

Ascent Solar Technologies, Inc.
Form PRE 14A
December 09, 2013
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 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))
- 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):

- 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

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

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
[____], 2014

December [], 2013

TO OUR STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that a Special Meeting of Stockholders of Ascent Solar Technologies, Inc., a Delaware corporation, will be held on January [], 2014, at [2:00] p.m. Mountain Time at the Company's offices, 12300 Grant Street, Thornton, Colorado 80241, for the following purposes, as more fully described in the Proxy Statement accompanying this notice:

To approve the issuance by the Company, in accordance with a securities purchase agreement between the
1. Company and Seng Wei Seow, dated June 17, 2013, 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.

2. To approve the issuance by the Company, in accordance with a securities purchase agreement between the Company and Ironridge Technology Co., a division of Ironridge Global IV, Ltd., dated October 28, 2013, 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.

To consider and approve a certificate of amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of the Company's common stock from 125,000,000 to 250,000,000. Note: I
3. am awaiting confirmation that brokers will be able to vote without instruction on the authorized increase proposal. If brokers cannot vote, then we should add another proposal that would let us adjourn the meeting if we are not able to obtain a quorum.

4. To transact such other business as may properly come before the special meeting or any adjournment thereof. Stockholders who owned shares of our common stock at the close of business on December [], 2013 are entitled to receive notice of, attend and vote at the Special 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 Special Meeting.

Your vote is important. Whether or not you plan to attend the Special 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 over the Internet. 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.

By Order of the Board of Directors

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

PROXY STATEMENT

For the Special Meeting of Stockholders to be held on January [__], 2014

Your proxy is being solicited on behalf of the Board of Directors (the “Board”) of Ascent Solar Technologies, Inc., a Delaware corporation, for use at the Special Meeting of Stockholders (the “Special Meeting”) to be held at [2:00 p.m.] Mountain Time on January [__], 2014, or at any adjournment or postponement thereof, for the purposes set forth in this Proxy Statement. The Special Meeting will be held at the Company’s offices, 12300 Grant Street, Thornton, Colorado 80241.

These proxy materials are first being provided on or about December [__], 2013 to all stockholders as of the record date, December [__], 2013. Stockholders who owned our common stock at the close of business on December [__], 2013 are entitled to receive notice of, attend and vote at the Special Meeting. On the record date, there were [_____] shares of our common stock outstanding.

All proxies will be voted in accordance with the instructions contained on those proxies, and if no choice is specified, the proxies will be voted in favor of each matter set forth in the accompanying Notice of Meeting. Any proxy may be revoked by a stockholder at any time before it is exercised by delivery of written revocation to our corporate secretary.

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

Table of Contents

TABLE OF CONTENTS

<u>VOTING AND RELATED MATTERS</u>	<u>1</u>
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	<u>3</u>
<u>PROPOSAL NO. 1: APPROVAL OF THE ISSUANCE OF SHARES OF COMMON STOCK RELATING TO SEOW TRANSACTION</u>	<u>5</u>
<u>PROPOSAL NO. 2: APPROVAL OF THE ISSUANCE OF SHARES OF COMMON STOCK RELATING TO IRONRIDGE TRANSACTION</u>	<u>7</u>
<u>PROPOSAL NO. 3: APPROVAL OF AN INCREASE IN THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK</u>	<u>10</u>
<u>WHERE TO FIND MORE INFORMATION</u>	<u>11</u>
<u>STOCKHOLDER PROPOSALS</u>	<u>12</u>
<u>OTHER BUSINESS</u>	<u>12</u>

Table of Contents

VOTING AND RELATED MATTERS

Voting Procedures

As a stockholder of Ascent, you have a right to vote on certain business matters affecting us. The proposals that will be presented at the Special 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 Special Meeting.

Electronic Delivery of Proxy Materials

Under rules adopted by the SEC, we are furnishing proxy materials to our stockholders primarily via the Internet, instead of mailing printed copies of those materials to each stockholder. On or about December [__], 2013, we sent our stockholders (other than those who previously requested electronic or paper delivery) a Notice of Internet Availability containing instructions on how to access our proxy materials on the Internet. The Notice of Internet Availability also instructs stockholders on how they can vote over the Internet or by telephone.

If you would prefer to receive printed proxy materials, please follow the instructions included in the Notice of Internet Availability. If you have previously elected to receive our proxy materials electronically, you will continue to receive these materials via e-mail unless you elect otherwise.

Methods of Voting

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

Voting in Person at the Meeting. If you attend the Special Meeting and plan to vote in person, we will provide you with a ballot at the Special 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 Special 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 Special Meeting, you will need to bring to the Special 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 Special 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 of the revocation to our Corporate Secretary at our principal executive offices, which are located at 12300 Grant Street, Thornton, Colorado 80241; or
- attend the Special Meeting and vote in person

Quorum and Voting Requirements To Approve Each Proposal

Stockholders of record at the close of business on December [__], 2013 are entitled to receive notice and vote at the meeting. On the record date, there were [_____] 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. Holders of our preferred stock do not have voting rights at the meeting.

Table of Contents

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, the following table summarizes the voting requirements to approve each proposal:

Proposal	Vote Required	Broker Discretionary Voting Allowed
Proposal 1 - To approve the issuance by the Company, in accordance with a securities purchase agreement between the Company and Seng Wei Seow, dated June 17, 2013, 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.	The affirmative vote of a majority of the votes cast at the Special Meeting.	No
Proposal 2 - To approve the issuance by the Company, in accordance with a securities purchase agreement between the Company and Ironridge Technology Co., a division of Ironridge Global IV, Ltd., dated October 28, 2013, 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.	The affirmative vote of a majority of the votes cast at the Special Meeting.	No
Proposal 3 - Approval of the amendment to the Company's certificate of incorporation to increase the number of authorized common shares.	A majority of the outstanding shares of common stock.	Yes

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. Accordingly, abstentions will have no effect on whether Proposal 1 or Proposal 2 is approved at the Special Meeting. Abstentions will have the same effect as a vote "AGAINST" Proposal 3.

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, is permitted to either leave your shares unvoted or vote your shares on matters that are considered routine. Proposal 1 and Proposal 2 are considered non-routine matters. Proposal 3 is considered a routine matter. Consequently, without your voting instructions, your brokerage firm (i) will not be able to vote your shares on Proposal 1 or Proposal 2, but (ii) will be able to vote your shares on Proposal 3. 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. Broker non-votes will not be counted as shares that are present and entitled to vote for purposes of determining the presence of a quorum. Assuming that a quorum is present, broker non-votes (i) will have no effect on whether Proposal 1 or Proposal 2 are approved at the Special Meeting and (ii) will have the same effect as a vote "AGAINST" Proposal 3.

Voting of Proxies

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

(1) “FOR” Proposal 1 to approve the issuance by the Company, in accordance with a securities purchase agreement between the Company and Seng Wei Seow, dated June 17, 2013, 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;

(2) “FOR” Proposal 2 to approve the issuance by the Company, in accordance with a securities purchase agreement between the Company and Ironridge Technology Co., a division of Ironridge Global IV, Ltd., dated October 28, 2013, 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;

(3) “FOR” Proposal 3: the amendment to the Company’s Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 125,000,000 to 250,000,000; and

Table of Contents

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

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 matters which are considered routine. Proposal 1 and Proposal 2 are not routine matters; Proposal 3 is a routine matter. Consequently, without your voting instructions, your brokerage firm (i) will not be able to vote your shares at the Special Meeting on Proposal 1 or Proposal 2, but (ii) will be able to vote your shares at the Special Meeting on Proposal 3.

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 Special Meeting and published in a Form 8-K to be filed within four (4) business days after the Special 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.

We will promptly deliver a separate copy of these proxy materials to any stockholder upon written or oral request to our Corporate Secretary by mail at 12300 Grant Street, Thornton, Colorado 80241 or by phone at (720) 872-5000.

Any stockholder who wants to receive separate copies of proxy materials in the future, or any stockholder who is receiving multiple copies and would like to receive only one copy per household, should contact that stockholder's bank, broker, or other nominee record holder, or that stockholder may contact us at the above address and phone number.

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 Special Meeting

The Company's main office is approximately 29 miles from Denver International Airport. From the Airport, take Pena Boulevard to I-70 West to I-270 West to I-25 North. Exit 120th Avenue. Turn right onto 120th Avenue, then turn left onto Grant Street. The Company's offices are on the right.

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 and greater than 5% beneficial owners as of December 5, 2013.

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. For purposes of calculating the percentage of our common stock beneficially owned, the number of shares of our common stock includes 60,546,289 shares of our common stock outstanding as of December 5, 2013.

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 Grant Street, Thornton, Colorado 80241.

Table of Contents

Name of Beneficial Owner	No. of Shares Beneficially Owned	Percentage	
5% Stockholders:			
TFG Radiant Investment Group Ltd. (1)	16,032,842	26.48	%
Seng Wei Seow (2)	5,994,082	9.90	%
Ironridge Technology Co., a division of Ironridge Global IV, Ltd. (3)	4,148,194	6.85	%
Officers and Directors:			
Victor Lee (4)	—	*	
Bill Gregorak (5)	—	*	
Amit Kumar, Ph.D.(6)	454,311	*	
Kim J. Huntley (7)	90,723	*	
G. Thomas Marsh (8)	309,942	*	
Xu Biao (9)	—	*	
All directors and executive officers as a group (16 persons)	854,976	1.41	%

* 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. Does not include 9,500,000 shares of common stock which could be issued to TFG Radiant upon exercise of an option granted to TFG Radiant in August 2011 and which has an exercise price of \$1.55 per share.

(2) The address for Mr. Seow is 17 Jalan Haji Salam, Singapore 468784. Mr. Seow may be deemed to have beneficial ownership of 5,994,082 shares of common stock, which consist of (i) 3,123,900 shares of common stock issuable upon conversion of shares of Series A preferred stock held Seow (ii) 2,766,484 shares of common stock held by Seow, and (iii) 103,698 shares of common stock issuable upon exercise of warrants held by Seow. The foregoing excludes 2,521,302 shares of common stock issuable upon exercise of warrants held by Seow, because the shares of Series A preferred stock and the warrants held by Seow are subject to blocker provisions under which Seow does not have the right to convert his Series A preferred stock or exercise his warrants to the extent that such conversion or exercise, respectively, would result in beneficial ownership by Seow of more than 9.9% of the common stock of Ascent. Without such blocker provisions, Seow may be deemed to have beneficial ownership of 8,515,384 shares of common stock. The Series A preferred stock and common stock warrants owned by Mr. Seow do not have voting rights. Accordingly, Mr. Seow will not be able to vote such securities on any proposal considered at the Special Meeting.

(3) The address for Ironridge is Harbour House, 2nd Floor, Waterfront Drive, Road Town, Tortola, British Virgin Islands VG1110. Ironridge may be deemed to have beneficial ownership of 4,148,194 shares of common stock, which consist of (i) 3,478,261 shares of common stock issuable upon conversion of 400 outstanding shares of Series B-1 preferred stock held Ironridge, and (ii) 669,933 shares of common stock held by Ironridge. Does not include any shares of common stock issuable upon conversion of 500 shares of Series B-1 or Series B-2 preferred stock, as applicable, that Ironridge would acquire in an additional closing if Proposal 2 is approved by our stockholders at the Special Meeting. If the Company issues Series B-1 preferred stock in such additional closing, such Series B-1 preferred stock would be convertible into 4,347,826 additional shares of common stock. If the Company issues Series B-2 preferred stock in such additional closing, such Series B-2 preferred stock would be convertible into 3,333,333 additional shares of common stock. The outstanding Series B-1 preferred stock owned by Ironridge does not have voting rights. Accordingly, Ironridge will not be able to vote such securities on any proposal considered at the Special Meeting.

- 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
- (4) disclaims beneficial ownership of our securities held by TFG Radiant Investment Group Ltd. Does not include options to purchase 200,000 shares of common stock held by Mr. Lee but which will not vest within 60 days of December 5, 2013.
- (5) Does not include options to purchase 50,000 shares of common stock held by Mr. Gregorak which will not be vested within 60 days of December 5, 2013.

Table of Contents

(6) Includes 399,941 shares of common stock and 46,370 restricted stock units which will be vested within 60 days of December 5, 2013, and 8,000 options to purchase shares of common stock which are vested.

(7) Includes 60,482 shares of common stock, and 30,241 restricted stock units which will be vested within 60 days of December 5, 2013.

(8) Includes 279,701 shares of common stock, and 30,241 restricted stock units which will be vested within 60 days of December 5, 2013.

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.

PROPOSAL NO. 1:

APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK PURSUANT TO A SECURITIES PURCHASE AGREEMENT, DATED JUNE 17, 2013.

Terms of the Seow Transaction

On June 17, 2013, the Company entered into a Securities Purchase Agreement (the "Seow Purchase Agreement") with Seng Wei Seow ("Seow"), pursuant to which Seow agreed to purchase from the Company, and we agreed to sell to Seow (subject to the terms and conditions set forth therein), an aggregate of 750,000 shares of Series A preferred stock at a price of \$8.00 per share of Series A preferred stock and warrants (the "Warrants") to purchase up to 2,625,000 shares of common stock of the Company at an exercise price of \$0.90 per share of common stock. The Warrants have a three year term.

The securities covered by the Seow Purchase Agreement were issued by the Company in three closings which occurred in June and August, 2013, resulting in gross proceeds to the Company of \$6 million.

The Series A preferred stock may be converted into shares of common stock at the option of the Company if the closing price of the common stock exceeds \$1.60, as adjusted, for 20 consecutive trading days, or by the holder at any time. The Company has the right to redeem the Series A preferred stock at a price of \$8.00 per share, plus any accrued and unpaid dividends, plus the make-whole amount (if applicable). The holder of the preferred shares may convert to common shares at any time, at no cost, at a ratio of 1 preferred share into 10 common shares (subject to standard ratable anti-dilution adjustments). Accordingly, the 750,000 shares of Series A preferred stock may be converted into an aggregate 7,500,000 shares of common stock. Upon any conversion (whether at the option of the Company or the holder), the holder is entitled to receive any accrued but unpaid dividends and also any make-whole amount (if applicable).

Holders of Series A Preferred Stock are entitled to cumulative dividends at a rate of 8.0% per annum (subject to adjustment in certain circumstances) when and if declared by the board of directors. The dividends may be paid in cash or in the form of common stock (valued at 10% below market price, but not to exceed the lowest closing price during the applicable measurement period), at the discretion of the board of directors. The dividend rate on the Series A preferred stock is indexed to the Company's stock price and subject to upward and downward adjustment. In addition, the Series A preferred stock contains a "make-whole" provision whereby, conversion or redemption of the Series A preferred stock within 4 years of issuance will require dividends for the full four year period to be paid by the Company in cash or common stock (valued at 10% below market price, but not to exceed the lowest closing price during the applicable measurement period).

The Company has the right to redeem all or a portion of the Series A Preferred Stock at any time at a redemption price of \$8.00 per share, plus any accrued and unpaid dividends and plus the make-whole amount (if any).

Upon any liquidation, dissolution or winding up of the Company, after payment or provision for payment of debts and other liabilities of the Company, the holders of Series A Preferred Stock shall be entitled to receive, pari passu with any distribution to the holders of common stock of the Company, an amount equal to \$8.00 per share of Series A Preferred Stock plus any accrued and unpaid dividends.

The Series A preferred stock ranks senior to the Company's common stock with respect to dividend rights, pari passu with respect to rights upon liquidation to the Company's common stock, and junior to all existing and future indebtedness. Except as otherwise required by law (or with respect to approval of certain actions), the Series A preferred stock has no voting rights.

Table of Contents

At no time will the Company issue shares of common stock in connection with the securities issued pursuant to the Seow Purchase Agreement (whether upon exercise of Warrants, conversion of Series A Preferred Stock, payment of dividends in common stock or payment of make-whole amounts in common stock) if such transaction (when aggregated with all other issuances in connection with the Seow Purchase Agreement) would result in the issuance of more than 19.999% of the amount of common stock of the Company issued and outstanding on the date of the Seow Purchase Agreement unless (i) the Company's stockholders shall have approved the issuance of shares of common stock in excess of 19.999% limit or (ii) Nasdaq has provided a waiver of its Listing Rule 5635(d).

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 exercise of the Warrants or the conversion of the Series A 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 make-whole amounts or dividends on the Series A 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 Seow Purchase Agreement could result in the issuance of more than 20% of our outstanding common stock as of June 17, 2013 (the date of the Seow 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 \$0.5433 and market value of \$0.73 on June 17, 2013. In particular, it is possible that the Company would elect to pay dividends and make-whole amounts on the Series A 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 June 17, 2013.

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 of common stock upon the conversion of the Series A preferred stock, upon the exercise of the Warrants, and upon payment of dividends and make-whole amounts in the form of common stock, rather than cash, could result in Seow 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 June 17, 2013.

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 Seow Purchase Agreement because the Seow Purchase Agreement restricts the number of shares that can be issued (whether upon exercise of Warrants, conversion of Series A preferred stock, payment of dividends in common stock or payment of make-whole amounts in common stock) to an amount that would not be in excess of the applicable Nasdaq limitations. Therefore, advance stockholder approval was not required by the Nasdaq Marketplace Rules. If stockholders do not approve Proposal 1 at the Special Meeting, this limit will remain in place.

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 Seow Purchase Agreement.

Effect of Proposal 1 on Current Stockholders

If Proposal 1 is adopted, we would be able to issue shares of common stock in excess of 19.999% of our outstanding shares of common stock as of June 17, 2013 upon conversion of the Series A preferred stock, exercise of the Warrants, and payment of dividends and make-whole 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

Table of Contents

upon conversion of the Series A preferred stock, exercise of the Warrants, or payment of dividends or make-whole amounts in the form of common stock could cause the market price of our common stock to decline.

Further Information

The terms of the Seow Purchase Agreement, the Series A preferred stock and the Warrants 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 June 21, 2013, 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 the Seow Purchase Agreement 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 holders of a majority of the shares of the Company's common stock present in person or by proxy and voting at the Special Meeting.

Any shares of common stock held by Seow shall not be entitled to vote on Proposal 1.

RECOMMENDATION OF THE BOARD FOR PROPOSAL 1:

THE BOARD RECOMMENDS A VOTE FOR APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK IN ACCORDANCE WITH THE SECURITIES PURCHASE AGREEMENT, DATED JUNE 17, 2013.

PROPOSAL 2:

APPROVAL OF THE ISSUANCE OF MORE THAN 20% OF THE COMPANY'S ISSUED AND OUTSTANDING COMMON STOCK PURSUANT TO A SECURITIES PURCHASE AGREEMENT, DATED OCTOBER 28, 2013.

Terms of the Ironridge Transaction

On June 17, 2013, 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 \$10,000,000 of the Company's newly designated Series B-1 preferred stock and Series B-2 preferred stock (collectively, the "Series B preferred stock").

The Company will sell the Series B preferred stock to Ironridge in two tranches. In the first tranche, the Company sold 500 shares of Series B-1 preferred stock to Ironridge at a purchase price of \$10,000 per share of Series B-1 preferred stock, resulting in gross proceeds to the Company of \$5,000,000. The first tranche closed on November 1, 2013. In the second tranche, the Company will offer either 500 shares of Series B-1 preferred stock or 500 shares of Series B-2 preferred stock (but not both) to Ironridge at a purchase price for each share of Series B-1 preferred stock or Series B-2 preferred stock of \$10,000 per share, which would result in additional gross proceeds to the Company of \$5,000,000. The second tranche will not close unless our stockholders approve Proposal 2 at the Special Meeting. If our stockholders do not vote to approve Proposal 2, then the second tranche will not close and we will not receive the related proceeds.

The shares issued in the second tranche will be Series B-2 preferred stock if the closing price of the Company's common stock on the Nasdaq Stock Market has reached \$1.35 or more on any trading day. If this condition is satisfied, the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder

approval or (ii) the date that the closing price was \$1.35 or more.

If the closing price of our common stock on the Nasdaq Stock Market has not yet reached \$1.35 or more, the Company has the option (exercisable until April 28, 2013) to request that the closing of the second tranche occur within 30 days. In this case, the Company would issue Series B-1 preferred stock to Ironridge and the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder approval or (ii) the 30th day following the Company's notice to Ironridge.

7

Table of Contents

Holders of the Series B 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 B preferred stock is indexed to the Company's stock price and subject to upward and downward adjustment in certain circumstances. The Series B preferred stock has a maximum dividend rate of 15% and a minimum dividend rate of 3%.

The Company has the option to pay dividends on the Series B 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) the lowest single day closing price for the common stock occurring during such measuring period.

The Series B-1 preferred stock will be convertible into common stock at a fixed conversion price of \$1.15 per share of common stock. The Series B-2 preferred stock (if issued) will be convertible into common stock at a fixed conversion price of \$1.50 per share of common stock. The Series B preferred stock may be converted into shares of common stock at any time at the option of the holder. The Series B 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 B 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 B 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) 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 B preferred stock, the Company will have the right, at its option, to redeem for cash all or a portion of the Series B 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 B preferred stock, the Company will have the option to redeem for cash all or a portion of the Series B 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 B 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 B 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, an amount equal to \$10,000 per share plus any accrued but unpaid dividends thereon.

At no time will the Company issue shares of common stock in connection with the securities issued pursuant to the Seow Purchase Agreement (whether upon conversion of Series B 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).

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

B 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 B 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 October 28, 2013 (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 \$0.25

Table of Contents

and market value of \$0.90 on October 28, 2013. In particular, it is possible that the Company would elect to pay dividends and embedded dividend liability amounts on the Series B 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 October 28, 2013. 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 of common stock upon the conversion of the Series B 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 October 28, 2013.

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 B 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 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.

If stockholders do not approve Proposal 2 at the Special Meeting, this limit will remain in place. The second tranche will not close unless our stockholders approve Proposal 2 at the Special Meeting. If our stockholders do not vote to approve Proposal 2, then 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 2 on Current Stockholders

If Proposal 2 is adopted, we would be able to issue shares of common stock in excess of 19.99% of our outstanding shares of common stock as of October 28, 2013 upon conversion of the Series B 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 B 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 B 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 October 30, 2013, 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 the Ironridge Purchase Agreement 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 holders of a majority of the shares of the Company's common stock present in person or by proxy and voting at the Special Meeting.

Any shares of common stock held by Ironridge shall not be entitled to vote on Proposal 2.

RECOMMENDATION OF THE BOARD FOR PROPOSAL 2:

9

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 IN ACCORDANCE WITH THE SECURITIES PURCHASE AGREEMENT, DATED OCTOBER 28, 2013.

PROPOSAL 3:

APPROVAL OF AN INCREASE IN THE NUMBER OF AUTHORIZED SHARES

Overview

The Company's Board of Directors has adopted, declared advisable and is submitting for stockholder approval an amendment to the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of the Company's common stock from 125,000,000 to 250,000,000. On December 5, 2013, there were 60,546,289 shares of the Company's common stock outstanding. In addition, we have reserved:

- 2,187,984 shares of common stock for issuance in connection with the Company's various employee benefit and compensation plans;
- 9,500,000 shares of common stock for issuance in connection with the exercise of the option issued to TFG Radiant in 2011;
- 7,500,000 shares of common stock for issuance in connection with the conversion of the Company's Series A preferred stock;
- 2,625,000 shares of common stock for issuance in connection with the exercise of the warrants issued to Mr. Seow in 2013;
- 11,500,000 shares of common stock for issuance in connection with the conversion of the Company's Series B preferred stock;

This leaves 31,140,727, shares of common stock available for future use.

In addition, we may also issue additional shares of common stock in the future if the Company elects to pay its obligations for make whole and embedded dividend liability amounts upon conversion of the Series A preferred stock and the Series B preferred stock in the form of shares rather than cash. The Company currently intends to pay such obligations in shares rather than cash.

The Company's Amended and Restated Certificate of Incorporation also authorizes the issuance of 25,000,000 shares of preferred stock. On December 5, 2013, 750,000 shares of preferred stock were designated as Series A preferred stock (of which 312,390 were outstanding), 2,000 shares of preferred stock were designated as Series B-1 preferred stock (of which 400 were outstanding), and 1,000 shares of preferred stock were designated as Series B-2 preferred stock (of which none were outstanding). The proposed amendment does not increase the number of shares of preferred stock that the Company is authorized to issue.

Form of the Amendment

If stockholders approve this proposal, the Company's Amended and Restated Certificate of Incorporation will be amended to increase the number of shares of common stock the Company is authorized to issue from 125,000,000 to 250,000,000. The par value of the common stock will remain at \$0.0001 per share. The amendment would amend the first sentence of Article 4 of the Company's Amended and Restated Certificate of Incorporation to read in its entirety as follows:

“The total number of shares of all classes of stock that the Corporation shall have authority to issue is two hundred fifty million (250,000,000) shares of common stock, having a par value of \$0.0001 per share, and twenty-five million (25,000,000) shares of preferred stock, having a par value of \$0.0001 per share.”

The remaining text of Article 4 of the Company’s Amended and Restated Certificate of Incorporation will remain unchanged.

Purpose of the Amendment

10

Table of Contents

The Board is recommending this increase in authorized shares of common stock primarily to give the Company appropriate flexibility to issue shares for future corporate needs. The shares may be issued by the Board in its discretion, subject to any further stockholder action required in the case of any particular issuance by applicable law, regulatory agency, or under the rules of the Nasdaq Stock Market. The newly authorized shares of common stock would be issuable for any proper corporate purpose, including future acquisitions, investment opportunities, capital raising transactions of equity or convertible debt securities, stock splits, stock dividends, issuance under current or future equity compensation plans, employee stock plans and savings plans or for other corporate purposes. There are no immediate agreements, plans, arrangements, commitments or understandings with respect to issuance of any of the additional shares of common stock that would be authorized by the proposed amendment. However, the Board believes that these additional shares will provide the Company with needed ability to issue shares in the future to take advantage of market conditions or favorable opportunities without the potential expense or delay incident to obtaining stockholder approval for a particular issuance.

Rights of Additional Authorized Shares

The additional authorized shares of common stock, if and when issued, would be part of the existing class of common stock and would have the same rights and privileges as the shares of common stock currently outstanding. Generally, the Company's stockholders do not have preemptive rights with respect to its common stock. Accordingly, should the Board of Directors elect to issue additional shares of common stock, existing stockholders would not have any preferential rights to purchase the shares. The Company, however, has entered into a stockholders agreement with TFG Radiant which grants such stockholder certain preemptive rights to purchase securities of the Company.

Potential Adverse Effects of the Amendment

Future issuances of common stock or securities convertible into common stock could have a dilutive effect on the earnings per share, book value per share, voting power and percentage interest of holdings of current stockholders. In addition, the availability of additional shares of common stock for issuance could, under certain circumstances, discourage or make more difficult efforts to obtain control of the Company. The Board is not aware of any attempt, or contemplated attempt, to acquire control of the Company. This proposal is not being presented with the intent that it be used to prevent or discourage any acquisition attempt, but nothing would prevent the Board from taking any appropriate actions not inconsistent with its fiduciary duties.

Effectiveness of the Amendment and Vote Required

If the proposed amendment is adopted, it will become effective upon the filing of a certificate of amendment to the Company's Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware. The adoption of this amendment requires the approval of a majority of the outstanding shares of common stock.

Recommendation

The Board recommends that shareholders vote "FOR" the proposal to amend the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of the Company's common stock.

Unless marked otherwise, proxies received will be voted FOR the proposal to amend the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of the Company's common stock.

WHERE TO FIND MORE INFORMATION

Edgar Filing: Ascent Solar Technologies, Inc. - Form PRE 14A

The SEC allows us to "incorporate by reference" information into this proxy statement, which means that we can disclose important information to you by referring you to another document that we filed separately with the SEC. Information in this proxy statement updates and, in some cases, supersedes information incorporated by reference from documents that we have filed with the SEC prior to the date of this proxy statement, while information that we file later with the SEC will automatically update and, in some cases, supersede the information in this proxy statement.

The following documents and information previously filed with the SEC are incorporated by reference into this proxy statement:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed with the SEC on March 14, 2013;
- our definitive proxy statement on Schedule 14A filed on April 29, 2013;

Table of Contents

our Quarterly Reports on Form 10-Q filed with the SEC on May 9, 2013, August 8, 2013 and November 7, 2013; and our Current Reports on Form 8-K filed with the SEC on January 25, 2013, June 7, 2013, June 21, 2013, July 9, 2013, August 7, 2013, August 15, 2013, September 11, 2013, September 23, 2013, October 28, 2013, and October 30, 2013.

In particular, our financial statements and management's discussion and analysis of financial condition and results of operations are incorporated by reference to our Quarterly Report, and our quantitative and qualitative disclosures about market risks are incorporated by reference to our Annual Report.

In addition, all documents we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this proxy statement and before the date of the special meeting are incorporated by reference into and deemed a part of this proxy statement from the date of filing of those documents.

As a stockholder, we may have sent you some of the documents incorporated by reference, but anyone can obtain any of them through us or the SEC. Documents incorporated by reference are available from us without charge, excluding all exhibits unless we have specifically incorporated by reference an exhibit in this proxy statement. You may obtain documents that we have filed with the SEC and incorporated by reference in this document, without charge, by making a request to us as follows:

Corporate Secretary
Ascent Solar Technologies, Inc.
12300 Grant Street
Thornton, Colorado 80241
Telephone: (720) 872-5000

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 2014 Annual Meeting of Stockholders, a stockholder proposal must be received in writing at our offices, 12300 Grant Street, Thornton, Colorado 80241, no later than December 19, 2013.

Stockholder Proposals Not to be Included in the Proxy Statement

If you wish to make a stockholder proposal at the 2014 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 February 6, 2014 and March 10, 2014. Furthermore, a proxy for our 2014 Annual Meeting of Stockholders may confer discretionary authority to vote on any matter not submitted to us by March 4, 2014.

Table of Contents

OTHER BUSINESS

We know of no other matters to be submitted to the stockholders at the Special Meeting. If any other matters properly come before the stockholders at the Special 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

[]

Thornton, Colorado

Table of Contents

Ascent Solar Technologies Inc.

Electronic Voting Instructions

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

IMPORTANT SPECIAL MEETING
INFORMATION

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

VALIDATION DETAILS ARE LOCATED BELOW IN
THE TITLE BAR.

Proxies submitted by the Internet or telephone must be
received by 1:00 a.m., Central Time, on January __, 2013.

Vote by Internet

- Log on to the Internet and go to
www.investorvote.com/ASTI
- Follow the steps outlined on the secured
website.

Vote by telephone

- Call toll free 1-800-652-VOTE (8683) within
the USA, US territories & Canada any time
on a touch tone telephone. There is NO
CHARGE to you for the call.
- Follow the instructions provided by the
recorded message.

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

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

Table of Contents

A Proposals — Board of Directors recommends a vote FOR Proposal 1 and FOR Proposal 2 and FOR Proposal 3.				
		For	Against	Abstain
1	To approve the issuance of certain shares of common stock pursuant to the Securities Purchase Agreement dated June 30, 2013.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		For	Against	Abstain
2	To approve the issuance of certain shares of common stock pursuant to the Securities Purchase Agreement dated October 28, 2013.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		For	Against	Abstain
3	To approve an amendment to the Company's certificate of incorporation (the "Certificate of Incorporation") to approve an increase in the number of authorized shares of the Company's common stock from 125,000,000 to 250,000,000.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B Non-Voting Items

Change of Address — Please print new address below.

C Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below
 Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

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

/ /

01BVLB

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

Table of Contents

Proxy — ASCENT SOLAR TECHNOLOGIES, INC.

12300 North Grant Street

Thornton, CO 80241

SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON JANUARY __, 2014

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Victor Lee and Bill Gregorak, and each of them individually, the proxies of the undersigned, with power of substitution to each of them, to vote all shares of Ascent Solar Technologies, Inc., a Delaware corporation, which the undersigned is entitled to vote at the Special Meeting of Stockholders of Ascent to be held on _____, January __, 2014, at 2:00 p.m., Mountain time, at the [], [], and at any adjournment thereof (the “Special Meeting”), upon matters properly coming before the meeting.

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

UNLESS OTHERWISE DIRECTED, THIS PROXY WILL BE VOTED “FOR” PROPOSAL 1 AND “FOR” PROPOSAL 2 AND “FOR” PROPOSAL 3 AND AT THE DISCRETION OF YOUR PROXY ON ANY OTHER MATTER THAT MAY BE PROPERLY BROUGHT BEFORE THE SPECIAL MEETING.

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

Continued and to be dated and signed on reverse side.