Ascent Solar Technologies, Inc.
Form DEF 14A
April 25, 2014
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 14A
(RULE 14a-101)
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)
Filed by the Registrant ý Filed by a Party other than the Registrant ¨
Check the appropriate box:
¨ Preliminary Proxy Statement
¨ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
ý Definitive Proxy Statement
¨ Definitive Additional Materials
¨ Soliciting 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)
Payment of Filing Fee (Check the appropriate box):
ý No fee required.
¨ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
(1) Title of each class of securities to which transaction applies:
(2) Aggregate number of securities to which transaction applies:
(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 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:
¨ Fee paid previously with preliminary materials:
¨ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
(1) Amount Previously Paid:
(2) Form, Schedule or Registration Statement No.:
(3) Filing Party:
(4) Date Filed:

Table of Contents

April 25, 2014

Dear Stockholder:

You are cordially invited to attend the 2014 Annual Meeting of Stockholders of Ascent Solar Technologies, Inc. to be held on May 22, 2014. The meeting will be held at the office of Faegre Baker Daniels LLP, 1470 Walnut Street, Suite 300, Boulder, Colorado 80302, beginning at 2:00 p.m. Mountain Time. At this year's Annual Meeting, our stockholders will be asked to elect two Class 3 directors, to ratify the selection of Hein & Associates LLP as our independent registered public accounting firm, to conduct an advisory vote on the compensation of our executive officers, to approve an amendment to the Company's certificate of incorporation, to effect a reverse stock split of the Company's issued and outstanding common stock, to approve certain issuances of our common stock relating to our Series C preferred stock, and to approve an amendment and restatement of our 2008 Restricted Stock Plan that increases the number of shares authorized for issuance under that plan by 2,000,000 shares. Additional information about the Annual Meeting is given in the attached Notice of 2014 Annual Meeting of Stockholders and Proxy Statement.

Whether or not you plan to attend the Annual Meeting, we hope you will vote as soon as possible. Voting your proxy 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,

Victor Lee
President and Chief Executive Officer

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
12300 North Grant Street
Thornton, Colorado 80241
(720) 872-5000

NOTICE OF 2014 ANNUAL MEETING OF STOCKHOLDERS
May 22, 2014
at 2:00 p.m. Mountain Time

TO OUR STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that the 2014 Annual Meeting of Stockholders (the “Annual Meeting”) of Ascent Solar Technologies, Inc., a Delaware corporation, will be held on May 22, 2014, at 2:00 p.m. Mountain Time at the office of Faegre Baker Daniels LLP, 1470 Walnut Street, Suite 300, Boulder, Colorado 80302, for the following purposes, as more fully described in the Proxy Statement accompanying this notice:

1. ELECTION OF DIRECTORS. To elect two Class 3 directors to serve until the 2017 annual meeting of stockholders and their successors have been elected and qualified;
2. RATIFICATION OF AUDITORS. To ratify the Audit Committee’s appointment of Hein & Associates LLP as our independent registered public accounting firm for the year ending December 31, 2014.
3. NON-BINDING ADVISORY VOTE TO APPROVE EXECUTIVE COMPENSATION. To approve a non-binding resolution on the Company's compensation of its executive officers.
4. AUTHORIZATION FOR REVERSE STOCK SPLIT. To approve an amendment to the Company's certificate of incorporation (the "Certificate of Incorporation") to effect a reverse stock split of the Company's issued and outstanding common stock (the "Reverse Stock Split").
5. APPROVAL OF COMMON STOCK ISSUANCES. To approve the issuance by the Company, in connection with 1,000 authorized shares of the Company’s Series C Preferred Stock, of more than 20% of the Company’s issued and outstanding common stock at a price that may be less than the greater of book or market value of the Company’s common stock.
6. AMENDMENT AND RESTATEMENT OF 2008 RESTRICTED STOCK PLAN. To approve an amendment and restatement of the Company’s 2008 Restricted Stock Plan that increases the number of shares authorized for issuance under that plan by 2,000,000 shares;
7. ANY OTHER BUSINESS that may properly come before the Annual Meeting or any adjournments or postponements thereof.

Stockholders who owned shares of our common stock at the close of business on April 18, 2014 are entitled to receive notice of, attend and vote at the Annual Meeting and any adjournment or postponement thereof. A complete list of these stockholders will be available at our corporate offices listed above during regular business hours for the ten days prior to the Annual Meeting.

Your vote is important. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. If you received notice of how to access the proxy materials over the Internet, a proxy card was not sent to you, but you may vote by telephone or online. If you received a proxy card and other proxy materials by mail, you may vote by mailing a completed proxy card, by telephone or online. For specific voting instructions, please refer to the information provided in the following Proxy Statement, together with your proxy card or the voting instructions you receive by e-mail or that are provided via the Internet.

The Board of Directors recommends stockholders vote FOR the Class 3 director nominees and FOR Proposals 2, 3, 4, 5, and 6.

By Order of the Board of Directors

Table of Contents

Victor Lee
President and Chief Executive Officer
Thornton, Colorado
April 25, 2014
Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on May 22, 2014 — The Proxy Statement and our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 are available at www.ascentsolar.com.

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
12300 North Grant Street
Thornton, Colorado 80241
(720) 872-5000

PROXY STATEMENT

Your proxy is being solicited by the Board of Directors (the "Board") of Ascent Solar Technologies, Inc., a Delaware corporation, for use at the 2014 Annual Meeting of Stockholders (the "Annual Meeting") to be held at 2:00 p.m. Mountain Time on May 22, 2014, or at any adjournment or postponement thereof, for the purposes set forth in this Proxy Statement. The Annual Meeting will be held at the office of Faegre Baker Daniels LLP, 1470 Walnut Street, Suite 300, Boulder, Colorado 80302.

These proxy materials are first being provided on or about April 25, 2014 to all stockholders as of the record date, April 18, 2014. Stockholders who owned our common stock at the close of business on April 18, 2014 are entitled to receive notice of, attend and vote at the Annual Meeting. On the record date, there were 75,901,029 shares of our common stock outstanding.

This Proxy Statement is being furnished to you with a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 (the "Annual Report"), which was filed with the Securities and Exchange Commission (the "SEC") on March 28, 2014. We will provide, without charge, additional copies of our Annual Report upon request. Any exhibits listed in the Annual Report also will be furnished upon request at the actual expense we incur in furnishing such exhibit to you. Any such requests should be directed to our Corporate Secretary at our executive offices set forth above.

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

Table of Contents

TABLE OF CONTENTS

VOTING AND RELATED MATTERS	1
EXECUTIVE OFFICERS AND DIRECTORS	3
CORPORATE GOVERNANCE	5
EXECUTIVE COMPENSATION	9
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	10
RELATED PARTY TRANSACTIONS	11
SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE	13
PRINCIPAL ACCOUNTANTS	13
REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS	14
PROPOSAL NO. 1: ELECTION OF DIRECTORS	14
PROPOSAL NO. 2: RATIFICATION OF APPOINTMENT OF HEIN & ASSOCIATES LLP	14
PROPOSAL NO. 3: NON-BINDING ADVISORY VOTE ON EXECUTIVE COMPENSATION	15
PROPOSAL NO. 4: AUTHORIZATION FOR REVERSE STOCK SPLIT	15
PROPOSAL NO. 5: APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK PURSUANT TO THE COMPANY'S AUTHORIZED SHARES OF SERIES C PREFERRED STOCK.	19
PROPOSAL NO. 6: APPROVAL OF AMENDMENT AND RESTATEMENT OF THE COMPANY'S 2008 RESTRICTED STOCK PLAN	23
ANNUAL REPORT ON FORM 10-K	26
STOCKHOLDER PROPOSALS	26
OTHER BUSINESS	26
ANNEX A: CERTIFICATE OF AMENDMENT TO AMENDED AND RESTATED CERTIFICATE OF INCORPORATION	27
ANNEX B: FOURTH AMENDED AND RESTATED RESTRICTED STOCK PLAN	28

Table of Contents

VOTING AND RELATED MATTERS

Voting Procedures

As a stockholder of Ascent Solar, you have a right to vote on certain business matters affecting us. The proposals that will be presented at the Annual Meeting and upon which you are being asked to vote are discussed below. Each share of our common stock you owned as of the record date entitles you to one vote on each proposal presented at the Annual Meeting.

Methods of Voting

You may vote over the Internet, by telephone, by mail or in person at the Annual Meeting.

Voting over the Internet. You can vote via the Internet. The website address for Internet voting and the instructions for voting are provided on your Notice or proxy card. You will need to use the control number appearing on your Notice or proxy card to vote via the Internet. If you vote via the Internet you do not need to vote by telephone or return a proxy card.

Voting by Telephone. You can vote by telephone by calling the toll-free telephone number provided on your proxy card. You will need to use the control number appearing on your Notice or proxy card to vote by telephone. If you vote by telephone you do not need to vote over the Internet or return a proxy card.

Voting by Mail. If you received a printed proxy card, you can vote by marking, dating and signing it, and returning it in the postage-paid envelope provided. You may also download the form of proxy card off the Internet and mail it to us. Please promptly mail your proxy card to ensure that it is received prior to the closing of the polls at the Annual Meeting.

Voting in Person at the Meeting. If you attend the Annual Meeting and plan to vote in person, we will provide you with a ballot at the Annual Meeting. If your shares are registered directly in your name, you are considered the stockholder of record, and you have the right to vote in person at the Annual Meeting. If your shares are held in the name of your broker or other nominee, you are considered the beneficial owner of shares held in street name. As a beneficial owner, if you wish to vote at the Annual Meeting, you will need to bring to the Annual Meeting a legal proxy from your broker or other nominee authorizing you to vote those shares.

Revoking Your Proxy

You may revoke your proxy at any time before it is voted at the Annual Meeting. To do this, you must:

- enter a new vote over the Internet or by telephone, or by signing and returning a replacement proxy card;
- provide written notice by May 22, 2014 of the revocation to our Corporate Secretary at our principal executive offices, which are located at 12300 North Grant Street, Thornton, Colorado 80241; or
- attend the Annual Meeting and vote in person.

Quorum and Voting Requirements

Stockholders of record at the close of business on April 18, 2014 are entitled to receive notice and vote at the meeting. On the record date, there were 75,901,029 issued and outstanding shares of our common stock. Each holder of our 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 outstanding 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 having voting power present in person or by proxy will be required to elect each director nominee;

(2) the affirmative vote of a majority of the shares having voting power present in person or by proxy will be required to ratify the appointment of Hein & Associates LLP as our independent registered public accounting firm for the year ending December 31, 2014;

(3) the affirmative vote of the holders of a majority of the outstanding shares of Common Stock will be required to approve the authorization of the Board of Directors to implement a Reverse Stock Split;

(4) the affirmative vote of a majority of the votes cast will be required to approve the issuance by the Company, in accordance with 1,000 authorized shares of the Company's Series C preferred stock, of more than 20% of the Company’s issued and outstanding common stock at a price that may be less than the greater of book or market

value of the Company's common stock;

1

Table of Contents

(5) the affirmative vote of a majority of the shares having voting power present in person or by proxy will be required to approve the amendment and restatement of the 2008 Restricted Stock Plan (the "Restricted Stock Plan") that increases the number of shares authorized for issuance under that plan by 2,000,000 shares; and

(6) unless otherwise required by our Second Amended and Restated Bylaws (the “Bylaws”) or by applicable law, the affirmative vote of a majority of the shares present having voting power 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.

The vote on Proposal 3 is a non-binding advisory vote. The Board of Directors will consider our executive officer compensation to have been approved by stockholders if Proposal 3 receives more votes “For” than “Against.”

Votes cast by proxy or in person at the meeting will be tabulated by the election inspectors appointed for the meeting. Such inspectors will also 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 your shares are held in street name and you do not instruct your broker on how to vote your shares, your brokerage firm, in its discretion, may either leave your shares unvoted or vote your shares on routine matters. The election of directors, the advisory vote to approve executive compensation, the reverse stock split proposal, the proposal to approve the issuance of shares pursuant to our Series C preferred stock, and the proposal to amend and restate the Restricted Stock Plan are considered non-routine matters. Consequently, without your voting instructions, your brokerage firm cannot vote your shares on these proposals. These unvoted shares, called “broker non-votes,” refer to shares held by brokers who have not received voting instructions from their clients and who do not have discretionary authority to vote on non-routine matters. The proposal to ratify the appointment of Hein & Associates LLP as our independent registered public accounting firm for the current fiscal year is considered a routine matter. To the extent your brokerage firm votes your shares on your behalf on this proposal, your shares also will be counted as present for the purpose of determining a quorum.

Abstentions shall have no effect on the outcome of Proposal 5 (approval of issuance of common shares pursuant to our Series C preferred stock). Abstentions shall have the same effect as a vote against Proposals 1 (election of directors), 2 (approval of auditors), 3 (advisory vote on executive compensation), 4 (approval of reverse stock split), and 6 (approval of amendment to restricted stock plan).

Broker non-votes shall have the same effect as a vote against Proposal 4 (approval of reverse stock split). Broker non-votes shall have no effect on the outcome of Proposals 1 (election of directors), 2 (approval of auditors), 3 (advisory vote on executive compensation), 5 (approval of common shares pursuant to our Series C preferred stock), and 6 (approval of amendment to restricted stock plan).

Voting of Proxies

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

(1) “for” the election of the director nominees set forth in this Proxy Statement;

(2) “for” the ratification of the appointment of Hein & Associates LLP as our independent registered public accounting firm for the year ending December 31, 2014;

(3) "for" the approval, on an advisory basis, of the compensation of our executive officers;

(4) "for" the authorization of the Board of Directors to implement a Reverse Stock Split.

(5) "for" the issuance by the Company, in accordance with 1,000 authorized shares of Series C preferred stock, of more than 20% of the Company’s issued and outstanding common stock at a price that may be less than the greater

of book or market value of the Company's common stock;

(6) "for" the amendment and restatement of the 2008 Restricted Stock Plan that increases the number of shares authorized for issuance under that plan by 2,000,000 shares; and

(7) at the discretion of your proxies on any other matter that may be properly brought before the Annual Meeting.

Table of Contents

If your shares are held in street name and you do not instruct your broker on how to vote your shares, your brokerage firm, in its discretion, may either leave your shares unvoted or vote your shares on routine matters, which include the ratification of our independent registered public accounting firm.

Voting Confidentiality

Proxies, ballots and voting tabulations are handled on a confidential basis to protect your voting privacy. This information will not be disclosed, except as required by law.

Voting Results

Voting results will be announced at the Annual Meeting and published in a Form 8-K to be filed within four (4) business days after the Annual Meeting.

Householding of Proxy Materials

In a further effort to reduce printing costs and postage fees, we have adopted a practice approved by the SEC called "householding." Under this practice, stockholders who have the same address and last name and do not participate in electronic delivery of proxy materials will receive only one copy of our proxy materials, unless one or more of these stockholders notifies us that he or she wishes to continue receiving individual copies.

If: (1) you share an address with another stockholder and received only one set of proxy materials, and would like to request a separate paper copy of these materials; or (2) you share an address with another stockholder and in the future together you would like to receive only a single paper copy of these materials, please notify our Corporate Secretary by mail at 12300 North Grant Street, Thornton, Colorado 80241.

Proxy 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, or by mail, facsimile, telephone, messenger or via the Internet, without additional compensation.

Driving Directions to the Annual Meeting

The office of Faegre Baker Daniels LLP, located at 1470 Walnut Street, Suite 300, Boulder, Colorado 80302, is approximately 43 miles from Denver International Airport. From the Airport, take Pena Boulevard to Exit 6B C-470 West. Continue on C-470 West to Highway 36 West. Turn left onto Canyon Boulevard, right on 13th Street and right on Walnut Street.

EXECUTIVE OFFICERS AND DIRECTORS

Our executive officers, continuing directors and director nominees, their ages and positions with us as of April 18, 2014, are as follows:

Name	Age	Position
Victor Lee	46	President and Chief Executive Officer, Director
William M. Gregorak	58	Vice President and Chief Financial Officer
Amit Kumar, Ph.D.	49	Chairman of the Board, Director
Kim J. Huntley	59	Director
G. Thomas Marsh	70	Director
Xu Biao	44	Director

Victor Lee (Lee Kong Hian) has been the President and Chief Executive Officer of Ascent Solar Technologies Inc. since February 1, 2012 and as a member of our Board since November 2011. Mr. Victor Lee is the managing director of Tertius Financial Group Pte Ltd, a boutique corporate advisory and private investment firm he founded in February 2009. He brings more than 17 years of experience in corporate banking, real estate finance and investment management, and corporate advisory services at leading worldwide financial institutions. Mr. Victor Lee began his career at Citibank N.A., in 1993, handling small- and medium-sized corporate finance and progressed to a vice president position in the International Personal Banking Division. In 1999 he moved to Deutsche Bank AG as Vice President and in 2004 was promoted to managing director Singapore Market

3

Table of Contents

Head in the Private Wealth Management Division, where he was responsible for management of approximately $1 Billion in assets. From 2007 until 2009, he was with Morgan Stanley Private Wealth Management, most recently as executive director and head of Singapore/Malaysia markets. Mr. Victor Lee holds a Bachelor's degree in Accounting from the University of Wisconsin and a Master's in Wealth Management from the Singapore Management University. Mr. Victor Lee is a designated board representative of TFG Radiant pursuant to the Amended and Restated Stockholders Agreement between us and TFG Radiant.

William M. Gregorak has served as our Vice President, Chief Financial Officer, and Secretary since September 2013. Prior to joining Ascent Solar, Mr. Gregorak served as Vice President and CFO of Thule Organization Solutions, a consumer products manufacturer of personal electronics cases sold under both the Case Logic® and Thule brands®, from 2008-2013; overseeing organizations in the United States, Europe and Hong Kong. Before Thule, Mr. Gregorak was the Vice President and corporate controller for Advanced Energy and Xilinx Corporations, both of which currently trade on the NASDAQ. Advanced Energy is a manufacturer of semiconductor equipment with operations in both the United States and China, while Xilinx is a manufacturer of semiconductors with operations spanning the United States, Ireland and Singapore. Prior to 2000, Mr. Gregorak spent 17 years with Hewlett-Packard in various financial and operational capacities. Mr. Gregorak holds a Bachelor's degree in Economics from the University of Washington.

Amit Kumar, Ph.D. has served on our Board of Directors since June 2007 and as Chairman since January 2011. Dr. Kumar is currently President and CEO of Geo Fossil Fuels, LLC, a privately held Energy company. From September 2001 until June 30, 2010, Dr. Kumar was President and CEO of CombiMatrix Corporation (NASDAQ: CBMX). Previously, Dr. Kumar was Vice President of Life Sciences of Acacia Research Corp (NASDAQ: ACTG). From January 1999 to February 2000, Dr. Kumar was the founding President and Chief Executive Officer of Signature BioSciences, Inc., a life science company developing technology for advanced research in genomics, proteomics and drug discovery. From January 1998 to December 1999, Dr. Kumar was an Entrepreneur in Residence with Oak Investment Partners, a venture capital firm. From October 1996 to January 1998, Dr. Kumar was a Senior Manager at IDEXX Laboratories, Inc., a biotechnology company. From October 1993 to September 1996, Dr. Kumar was Head of Research & Development for Idetek Corporation, which was later acquired by IDEXX Laboratories, Inc.

Dr. Kumar received his B.S. degree in chemistry from Occidental College. After joint studies at Stanford University and the California Institute of Technology, he received his Ph.D. in Chemistry from Caltech in 1991. He also completed a post-doctoral fellowship at Harvard University in 1993. Dr. Kumar has authored and co-authored over 40 peer-reviewed publications and holds a dozen patents. Dr. Kumar brings significant leadership experience as well as experience in photovoltaic research including work on energy conversion using cells made from silicon (single crystal, polycrystalline, and amorphous), gallium arsenide, indium phosphide, metal oxides and other materials. Dr. Kumar is a member of the Board of Directors of CopyTele, Inc. (OTC:COPY) and Aeolus Pharmaceuticals (OTC: AOLS).

Kim J. Huntley has served on our Board of Directors since June 2010. Mr. Huntley served in the Defense Logistics Agency (DLA) of the U.S. Department of Defense (DOD) for more than 32 years in positions of increasing responsibility. Most recently, from July 2008 until his retirement in January 2010, Mr. Huntley served as Director of the Defense Energy Support Center (DESC) in Fort Belvoir, Virginia. The DESC operates as part of the DLA and is responsible for providing energy solutions to the DOD and federal civilian agencies. As Director of the DESC, Mr. Huntley was the principal executive officer in charge of approximately 1,100 employees worldwide and over $25 billion in annual appropriations involving energy infrastructure and products. From March 2006 and immediately prior to becoming Director of the DESC, Mr. Huntley served in leadership roles involving supply chain management, including Deputy Commander for the Defense Supply Center in Richmond, Virginia and Columbus, Ohio, and as Executive Director of Customer Support and Readiness. From December 2003 to March 2006, Mr. Huntley served as Chief of the Customer Support Office in Fort Belvoir, Virginia. Mr. Huntley chaired the Inter Agency Working Group for Alternative Fuels and Renewable Energy from January 2009 to January 2010. The Group included senior energy representatives from DOD, DOE, EPA, and other major Federal Agencies. Mr. Huntley holds a B.A. degree in Economics from Golden Gate University and attended post-graduate courses in economics at California State

University, Hayward. Mr. Huntley brings extensive supply chain, budget and defense industry experience to our Board.

G. Thomas Marsh has served on our Board of Directors since June 2010. In June 2006, Mr. Marsh retired as Executive Vice President of Lockheed Martin Space Systems Company, a subsidiary of Lockheed Martin Corporation. Lockheed Martin Space Systems designs, develops, tests, manufactures and operates advanced-technology systems, including human space flight systems, satellites and instruments, space observatories and interplanetary spacecraft, laser radar, fleet ballistic missiles, and missile defense systems. From 1969 until its merger in 1995 to form Lockheed Martin Corporation, Mr. Marsh worked at Martin Marietta Corporation, most recently in the position of President, Manned Space Systems. After 1995, he held positions of increasing responsibility within Lockheed Martin Corporation, including serving as President and General Manager of the Missiles and Space Operations business unit from 2002 until his appointment as Executive Vice President of Lockheed Martin Space Systems in 2003. Mr. Marsh was responsible for business operations and the activities of approximately 18,000 Space Systems employees. Mr. Marsh holds a B.S. degree in Electrical Engineering from the University of New Mexico, an M.B.A.

Table of Contents

from the University of Colorado, and attended the Massachusetts Institute of Technology's Sloan School of Management. Mr. Marsh brings a background in executive management and deep experience with the space and defense industries to our Board.

Xu Biao (Winston Xu) has served on our Board of Directors since April 2012. Mr. Xu currently serves as the Chairman of Radiant Group which he founded in 1997, and as the Chairman of TFG Radiant Investment Group Ltd., a joint venture between Radiant Group and Tertius Financial Group, a private investment firm based in Singapore. Mr. Xu has more than 15 years of experience with investments and operations for a broad spectrum of business start-ups, developments, turnarounds and private equity investments. As a fellow Chartered Institute of Building ("CIOB") member, Mr. Xu is an industry expert in the areas of metallic roofing design and construction, building materials, manufacturing, and international trading. Mr. Xu is a self-made entrepreneur and has businesses footprints spanning the world. He started his career in 1995 as a project manager for Shenzhen Nanli Decorate Construction Company where he designed and developed over thirty types of profiles and systems and is the owner of such intellectual property. He is a certified engineer in Construction Management from China National Institute of Engineers. He holds a Bachelor of Science degree in Industrial Design from ZhongNan Industrial University, and a MBA from QingHua University. Mr. Xu is a designated board representative of TFG Radiant pursuant to the Amended and Restated Stockholders Agreement between us and TFG Radiant.

CORPORATE GOVERNANCE

Overview

Our Bylaws provide that the size of our Board of Directors is to be determined from time to time by resolution of the Board of Directors, but shall consist of at least two and no more than nine members. Our Board of Directors currently consists of five members. Following the annual meeting, the Board of Directors will consist of five members. The Board has determined that the following directors are "independent" as required by the listing standards of the NASDAQ Stock Market and by our corporate governance guidelines: Dr. Kumar, Mr. Huntley and Mr. Marsh.

Our Certificate of Incorporation provides that the Board of Directors will be divided into three classes. Our Class 1 director is Dr. Amit Kumar. Our Class 2 directors are Kim J. Huntley and G. Thomas Marsh. Our Class 3 directors are Victor Lee and Xu Biao. The terms of Messrs. Lee and Xu expire at the Annual Meeting. Upon the recommendation of the Nominating and Governance Committee, the Board has nominated Messrs. Lee and Xu as the Class 3 director nominees.

Board Leadership Structure and Role in Risk Oversight

We currently separate the roles of Chairman of the Board and Chief Executive Officer. We believe that Dr. Kumar possesses the strategic, technical and industry knowledge and expertise to serve as our Chairman. As President and Chief Executive Officer, Mr. Victor Lee is responsible for day-to-day oversight of our operations and personnel. Notwithstanding the foregoing, our Board does not have a formal policy regarding separation of the Chairman and Chief Executive Officer roles, and the Board may in the future decide to implement such a policy if it deems it in the best interests of us and our stockholders. The Board does not have a lead independent director.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including credit risk, interest rate risk, liquidity risk, operational risk, strategic risk and reputation risk. Management is responsible for the day-to-day management of risks we face, while the Board, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, the Board of Directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed. To do this, the Chairman of the Board meets regularly with management to discuss strategy and the risks we face. In addition, the Audit Committee regularly monitors our enterprise risk, including financial risks, through reports from management. Senior management attends the Board meetings and is available to address any questions or concerns raised by the Board on risk management and any other matters. The Chairman of the Board and independent members of the Board work together to provide strong, independent oversight of our management and affairs through the Board's standing committees and, when necessary, executive sessions of the independent directors.

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. The charters of the Audit Committee, the Compensation Committee, and the Nominating and Governance Committee can be found on our website www.ascentsolar.com.

Table of Contents

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;
- reviewing and monitoring the enterprise risk management process;
- 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; and
- preparing the report that the SEC requires in our annual proxy statement.

Our Audit Committee is comprised of Mr. Huntley, Dr. Kumar and Mr. Marsh. Mr. Huntley 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. Huntley qualifies as an “audit committee financial expert,” as defined by the rules of the SEC.

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.

The Compensation Committee reviews all components of compensation including base salary, bonus, equity compensation, benefits and other perquisites. In addition to reviewing competitive market values, the Compensation Committee also examines the total compensation mix, pay-for-performance relationship and how all elements, in the aggregate, comprise the executives’ total compensation package. The CEO makes recommendations to the Compensation Committee from time to time regarding the appropriate mix and level of compensation for other officers. Those recommendations consider the objectives of our compensation philosophy and the range of compensation programs authorized by the Compensation Committee. The Compensation Committee may determine director compensation by reviewing peer group data. Although the Compensation Committee has the authority to retain outside third parties, it does not currently utilize any outside consultants. The Compensation Committee may delegate certain of its responsibilities, as it deems appropriate, to other committees or officers.

Our Compensation Committee is comprised of Mr. Marsh, Mr. Huntley and Dr. Kumar. Mr. Marsh 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 Dr. Kumar, Mr. Huntley, and Mr. Marsh. 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 in accordance with our Nominating and Governance Committee Charter:

- 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 us and our constituents;

Table of Contents

- willingness and ability to devote the time and effort required to effectively fulfill the duties and responsibilities related to the 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 our 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 us and our constituents; and
- willingness to act in the best interests of us and our 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:

- 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 who follow the nomination procedures in our bylaws. The Nominating and Governance Committee does not have a formal policy with respect to diversity; however, as noted above, the Board and the Nominating and Governance Committee believe that it is essential that Board members represent diverse viewpoints.

Number of Meetings

The Board held a total of 6 meetings in 2013. Our Audit Committee held 8 meetings, our Compensation Committee held 4 meetings, and our Nominating and Governance Committee held 2 meetings in 2013. With the exception of Winston Xu, each 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.

Board Member Attendance at Annual Stockholder Meetings

Although we do not have a formal policy regarding director attendance at annual stockholder meetings, directors are encouraged to attend these annual meetings absent extenuating circumstances. Our 2013 annual meeting was attended by all five directors serving at the time.

Stockholder Nominations

In accordance with our Bylaws, a stockholder wishing to nominate a director for election at an annual or special meeting of stockholders must timely submit a written proposal of nomination to us at our executive offices. To be timely, a written proposal of nomination for an annual meeting of stockholders must be received at least 90 calendar days but no more than 120 calendar days before the first anniversary of the date on which we held our annual meeting of stockholders in the immediately preceding year; provided, however, that in the event that the date of the annual meeting is advanced or delayed more than 30 calendar days from the anniversary of the annual meeting of stockholders in the immediately preceding year, the written proposal must be received: (i) at least 90 calendar days but no more than 120 calendar days prior to the date of the annual meeting; or (ii) no more than 10 days after the date we first publicly announce the date of the annual meeting. A written proposal of nomination for a special meeting of stockholders must be received no earlier than 120 calendar days prior to the date of the special meeting nor any later than the later of: (i) 90 calendar days prior to the date of the special meeting; and (ii) 10 days after the date we first

publicly announce the date of the special meeting.

Each written proposal for a nominee must contain: (i) the name, age, business address and telephone number, and residence address and telephone number of the nominee; (ii) the current principal occupation or employment of each nominee, and the principal occupation or employment of each nominee for the prior ten (10) years; (iii) a complete list of companies, whether publicly traded or privately held, on which the nominee serves (or, during any of the prior ten (10) years, has served) as a member

Table of Contents

of the board of directors; (iv) the number of shares of our common stock that are owned of record and beneficially by each nominee; (v) a statement whether the nominee, if elected, intends to tender, promptly following such person's failure to receive the required vote for election or reelection at the next meeting at which the nominee would face election or reelection, an irrevocable resignation effective upon acceptance of such resignation by the Board; (vi) a completed and signed questionnaire, representation and agreement relating to voting agreements or commitments to which the nominee is a party; (vii) other information concerning the nominee that would be required in a proxy statement soliciting the nominee's election; and (viii) information about, and representations from, the stockholder making the nomination.

A stockholder interested in submitting a nominee for election to the Board of Directors should refer to our Bylaws for additional requirements. Upon receipt of a written proposal of nomination meeting these requirements, the Nominating and Governance Committee of the Board will evaluate the nominee in accordance with its charter and the characteristics listed above.

Director Compensation

In 2013, our independent directors each received an annual cash retainer of $20,000 and restricted stock units valued at $35,000 based on the closing price of our common stock on December 31, 2012. In addition, an independent director received: (1) for serving as a Board committee member, restricted stock unit awards valued at $10,000 based on the closing price of our common stock as of December 31, 2012; (2) for serving as a committee chairman, restricted stock unit awards valued at $20,000 based on the closing price of our common stock on December 31, 2012; and (3) for serving as chairman of the Board, additional cash compensation of $100,000 and restricted stock unit awards valued at $40,000 based on the closing price of our common stock on December 31, 2012.

The following Director Compensation Table summarizes the compensation of each of our non-employee directors for services rendered to us during the year ended December 31, 2013:

2013 Director Compensation Table

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	All Other Comp ($)	Total ($)
Amit Kumar	120,000	114,998	—	234,998
Kim J. Huntley	20,000	74,998	—	94,998
G. Thomas Marsh	20,000	74,998	—	94,998
Victor Lee	—	—	—	—
Xu Biao	—	—	—	—

(1) Represents the aggregate grant date fair value of restricted stock unit awards computed in accordance with FASB ASC Topic 718 for awards of stock granted during the year ended December 31, 2013.

In addition to the fees listed above, we reimburse the directors for travel expenses submitted to us related to their attendance at 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 current report on Form 8-K.

Communication with the Board of Directors

Stockholders may communicate with the Board by sending correspondence to our Chairman, c/o the Corporate Secretary, at our corporate address on the cover of this Proxy Statement. 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.

Table of Contents

EXECUTIVE COMPENSATION

Compensation of Executive Officers in 2013

The following Summary Compensation Table sets forth certain information regarding the compensation of our principal executive officer and former chief financial officer for services rendered in all capacities to us during the years ended December 31, 2013 and 2012.

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)(1)	Option Awards ($)(2)	All Other Comp($)	Total ($)
Victor Lee—Chief Executive Officer(3)	2013	—	—	—	95,660	—	95,660
	2012	—	—	—	—	—	—
Gary Gatchell—Former Chief Financial Officer(4)	2013	148,096		—	23,915	—	172,011
	2012	204,231	50,000			—	254,231

(1) Represents the aggregate grant date fair value computed in accordance with FASB ASC Topic 718 for awards of stock awards granted during the years ended December 31, 2013 and 2012.

(2) Represents the aggregate grant date fair value computed in accordance with FASB ASC Topic 718 for options granted during the years ended December 31, 2013 and 2012.

(3) Mr. Lee became our CEO in February 2012. Mr. Lee agreed at that time to serve as CEO without any cash compensation. Mr. Lee is reimbursed for travel expenses in accordance with the Company's expense reimbursement policies. As described below, we entered into an employment agreement with Mr. Lee effective March 31, 2014.

(4) Gary Gatchell voluntarily resigned as our Chief Financial Officer on August 30, 2013.

Executive Employment Agreements

As of December 31, 2013, we did not have any executive employment agreements.

On April 4, 2014, we entered into an employment agreement with Mr. Lee. The employment agreement provides that Mr. Lee will receive an annual base salary of $300,000, subject to annual adjustments as determined by our board. Mr. Lee will also be eligible for an annual bonus of up to 100% of his base salary as determined at the sole discretion of our board or compensation committee. Under this agreement, if the Company terminates Mr. Lee without cause, Mr. Lee is entitled to receive twelve months of base salary from the date of termination. In addition, if Mr. Lee is terminated without Cause, an additional portion of his stock options will become vested. In addition, the employment agreement provides that Mr. Lee is eligible to participate in the Company’s standard benefit plans and programs.

As provided in the employment agreement, Mr. Lee was granted stock options to purchase 200,000 shares of the Company’s common stock. These options vest in four equal annual installments on the first, second, third and fourth anniversaries of the employment agreement date, with an exercise price of $0.55 per share. These options expire on April 4, 2024.

The following table sets forth information concerning the outstanding equity awards granted to the named executive officers as of December 31, 2013.

Outstanding Equity Awards at Fiscal Year-End 2013

Table of Contents

Name	Option Awards Number of Securities Underlying Unexercised Options(#) Exercisable	Unexercisable	Option Exercise Price($/sh)	Option Expiration Date	Stock Awards Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested
Victor Lee(1)	—	200,000	$0.65	3/1/2023	—	—
Gary Gatchell(2)	—	—	$—		—	—

Vesting dates of securities underlying unexercised options and stock awards not yet vested as of December 31, 2013:

(1) $0.65 options—100,000 vesting on 3/01/14 and 100,000 vesting on 3/01/15
(2) Gary Gatchell voluntarily resigned as our Chief Financial Officer on August 30, 2013.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows information regarding the beneficial ownership of our common stock by our directors, executive officers, former executive officers and greater than 5% beneficial owners as of April 18, 2014.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power and all shares issuable upon exercise of options or the vesting of restricted stock within 60 days of April 18, 2014. For purposes of calculating the percentage of our common stock beneficially owned, the number of shares of our common stock includes 75,901,029 shares of our common stock outstanding as of April 18, 2014.

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., 12300 North Grant Street, Thornton, Colorado 80241.

Name of Beneficial Owner	No. of Shares Beneficially Owned	Percentage	
5% Stockholders:			
TFG Radiant Investment Group Ltd.(1)	16,032,842	21.12	%
Ironridge Technology Co.(2)	7,582,513	9.99	%
Seng Wei Seow(3)	7,514,202	9.90	%
Officers and Directors:			
Victor Lee(4)	100,000	*	
William M. Gregorak(5)	—	—	%
Amit Kumar, Ph.D.(6)	486,803	*	
Kim J. Huntley(7)	117,131	*	
G. Thomas Marsh(8)	336,350	*	
Xu Biao(9)	—	—	%
Gary Gatchell(10)	—	—	%
All directors and executive officers as a group (5 persons)	1,040,284	1.37	%

* Less than 1.0%.

(1)

The address of TFG Radiant Investment Group Ltd. is Block B. 4th Floor, Jihong R&D Building, No.1 Binlang Road, Futian FTZ, Shenzhen, China 518038.

(2) The address for Ironridge Technology Group Ltd. is Harbour House, 2nd Floor, Waterfront Drive, Road Town, Tortola, British Virgin Islands VG1110. The Series B-1 and Series C preferred shares held by Ironridge contain conversion and issuance limitations providing that the Ironridge may not be issued shares of common stock (whether by means of conversion of Series B-1 or Series C preferred stock, or otherwise) if after giving effect to such issuance Ironridge would beneficially own in excess of 9.99% of the Company's outstanding shares of common stock. Accordingly, the number of

Table of Contents

shares of common stock set forth in the table above reflects only the number of shares which would represent approximately 9.99% of the shares of common stock outstanding as of April 18, 2014. Does not include any other shares of common stock that may be issued in the future in connection with any shares of Series B-1 or Series C preferred stock previously issued to Ironridge (or additional shares of Series C preferred stock issuable in the future to Ironridge) that could be issued to Ironridge if such 9.99% limitation does not apply.

(3) The address for Seng Wei Seow is 17 Jalan Haji Salam, Singapore 468784. The Series A preferred stock and common stock warrants held by Seow contain conversion, exercise and issuance limitations providing that Seow may not be issued shares of common stock (whether by means of conversion of Series A preferred stock, exercise of warrants or otherwise) if after giving effect to such issuance Seow would beneficially own in excess of 9.9% of the Company's outstanding shares of common stock. Accordingly, the number of shares of common stock set forth in the table above reflects only the number of shares which would represent approximately 9.9% of the shares of common stock outstanding as of April 18, 2014. Does not include any other shares of common stock that may be issued in the future in connection with any shares of Series A preferred stock or common stock warrants previously issued to Seow that could be issued to Seow if such 9.9% limitation does not apply.

(4) Does not include securities held by TFG Radiant Investment Group Ltd., our largest stockholder. Mr. Lee is managing director of Tertius Financial Group Pte Ltd. a 50% owner of TFG Radiant Investment Group Ltd., and disclaims beneficial ownership of our securities held by TFG Radiant Investment Group Ltd. Does not include 100,000 options to purchase common stock issued but not vested as of or within 60 days of April 18, 2014.

(5) Does not include 50,000 options to purchase common stock issued but not vested as of or within 60 days of April 18, 2014.

(6) Does not include 80,984 shares of restricted stock issued but not vested as of or within 60 days of April 18, 2014.

(7) Does not include 52,816 shares of restricted stock issued but not vested as of or within 60 days of April 18, 2014.

(8) Does not include 52,816 shares of restricted stock issued but not vested as of or within 60 days of April 18, 2014.

(9) Does not include securities held by TFG Radiant Investment Group Ltd., our largest stockholder. Mr. Xu is an investor in TFG Radiant Investment Group Ltd., and disclaims beneficial ownership of our securities held by TFG Radiant Investment Group Ltd.

(10) Gary Gatchell voluntarily resigned as our Chief Financial Officer effective as of August 30, 2013.

RELATED PARTY TRANSACTIONS

Transactions Involving TFG Radiant

On August 12, 2011, we entered into a strategic alliance with TFG Radiant and its affiliates. TFG Radiant made an initial $7.36 million equity investment in our common stock and received an option to acquire an additional 9,500,000 shares of our common stock at an exercise price of $1.55 per share. This option expired unexercised in February, 2014. In connection with the transaction, we entered into a stockholders agreement with TFG Radiant (the "Prior Stockholders Agreement"), which granted TFG Radiant the right to designate a member of our Board of Directors for election so long as TFG Radiant holds at least 15% of our common stock. On November 3, 2011, we appointed Mr. Victor Lee as a member of our Board of Directors and a designated representative of TFG Radiant.

On March 30, 2012, TFG Radiant purchased all of the Ascent Solar common shares then owned by Norsk Hydro (previously our largest shareholder), or 8,067,390 shares, for $4 million, or approximately $0.50 per share.

In April 2012, we appointed the Chairman of TFG Radiant, Mr. Winston Xu (aka Xu Biao), as a member of our Board of Directors. TFG Radiant owns approximately 21% of our outstanding common stock as of April 18, 2014.

Amended and Restated Stockholders Agreement

We previously entered into the Prior Stockholders Agreement in connection with TFG Radiant's prior investment in our common stock. On December 30, 2011, we entered into an Amended and Restated Stockholders Agreement with

TFG Radiant (the "Amended and Restated Stockholders Agreement"). The Amended and Restated Stockholders Agreement became effective March 30, 2012 and has replaced and superseded the Prior Stockholders Agreement.

Among other things, the Amended and Restated Stockholders Agreement provides that:

a. TFG Radiant may designate a second representative for election to our Board at any time as TFG Radiant beneficially owns 25% of our outstanding common stock;

b. TFG Radiant may designate a third representative for election to our Board at any time as TFG Radiant beneficially owns 45% of our outstanding common stock; and

c. TFG Radiant will vote its shares of our common stock for the election of all persons nominated for election to our Board if such nominees (i) have been approved by a majority of our Board and (ii) such board approval included the affirmative vote of at least one TFG Radiant representative on the Board;

Pursuant to the terms of the Amended and Restated Stockholders Agreement, on April 16, 2012, Mr. Xu Biao of TFG Radiant was appointed to our Board.

Joint Development Agreement

We entered into a Joint Development Agreement (the "Joint Development Agreement") with TFG Radiant dated August 12, 2011 in connection with TFG Radiant's prior investment in us. Under the terms of the Joint Development Agreement:

a. The parties will collaborate in order to allow TFG Radiant to (i) develop and commercialize facilities ("Fabs") that manufacture Copper Indium Gallium diSelenide ("CIGS") thin-film photovoltaic modules ("CIGS PV") in an agreed upon territory in East Asia, and (ii) sell CIGS PV in such territory.

b. TFG Radiant agrees to pay to us certain specified non-recurring engineering funding.

c. We shall have the option to require TFG Radiant to purchase CIGS PV produced by us, subject to certain minimum volume and price thresholds.

d. TFG Radiant has been granted an exclusive license to intellectual property owned by us or developed by us in connection with constructing Fabs and selling CIGS PVs in the territory. In order to maintain exclusivity in the territory, TFG Radiant must achieve certain specified performance metrics.

e. TFG Radiant will pay to us a series of milestones payments in the event TFG Radiant (i) sells and ships certain quantities of CIGS PV and (ii) achieves certain target costs of production.

f. TFG Radiant will pay to us a royalty percentage based on net sales of the CIGS PV, a portion of which can be converted into an ownership interest in the Fab responsible for such production.

g. TFG Radiant will pay to us a license fee at the time of commissioning for each TFG Radiant Fab.

During 2013 we did not receive any funds pursuant to the Joint Development Agreement from TFG Radiant.

The Joint Development Agreement was filed as an exhibit to our Quarterly Report on Form 10-Q filed on November 10, 2011 and is subject to a confidential treatment order of the SEC through December 31, 2020.

Supply Agreement

In June 2012, we entered into a supply agreement with TFG Radiant. Under the supply agreement TFG Radiant is a distributor of our consumer products in Asia. During the year ended December 31, 2013, we recognized revenue in the amount of $143,000 for products sold to TFG Radiant under the supply agreement.

Contract Manufacturing Agreement

In June 2012, we entered into a contract manufacturing agreement with TFG Radiant. Under the terms of the contract manufacturing agreement TFG Radiant oversees certain aspects of the contract manufacturing process related to our EnerPlex™ line of consumer products. We compensate TFG Radiant for acting as general contractor in the contract manufacturing process. During the year ended December 31, 2013 we made disbursements to TFG Radiant in the amount of $552,000 for finished goods received and deposits for work-in-process. As of December 31, 2013, we had $21,000 in deposits with TFG Radiant.

Consulting Agreement

In December 2012, we entered into a services agreement with TGF Radiant for product design, product development and manufacturing coordination activities provided by TFG Radiant to us in connection with our line of consumer electronics products. The services agreement has a one year term initially, and the services agreement may be terminated by either party upon 10 days

prior written notice. During the year ended December 31, 2013, we made disbursements to TFG Radiant in the amount of $800,000 for consulting fees.

Policies and Procedures with Respect to Transactions with Related Persons

The Board recognizes that related person transactions can present a heightened risk of potential or actual conflicts of interest. Accordingly, our Audit Committee charter requires that 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. 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.

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, 2013, 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 in a timely manner during such fiscal year.

PRINCIPAL ACCOUNTANTS

Principal Accounting Fees and Services

Fees for audit and related services by our accounting firm, Hein & Associates LLP, for the years ended December 31, 2013 and 2012 were as follows:

	2013	2012
Audit fees	$150,000	$147,000
Audit related fees	12,000	16,000
Total audit and audit related fees	$162,000	$163,000
Tax fees	—	—
All other fees	—	—
Total Fees	$162,000	$163,000

Audit fees for Hein & Associates LLP for fiscal year 2013 and 2012 represent aggregate fees during the audit of the financial statements, interim reviews of the quarterly financial statements and consents and comfort letters.

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, as amended (AICPA, Professional Standards, Vol. 1. AU Section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T (as superseded by Statement on Auditing Standards No. 114). The Audit Committee also has received the written disclosures and the letter from the independent accountants required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, 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 Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2013.

Respectfully submitted,

AUDIT COMMITTEE

Kim J. Huntley, Chairman

Amit Kumar

G. Thomas Marsh

PROPOSAL NO. 1 – ELECTION OF DIRECTORS

Overview

There are currently five members of our Board. Our Class 1 director is Dr. Amit Kumar. Our Class 2 directors are Kim J. Huntley and G. Thomas Marsh. Our Class 3 directors are Victor Lee and Xu Biao.

The terms of Messrs. Lee and Xu are scheduled to expire at this Annual Meeting. Our Board has nominated Messrs. Lee and Xu to serve as our Class 3 directors until the 2017 annual meeting; each until their successors are duly elected and qualified.

Nominees

Upon the recommendation of our Nominating and Governance Committee, the Board has nominated Mr. Victor Lee and Mr. Xu Biao to serve as our Class 3 directors until the 2017 annual meeting and until their successors are duly elected and qualified.

Vote Required

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

Recommendation

The Board recommends that stockholders vote FOR the election of Mr. Lee and Mr. Xu.

Unless marked otherwise, proxies received will be voted FOR the election of the director nominee.

PROPOSAL NO. 2 – RATIFICATION OF APPOINTMENT OF HEIN & ASSOCIATES LLP

Overview

The Audit Committee has engaged the registered public accounting firm of Hein & Associates LLP as our independent registered public accounting firm to audit our financial statements for the year ending December 31, 2014. Hein & Associates LLP audited our financial statements for the years ended December 31, 2013 and 2012. Please refer to "Principal Accountants" above for information about fees and services paid to Hein & Associates LLP in 2013 and 2012, and our Audit Committee's pre-approval policies.

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.

Vote Required

The affirmative vote of a majority of the shares with voting power present in person or by proxy will be required to ratify the appointment of Hein & Associates LLP as our independent registered public accounting firm to audit our financial statements for the year ending December 31, 2014.

Recommendation

The Board recommends that shareholders vote “FOR” the proposal to ratify the appointment of Hein & Associates LLP as our independent registered public accounting firm to audit our financial statements for the year ending December 31, 2014.

Unless marked otherwise, proxies received will be voted FOR ratification of Hein & Associates LLP as our independent registered public accounting firm to audit our financial statements for the year ending December 31, 2014.

PROPOSAL 3 – NON-BINDING ADVISORY VOTE TO APPROVE EXECUTIVE COMPENSATION

Overview

Section 14A of the Securities Exchange Act requires public companies to conduct a separate stockholder advisory vote on executive compensation as disclosed in the Executive Compensation section of the annual proxy statement. While this advisory vote, commonly referred to as a “say-on-pay” vote, is non-binding, the Board of Directors and the Compensation Committee will review and consider the voting results when making future decisions regarding our executive compensation programs.

We urge stockholders to carefully read the Executive Compensation section of this proxy statement, which describes the executive compensation paid to our executive officers. Our Board of Directors and our Compensation Committee believe that the compensation paid to our executive officers is effective in achieving our compensation objectives.

In accordance with Section 14A of the Securities Exchange Act, we are asking stockholders to approve the following advisory resolution at the 2014 Annual Meeting:

RESOLVED, that the stockholders of Ascent Solar Technologies, Inc. approve, on an advisory basis, the compensation of the Company's executive officers as disclosed in the Executive Compensation section of the proxy statement for the Company's 2014 Annual Meeting.

Vote Required

The affirmative vote of a majority of shares with voting power present in person or by proxy will be required to approve the resolution.

Recommendation

The Board recommends that stockholders vote FOR the resolution. Unless marked otherwise, proxies received will be voted FOR the resolution.

PROPOSAL 4 – AMENDMENT TO THE CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT

General

Our Board of Directors has unanimously adopted a resolution approving, declaring advisable and recommending to the stockholders for their approval of a proposal to amend the Certificate of Incorporation to effect a Reverse Stock Split at any whole number ratio between, and inclusive of, one for five (every 5 shares would be combined into one) and one for ten (every 10 shares would be combined into one). Approval of this Proposal will grant the Board of Directors the authority, without further action by the stockholders, to carry out the amendment to the Certificate of Incorporation at any time within one year after the date stockholder approval for the amendment is obtained, with the exact exchange ratio and timing of the Reverse Stock Split to be determined at the discretion of the Board of Directors. The decision whether and when to effect the Reverse Stock Split, and at what whole number ratio to effect the Reverse Stock Split, will be based on a number of factors, including market conditions, existing and anticipated trading prices for our common stock and the continued listing requirements of the NASDAQ Capital Market.

We may not be required to effect a stock split, if before September 15, 2014, our stock has achieved a bid price of at least $1.00 for a minimum of 10 and a maximum of 20 consecutive days. The Board of Directors reserves the right to

abandon the Reverse Stock Split without further action by our stockholders at any time before the effectiveness of the amendment to the Certificate of Incorporation, even if the Reverse Stock Split has been authorized by our stockholders at the Annual Meeting. By

Table of Contents

voting in favor of the Reverse Stock Split, you are expressly also authorizing our Board of Directors to determine not to proceed with, and abandon, the Reverse Stock Split if it should so decide.

A sample form of the certificate of amendment relating to this Proposal, which we would file with the Secretary of State of the State of Delaware to effect the Reverse Stock Split, is attached to this Proxy Statement as Annex A.

Rationale for the Reverse Stock Split

Our common stock trades on the NASDAQ Capital Market, which we believe helps support and maintain stock liquidity and company recognition for our stockholders. Companies listed on the NASDAQ Capital Market, however, are subject to various continued listing standards imposed by the NASDAQ Stock Market. One of these standards is the "minimum bid price" requirement, which requires that the bid price of the common stock of listed companies be at least $1.00 per share. A listed company risks being delisted and removed from the NASDAQ Capital Market if the closing bid price of its stock remains below $1.00 per share for an extended period of time.

On March 19, 2014, we received notice from NASDAQ stating that, due to our continued non-compliance with the $1.00 minimum bid price requirement for continued listing, we were subject to delisting pending request of a hearing before the Nasdaq listing panel or a transfer of listing to the NASDAQ Capital Market tier. We subsequently requested a transfer to the NASDAQ Capital Market tier and our request was approved. Our listing on the NASDAQ Capital Market tier became effective March 28, 2014. We now have a period of 180 calendar days, or until September 15, 2014, for our closing bid price to meet or exceed $1.00 per share for a minimum of 10 consecutive business days. If this initial compliance period were to expire, we could request a hearing which would stay any delisting action in connection with the notice and allow the continued listing of our common stock until the panel renders a decision subsequent to the hearing. The implementation of a reverse stock split would likely increase the price of our stock such that we would be able to meet the $1.00 minimum bid requirement and thereby maintain our compliance with the Nasdaq Listing Qualifications.

Effecting the Reverse Stock Split would reduce our total shares of common stock outstanding, which we believe will increase the price per share of our common stock. For example, a hypothetical company with a market value of $50 million and 100 million shares outstanding would have a trading price of $0.50 per share, while a company with the same market value and only 20 million shares outstanding would have a trading price of $2.50 per share.

We are asking stockholders to approve this Proposal because we believe the Reverse Stock Split will result in a higher price per share for outstanding shares of our common stock. This, we believe, could provide a number of potential advantages. We describe each of these below.

Potential Advantages of the Reverse Stock Split

Maintain NASDAQ Capital Market Listing. We believe that having our common stock delisted from the NASDAQ Capital Market would be undesirable for our stockholders and potentially detrimental to our business. Among other things, being delisted could reduce the liquidity of our common stock. We also deem valuable our ticker symbol, which is easily recognized as "ASTI" and which we could lose if we were delisted by the NASDAQ Capital Market. Moreover, being listed on the NASDAQ Capital Market carries with it certain prestige and we believe it improves the recognition of our company.

Our Board of Directors believes that a Reverse Stock Split, at a whole number exchange ratio ranging from one for five to one for ten, would result in an increase in the price per share, and thereby help us meet the $1.00 per share minimum bid price requirement. While our stock price has traded above $1.00 on its own accord over the last year, our Board believes that it is in our best interests and in the interests of our stockholders to seek approval of the proposed amendment to our Certificate of Incorporation to effect the Reverse Stock Split in order to increase the likelihood that we will be able to regain compliance with the Nasdaq listing requirements. Even if our common stock's closing bid price were to satisfy the minimum closing bid price requirements prior to approval of this Proposal, we may still effect the Reverse Stock Split if our stockholders approve this Proposal and our Board of Directors determine that effecting the Reverse Stock Split would be in the best interests of the company and its stockholders.

Facilitate Potential Future Financings. By preserving our NASDAQ Capital Market listing, we can continue to consider and pursue a wide range of future financing options to support our business. We believe being listed on a national securities exchange, such as the NASDAQ Capital Market, is valued highly by many long-term investors. A listing on a national securities exchange also has the potential to create better liquidity and reduce volatility for buying

and selling shares of our stock, which benefits our current and future stockholders.

Increase Our Common Stock Price to a Level More Appealing for Investors. We believe that the Reverse Stock Split could enhance the appeal of our common stock to the financial community, including institutional investors, and the general investing public. We believe that a number of institutional investors and investment funds are reluctant to invest in lower-priced securities

Table of Contents

and that brokerage firms may be reluctant to recommend lower-priced stock to their clients, which may be due in part to a perception that lower-priced securities are less promising as investments, are less liquid, or are less likely to be followed by institutional securities research firms. We believe that the reduction in the number of issued and outstanding shares of our common stock caused by the Reverse Stock Split, together with the anticipated increased stock price immediately following and resulting from the Reverse Stock Split, may encourage further interest in our common stock.

Certain Risks Associated with the Reverse Stock Split

The proposed Reverse Stock Split carries with it several significant risks.

We cannot assure you, for example, that the market price per share of our common stock after the Reverse Stock Split will rise or remain constant in proportion to the reduction in the number of shares of common stock outstanding before the Reverse Stock Split. For instance, using the closing price of our common stock on April 18, 2014 of $0.51 per share as an example, if our Board of Directors were to implement the Reverse Stock Split at a one for five ratio, we cannot assure you that the post-split market price of our common stock would be or would remain at a price of five times greater than $0.51, or $2.55. In many cases, the market price of a company's shares declines after a reverse stock split. Thus, while our stock price might meet the continued listing requirements for the NASDAQ Capital Market initially, we cannot assure you that it would continue to do so.

The market price of our common stock will also be affected by our performance and other factors, some of which are unrelated to the number of shares outstanding. If the Reverse Stock Split is effected and the market price of our common stock declines, the decline as a percentage of our overall market capitalization may be greater than would occur in the absence of a Reverse Stock Split. Furthermore, the liquidity of our common stock could be adversely affected by the reduced number of shares that would be outstanding after the Reverse Stock Split.

Principal Effects of the Reverse Stock Split

Reduction of Shares Held by Our Stockholders. After the effective date of the Reverse Stock Split, each stockholder will own fewer shares of our common stock. However, the Reverse Stock Split will affect all of our stockholders uniformly and will not affect any stockholder's percentage ownership interest in the Company. For example, a holder of two percent of the voting power of the outstanding shares of common stock immediately prior to the Reverse Stock Split would continue to hold two percent of the voting power of the outstanding shares of common stock immediately after the Reverse Stock Split.

The number of stockholders of record will not be affected by the Reverse Stock Split. In addition, because the number of shares of authorized common stock will not be affected, the Reverse Stock Split will result in an increase in the authorized, but unissued, shares of common stock as a percentage of total authorized shares.

Change in Number and Exercise Price of Outstanding Options and RSUs. Under the terms of our 2005 Stock Option Plan, as amended, and our 2008 Restricted Stock Plan, as amended, the administrator will make appropriate adjustments to the maximum number of shares that may be issued under the plans, the number of shares subject to outstanding awards and the exercise prices relating to awards.

Change in Conversion Prices and Other Terms Relating to our Preferred Stock. We currently have outstanding shares of our Series A preferred stock, Series B-1 preferred stock and Series C preferred stock. All such preferred shares are convertible into our common stock at a fixed conversion price. Such preferred shares also have other features and adjustments which are tied to the market price of our common stock. The certificates of designation for such preferred stock contain provisions that will automatically make ratable adjustments to the conversion prices and other price-related provisions in the event of a reverse stock split.

Reduction in Number of Outstanding Shares; Increase in Number of Unreserved Shares. The Reverse Stock Split will reduce the total number of outstanding shares of common stock by the exchange ratio determined by the Board in its discretion and it will apply automatically to all shares of our common stock, including shares issuable upon the exercise of outstanding stock options and RSUs. The following table contains approximate information relating to our common stock under certain of the possible exchange ratios, based on share information as of April 18, 2014:

Table of Contents

	Current	1-For-5 Split	1-For-10 Split
Authorized common stock	250,000,000	250,000,000	250,000,000
Common stock outstanding	75,901,029	15,180,206	7,590,103
Common stock issuable upon exercise of outstanding options	932,609	186,522	93,261
Common stock issuable upon vesting of restricted stock grants	619,532	123,906	61,953
Common stock reserved for issuance upon exercise of options available for future grant	839,967	167,993	83,997
Common stock reserved for issuance upon exercise of restricted stock available for future grant	136,485	27,297	13,649
Common stock reserved for issuance upon conversion of outstanding Series A preferred shares	2,623,900	524,780	262,390
Common stock reserved for issuance upon conversion of outstanding Series B-1 preferred shares	1,739,130	347,826	173,913
Common stock reserved for issuance upon conversion of Series C preferred shares which are currently outstanding or issuable under existing agreements	6,000,000	1,200,000	600,000
Common stock authorized but unissued and unreserved(1)	161,207,348	232,241,470	241,120,734

(1) Does not reflect any additional shares of common stock which may be issued under certain circumstances to pay make whole and dividend amounts due on our Series A, Series B-1 and Series C preferred shares if we elect to pay such amounts in shares rather than cash.

As reflected in the table above, the number of authorized shares of our common stock will not be reduced by the Reverse Stock Split. Accordingly, the Reverse Stock Split will have the effect of increasing the authorized, but unissued, shares of our common stock as a percentage of total authorized shares. These shares may be used by us for various purposes in the future without further stockholder approval (subject to applicable NASDAQ rules), including, among other things, financings, strategic partnering arrangements, equity incentive plans, acquisitions of assets or businesses, stock splits or stock dividends.

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates

If this Proposal is approved by our stockholders and if our Board of Directors concludes that the Reverse Stock Split is in the best interests of the Company and its stockholders on a date within one year after stockholder approval is obtained, our Board of Directors will cause the Reverse Stock Split to be implemented at the whole number ratio between one for five and one for ten as selected by our Board of Directors in its sole discretion. We will file an amendment to our Certificate of Incorporation with the Delaware Secretary of State at such time as our Board of Directors deems appropriate. The amendment will become effective on the date that it is filed (the “Effective Date”). As soon as practicable after the Effective Date, stockholders will be notified that the Reverse Stock Split has been effected. We will retain an exchange agent (the “Exchange Agent”) for purposes of implementing the exchange of stock certificates. Holders of pre-reverse split shares will be asked to surrender to the Exchange Agent certificates representing pre-reverse split shares in exchange for certificates representing post-reverse split shares in accordance with the procedures to be set forth in a letter of transmittal that will be delivered to the Company’s stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered to the Exchange Agent his, her or its outstanding certificate(s) together with the properly completed and executed letter of transmittal.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT ANY CERTIFICATES UNTIL REQUESTED TO DO SO. Stockholders whose shares are held in book-entry form do not need to submit old share certificates for exchange. These shares will automatically reflect the new quantity of shares based on the Reverse Stock Split. Beginning on the Effective Date, each certificate representing pre-reverse split shares will be deemed for all corporate purposes to evidence ownership of post-reverse split shares.

Fractional Shares

No fractional shares will be issued in connection with the Reverse Stock Split. Stockholders of record who otherwise would be entitled to receive fractional shares will be entitled to rounding up of their fractional share to the nearest

whole share.
Accounting Matters

Table of Contents

The Reverse Stock Split will not affect the common stock capital account on our balance sheet. As of the Effective Date, the stated capital on our balance sheet attributable to our common stock will be reduced proportionately based on the selected exchange ratio, and the additional paid-in capital account will be credited with the amount by which the stated capital is reduced. In future financial statements, we will restate net income or loss per share and other per share amounts for periods ending before the Reverse Stock Split to give retroactive effect to the Reverse Stock Split. The per share net income or loss and net book value of our common stock will be increased because there will be fewer shares of our common stock outstanding.

Discretionary Authority of the Board of Directors to Abandon Reverse Stock Split

The Board of Directors reserves the right to abandon the Reverse Stock Split without further action by our stockholders at any time before the effectiveness of the amendment to the Certificate of Incorporation, even if the Reverse Stock Split has been authorized by our stockholders at the Annual Meeting. By voting in favor of the Reverse Stock Split, you are expressly also authorizing our Board of Directors to determine not to proceed with, and abandon, the Reverse Stock Split if it should so decide.

No Dissenter's Rights

Under applicable Delaware law, our stockholders are not entitled to dissenter's rights with respect to the Reverse Stock Split, and we will not independently provide stockholders with any such right.

Directors' Recommendation

The affirmative vote of a majority of all issued and outstanding shares of common stock is required to approve the Reverse Stock Split at the Annual Meeting. If you abstain from voting on this proposal to approve the Reverse Stock Split, it will have the same effect as a vote "AGAINST" the proposal. Your vote is therefore extremely important.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE PROPOSAL TO AMEND THE COMPANY'S CERTIFICATE OF INCORPORATION TO EFFECT THE REVERSE STOCK SPLIT.

Please Note: This Proxy Statement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the safe harbor created by that section. Such statements include, but are not limited to, all statements as to expectation or belief and statements as to the future trading price and liquidity of our common stock, whether traded on the NASDAQ Capital Market or otherwise; our future results of operations; our ability to satisfy the listing requirements of NASDAQ; the prospect for analyst coverage; and financing needs, as well as assumptions relating to the foregoing. The words "anticipate," "believe," "expect," "may," "plan," "will," and similar expressions identify forward-loo statements, which speak only as of the date the statement was made.

These forward-looking statements are not guarantees of future performance. All forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements and risk factors identified from time to time in our SEC reports, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the SEC. Except as expressly required by federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changes in circumstances or any other reason.

PROPOSAL 5 – APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK PURSUANT TO 1,000 AUTHORIZED SHARES OF SERIES C PREFERRED STOCK.

Terms of the Ironridge Transaction

On April 1, 2014, the Company entered into a Securities Purchase Agreement (the "Ironridge Purchase Agreement") with Ironridge Technology Co., a division of Ironridge Global IV, Ltd. ("Ironridge"), pursuant to which Ironridge agreed to purchase from the Company, and we agreed to sell to Ironridge (subject to the terms and conditions set forth therein), up to $6,000,000 of the Company's newly designated Series C preferred stock (the "Series C preferred stock"). The Company will sell the Series C preferred stock to Ironridge in two tranches. In the first tranche, the Company sold 300 shares of Series C preferred stock to Ironridge at a purchase price of $10,000 per share of Series C preferred stock, resulting in gross proceeds to the Company of $3,000,000. The first tranche closed on April 1, 2013.

19

Table of Contents

In the second tranche, the Company has the option to sell 300 shares of Series C preferred stock to Ironridge at a purchase price for each share of Series C preferred stock of $10,000 per share, which would result in additional gross proceeds to the Company of $3,000,000. The Company must exercise this option within three trading days after the date on which the registration statement covering the re-sale of the common stock underlying the Series C preferred stock has been declared effective by the Securities and Exchange Commission.

The exercise of this option will not close, however, until after our stockholders approve certain issuances of our common stock related to the Series C Preferred Stock in accordance with Nasdaq Listing Rule 5635(d). Accordingly, the second tranche will not close unless our stockholders approve Proposal 5 at the annual meeting. If our stockholders do not vote to approve Proposal 5, then the second tranche will not close and we will not receive the related proceeds. In connection with the Ironridge Purchase Agreement, TFG Radiant, the Company's largest stockholder, entered into a Voting Agreement with Ironridge. Pursuant to the Voting Agreement, TFG Radiant has agreed to vote all shares of common stock it owns in favor of the stock issuances related to the Series C Preferred Stock.

In connection with the Ironridge Purchase Agreement, the Company entered into a Registration Rights Agreement agreeing to register the shares of common stock which may be issued upon (i) conversion of the Series C preferred stock, and (ii) the payment by the Company of dividends and make whole amounts (if any) on the Series C Preferred Stock. As required by the Registration Rights Agreement, the Company filed a resale registration statement with the Securities and Exchange Commission in April 2014.

The Registration Rights Agreement provides that if such resale registration statement is not to be declared effective on or before (i) the 30th day after April 1, 2014, the Company will be required to issue 30 additional shares of Series C preferred stock to Ironridge; (ii) the 60th day after April 1, 2014, the Company will be required to issue 30 additional shares of Series C preferred stock to Ironridge; and (iii) before the 90th day after April 1, 2014, the Company will be required to issue 30 additional shares of Series C preferred stock to Ironridge.

Holders of the Series C preferred stock are entitled to dividends in the amount of 5.75% per annum, payable when, as and if declared by the board of directors in its discretion. The dividend rate on the Series C preferred stock is indexed to the Company's stock price and subject to upward and downward adjustment in certain circumstances. The Series C preferred stock has a maximum dividend rate of 18% and a minimum dividend rate of 3%.

The Company has the option to pay dividends on the Series C Preferred Stock in cash or in additional shares of common stock. If the Company elects to pay in the form of common stock, the number of shares to be issued shall be calculated by using the lesser of (i) 92% of the volume weighted average price for the common stock over a 60 day measuring period or (ii) 92% of the lowest single day closing price for the common stock occurring during such measuring period.

The Series C preferred stock will be convertible into common stock at a fixed conversion price of $1.15 per share of common stock. The Series C preferred stock may be converted into shares of common stock at any time at the option of the holder. The Series C preferred stock may also be converted into shares of common stock at the option of the Company if the closing price of the common stock exceeds $2.00 for 20 consecutive trading days.

In addition to the issuance of the applicable number of conversion shares, upon any conversion of Series C preferred stock the Company will also pay to the holder an "embedded dividend liability" amount equal to the dividends (calculated at the then applicable dividend rate) on the converted Series C preferred stock for a full five year period from the date of issue (less any period for which dividends have previously been paid). Such embedded dividend liability amount may be paid in cash or, at the Company’s option, additional shares of common stock. If the Company elects to pay the embedded dividend liability amount in the form of common stock, the number of shares to be issued shall be calculated by using the lesser of (i) 92% of the volume weighted average price for the common stock over a 60 day measuring period or (ii) 92% of the lowest single day closing price for the common stock occurring during such measuring period.

Upon or after the fifth anniversary of the initial issuance date of the Series C preferred stock, the Company will have the right, at its option, to redeem for cash all or a portion of the Series C preferred stock at a price per share equal to $10,000 plus any accrued but unpaid dividends. At any time prior to the fifth anniversary of the date of the initial issuance of Series C preferred stock, the Company will have the option to redeem for cash all or a portion of the Series

C preferred stock at a price per share equal to (a) $10,000 plus (b) the “embedded dividend liability” amount equal to the dividends on the redeemed Series C preferred stock for a full five year period from the date of issue (less any period for which dividends have previously been paid).

Upon our liquidation, dissolution or winding up, holders of Series C preferred stock will be entitled to be paid out of our assets, on a parity with holders of our common stock and our Series A preferred stock, Series B-1 preferred stock and Series B-2 preferred stock, an amount equal to $10,000 per share plus any accrued but unpaid dividends thereon.

Table of Contents

At no time will the Company issue shares of common stock in connection with the securities issued pursuant to the Ironridge Purchase Agreement (whether upon conversion of Series C Preferred Stock, payment of dividends in common stock or payment of embedded dividend liability amounts in common stock) if such transaction (when aggregated with all other issuances in connection with the Ironridge Purchase Agreement) would result in the issuance of more than 19.99% of the amount of common stock of the Company issued and outstanding on the date of the Ironridge Purchase Agreement unless (i) the Company's stockholders shall have approved the issuance of shares of common stock in excess of 19.99% limit or (ii) Nasdaq has provided a waiver of its Listing Rule 5635(d).

On November 1, 2013, the Company entered into a previous securities purchase agreement with Ironridge. Pursuant to that previous agreement, the Company issued to Ironridge an aggregate of 1,000 shares of Series B-1 preferred stock in two tranches, resulting in gross proceeds to the Company of $10,000,000. The first Series B-1 tranche closed in November 2013. The second Series B-1 tranche closed in January 2014. Our stockholders approved the issuances of common stock related to the Series B-1 preferred stock at a special stockholders meeting in January 2014.

Potential Issuance of Additional Authorized Series C Preferred Stock to Ironridge

In connection with the Ironridge Purchase Agreement, we filed a certificate of designation with the office of the Delaware Secretary of State which created and authorized 1,000 shares of Series C preferred stock. Under the terms of the Ironridge Purchase Agreement, we may issue between 300 and 690 shares of Series C preferred stock. We do not currently have any agreements in place regarding the issuance and sale of Series C preferred stock other than the Ironridge Purchase Agreement.

Following the completion of the transactions under the Ironridge Purchase Agreement, however, we may decide to issue any remaining authorized shares of Series C preferred stock to Ironridge on terms which are substantially similar to the terms contained in the a Purchase Agreement. If our stockholders approve Proposal 5 at the annual meeting, then we would be able to issue any such remaining shares of Series C preferred stock to Ironridge on substantially similar terms and the issuance of common shares related to such remaining shares of Series C preferred stock would not be limited by applicable Nasdaq listing rules. Approval of Proposal 5 would not apply to (i) the issuance of any remaining Series C preferred stock to an investor other than Ironridge or (ii) the issuance of any remaining Series C preferred stock to Ironridge on terms that were significantly different than those contained in the Ironridge Purchase Agreement.

There is no assurance that we would actually issue any remaining shares of Series C preferred stock to Ironridge on substantially similar terms if our stockholders approve proposal 5 at the annual meeting. If our stockholders do not vote to approve Proposal 5, then the issuance of common shares related to any remaining shares of Series C preferred stock would be limited by applicable Nasdaq listing rules. That limitation could make it more difficult for us to issue any remaining shares of Series C preferred stock to Ironridge.

Why the Company Needs Stockholder Approval

Our common stock is listed on the Nasdaq Global Market and, as such, we are subject to the Nasdaq Marketplace Rules. Nasdaq Marketplace Rule 5635(d) is referred to as the “Nasdaq 20% Rule.” The Nasdaq 20% Rule requires that an issuer obtain stockholder approval prior to certain issuances of common stock or securities convertible into or exchangeable for common stock at a price less than the greater of market price or book value of such securities (on an as exercised basis) if such issuance equals 20% or more of the common stock or voting power of the issuer outstanding before the transaction. Shares of our common stock that might be issued upon the conversion of the Series C preferred stock are considered common stock issued for the purposes of determining whether the 20% limit has been reached. Shares of our common stock that might be issued in payment of embedded dividend liability amounts or dividends on the Series C preferred stock are also considered common stock issued for the purposes of determining whether the 20% limit has been reached.

The aggregate number of shares of our common stock issuable in connection with the Ironridge Purchase Agreement could result in the issuance of more than 20% of our outstanding common stock as of April 1, 2014 (the date of the Ironridge Purchase Agreement) at a price less than the greater of the book value or market of the shares. Our common stock had a book value of $0.20 and market value of $0.55 on April 1, 2014. In particular, it is possible that the Company would elect to pay dividends and embedded dividend liability amounts on the Series C preferred stock in the form of common stock, rather than cash, so that such issuances would be subject to the Nasdaq 20% Rule.

Accordingly, we need stockholder approval of the potential issuance of more than 20% of the Company's issued and outstanding common stock at a price that may be less than the greater of book or market value of the Company's common stock as of April 1, 2014.

Nasdaq Marketplace Rule 5635(b) requires us to obtain stockholder approval prior to certain issuances with respect to common stock or securities convertible into common stock which could result in a change of control of the issuer. This rule is referred to as the "Nasdaq Change of Control Rule." Generally, Nasdaq interpretations provide that the acquisition of 20% of the shares of an issuer by one person or group of affiliated persons may be considered a change of control of such issuer. The issuance

Table of Contents

of common stock upon the conversion of the Series C preferred stock, and upon payment of dividends and embedded dividend liability amounts in the form of common stock, rather than cash, could result in Ironridge acquiring more than 20% of our shares of common stock. Accordingly, we need stockholder approval of the issuance of shares of common stock in excess of 20% of the amount of common stock issued and outstanding as of April 1, 2014.

In order to comply with the Nasdaq 20% Rule and the Nasdaq Change of Control Rule, we are seeking stockholder approval for the potential issuance of securities in excess of the Nasdaq limitations.

We did not seek advance stockholder approval of all potential share issuances related to the Ironridge Purchase Agreement because the Ironridge Purchase Agreement restricts the number of shares that can be issued (whether upon conversion of Series C preferred stock, payment of dividends in common stock or payment of embedded dividend liability amounts in common stock) to an amount that would not be in excess of the applicable Nasdaq limitations. In addition, the closing of any exercise of the Company's option for the second tranche under the Ironridge Purchase Agreement is expressly conditioned upon the Company first obtaining stockholder approval of the issuance of the second tranche shares. Therefore, stockholder approval was not required by the Nasdaq Marketplace Rules.

We are, however, seeking advance stockholder approval of all potential share issuances related to any of our authorized Series C preferred stock which remains unissued following the completion of the transactions under the Ironridge Purchase Agreement. If our stockholders approve Proposal 5 at the annual meeting, then we would be able to issue any such remaining shares of Series C preferred stock to Ironridge on substantially similar terms and the issuance of common shares related to such remaining shares of Series C preferred stock would not be limited by applicable Nasdaq listing rules. This advance stockholder approval could make it easier for us to issue any remaining shares of Series C preferred stock to Ironridge on terms that are substantially similar to the Ironridge Purchase Agreement.

If stockholders do not approve Proposal 5 at the annual meeting, this limit will remain in place. The Company’s option for the second tranche will not close unless our stockholders approve Proposal 5 at the annual meeting. If our stockholders do not vote to approve Proposal 5, then the Company’s option for the second tranche will not close and we will not receive the related proceeds.

No Dissenters’ Rights

Under applicable Delaware law, our stockholders are not entitled to dissenters’ or appraisal rights with respect to the approval of the issuance of shares related to the Ironridge Purchase Agreement.

Effect of Proposal 5 on Current Stockholders

If Proposal 5 is adopted, we would be able to issue shares of common stock in excess of 19.99% of our outstanding shares of common stock upon conversion of the Series C preferred stock, and payment of dividends and embedded dividend liability amounts in the form of common stock, rather than cash. The issuance of such shares could result in significant dilution to our stockholders, and afford them a smaller percentage interest in the voting power, liquidation value and aggregate book value of the Company. Additionally, the sale or any resale into the public markets of the common stock issued upon conversion of the Series C preferred stock, or payment of dividends or embedded dividend liability amounts in the form of common stock could cause the market price of our common stock to decline.

Further Information

The terms of the Ironridge Purchase Agreement and the Series C preferred stock are complex and only briefly summarized above. For further information, please refer to the descriptions contained in the Company’s Current Report on Form 8-K filed with the SEC on April 2, 2014, and the transaction documents filed as exhibits to such report. The discussion herein is qualified in its entirety by reference to such filed transaction documents.

Required Vote

Approval of the issuance of more than 20% of the Company’s issued and outstanding common stock pursuant to 1,000 authorized shares of our Series C preferred stock at a price that may be less than the greater of book or market value in accordance therewith requires the receipt of the affirmative vote of the majority of the votes cast at the annual meeting.

Any shares of common stock held by Ironridge shall not be entitled to vote on Proposal 5.

RECOMMENDATION OF THE BOARD FOR PROPOSAL 5:

22

Table of Contents

THE BOARD RECOMMENDS A VOTE FOR APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK PURSUANT TO 1,000 SHARES OF OUR AUTHORIZED SERIES C PREFERRED STOCK.

PROPOSAL 6 – APPROVAL OF AMENDMENT AND RESTATEMENT OF THE COMPANY'S 2008 RESTRICTED STOCK PLAN

Overview

Subject to stockholder approval, the Board approved an amendment and restatement of our 2008 Restricted Stock Plan (the "Restricted Stock Plan") that increases the number of shares of common stock authorized for issuance under the Restricted Stock Plan by 2,000,000 shares. The proposed amendment and restatement will not become effective if the stockholders do not approve it.

The Restricted Stock Plan was adopted by the Board in June 2008 and approved by the stockholders in July 2008. As originally adopted, the Restricted Stock Plan permitted shares of restricted stock to be issued. The Restricted Stock Plan was later amended in September 2008 by our Board to permit restricted stock units to also be issued. That amendment did not require stockholder approval. The Restricted Stock Plan was amended and restated in June 2010 pursuant to shareholder approval, and the number of shares authorized for issuance was increased by 800,000. The Restricted Stock Plan was amended and restated in June 2012 pursuant to shareholder approval, and the number of shares authorized for issuance was increased by 1,000,000.

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 our success. 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 high demand. The Board believes that the ability to make stock-based awards will be important to our future success by allowing it to remain competitive in attracting and retaining such key personnel. We are asking our stockholders to approve an increase in the number of shares issuable under the Restricted Stock 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. We expect the number of persons eligible to participate in the Restricted Stock Plan to increase as we continue our planned expansion of operations.

The Restricted Stock Plan (prior to the proposed amendment and restatement) authorizes the issuance of 2,550,000 shares of our common stock. As of April 18, 2014, there were approximately 136,485 shares of our common stock remaining available for future grants under the Restricted Stock Plan, and approximately 115 persons were eligible to participate in the Restricted Stock Plan.

Proposal

The stockholders are asked to approve an amendment and restatement of the Restricted Stock Plan to increase the number of shares authorized for issuance by 2,000,000. If approved, the number of shares of our common stock authorized for issuance under the Restricted Stock Plan will be increased from 2,550,000 to 4,550,000.

In addition, the stockholders are asked to approve an amendment and restatement of the Restricted Stock Plan to increase the number of shares that may be awarded to any individual grantee under the Restricted Stock Plan in any calendar year. If approved, the number of shares that may be awarded to any individual grantee under the Restricted Stock Plan in any calendar year will be increased from 200,000 to 400,000.

A copy of the proposed Fourth Amended and Restated 2008 Restricted Stock Plan is attached to this Proxy Statement as Annex B.

Vote Required

The affirmative vote of a majority of the shares having voting power present in person or by proxy will be required to approve the amendment and restatement of the Restricted Stock Plan.

Recommendation

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

23

Table of Contents

Unless marked otherwise, proxies will be voted FOR approval of the amendment and restatement 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 Fourth Amended and Restated Restricted Stock Plan, a copy of which is attached to this proxy statement as Annex 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 our employees, consultants and directors and to promote the success of our business.

Awards. The Restricted Stock Plan provides for awards of restricted stock and restricted stock units.

Stock Subject to the Restricted Stock Plan. The Restricted Stock Plan, if amended as proposed, will authorize the issuance of restricted stock and restricted stock units representing up to 4,550,000 shares of our common stock. 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. The Restricted Stock Plan, if amended as proposed, will provide that no more than 400,000 shares may be awarded to any individual grantee under the Restricted Stock Plan in any calendar year. The aggregate number of shares available for issuance under the Restricted Stock 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. An award made under the Restricted Stock Plan may be subject to time-based vesting or to a vesting schedule based on performance targets or criteria established by the Compensation Committee.

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 and restricted stock unit 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 us. As of April 18, 2014, 2014, approximately 115 persons would be eligible to participate in the Restricted Stock Plan.

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 us; 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 award of restricted stock or restricted stock units 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. Eligible performance criteria specified in the Restricted Stock Plan are: (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;

Table of Contents

(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. 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 our outstanding stock by reason of any stock splits, reverse stock splits, stock dividends, combination or reclassification or any change in our capital structure, 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 any time amend, alter, suspend or terminate the Restricted Stock Plan; provided, however, that we 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 us. 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 Tax Consequences

The following discussion summarizes the material United States federal income tax consequences to us 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. We 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. We will be entitled to a deduction in the same amount and at the same time as the ordinary taxable income realized by the grantee.

Table of Contents

All of the above-described deductions are subject to the limitations on deductibility described in Section 162(m) of the Code. It is our 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 us 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.

ANNUAL REPORT ON FORM 10-K

On March 28, 2014, we filed our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 with the SEC. A copy of the Annual Report has been sent or made available 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.

STOCKHOLDER PROPOSALS

Stockholders may present proposals for action at a future meeting if they comply with SEC rules, state law and our Bylaws.

Stockholder Proposals to be Included in the Proxy Statement

To be considered for inclusion in our proxy materials for the 2015 Annual Meeting of Stockholders, a stockholder proposal must be received in writing at our offices, 12300 North Grant Street, Thornton, Colorado 80241, no later than December 26, 2014.

Stockholder Proposals Not to be Included in the Proxy Statement

If you wish to make a stockholder proposal at the 2015 Annual Meeting of Stockholders that is not intended to be included in our proxy materials for that meeting, you generally must provide appropriate notice to us in the manner specified in our Bylaws between January 21, 2015 and February 20, 2015. Furthermore, a proxy for our 2015 Annual Meeting of Stockholders may confer discretionary authority to vote on any matter not submitted to us by March 6, 2015.

OTHER BUSINESS

We know 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 as proxies intend to vote the shares they represent as the Board may recommend.

BY ORDER OF THE BOARD OF DIRECTORS
Victor Lee
President and Chief Executive Officer
April 25, 2014
Thornton, Colorado

Table of Contents

Annex A

CERTIFICATE OF AMENDMENT

TO THE

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

ASCENT SOLAR TECHNOLOGIES, INC.

Ascent Solar Technologies, Inc., a corporation duly organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies as follows:

FIRST: That the Board of Directors of the Corporation has duly adopted resolutions (i) authorizing the Corporation to execute and file with the Secretary of State of the State of Delaware this Certificate of Amendment to the Amended and Restated Certificate of Incorporation (this "Amendment") to combine each [ ] outstanding shares of the Corporation's Common Stock, par value $.0001 per share (the "Common Stock"), into one (1) validly issued, fully paid and non-assessable share of Common Stock; and (ii) declaring this Amendment to be advisable, submitted to and considered by the stockholders of the Corporation entitled to vote thereon for approval by the affirmative vote of such stockholders in accordance with the terms of the Company's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") and Section 242 of the General Corporation Law of the State of Delaware (the "DGCL") and recommended for approval by the stockholders of the Corporation.

SECOND: That this Amendment was duly adopted in accordance with the terms of the Certificate of Incorporation and the provisions of Section 242 of the DGCL by the Board of Directors and stockholders of the Corporation.

THIRD: That the capital of the Corporation shall not be reduced under or by reason of this Amendment.

FOURTH: That upon the effectiveness of this Amendment, the Certificate of Incorporation is hereby amended such that the following paragraph shall be added after the first paragraph of ARTICLE 4 of the Certificate of Incorporation:

As of 5:00 p.m. (eastern time) on [,] (the "Effective Time"), each [ ] shares of Common Stock issued and outstanding at such time shall be combined into one (1) share of Common Stock (the "Reverse Stock Split"). The par value of the Common Stock following the Reverse Stock Split shall remain $.0001 per share. No fractional shares will be issued in connection with the Reverse Stock Split. Stockholders of record who otherwise would be entitled to receive fractional shares, will be entitled to rounding up of their fractional share to the nearest whole share. Each certificate that immediately prior to the Effective Time represented shares of Common Stock (an "Old Certificate") shall thereafter represent that number of shares of Common Stock into which the shares of Common Stock represented by the Old Certificate shall have been combined, subject to the elimination of fractional share interests as described above.

IN WITNESS WHEREOF, the Company has caused this Certificate of Amendment to the Amended and Restated Certificate of Incorporation to be executed by William M. Gregorak, its Secretary, this [ ] day of [ ], 201_.

ASCENT SOLAR TECHNOLOGIES, INC.

By:	/s/ William M. Gregorak
Name:	William M. Gregorak
Title:	Secretary

Table of Contents

Annex B

ASCENT SOLAR TECHNOLOGIES, INC.
FOURTH AMENDED AND RESTATED 2008 RESTRICTED STOCK PLAN

(Approved by the Board of Directors on [ ], 2014;
Adopted by the Stockholders on [ ], 2014)

1. Purposes of the Plan. The purposes of this Fourth Amended and Restated 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 Restricted Stock or Restricted Stock Units 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

(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 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

Table of Contents

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. " 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.

l. " Date of Termination " means the date on which a Grantee's employment or service as a Director, whichever is applicable, terminates.

m. " Director " means a member of the Board.

n. " Eligible Employee " means any person who is employed by the Company or any Parent or Subsidiary of the Company.

o. " Exchange Act " means the Securities Exchange Act of 1934, as amended.

p. " 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.

q. " Grantee " means an individual to whom an Award has been granted.

r. " 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.

s. " 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.

t. " Plan " means this Second Amended and Restated 2008 Ascent Solar Technologies, Inc. Restricted Stock Plan, as it may be amended from time to time.

u. " Restricted Stock " means Common Stock awarded under this Plan.

Table of Contents

v. " Restricted Stock Unit " means a bookkeeping entry representing an amount equivalent to the fair market value of one share of Common Stock, payable in cash or shares of Common Stock. Restricted Stock Units represent an unfunded and unsecured obligation of the Company, except as otherwise provided for by the Committee.
w. " 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.

x. " Section 16(b) " means Section 16(b) of the Exchange Act.

y. " Share " means a share of the Common Stock awarded under the Plan as (i) part of a Restricted Stock grant or (ii) a component of a Restricted Stock Unit, as adjusted in accordance with Section 7 of the Plan.

z. " 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 four million five hundred fifty thousand (4,550,000) two million five hundred fifty thousand (2,550,000) 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 400,000 200,000 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;

Table of Contents

(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 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 Award shall depend on the extent to which each such condition is timely satisfied. Unless otherwise provided in the Award Agreement, the Award shall vest in a series of three (3) successive equal annual installments over the three (3)-year period measured from the Date of Grant.

(i) With respect to Awards of Restricted Stock, 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 Shares for which a grant has become effective as soon as practicable after the Date of Grant.

(ii) With respect to Awards of Restricted Stock Units, as soon as administratively possible after the date of vesting, but in no event later than two and a half months after the end of the calendar year in which the vesting occurs, the Committee will cause to be issued to the Grantee, a share certificate to, or for the benefit of, the Grantee with respect to the number of vested Shares. Alternatively, at the discretion of the Committee, vested Restricted Stock Units may

be paid to the Grantee in cash.

d. Code Section 162(m) Provisions.

Table of Contents

(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 Shares or cash 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.

(i) Restricted Stock . 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 Shares after the Date of Grant and before the first day that the Grantee's interest in such 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 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 Share after the grant is effective but before the Grantee's interest in such Share has been forfeited or has become nonforfeitable and vested, such stock dividend shall be treated as part of the grant of the 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 Shares related to his or her Award of after the Date of Grant of such Shares but before his or her interest in such Shares has been forfeited or has become nonforfeitable and vested

Table of Contents

(ii) Restricted Stock Units . No dividend or voting rights shall attach to Shares associated with Awards of Restricted Stock Units unless and until such Shares become nonforfeitable and vested.

f. Satisfaction of Forfeiture Conditions. A Share shall cease to be restricted at such time as a Grantee's interest in such 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:

i. With respect to the portion of an Award that is forfeitable immediately before the Date of Termination, the 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 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 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 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 Shares. Any certificates representing the Shares issued under the Plan shall be issued in the Grantee's name, but, if the applicable Award Agreement so provides, the Shares will be held by a custodian designated by the Committee (the "Custodian"). Each applicable Award Agreement providing for the transfer of 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 Shares held by the Custodian for such Grantee, if the Grantee forfeits the 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 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 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 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 _____. A copy of the Plan

Table of Contents

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

l. Removal of Restrictions. Shares shall become freely transferable by the Grantee after they become nonforfeitable and vested. Once the 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 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. In the case where the Grantee is an Eligible Employee, 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 Shares, the Grantee's actual number of vested 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 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 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 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 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 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.

34

Table of Contents

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 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.

35

Table of Contents

EXHIBIT A

ASCENT SOLAR TECHNOLOGIES, INC.
FOURTH AMENDED AND RESTATED 2008 RESTRICTED STOCK PLAN
RESTRICTED STOCK AWARD AGREEMENT

This RESTRICTED STOCK AWARD AGREEMENT (the “Agreement”) is made as of [ ] (the “ Date of Grant ”) between ASCENT SOLAR TECHNOLOGIES, INC., a Delaware corporation (the “ Company ”) and [ ] (the “ Grantee ”).

Background Information

A. The Board of Directors (the “ Board ”) and shareholders of the Company previously adopted the Ascent Solar Technologies, Inc. Second Amended and Restated 2008 Restricted Stock Plan (the “ Plan ”).

B. The Plan provides that the Committee shall have the discretion and right to grant Awards to any Eligible Employees or Directors of the Company, subject to the terms and conditions of the Plan and any additional terms provided by the Committee. The Committee has made an Award grant to the Grantee as of the Date of Grant pursuant to the terms of the Plan and this Agreement.

C. In cases where the Committee has determined that the vesting of the Award is subject to certain performance targets set forth in Section 5(d) of the Plan, the Compensation Committee of the Board (the " Compensation Committee ") has determined that it is 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, and the Compensation Committee has determined that Section 5(d) of the Plan is applicable to such Award.

C. The Grantee desires to accept the Award grant and agrees to be bound by the terms and conditions of the Plan and this Agreement.

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

Agreement

1. Restricted Stock . Subject to the terms and conditions provided in this Agreement and the Plan, the Company hereby grants to the Grantee [ ] (_____) shares of Common Stock (the “ Shares ”) as of the Date of Grant. The extent to which the Shares become vested and nonforfeitable shall be determined in accordance with the provisions of Sections 2 and 3 of this Agreement.

2. Vesting . Except as may be otherwise provided in this Section 2 and in Section 3 of this Agreement, the Grantee's rights and interest in the Shares shall become vested and nonforfeitable and shall cease being restricted as follows: CHECK ONE:

Time-based vesting according to the following schedule:

Date	Percent Vested

Performance-based vesting according to the following criteria:

Except as may be otherwise provided in Section 3 of this Agreement, the extent of the vesting of the Restricted Stock shall be based upon the satisfaction of the performance goal specified in this Section 2 (the " Performance Goal "). The Performance Goal shall be based upon [ ].

The portion of the Grantee's rights and interest in the Restricted Stock, if any, that become vested and non-forfeitable and ceases to be restricted shall be determined in accordance with the following schedule: [ ].

Table of Contents

The applicable portion of the Restricted Stock shall become vested and non-forfeitable and shall cease being restricted upon written certification by the Compensation Committee of the Company's Board of Directors that the corresponding Performance Goal has been satisfied, provided the Grantee's Continuous Status as an Employee or Consultant has not terminated more than thirty (30) days prior to the date and time of the Compensation Committee's certification. Any determination as to whether or not and to what extent the Performance Goal has been satisfied shall be made by the Compensation Committee in its sole and absolute discretion and shall be final, binding and conclusive on all persons, including, but not limited to, the Company and the Grantee. The Grantee shall not be entitled to any claim or recourse if any action or inaction by the Company, or any other circumstance or event, including any circumstance or event outside the control of the Grantee, adversely affects the ability of the Grantee to satisfy the Performance Goal or in any way prevents the satisfaction of the Performance Goal.

3. Change in Control . [In the event of a Change in Control, any portion of the Shares that is not yet vested and nonforfeitable on the date such Change in Control occurs shall become vested and nonforfeitable in accordance with Section 7(b) of the Plan.]

4. Restrictions on Transfer . Until such time as a Share becomes vested and nonforfeitable pursuant to Section 2 or Section 3 of this Agreement, the Grantee shall not have the right to make or permit to occur any transfer, pledge or hypothecation of all or any portion of the Shares, whether outright or as security, with or without consideration, voluntary or involuntary. Any transfer, pledge or hypothecation not made in accordance with this Agreement shall be deemed null and void.

5. Termination of Employment . Subject to Section 3 above, in the event that the Grantee's employment or service as a Director terminates for any reason, then:

(i) With respect to the portion of the Award that is unvested and forfeitable immediately before the Date of Termination, the Shares shall thereupon automatically be forfeited; and

(iii) With respect to the portion of the Award that is nonforfeitable and vested immediately before the Date of Termination, the 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 Shares.

6. Shares Held by Custodian . The Grantee hereby authorizes and directs the Company to deliver any share certificate issued by the Company to evidence the Award to the Secretary of the Company or such other officer of the Company as may be designated by the Committee (the “ Share Custodian ”) to be held by the Share Custodian until the Shares becomes vested and nonforfeitable in accordance with Section 2 or Section 3 of this Agreement. When a Share becomes vested, the Share Custodian shall deliver to the Grantee (or his beneficiary in the event of death) a certificate representing the vested and nonforfeitable Share. The Grantee hereby irrevocably appoints the Share Custodian, and any successor thereto, as the true and lawful attorney-in-fact of the Grantee with full power and authority to execute any stock transfer power or other instrument necessary to transfer the Shares to the Company, or to transfer a portion of the Shares to the Grantee on an unrestricted basis upon vesting, pursuant to this Agreement, in the name, place, and stead of the Grantee. The term of such appointment shall commence on the Date of Grant and shall continue until all the Shares become vested or are forfeited. During the period that the Share Custodian holds the Shares subject to this Section 6, the Grantee shall be entitled to all rights applicable to shares of common stock of the Company not so held, including the right to vote and receive dividends, but provided, however, in the event the number of Shares is increased or reduced in accordance with Section 7 of the Plan, and in the event of any distribution of common stock or other securities of the Company in respect of such shares of common stock, the Grantee agrees that any certificate representing shares of such additional common stock or other securities of the Company issued as a result of any of

the foregoing shall be delivered to the Share Custodian and shall be subject to all of the provisions of this Agreement as if initially received hereunder.

7. Tax Consequences .

(a) Upon the occurrence of a vesting event specified in Section 2 or Section 3 above, the Grantee must satisfy the federal, state, local or foreign income and social insurance withholding taxes imposed by reason of the vesting of the Restricted Stock. In the case of a Grantee who is an employee: (i) 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; and (ii) 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 Shares, the Grantee's actual number of vested Shares of shall be reduced by the smallest number of whole Shares which, when

Table of Contents

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.
(b) The Grantee understands that the Grantee may elect to be taxed at the Date of Grant rather than when the Shares become vested by filing with the Internal Revenue Service an election under section 83(b) of the Internal Revenue Code of 1986, as amended (the " Code "), within thirty (30) days from the Date of Grant. The Grantee acknowledges that it is the Grantee's sole responsibility and not the Company's responsibility to timely file the Code section 83(b) election with the Internal Revenue Service if the Grantee intends to make such an election. Grantee agrees to provide written notification to the Company if the Grantee files a Code section 83(b) election.

8. No Effect on Employment . Nothing in the Plan or this Agreement shall confer upon the Grantee the right to continue in the employment of the Company or effect any right which the Company may have to terminate the employment of the Grantee regardless of the effect of such termination of employment on the rights of the Grantee under the Plan or this Agreement.

9. Governing Laws . This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware.
10. Successors . This Agreement shall inure to the benefit of, and be binding upon, the Company and the Grantee and their heirs, legal representatives, successors and permitted assigns.

11. Severability . In the event that any one or more of the provisions or portion thereof contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, the same shall not invalidate or otherwise affect any other provisions of this Agreement, and this Agreement shall be construed as if the invalid, illegal or unenforceable provision or portion thereof had never been contained herein.

12. Entire Agreement . Subject to the terms and conditions of the Plan, which are incorporated herein by reference, this Agreement expresses the entire understanding and agreement of the parties hereto with respect to such terms, restrictions and limitations.

13. Headings . Section headings used herein are for convenience of reference only and shall not be considered in construing this Agreement.

14. Additional Acknowledgements . By their signatures below, the Grantee and the Company agree that the Shares is granted under and governed by the terms and conditions of the Plan and this Agreement. Grantee has had an opportunity to request a copy of the Plan, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan and this Agreement. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee made in accordance with the terms of the Plan and this Agreement upon any questions relating to the Plan and this Agreement.

15. Incorporation of Plan by Reference . The Award is granted in accordance with the terms and conditions of the Plan, the terms of

IN WITNESS WHEREOF, the Company and the Grantee have executed this Agreement as of the Date of Grant set forth above.

ASCENT SOLAR TECHNOLOGIES, INC.
By:
Print Name:
GRANTEE

38

Table of Contents

EXHIBIT B

ASCENT SOLAR TECHNOLOGIES, INC.
FOURTH AMENDED AND RESTATED 2008 RESTRICTED STOCK PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT

This RESTRICTED STOCK UNIT AWARD AGREEMENT (the “Agreement”) is made as of [ ] (the “ Date of Grant ”) between ASCENT SOLAR TECHNOLOGIES, INC., a Delaware corporation (the “ Company ”) and [ ] (the “ Grantee ”).

Background Information

A. The Board of Directors (the “ Board ”) and shareholders of the Company have adopted the Ascent Solar Technologies, Inc. Second Amended and Restated 2008 Restricted Stock Plan (the “ Plan ”).

B. The Plan provides that the Committee shall have the discretion and right to grant Restricted Stock Units to any Eligible Employees or Directors of the Company, subject to the terms and conditions of the Plan and any additional terms provided by the Committee. The Committee has made grant of Restricted Stock Units to the Grantee as of the Date of Grant pursuant to the terms of the Plan and this Agreement.

C. In cases where the Committee has determined that the vesting of the Restricted Stock Units is subject to certain performance targets set forth in Section 5(d) of the Plan, the Compensation Committee of the Board (the " Compensation Committee ") has determined that it is desirable for compensation delivered pursuant to such Restricted Stock Units to be eligible to qualify for an exemption from the limit on tax deductibility of compensation under Section 162(m) of the Code, and the Compensation Committee has determined that Section 5(d) of the Plan is applicable to such Restricted Stock Units.

D. The Grantee desires to accept the Restricted Stock Units grant and agrees to be bound by the terms and conditions of the Plan and this Agreement.

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

Agreement

1. Restricted Stock Unit . Subject to the terms and conditions provided in this Agreement and the Plan, the Company hereby grants to the Grantee [ ] (_____) Restricted Stock Units covering shares of Common Stock as of the Date of Grant. The extent to which the Restricted Stock Units become vested and nonforfeitable shall be determined in accordance with the provisions of Sections 2 and 3 of this Agreement.

2. Vesting . Except as may be otherwise provided in this Section 2 and in Section 3 of this Agreement, the Grantee's rights and interest in the Restricted Stock Units shall become vested and nonforfeitable as follows:
CHECK ONE:

Time-based vesting according to the following schedule:

Date	Percent Vested

Performance-based vesting according to the following criteria:

Except as may be otherwise provided in Section 3 of this Agreement, the extent of the vesting of the Restricted Stock Units shall be based upon the satisfaction of the performance goal specified in this Section 2 (the " Performance Goal ").

The Performance Goal shall be based upon [ ].

Table of Contents

The portion of the Grantee's rights and interest in the Restricted Stock Units, if any, that become vested and non-forfeitable shall be determined in accordance with the following schedule: [ ].

The applicable Restricted Stock Units shall become vested and non-forfeitable upon written certification by the Compensation Committee of the Company's Board of Directors that the corresponding Performance Goal has been satisfied, provided the Grantee's Continuous Status as an Employee or Consultant has not terminated more than thirty (30) days prior to the date and time of the Compensation Committee's certification. Any determination as to whether or not and to what extent the Performance Goal has been satisfied shall be made by the Compensation Committee in its sole and absolute discretion and shall be final, binding and conclusive on all persons, including, but not limited to, the Company and the Grantee. The Grantee shall not be entitled to any claim or recourse if any action or inaction by the Company, or any other circumstance or event, including any circumstance or event outside the control of the Grantee, adversely affects the ability of the Grantee to satisfy the Performance Goal or in any way prevents the satisfaction of the Performance Goal.

3. Change in Control . [In the event of a Change in Control, any Restricted Stock Units that are not yet vested and nonforfeitable on the date such Change in Control occurs shall become vested and nonforfeitable in accordance with Section 7(b) of the Plan.]

4. Restrictions on Transfer . The Grantee shall not have the right to make or permit to occur any transfer, pledge or hypothecation of all or any portion of the Restricted Stock Units, whether outright or as security, with or without consideration, voluntary or involuntary. Any transfer, pledge or hypothecation not made in accordance with this Agreement shall be deemed null and void.

5. Termination of Employment . Subject to Section 3 above, in the event that the Grantee's employment or service as a Director terminates for any reason, then with respect to the Restricted Stock Units that are unvested and forfeitable immediately before the Date of Termination, such unvested Restricted Stock Units shall thereupon automatically be forfeited.

6. Settlement of Vested Restricted Stock Units . Subject to Section 7 below, as soon as administratively feasible after the date of vesting of a Restricted Stock Unit, but no later than 2 and 1/2 months after the last day of the calendar year in which the vesting occurs, the Committee shall cause to be delivered to the Grantee the equivalent number of shares of Common Stock or cash, or a combination of both, as determined by the Committee in its sole discretion.

7. Tax Consequences . Upon the occurrence of a vesting event specified in Section 2 or Section 3 above, the Grantee must satisfy the federal, state, local or foreign income and social insurance withholding taxes imposed by reason of the vesting of the Restricted Stock Units. In the case of a Grantee who is an employee: (i) upon grant of Restricted Stock Units, 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; and (ii) 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 Restricted Stock Units, the Grantee's actual number of shares of Common Stock shall be reduced by the smallest number of whole shares of Common Stock 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.

8. No Effect on Employment . Nothing in the Plan or this Agreement shall confer upon the Grantee the right to continue in the employment of the Company or affect any right which the Company may have to terminate the employment of the Grantee regardless of the effect of such termination of employment on the rights of the Grantee under the Plan or this Agreement.

9. Governing Laws . This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware.

10. Successors . This Agreement shall inure to the benefit of, and be binding upon, the Company and the Grantee and their heirs, legal representatives, successors and permitted assigns.

11. Severability . In the event that any one or more of the provisions or portion thereof contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, the same shall not invalidate or otherwise affect any other provisions of this Agreement, and this Agreement shall be construed as if the invalid, illegal or unenforceable provision or portion thereof had never been contained herein.

Table of Contents

12. Entire Agreement . Subject to the terms and conditions of the Plan, which are incorporated herein by reference, this Agreement expresses the entire understanding and agreement of the parties hereto with respect to such terms, restrictions and limitations.

13. Headings . Section headings used herein are for convenience of reference only and shall not be considered in construing this Agreement.

14. Additional Acknowledgements . By their signatures below, the Grantee and the Company agree that the Restricted Stock Units are granted under and governed by the terms and conditions of the Plan and this Agreement. Grantee has had an opportunity to request a copy of the Plan, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan and this Agreement. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee made in accordance with the terms of the Plan and this Agreement upon any questions relating to the Plan and this Agreement.

15. Incorporation of Plan by Reference . These Restricted Stock Units are granted in accordance with the terms and conditions of the Plan, the terms of which are incorporated in this Agreement by reference, and this Agreement shall in all respects be interpreted in accordance with the Plan.

IN WITNESS WHEREOF, the Company and the Grantee have executed this Agreement as of the Date of Grant set forth above.

ASCENT SOLAR TECHNOLOGIES, INC.
By:
Print Name:
GRANTEE

Table of Contents

Table of Contents