under the circumstances for Eligible Employees, Consultants or Directors generally or for a Grantee in particular, and the related Award Agreement shall set forth each such condition and the deadline for satisfying each such forfeiture condition. A Grantee's nonforfeitable and vested interest in the Covered Shares shall depend on the extent to which each such condition is timely satisfied. Unless otherwise provided in the Award Agreement, the Covered Shares shall vest in a series of three (3) successive equal annual installments over the three (3)-year period measured from the Date of Grant. A Share certificate shall be issued (subject to the conditions, if any, described in this Section 5) to, or for the benefit of, the Grantee with respect to the number of Covered Shares for which a grant has become effective as soon as practicable after the Date of Grant.

d. Code Section 162(m) Provisions.

i.

Notwithstanding any other provision of the Plan, if the Compensation Committee of the Board (the "Compensation Committee") determines at the time an Award is granted to an Eligible Employee, Consultant or Director that such Eligible Employee, Consultant or Director is, or may be as of the end of the tax year for which the Company would claim a tax deduction in connection with such Award, a "covered employee" within the meaning of Section 162(m)(3) of the Code, and to the extent the Compensation Committee considers it desirable for compensation delivered pursuant to such Award to be eligible to qualify for an exemption from the limit on tax deductibility of compensation under Section 162(m) of the Code, then the Compensation Committee may provide that this Section 5(d) is applicable to such Award under such terms as the Compensation Committee shall determine.

ii.

If an Award is subject to this Section 5(d), then the lapsing of restrictions thereon and the distribution of Covered Shares pursuant thereto, as applicable, shall be subject to satisfaction of one, or more than one, objective performance targets. The Compensation Committee shall determine the performance targets that will be applied with respect to each Award subject to this Section 5(d) at the time of grant, but in no event later than 90 days after the commencement of the period of service to which the performance target(s) relate. The performance criteria applicable to Awards subject to this Section 5(d) will be one or more of the following criteria: (A) stock price; (B) market share; (C) sales; (D) earnings per share, core earnings per share or variations thereof; (E) return on equity; (F) costs; (G) revenue; (H) cash to cash cycle; (I) days payables outstanding; (J) days of supply; (K) days sales outstanding; (L) cash flow; (M) operating income; (N) profit after tax; (O) profit before tax; (P) return on assets; (Q) return on sales; (R) inventory turns; (S) invested capital; (T) net operating profit after tax; (U) return on invested capital; (V) total shareholder return; (W) earnings; (X) return on equity or average shareowners' equity; (Y) total shareowner return; (Z) return on capital; (AA) return on investment; (BB) income or net income; (CC) operating income or net operating income; (DD) operating profit or net operating profit; (EE) operating margin; (FF) return on operating revenue; (GG) contract awards or backlog; (HH) overhead or other expense reduction; (II) growth in shareowner value relative to the moving average of the S&P 500 Index or a peer group index; (JJ) credit rating; (KK) strategic plan development and implementation; (LL) net cash provided by operating activities; (MM) gross margin; (NN) economic value added; (OO) customer satisfaction; (PP) financial return ratios; (QQ) market performance; (RR) production capacity; (SS) production volume; (TT) achievement of photovoltaic conversion efficiency; (UU) production yields;

(VV) EBITDA; (WW) EBIT; (XX) market capitalization; (YY) liquidity; (ZZ) strategic partnerships; (AAA) production agreements and relationships; and (BBB) product certifications.

- iii.

 Notwithstanding any contrary provision of the Plan, the Compensation Committee may not increase the number of shares granted pursuant to any Award subject to this Section 5(d), nor may it waive the achievement of any performance target established pursuant to this Section 5(d).
- iv.

 Prior to the payment of any Award subject to this Section 5(d), the Compensation Committee shall certify in writing that the performance target(s) applicable to such Award was met.
- v.

 The Compensation Committee shall have the power to impose such other restrictions on Awards subject to this Section 5(d) as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements for "performance-based compensation" within the meaning of Code section 162(m)(4)(C) of the Code, the regulations promulgated thereunder, and any successors thereto.
- e. Dividends and Voting Rights. Unless otherwise provided in the Award Agreement, the Grantee shall have the right to receive any cash dividends which are paid with respect to any of his or her Covered Shares after the Date of Grant and before the first day that the Grantee's interest in such Covered Shares is forfeited or becomes nonforfeitable and vested. If an Award Agreement provides that a Grantee has no right to receive a cash dividend when paid, such Award Agreement may set forth the conditions, if any, under which the Grantee will be eligible to receive one, or more than one, payment in the future to compensate the Grantee for the fact that he or she had no right to receive any cash dividends on his or her Covered Shares when such dividends were paid. If an Award Agreement calls for any such payments to be made, the Company shall make such payments from the Company's general assets, and the Grantee shall be no more than a general and unsecured creditor of the Company with respect to such payments. If a stock dividend is declared on such a Covered Share after the grant is effective but before the Grantee's interest in such Covered Share has been forfeited or has become nonforfeitable and vested, such stock dividend shall be treated as part of the grant of the Covered Shares, and a Grantee's interest in such stock dividend shall be forfeited or shall become nonforfeitable and vested at the same time as the Share with respect to which the stock dividend was paid is forfeited or becomes nonforfeitable and vested. If a dividend is paid other than in cash or stock, the disposition of such dividend shall be made in accordance with such rules as the Committee shall adopt with respect to each such dividend. Unless otherwise provided in the Award Agreement, the Grantee shall have the right to vote the Covered Shares related to his or her Award after the Date of Grant of such Covered Shares but before his or her interest in such Covered Shares has been forfeited or has become nonforfeitable and vested.
- f. Satisfaction of Forfeiture Conditions. A Covered Share shall cease to be restricted at such time as a Grantee's interest in such Covered Share becomes nonforfeitable and vested in accordance with the terms of the Plan and the Award Agreement, and the certificate representing such share shall be reissued as soon as practicable thereafter and shall be transferred to the Grantee.
- g. Termination of Employment or Service as a Director. In the event that a Grantee's employment or service as a Director terminates for any reason, then, unless otherwise provided by the Award Agreement, and subject to Section 7 of the Plan:
 - With respect to the portion of an Award that is forfeitable immediately before the Date of Termination, the Covered Shares shall thereupon automatically be forfeited; and

ii.

- With respect to the portion of an Award that is nonforfeitable and vested immediately before the Date of Termination, the Covered Shares shall promptly be settled by delivery to the Grantee (or the Grantee's beneficiary, in the event of the death of the Grantee) of a number of unrestricted Shares equal to the aggregate number of the Grantee's nonforfeitable and vested Covered Shares.
- h. *Nontransferability of Awards*. Until such time as it becomes nonforfeitable and vested in accordance with the terms of the Plan and the Award Agreement, no Award, no right under any Award, and no Covered Shares may be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by a Grantee otherwise than by will or by the laws of descent and distribution or to the Company, and any such purported assignment, alienation, pledge, attachment, sale, transfer or encumbrance shall be void and unenforceable against the Company or any Subsidiary; provided, that the designation of a beneficiary shall not constitute an assignment, alienation, pledge, attachment, sale, transfer or encumbrance.
- i. *Escrow of Covered Shares*. Any certificates representing the Covered Shares issued under the Plan shall be issued in the Grantee's name, but, if the applicable Award Agreement so provides, the Covered Shares will be held by a custodian designated by the Committee (the "Custodian"). Each applicable Award Agreement providing for the transfer of Covered Shares to the Custodian shall appoint the Custodian as attorney-in-fact for the Grantee for the term specified in the applicable Award Agreement, with full power and authority in the Grantee's name, place and stead to transfer, assign and convey to the Company any Covered Shares held by the Custodian for such Grantee, if the Grantee forfeits the Covered Shares under the terms of the applicable Award Agreement. During the period that the Custodian holds the shares subject to this Section 5(i), the Grantee will be entitled to all rights, except as otherwise provided in the Plan or the applicable Award Agreement, applicable to Shares not so held.
- j. Other Restrictions. The Committee shall impose such other restrictions on any Award as it may deem advisable including, without limitation, restrictions under Applicable Law. The Committee may also require that Grantees make cash payments at the time of grant or upon lapsing of restrictions. An Award shall not be granted and Shares shall not be issued pursuant to an Award unless the grant of such Award and the issuance and delivery of such Shares shall comply with all relevant provisions of Applicable Law, and shall be further subject to the approval of counsel for the Company with respect to such compliance. Any certificate issued to evidence Covered Shares may bear such legends and statements, and shall be subject to such transfer restrictions, as the Committee deems advisable to assure compliance with Applicable Law and the requirements of this Section 5(j). As a condition to the issuance of Shares under this Plan, the Committee may require the Grantee to represent and warrant that the Shares will be held for investment and not with a view of resale or distribution to the public. No Shares may not be issued under this Plan until the Company has obtained the consent or approval of every regulatory body, federal or state, having jurisdiction over such matters as the Board deems advisable. Each person who acquires the right to ownership of Shares by bequest or inheritance may be required by the Committee to furnish reasonable evidence of such right of ownership. In addition, the Board may require such consents and releases of taxing authorities as the Board deems advisable. Additionally, as a condition to the issuance of shares under this Plan, the Grantee shall be required to become a party to the then-current version of any shareholder agreement that is in effect among the holders of a majority of the Company's equity securities.
- k. *Certificate Legend.* In addition to any legends placed on certificates pursuant to Section 5(j) above, each certificate representing Covered Shares shall bear the following legend:

The sale or other transfer of the Shares of stock represented by this certificate, whether voluntary, involuntary, or by operation of law, is subject to certain restrictions on transfer

as set forth in the Ascent Solar Technologies, Inc. Restricted Stock Plan, as amended, and in a Restricted Stock Agreement dated

. A copy of the Plan and the Restricted Stock Agreement may be obtained from the Chief Financial Officer of Ascent Solar Technologies, Inc.

- 1. Removal of Restrictions. Covered Shares shall become freely transferable by the Grantee after they become nonforfeitable and vested. Once the Covered Shares are released from the forfeiture restrictions, the Grantee shall be entitled to have the legend required by Section 5(k) above removed from the Grantee's Share certificate.
- 6. Tax Withholding. Upon each vesting event, the Grantee must satisfy the federal, state, local or foreign income and social insurance withholding taxes imposed by reason of the vesting of the Covered Shares. Upon grant of an Award, the Grantee shall make an election with respect to the method of satisfaction of such tax withholding obligation in accordance with procedures established by the Administrator. Unless the Grantee delivers to the Company or its designee within five (5) days after the occurrence of the vesting event specified in Section 2 or Section 3 above a certified check payable in the amount of all tax withholding obligations imposed on the Grantee and the Company by reason of the vesting of the Covered Shares, the Grantee's actual number of vested Covered Shares shall be reduced by the smallest number of whole Shares which, when multiplied by the Fair Market Value of the Common Stock on the vesting date, is sufficient to satisfy the amount of such tax withholding obligations.
 - 7. Adjustments Upon Changes in Capitalization or Change of Control.
 - a. Changes in Capitalization. Subject to any required action by the shareholders of the Company, the number of Covered Shares, and the number of Shares which have been authorized for issuance under the Plan but as to which no Awards have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Award shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Covered Shares.
 - b. Change in Control. Unless otherwise provided in the Award Agreement, in the event of a Change in Control, then, as to each Grantee, 50 percent of any Covered Shares that have not yet been forfeited and that are not yet nonforfeitable and vested at the time such Change in Control is determined to have occurred shall become nonforfeitable and vested immediately before such Change in Control is determined to have occurred. Notwithstanding the foregoing and anything else in this Plan, and unless otherwise provided in the Award Agreement, if the employment of a Grantee is terminated by the Company or its successor in connection with a Change in Control (as determined in the sole and absolute discretion of the Committee), then all of such Grantee's Covered Shares that have not yet been forfeited and are not yet nonforfeitable and vested at termination of employment shall become nonforfeitable and vested upon termination of employment.
 - c. *Dissolution or Liquidation*. Unless otherwise provided in the Award Agreement, in the event of the dissolution or liquidation of the Company, then immediately before such dissolution

or liquidation, any Covered Shares that are not yet nonforfeitable and vested shall become nonforfeitable and vested.

- 8. *Term of Plan*. The Plan shall become effective upon its approval by the shareholders of the Company within 12 months after the earlier of the date of its adoption by the Board or the date of its approval by the shareholders. Such shareholder approval shall be obtained in the manner and to the degree required under applicable federal and state law. The Plan shall continue in effect until the tenth anniversary of adoption of the Plan by the Board, unless terminated earlier under Section 9 of the Plan.
 - 9. Amendment and Termination of the Plan.
 - a. Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.
 - b. Shareholder Approval. The Company shall obtain shareholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Law. Such shareholder approval, if required, shall be obtained in such a manner and to such a degree as is required by the Applicable Law.
 - c. *Effect of Amendment or Termination*. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Grantee, unless mutually agreed otherwise between the Grantee and the Committee, which agreement must be in writing and signed by the Grantee and the Company.
 - 10. Liability of Company.
 - a. *Inability to Obtain Authority*. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.
 - b. *Grants Exceeding Allotted Shares*. If the Shares covered by an Award exceeds, as of the date of grant, the number of Shares that may be issued under the Plan without additional shareholder approval, such Award shall be void with respect to such excess Covered Shares, unless shareholder approval of an amendment sufficiently increasing the number of Shares subject to the Plan is timely obtained in accordance with Section 9 of the Plan.
- 11. Reservation of Shares. The Company, during the term of the Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.
- 12. Rights of Grantees. Neither the Plan nor any Award shall confer upon an Grantee any right with respect to continuing the Grantee's employment or service as a Consultant or Director, nor shall they interfere in any way with the Grantee's right or the Company's right to terminate such employment or service as a Consultant or Director at any time, with or without cause.
- 13. Construction. The Plan shall be construed under the laws of the State of Delaware, to the extent not preempted by federal law, without reference to the principles of conflict of laws.

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Appendix B

ASCENT SOLAR TECHNOLOGIES, INC. SECOND AMENDED AND RESTATED 2005 STOCK OPTION PLAN (Approved by Board of Directors on Adopted by Stockholders on)

1.	Purposes of	f the Plan.	The purposes	of this 20	005 Stock O	ption Plan are:

to attract and retain the best available personnel;

to provide additional incentive to Employees, Directors and Consultants; and

to promote the success of the Company's business.

Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant.

- 2. Definitions. As used herein, the following definitions shall apply:
 - (a) "Administrator" means the Board or any of its Committees as shall be administering the Plan, in accordance with Section 4 of the Plan.
- (b) "Applicable Laws" means the requirements relating to the administration of stock option plans under U. S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Options are, or will be, granted under the Plan.
 - (c) "Board" means the Board of Directors of the Company.
 - (d) "Code" means the Internal Revenue Code of 1986, as amended.
 - (e) "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 of the Plan.
 - (f) "Common Stock" means the common stock of the Company.
 - (g) "Company" means Ascent Solar Technologies, Inc., a Delaware corporation.
- (h) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.
 - (i) "Director" means a member of the Board.
 - (j) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.
- (k) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed one hundred eighty (180) days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, on the one hundred eighty-first (181st) day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.
 - (1) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

- (m) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:
 - (i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Market or The Nasdaq Capital Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system for the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;
 - (ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or
 - (iii) In the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Administrator.
- (n) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.
 - (o) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option.
- (p) "Notice of Grant" means a written or electronic notice evidencing certain terms and conditions of an individual Option grant. The Notice of Grant is part of the Option Agreement.
- (q) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
 - (r) "Option" means a stock option granted pursuant to the Plan.
- (s) "Option Agreement" means an agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.
- (t) "Option Exchange Program" means a program whereby outstanding Options are surrendered in exchange for Options with a lower exercise price.
 - (u) "Optioned Stock" means the Common Stock subject to an Option.
 - (v) "Optionee" means the holder of an outstanding Option granted under the Plan.
 - (w) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.
 - (x) "Plan" means this 2005 Stock Option Plan, as amended.
- (y) "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
 - (z) "Section 16(b)" means Section 16(b) of the Exchange Act.
 - (aa) "Service Provider" means an Employee, Director or Consultant.
 - (bb) "Share" means a share of the Common Stock, as adjusted in accordance with Section 12 of the Plan.
 - (cc) "Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.
- 3. Stock Subject to the Plan. Subject to the provisions of Section 12 of the Plan, the maximum aggregate number of Shares which may be optioned and sold under the Plan is one million five

hundred thousand (1,500,000) Shares. The Shares may be authorized, but unissued, or reacquired Common Stock.

If an Option expires or becomes unexercisable without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated); *provided*, *however*, that Shares that have actually been issued under the Plan shall not be returned to the Plan and shall not become available for future distribution under the Plan.

- 4. Administration of the Plan.
 - (a) Procedure.
 - (i) Multiple Administrative Bodies. The Plan may be administered by different Committees with respect to different groups of Service Providers.
 - (ii) Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Options granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more "outside directors" within the meaning of Section 162(m) of the Code.
 - (iii) *Rule 16b-3*. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.
 - (iv) Other Administration. Other than as provided above, the Plan shall be administered by (A) the Board or (B) a Committee, which committee shall be constituted to satisfy Applicable Laws.
- (b) *Powers of the Administrator.* Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:
 - (i) to determine the Fair Market Value;
 - (ii) to select the Service Providers to whom Options may be granted hereunder;
 - (iii) to determine the number of shares of Common Stock to be covered by each Option granted hereunder;
 - (iv) to approve forms of agreement for use under the Plan;
 - (v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Option granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Options may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or the shares of Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;
 - (vi) to institute an Option Exchange Program;
 - (vii) to construe and interpret the terms of the Plan and awards granted pursuant to the Plan;
 - (viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws;

- (ix) to modify or amend each Option (subject to Section 14(c) of the Plan), including the discretionary authority to extend the post-termination exercisability period of Options longer than is otherwise provided for in the Plan;
- (x) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Option previously granted by the Administrator; and
 - (xi) to make all other determinations deemed necessary or advisable for administering the Plan.
- (c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations shall be final and binding on all Optionees and any other holders of Options.
- 5. Eligibility. Nonstatutory Stock Options may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.
- 6. Limitations.
- (a) Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.
- (b) Neither the Plan nor any Option shall confer upon an Optionee any right with respect to continuing the Optionee's relationship as a Service Provider with the Company, nor shall they interfere in any way with the Optionee's right or the Company's right to terminate such relationship at any time, with or without cause.
- (c) No Employee shall be granted, in any one fiscal year of the Company, Options to purchase more than one hundred thousand (100,000) Shares.
- 7. Term of Plan. Subject to Section 18 of the Plan, the Plan shall become effective upon its adoption by the Board. It shall continue in effect for a term of ten (10) years unless terminated earlier under Section 14 of the Plan.
- 8. Term of Option. The term of each Option shall be stated in the Option Agreement; provided, however, that the term shall be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option, the term shall be ten (10) years from the date of grant or such shorter term as may be provided in the Option Agreement. Moreover, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.
- 9. Option Exercise Price and Consideration.
- (a) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be determined by the Administrator, subject to the following:
 - (i) In the case of an Incentive Stock Option
 - (A) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of

stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

- (B) granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.
- (ii) In the case of a Nonstatutory Stock Option
 - (A) granted to a Service Provider who, at the time the Nonstatutory Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant.
 - (B) granted to a Service Provider other than a Service Provider described in paragraph (A) immediately above, or intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.
- (iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a merger or other corporate transaction.
- (b) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator shall fix the period within which the Option may be exercised and shall determine any conditions which must be satisfied before the Option may be exercised.
- (c) Form of Consideration. The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator shall determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of:
 - (i) cash;
 - (ii) check;
 - (iii) other Shares which (A) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six months on the date of surrender, and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised;
 - (iv) consideration received by the Company under a cashless exercise program, if implemented by the Company in connection with the Plan;
 - (v) a reduction in the amount of any Company liability to the Optionee, including any liability attributable to the Optionee's participation in any Company-sponsored deferred compensation program or arrangement;
 - (vi) any combination of the foregoing methods of payment; or
 - (vii) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws.

10. Exercise of Option.

(a) *Procedure for Exercise; Rights as a Stockholder.* Any Option granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. Unless otherwise stated in the Option Agreement, Options shall become exercisable at a rate one-third (1/3) per year over three (3) years from the date the Options are granted, with one-third (1/3) of the Shares under the Option vesting on each of the first, second and third anniversaries of the date of grant. Unless the Administrator provides otherwise, vesting of Options granted hereunder shall be suspended during any unpaid leave of absence. An Option may not be exercised for a fraction of a Share.

An Option shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Shares issued upon exercise of an Option shall be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 12 of the Plan.

Exercising an Option in any manner shall decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

- (b) Termination of Relationship as a Service Provider. If an Optionee ceases to be a Service Provider, other than upon the Optionee's death or Disability, the Optionee may exercise his or her Option within ninety (90) days of termination, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified by the Administrator, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.
- (c) Disability of Optionee. If an Optionee ceases to be a Service Provider as a result of the Optionee's Disability, the Optionee may exercise his or her Option within one (1) year of termination, or such longer period of time as may be specified in the Option Agreement, to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.
- (d) *Death of Optionee*. If an Optionee dies while a Service Provider, the Option may be exercised within one (1) year following Optionee's death, or such longer period of time as may be specified in the Option Agreement, to the extent that the Option is vested on the date of death (but in no event later than the expiration of the term of such Option as set forth in the Notice of Grant), by the Optionee's designated beneficiary, provided such beneficiary has been designated prior to Optionee's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Optionee, then such Option may be exercised by the personal representative of the Optionee's

estate or by the person(s) to whom the Option is transferred pursuant to the Optionee's will or in accordance with the laws of descent and distribution. If, at the time of death, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

- (e) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares an Option previously granted based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.
 - (f) Code Section 162(m) Provisions.
 - (i) Notwithstanding any other provision of the Plan, if the Compensation Committee of the Board (the "Compensation Committee") determines at the time an Option is granted to an Optionee that such Optionee is, or may be as of the end of the tax year for which the Company would claim a tax deduction in connection with such Option, a "covered employee" within the meaning of Section 162(m)(3) of the Code, and to the extent the Compensation Committee considers it desirable for compensation delivered pursuant to such Option to be eligible to qualify for an exemption from the limit on tax deductibility of compensation under Section 162(m) of the Code, then the Compensation Committee may provide that this Section 10(f) is applicable to such Option under such terms as the Compensation Committee shall determine.
 - (ii) If an Option is subject to this Section 10(f), then vesting of the Option and issuance of Optioned Stock pursuant thereto, as applicable, may be subject to satisfaction of one, or more than one, objective performance targets. In such event, the Compensation Committee shall determine the performance targets that will be applied with respect to each Option subject to this Section 10(f) at the time of grant, but in no event later than 90 days after the commencement of the period of service to which the performance target(s) relate. The performance criteria applicable to Options subject to this Section 10(f) will be one or more of the following criteria: (A) stock price; (B) market share; (C) sales; (D) earnings per share, core earnings per share or variations thereof; (E) return on equity; (F) costs; (G) revenue; (H) cash to cash cycle; (I) days payables outstanding; (J) days of supply; (K) days sales outstanding; (L) cash flow; (M) operating income; (N) profit after tax; (O) profit before tax; (P) return on assets; (Q) return on sales; (R) inventory turns; (S) invested capital; (T) net operating profit after tax; (U) return on invested capital; (V) total shareholder return; (W) earnings; (X) return on equity or average shareowners' equity; (Y) total shareowner return; (Z) return on capital; (AA) return on investment; (BB) income or net income; (CC) operating income or net operating income; (DD) operating profit or net operating profit; (EE) operating margin; (FF) return on operating revenue; (GG) contract awards or backlog; (HH) overhead or other expense reduction; (II) growth in shareowner value relative to the moving average of the S&P 500 Index or a peer group index; (JJ) credit rating; (KK) strategic plan development and implementation; (LL) net cash provided by operating activities; (MM) gross margin; (NN) economic value added; (OO) customer satisfaction; (PP) financial return ratios; (QQ) market performance; (RR) production capacity; (SS) production volume; (TT) achievement of photovoltaic conversion efficiency; (UU) production yields; (VV) EBITDA; (WW) EBIT; (XX) market capitalization; (YY) liquidity; (ZZ) strategic partnerships; (AAA) production agreements and relationships; and (BBB) product certifications.
 - (iii) Notwithstanding any contrary provision of the Plan, the Compensation Committee may not increase the number of Optioned Stock pursuant to any Option subject to this Section 10(f), nor may it waive the achievement of any performance target established pursuant to this Section 10(f).
 - (iv) The Compensation Committee shall have the power to impose such other restrictions on Options subject to this Section 10(f) as it may deem necessary or appropriate to ensure that such

Option satisfies all requirements for "performance-based compensation" within the meaning of Code section 162(m)(4)(C) of the Code, the regulations promulgated thereunder, and any successors thereto.

- 11. *Limited Transferability of Options*. Unless determined otherwise by the Administrator, Options may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or the laws of descent and distribution, and may be exercised during the lifetime of the Optionee, only by the Optionee. If the Administrator in its sole discretion makes an Option transferable, such Option may only be transferred (i) by will, (ii) by the laws of descent and distribution, or (iii) as permitted by Rule 701 of the Securities Act of 1933, as amended.
- 12. Adjustments Upon Changes in Capitalization, Dissolution, Merger or Asset Sale.
- (a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Options have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option .
- (b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Optionee as soon as practicable prior to the effective date of such proposed transaction. The Administrator in its discretion may provide for an Optionee to have the right to exercise his or her Option until ten (10) days prior to such transaction as to all of the Optioned Stock covered thereby, including Shares as to which the Option would not otherwise be exercisable. In addition, the Administrator may provide that any Company repurchase option applicable to any Shares purchased upon exercise of an Option shall lapse as to all such Shares, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Option will terminate immediately prior to the consummation of such proposed action.
- (c) Change of Control. Unless otherwise stated in the Option Agreement, in the event of a Change of Control, then as to each Optionee, fifty percent (50%) of any outstanding Optioned Stock that has not yet vested at the time such Change of Control occurs shall become vested and exercisable. In such event, the Administrator shall notify the Optionee in writing or electronically at least fifteen (15) calendar days prior to the Change of Control of the exercisability of the Option. The portion of the Option that is then vested (including 50% of the unvested portion that becomes vested due to the Change of Control) shall be exercisable by the Optionee for a period of fifteen (15) calendar days from the date of such notice, and the Option shall terminate upon the expiration of such period. Notwithstanding the foregoing and anything else in this Plan, and unless otherwise stated in the Option Agreement, if the employment of an Optionee is terminated by the Company or its successor in connection with a Change of Control (as determined in the sole and absolute discretion of the Committee), then the Optionee's entire Option shall become vested and exercisable upon termination

of employment. For purposes of this paragraph, a "Change of Control" means the happening of any of the following:

- (i) any one person, or more than one person acting as a group, acquires ownership of stock of the Company that, together with stock held by such person or group, possesses more than 50 percent of the total fair market value or total voting power of the stock of the Company; provided, however, that if any one person, or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the stock of the Company, the acquisition of additional stock by the same person or persons will not be considered a Change of Control. Notwithstanding the foregoing, an increase in the percentage of stock of the Company owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires its stock in exchange for property will be treated as an acquisition of stock of the Company for purposes of this subsection (i);
- (ii) during any period of 12 consecutive months, individuals who at the beginning of such period constituted the Board (together with any new or replacement directors whose election by the Board, or whose nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then still in office who were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of the directors then in office; or
- (iii) any one person, or more than one person acting as a group, acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by the person or persons) assets from the Company, outside of the ordinary course of business, that have a gross fair market value equal to or more than 50 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), "gross fair market value" means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. Notwithstanding anything to the contrary in this Agreement, the following shall not be treated as a Change of Control under this subsection (iii): (A) a transfer of assets from the Company to a shareholder of the Company (determined immediately before the asset transfer); (B) a transfer of assets from the Company to an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company; (C) a transfer of assets from the Company to a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by a person described in (iii)(C) above.
- 13. *Date of Grant.* The date of grant of an Option shall be, for all purposes, the date on which the Administrator makes the determination granting such Option, or such other later date as is determined by the Administrator. Notice of the determination shall be provided to each Optionee within a reasonable time after the date of such grant.
- 14. Amendment and Termination of the Plan.
 - (a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.
- (b) Stockholder Approval. The Company shall obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.
- (c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Optionee, unless mutually agreed otherwise between the Optionee and the Administrator, which agreement must be in writing and signed by the Optionee and

the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Options granted under the Plan prior to the date of such termination.

- 15. Conditions Upon Issuance of Shares.
- (a) Legal Compliance. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.
- (b) *Investment Representations*. As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.
- 16. *Inability to Obtain Authority*. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.
- 17. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.
- 18. *Stockholder Approval.* The Plan shall be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval shall be obtained in the manner and to the degree required under Applicable Laws.
- 19. *Information to Optionees.* The Company shall provide, or make available, to each Optionee and to each individual who acquires Shares pursuant to the Plan, not less frequently than annually during the period such participant has one or more Options outstanding, and, in the case of an individual who acquires Shares pursuant to the Plan, during the period such individual owns such Shares, copies of annual financial statements. The Company shall not be required to provide such statements to key employees whose duties in connection with the Company assure their access to equivalent information.

ASCENT SOLAR TECHNOLOGIES, INC. SECOND AMENDED AND RESTATED 2005 STOCK OPTION PLAN STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Option Agreement.

I. NOTICE OF STOCK OPTION GRANT

«NAME»

The undersigned Optionee has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant:	
Vesting Commencement Date: (same as Date of Grant, if left blank)	
Exercise Price per Share:	
Total Number of Shares Granted:	
Type of Option:	Incentive Stock Option
	Nonstatutory Stock Option
Expiration Date: (10 years from Date of Grant, if left blank)	

Vesting Schedule:

One-third (1/3) of the Shares subject to the Option shall vest on each of the first, second and third anniversaries of the Vesting Commencement Date, subject to Optionee continuing as a Service Provider on such dates.

Termination Period:

This Option shall be exercisable for ninety (90) days after Optionee ceases to be a Service Provider. Upon Optionee's death or disability, this Option may be exercised for such longer period as provided in the Plan. In no event may Optionee exercise this Option after the Term/Expiration Date as provided above.

II. AGREEMENT

1. *Grant of Option.* The Plan Administrator of the Company hereby grants to the Optionee named in the Notice of Grant (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 14(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the \$100,000 rule of Code Section 422(d), this Option shall be

treated as a Nonstatutory Stock Option ("NSO").

2. Exercise of Option.

- (a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and with the applicable provisions of the Plan and this Option Agreement.
- (b) *Method of Exercise*. This Option shall be exercisable by delivery of an exercise notice in the form attached as **Exhibit A** (the "Exercise Notice") which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

- 3. *Method of Payment*. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:
 - (a) cash or check;
 - (b) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan;
 - (c) surrender of other Shares which, (i) in the case of Shares acquired from the Company, either directly or indirectly, have been owned by the Optionee for more than six (6) months on the date of surrender, and (ii) have a Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Exercised Shares; or
 - (d) any other form or manner endorsed in the Plan.
- 4. *Restrictions on Exercise*. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.
- 5. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.
- 6. *Term of Option*. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option.

7. Tax Obligations.

- (a) *Taxes.* Optionee acknowledges and agrees that Optionee is solely responsible for the satisfaction of all federal, state, local and foreign income and other tax arising from or applicable to the Option exercise and the acquisition or sale of the Optioned Stock. Optionee agrees that Optionee shall indemnify the Company for any liability, including attorneys' fees and expenses, accrued by the Company as a result of the Optionee's failure to satisfy those taxes.
- (b) Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Optionee herein is an ISO, and if Optionee sells or otherwise disposes of any of the Shares acquired

pursuant to the ISO on or before the later of (1) the date two (2) years after the Date of Grant, or (2) the date one year after the date of exercise, the Optionee shall immediately notify the Company in writing of such disposition.

- 8. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This agreement is governed by the internal substantive laws but not the choice of law rules of Colorado.
- 9. No Guarantee of Continued Service. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel and other advisors prior to executing this Option and fully understands all provisions of the Option. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

OPTIONEE:	ASCENT SOLAR TECHNOLOGIES, INC.
Signature	Ву
Print Name	Name
	Title
Residence Address	B-13

EXHIBIT A

EXERCISE NOTICE AND AGREEMENT

Ascent Solar Technologies, Inc. 8120 Shaffer Parkway Littleton, CO 80127

Attention: Stock Option Plan Administrator

Re: Exercise of Stock Option Pursuant to	to Second Ar	mended and Restated 2005 Stock Option Plan
Name of Optionee:		
Optionee's Address:		
Optionee's Social Security Number:		
Date of Option Agreement:		
Exercise Date:		
The Shares Purchased are Incentive Stock Options: (circle one)		Yes / No
Number of Shares Purchased Pursuant to this Notice::		
Exercise Price per Share:	\$	
Aggregate Exercise Price:	\$	
Amount of Payment Enclosed:	\$	

- 1. Exercise of Option. Pursuant to the Second Amended and Restated 2005 Stock Option Plan (the "Plan") of Ascent Solar Technologies, Inc., a Delaware corporation (the "Company") and the Stock Option Agreement ("Option Agreement") entered into as of the date set forth above between the undersigned Optionee and the Company, Optionee hereby elects, effective as of the date of this notice, to exercise Optionee's option to purchase the number of shares of common stock (the "Shares") of the Company indicated above.
 - 2. Payment. Enclosed is Optionee's payment in the amount indicated above, which is the full exercise price for the Shares.
- 3. Deemed Date of Exercise. The date of exercise shall be deemed to be the first date after which this Notice is filed with Company upon which Shares become eligible for issuance to Optionee under applicable state and federal laws and regulatory requirements.
- 4. Compliance with Laws. Optionee understands and acknowledges that the purchase and sale of the Shares may be subject to approval under the state and federal securities laws and other laws and, notwithstanding any other provision of the Option Agreement to the contrary, the

exercise of any rights to purchase Shares is expressly conditioned upon approval (if necessary) and compliance with all such laws.

B-14

- 5. Representations of Optionee. Optionee represents and warrants to the Company, as follows:
 - (a) Optionee has received, read, and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.
 - (b) The Options exercised herewith are exercisable only according to the schedule in the Option Agreement.
 - (c) Optionee is aware of the business affairs and financial condition of the Company and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares.
- 6. *Refusal to Transfer*. The Company shall not be required (a) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement, the Option Agreement, or the Plan or (b) to treat as owner of such Shares or to accord the right to vote or receive dividends to any purchaser or other transferree to whom such Shares shall have been so transferred.
- 7. *Tax Consultation*. Optionee understands that Optionee may suffer adverse tax consequences as a result of Optionee's purchase or disposition of the Shares. Optionee represents that Optionee is not relying on the Company for any tax advice.
- 8. *Entire Agreement*. The Plan and the Option Agreement are incorporated herein by reference. This Agreement, the Plan, and the Option Agreement constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof.

Submitted by: "OPTIONEE":	Accepted by: "COMPANY"
	Ascent Solar Technologies, Inc., a Delaware corporation
Signature	Ву
Print Name	Name
	Title
B-	15

C123456789

ADD 2
ADD 3

Electronic Voting Instructions

You can vote by Internet or telephone! Available 24 hours a day, 7 days a week!

Instead of mailing your proxy, you may choose one of the two voting methods outlined below to vote your proxy.

VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.

Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Central Time, on July 1, 2008.

[COMPUTER GRAPHIC]

Vote by Internet

Log on to the Internet and go to

www.investorvote.com/ASTI

Follow the steps outlined on the secured website.

[TELEPHONE GRAPHIC] Vote by telephone

Call toll free 1-800-652-VOTE (8683) within the United States, Canada & Puerto Rico any time on a touch tone telephone. There is **NO CHARGE** to you for the call.

Follow the instructions provided by the recorded message.

Using a <u>black ink</u> pen, mark your votes with an **X** as shown in this example. Please do not write outside the designated areas.

Annual Meeting Proxy Card

ADD 4

ADD 5

ADD 6

ý

123456 <u>C0123456789</u> 12345

IF YOU HAVE NOT VOTED VIA THE INTERNET \underline{OR} TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

[A] Proposals Board of Directors recommends a votaFOR each of the following nominees in Proposals 1 and 2 and FOR Proposals 3 and 4.

1. To elect two Class 1 directors, to serve until the 2009 annual meeting of stockholders and until their respective successors are duly elected and qualified:

For Withhold For Withhold 01 Dr. Amit Kumar o o o 02 Joel Porter o o

2. To elect two Class 3 directors, to serve until the 2011 annual meeting of stockholders and until their respective successors are duly elected and qualified:

		For	Withhold		For	Withhold
01	Einar Glomnes	o	o	02 Dr. Mohan Misra	o	o

For Against Abstain For Against Abstain

3. [B]	Non-Voting Ite	ck Plan.	o	0	o	4.	Amended and Restated 200 Stock Option Plan.	0	o	o
Cha	nge of Address	Please print ne	w address bel	ow.						
[C]	Authorized Sig	gnatures This	section must	be complet	ed for you	r vote to	be counted. Date and Sig	n Below		
		s name(s) appear n, please give fu		t owners sho	ould each s	ign. When	n signing as attorney, execute	or, administrato	r, corporate of	ficer, trustee,
Date	(mm/dd/yyyy)	Please print da	te below.	Sig box		Please ke	ep signature within the	Signature 2 box.	Please keep	signature within the
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 \lor IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. \lor

Proxy ASCENT SOLAR TECHNOLOGIES, INC.

8120 Shaffer Parkway Littleton, Colorado 80127

ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JULY 1, 2008

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Matthew Foster and Gary Gatchell, and each of them individually, the proxies of the undersigned, with power of substitution to each of them, to vote all shares of Ascent Solar Technologies, Inc., a Delaware corporation, which the undersigned is entitled to vote at the Annual Meeting of Stockholders of Ascent to be held on Tuesday, July 1, 2008, at 9:00 a.m., local time, at the Denver Marriott West, 1717 Denver West Boulevard, Golden, Colorado, and at any adjournment thereof (the "Annual Meeting"), upon matters properly coming before the meeting.

In their discretion, the proxies are authorized to vote upon such other business as may properly come before the annual meeting or any adjournments or postponements thereof.

UNLESS OTHERWISE DIRECTED, THIS PROXY WILL BE VOTED "FOR" THE ELECTION OF EACH OF THE DIRECTOR NOMINEES IN PROPOSALS 1 AND 2, "FOR" PROPOSALS 3 AND 4 AND AT THE DISCRETION OF YOUR PROXY ON ANY OTHER MATTER THAT MAY BE PROPERLY BROUGHT BEFORE THE ANNUAL MEETING.

Please date, sign and mail your proxy card in the envelope provided as soon as possible.

Continued and to be dated and signed on reverse side.

Using a <u>black ink</u> pen, mark your votes with an \mathbf{X} as shown in this example. Please do not write outside the designated areas.



Annual Meeting Proxy Card

PLEASE FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

- [A] Proposals Board of Directors recommends a voteFOR each of the following nominees in Proposals 1 and 2 and FOR Proposals 3 and 4.
- 1. To elect two Class 1 directors, to serve until the 2009 annual meeting of stockholders and until their respective successors are duly elected and qualified:

		For	Withhold		For	Withhold
01	Dr. Amit Kumar	0	О	02 Joel Porter	o	o

2. To elect two Class 3 directors, to serve until the 2011 annual meeting of stockholders and until their respective successors are duly elected and qualified:

		For	Withhold		For	Withhold
01	Einar Glomnes	o	o	02 Dr. Mohan Misra	o	o

		For	Against	Abstain			For	Against	Abstain
3.	To approve the 2008 Restricted Stock Plan.	0	o	o	4.	To approve the Second Amended and Restated 2005 Stock Option Plan	o	o	o

[B] Authorized Signatures This section must be completed for your vote to be counted. Date and Sign Below

Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

Date (mm/dd/yyyy) Please print date below. Signature 1 Please keep signature within the box. Signature 2 Please keep signature within the box.

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Proxy ASCENT SOLAR TECHNOLOGIES, INC.

8120 Shaffer Parkway Littleton, Colorado 80127

ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JULY 1, 2008

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Matthew Foster and Gary Gatchell, and each of them individually, the proxies of the undersigned, with power of substitution to each of them, to vote all shares of Ascent Solar Technologies, Inc., a Delaware corporation, which the undersigned is entitled to vote at the Annual Meeting of Stockholders of Ascent to be held on Tuesday, July 1, 2008, at 9:00 a.m., local time, at the Denver Marriott West, 1717 Denver West Boulevard, Golden, Colorado, and at any adjournment thereof (the "Annual Meeting"), upon matters properly coming before the meeting.

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Continued and to be dated and signed on reverse side.

QuickLinks

Your vote is very important to us.

VOTING AND RELATED MATTERS

EXECUTIVE OFFICERS AND DIRECTORS

BOARD OF DIRECTORS

EXECUTIVE COMPENSATION

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

CERTAIN TRANSACTIONS

PRINCIPAL ACCOUNTANT FEES AND SERVICES

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

PROPOSAL NOS. 1 AND NO. 2 ELECTION OF DIRECTORS

PROPOSAL NO. 3 APPROVAL OF 2008 RESTRICTED STOCK PLAN

PROPOSAL NO. 4 APPROVAL OF AMENDMENT AND RESTATEMENT OF 2005 STOCK OPTION PLAN

ANNUAL REPORT ON FORM 10-K

HOUSEHOLDING

STOCKHOLDER PROPOSALS

OTHER BUSINESS

Appendix A

Appendix B