

Ascent Solar Technologies, Inc.
Form 10-Q
May 15, 2015
Table of Contents

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2015

or

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition Period from _____ to _____
Commission File No. 001-32919

Ascent Solar Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware 20-3672603
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

12300 Grant Street, Thornton, CO 80241
(Address of principal executive offices) (Zip Code)

Registrant's telephone number including area code: 720-872-5000

Indicate by check mark whether the issuer (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of May 12, 2015, there were 29,866,517 shares of our common stock issued and outstanding.

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
Quarterly Report on Form 10-Q
Quarterly Period Ended March 31, 2015
Table of Contents

PART I. FINANCIAL INFORMATION

Item 1.	<u>Condensed Consolidated Financial Statements (unaudited)</u>	<u>3</u>
	<u>Condensed Consolidated Balance Sheets—As of March 31, 2015 and December 31, 2014</u>	<u>3</u>
	<u>Condensed Consolidated Statements of Operations—For the three months ended March 31, 2015 and March 31, 2014</u>	<u>4</u>
	<u>Condensed Consolidated Statements of Cash Flows—For the three months ended March 31, 2015 and March 31, 2014</u>	<u>5</u>
	<u>Notes to Condensed Consolidated Financial Statements</u>	<u>6</u>
Item 2.	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>19</u>
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>26</u>
Item 4.	<u>Controls and Procedures</u>	<u>27</u>

PART II. OTHER INFORMATION

Item 1.	<u>Legal Proceedings</u>	<u>28</u>
Item 1A.	<u>Risk Factors</u>	<u>28</u>
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>28</u>
Item 3.	<u>Defaults Upon Senior Securities</u>	<u>28</u>
Item 4.	<u>Mine Safety Disclosures</u>	<u>28</u>
Item 5.	<u>Other Information</u>	<u>28</u>
Item 6.	<u>Exhibits</u>	<u>28</u>
	<u>SIGNATURES</u>	<u>29</u>
	<u>EXHIBIT INDEX</u>	<u>30</u>

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

ASCENT SOLAR TECHNOLOGIES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

	March 31, 2015	December 31, 2014
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 174,838	\$ 3,316,576
Restricted cash - short term	24,000,000	24,000,000
Trade receivables, net	1,598,858	2,782,105
Inventories	3,853,003	2,427,212
Prepaid expenses and other current assets	1,947,957	2,660,384
Total current assets	31,574,656	35,186,277
Property, Plant and Equipment:	37,618,744	37,598,452
Less accumulated depreciation and amortization	(24,370,751)	(22,941,264)
	13,247,993	14,657,188
Other Assets:		
Restricted cash - long term	4,019,733	4,001,880
Patents, net of amortization of \$132,572 and \$122,731, respectively	1,408,285	1,305,895
Investment in joint venture	320,000	320,000
Other non-current assets	395,672	449,142
	6,143,690	6,076,917
Total Assets	\$ 50,966,339	\$ 55,920,382
LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY		
Current Liabilities:		
Accounts payable	\$ 2,320,627	\$ 1,569,746
Accrued expenses	2,744,273	2,934,246
Current portion of long-term debt	331,925	302,210
Current portion of convertible note payable, net of discount of \$8,202,450 and \$7,607,492, respectively	1,187,794	364,093
Current portion of litigation settlement	505,207	493,732
Series D preferred stock, net of discount of \$0 and \$1,194,222	—	224,778
Short term embedded derivative liabilities	5,373,359	4,427,011
Make-whole dividend liability	849,560	849,560
Total current liabilities	13,312,745	11,165,376
Accrued Litigation Settlement, net of current portion	750,073	880,760
Long-Term Debt	5,686,253	5,764,965
Long-Term Convertible Note, net of discount of \$17,952,871 and \$22,930,946. respectively	2,599,750	1,097,469
Warrant Liability	18,234,634	15,866,667
Long Term Embedded Derivative Liabilities	11,760,782	13,344,155
Accrued Warranty Liability	147,000	136,000
Commitments and Contingencies (Notes 4 & 13)		
Stockholders' (Deficit) Equity:		

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Series A preferred stock, \$.0001 par value; 750,000 shares authorized and issued; 212,390 shares and 212,390 shares outstanding as of March 31, 2015 and December 31, 2014, respectively (\$2,548,680 Liquidation Preference)	21	21
Common stock, \$0.0001 par value, 450,000,000 shares authorized; 26,580,314 and 18,211,104 shares issued and outstanding, respectively	2,658	1,821
Additional paid in capital	315,544,189	306,947,144
Accumulated deficit	(317,071,766)	(299,283,996)
Total stockholders' (deficit) equity	(1,524,898)	7,664,990
Total Liabilities and Stockholders' (Deficit) Equity	\$50,966,339	\$55,920,382

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

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
 (Unaudited)

	For the Three Months Ended March 31,	
	2015	2014
Revenues*	657,640	753,063
Costs and Expenses:		
Cost of revenues (exclusive of depreciation shown below)	1,581,493	—
Research, development and manufacturing operations (exclusive of depreciation shown below)	1,716,387	3,817,136
Selling, general and administrative (exclusive of depreciation shown below)	2,840,799	3,044,099
Depreciation and amortization	1,440,266	1,470,149
Total Costs and Expenses	7,578,945	8,331,384
Loss from Operations	(6,921,305	) (7,578,321
Other Income/(Expense)		
Other Income, net	17,853	552
Loss on extinguishment of liabilities	(2,610,152	) (351,521
Interest expense	(9,951,760	) (105,480
Deemed interest expense on warrant liability	(909,092) —
Change in fair value of derivative liabilities	2,586,686	(735,454
Total Other Income/(Expense)	(10,866,465	) (1,191,903
Net Loss	\$(17,787,770	) \$(8,770,224
Deemed dividend on Preferred Stock and accretion of warrants	—	(2,920,000
Net Loss applicable to common stockholders	\$(17,787,770	) \$(11,690,224
Net Loss Per Share (Basic and diluted)	\$(0.79	) \$(1.77
Weighted Average Common Shares Outstanding (Basic and diluted)	22,440,851	6,603,665

* Includes related party revenue of \$8,050 for the three months ended March 31, 2014.

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

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
 (Unaudited)

	Three Months Ended	
	March 31,	
	2015	2014
Operating Activities:		
Net loss	\$(17,787,770	) \$(8,770,224
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,440,266	1,470,149
Share based compensation	261,141	222,814
Amortization of financing costs to interest expense	132,485	—
Non-cash interest expense	559,995	—
Amortization of debt discount	8,985,875	—
Loss on extinguishment of liabilities	2,610,152	351,521
Accrued litigation settlement	(119,212	) (62,220
Deemed interest expense on warrant liability	909,092	—
Change in fair value of derivative liabilities	(2,586,686	) 735,454
Bad debt expense	80,144	—
Changes in operating assets and liabilities:		
Accounts receivable	1,103,103	(316,608
Related party receivables and deposits	—	(201,031
Inventories	(1,425,791	) (237,350
Prepaid expenses and other current assets	(177,067	) (323,837
Accounts payable	750,880	(39,642
Accrued expenses	(189,972	) 660,317
Warranty reserve	11,000	6,063
Net cash used in operating activities	(5,442,365	) (6,504,594
Investing Activities:		
Purchase of property, plant and equipment	(20,292	) 17,043
Interest income on restricted cash	(17,853) —
Patent activity costs	(112,231	) (198,392
Net cash used in investing activities	(150,376	) (181,349
Financing Activities:		
Repayment of debt	(48,997	) (69,004
Proceeds from issuance of stock and warrants	2,500,000	5,000,000
Net cash provided by financing activities	2,451,003	4,930,996
Net change in cash and cash equivalents	(3,141,738	) (1,754,947
Cash and cash equivalents at beginning of period	3,316,576	3,318,155
Cash and cash equivalents at end of period	\$ 174,838	\$ 1,563,208
Supplemental Cash Flow Information:		
Cash paid for interest	\$ 97,392	\$ 105,482
Non-Cash Transactions:		
Non-cash conversions	\$ 5,477,292	\$ 3,487,497
Make-whole provision on convertible preferred stock	\$ —	\$ 2,920,000

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

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1. ORGANIZATION

Ascent Solar Technologies, Inc. ("Ascent") was incorporated on October 18, 2005 from the separation by ITN Energy Systems, Inc. ("ITN") of its Advanced Photovoltaic Division and all of that division's key personnel and core technologies. ITN, a private company incorporated in 1994, is an incubator dedicated to the development of thin-film, photovoltaic ("PV"), battery, fuel cell and nano technologies. Through its work on research and development contracts for private and governmental entities, ITN developed proprietary processing and manufacturing know-how applicable to PV products generally, and to Copper-Indium-Gallium-diSelenide ("CIGS") PV products in particular. ITN formed Ascent to commercialize its investment in CIGS PV technologies. In January 2006, in exchange for 102,800 shares of common stock of Ascent, ITN assigned to Ascent certain CIGS PV technologies and trade secrets and granted to Ascent a perpetual, exclusive, royalty-free worldwide license to use, in connection with the manufacture, development, marketing and commercialization of CIGS PV to produce solar power, certain of ITN's existing and future proprietary and control technologies that, although non-specific to CIGS PV, Ascent believes will be useful in its production of PV modules for its target markets. Upon receipt of the necessary government approvals and pursuant to novation in early 2007, ITN assigned government-funded research and development contracts to Ascent and also transferred the key personnel working on the contracts to Ascent.

Currently, the Company is producing consumer oriented products focusing on charging mobile devices powered by or enhanced by the Company's solar modules. Products in these markets are priced based on the overall product value proposition rather than a commodity-style price per watt basis. The Company continues to develop new consumer products and has adjusted utilization of its equipment to meet near term sales forecasts.

NOTE 2. BASIS OF PRESENTATION

The accompanying condensed consolidated financial statements have been derived from the accounting records of Ascent Solar Technologies, Inc., Ascent Solar (Asia) Pte. Ltd., and Ascent Solar (Shenzhen) Co., Ltd. (collectively, "the Company") as of March 31, 2015 and December 31, 2014, and the results of operations for the three months ended March 31, 2015 and 2014. Ascent Solar (Shenzhen) Co., Ltd. is wholly owned by Ascent Solar (Asia) Pte. Ltd., which is wholly owned by Ascent Solar Technologies, Inc. All significant inter-company balances and transactions have been eliminated in the accompanying consolidated financial statements.

The Company's activities from inception through December 31, 2014 consisted substantially of raising capital, research and development, establishment and development of the Company's production plant, product development and establishing a sales channel for its line of consumer products which is sold under the EnerPlex™ brand. Revenues from inception through December 31, 2014 had been primarily generated from the Company's governmental research and development contracts until EnerPlex branded products began to sell in higher volumes in 2014. During this time period the Company's primary focus was not generating significant revenue, and thus cost of revenue was not considered a relevant number due to the development nature of the Company. As such, the majority of the Company's costs were considered to be research and development costs from inception through December 31, 2014. Beginning in 2015, due to the success of EnerPlex branded products, the Company's primary focus going forward is to build on the Company's past results and to significantly increase our revenues. As the Company's primary focus is increasing revenues by utilizing and expanding the sales channel established during prior years, the Company has determined that cost of revenue is a relevant number going forward. As such, the Company has included a Cost of revenues line item in the Statements of Operations for the three months ended March 31, 2015.

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, these interim financial statements do not include all of the information and footnotes typically found in U.S. GAAP audited annual financial statements. In the opinion of management, all adjustments (consisting only of normal recurring

adjustments) considered necessary for a fair statement have been included. The Condensed Consolidated Balance Sheet at December 31, 2014 has been derived from the audited financial statements as of that date but does not include all of the information and footnotes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2014. These condensed consolidated financial statements and notes should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

Table of Contents

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Operating results for the three months ended March 31, 2015 are not necessarily indicative of the results that may be expected for the year ending December 31, 2015.

NOTE 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company's significant accounting policies were described in Note 3 to the audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

In May 2014, FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606). The update will establish a comprehensive revenue recognition standard for virtually all industries in GAAP. ASU 2014-09 will change the amount and timing of revenue and cost recognition, implementation, disclosures and documentation. ASU 2014-09 is effective for fiscal years beginning in 2017. The Company is researching whether the adoption of ASU 2014-09 will have a material effect on the Company's financial statements.

In June 2014, FASB issued ASU No. No. 2014-10, Development Stage Entities (Topic 915). Amongst other things, the amendments in this update removed the definition of development stage entity from Topic 915, thereby removing the distinction between development stage entities and other reporting entities from US GAAP. In addition, the amendments eliminate the requirements for development stage entities to (1) present inception-to-date information on the statements of income, cash flows and shareholders equity; (2) label the financial statements as those of a development stage entity; (3) disclose a description of the development stage activities in which the entity is engaged; and (4) disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. The standard is effective for the Company during the first quarter of 2015. Accordingly, the Company has adopted this standard for the quarter ended March 31, 2015 and has not disclosed inception-to-date information on the statements of income and cash flows and the Company has not labeled the financial statements as those of a development stage entity.

Reclassifications: Certain reclassifications have been made to the 2014 financial information to conform to the 2015 presentation. Such reclassifications had no effect on the net loss.

NOTE 4. LIQUIDITY AND CONTINUED OPERATIONS

As of March 31, 2015, the Company had \$0.2 million in cash and cash equivalents, restricted cash of \$28.0 million, and working capital of \$18.3 million. In February 2015, the Company completed the sale of 2,500 shares of Series D-1 preferred stock in a private placement for gross proceeds of \$2.5 million. See Note 15. Subsequent Events for transactions that occurred subsequent to March 31, 2015.

On November 14, 2014, the Company entered into a securities purchase agreement (the "November 2014 Purchase Agreement") with one institutional and accredited investor (the "Investor"). Pursuant to the terms of the November 2014 Purchase Agreement, the Company sold to the Investor (i) \$3,000,000 (3,000 shares) of Series D Convertible Preferred Stock (the "Series D Preferred Stock"), (ii) \$32,000,000 original principal amount of senior secured convertible notes (the "Notes"), and (iii) warrants (the "Warrants") to purchase up to 7,777,778 shares of the Company's common stock, par value \$0.0001 per share. At the closing of the sale of the Series D Preferred Stock, the Notes and the Warrants (the "Financing"), the Company entered into certain account control agreements with several banks with respect to restricted control accounts described in the November 2014 Purchase Agreement. The Company anticipates receiving \$18 million from the restricted control account during the remaining nine months of fiscal 2015 per the terms of the November 2014 Purchase Agreement.

The Company has commenced production at its manufacturing facility. The Company does not expect that sales revenue and cash flows will be sufficient to support operations and cash requirements until it has fully implemented its new consumer products strategy. During the first quarter of 2015 the Company used \$5.4 million in cash for

operations. For the remainder of 2015, the Company expects to incur a base level of maintenance capital expenditures and relatively minor improvements to the existing asset base. The Company's primary significant long term cash obligation consists of a note payable of \$6.0 million to a financial institution secured by a mortgage on its headquarters and manufacturing building in Thornton, Colorado. Total payments of \$0.6 million, including principal and interest, will come due in the remainder of 2015. The Company owes \$1.3 million as of March 31, 2015 related to a litigation settlement reached in April 2014, which is being paid in equal installments over 40 months which began in April 2014.

Additional projected product revenues are not anticipated to result in a positive cash flow position for the year 2015 overall. As such, cash liquidity sufficient for the year ending December 31, 2015 may require additional financing. The Company continues

Table of Contents

to accelerate sales and marketing efforts related to its consumer products strategy through increased promotion and expansion of its sales channel. The Company has begun activities related to securing additional financing through strategic or financial investors, but there is no assurance the Company will be able to raise additional capital on acceptable terms or at all. If the Company's revenues do not increase rapidly, and/or additional financing is not obtained, the Company will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on the Company's future operations.

NOTE 5. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment as of March 31, 2015 and December 31, 2014:

	As of March 31, 2015	As of December 31, 2014
Building	\$5,828,960	\$ 5,828,960
Furniture, fixtures, computer hardware and computer software	472,065	475,266
Manufacturing machinery and equipment	31,247,645	31,227,523
Net depreciable property, plant and equipment	37,548,670	37,531,749
Manufacturing machinery and equipment in progress	70,074	66,703
Property, plant and equipment	37,618,744	37,598,452
Less: Accumulated depreciation and amortization	(24,370,751)	(22,941,264)
Net property, plant and equipment	\$13,247,993	\$ 14,657,188

The Company analyzes its long-lived assets for impairment, both individually and as a group, whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable.

Depreciation expense for the three months ended March 31, 2015 and 2014 was \$1,429,487 and \$1,467,746, respectively. Depreciation expense is recorded under "Depreciation and amortization expense" in the Condensed Consolidated Statements of Operations.

NOTE 6. INVENTORIES

Inventories consisted of the following at March 31, 2015 and December 31, 2014:

	As of March 31, 2015	As of December 31, 2014
Raw materials	\$1,009,221	\$941,912
Work in process	732,041	335,275
Finished goods	2,111,741	1,150,025
Total	\$3,853,003	\$2,427,212

NOTE 7. DEBT

On February 8, 2008, the Company acquired a manufacturing and office facility in Thornton, Colorado, for approximately \$5.5 million. The purchase was financed by a promissory note, deed of trust and construction loan agreement (the "Construction Loan") with the Colorado Housing and Finance Authority ("CHFA"), which provided the Company borrowing availability of up to \$7.5 million for the building and building improvements. In 2009, the Construction Loan was converted to a permanent loan pursuant to a Loan Modification Agreement between the Company and CHFA (the "Permanent Loan"). The Permanent Loan, collateralized by the building, has an interest rate of 6.6% and the principal will be amortized through its term to January 2028. The Company will incur a prepayment penalty if the Permanent Loan is prepaid prior to December 31, 2015. Further, pursuant to certain negative covenants in the Permanent Loan, the Company may not, among other things, without CHFA's prior written consent (which by the terms of the deed of trust is subject to a reasonableness requirement): create or incur additional indebtedness (other

than obligations created or incurred in the ordinary course of business); merge or consolidate with any other entity; or make loans or advances to the Company's officers, shareholders, directors or employees. The outstanding balance of the Permanent Loan was \$6,018,178 as of March 31, 2015.

8

Table of Contents

As of March 31, 2015, future principal payments on long-term debt are due as follows:

2015	\$253,213
2016	322,771
2017	344,730
2018	368,183
2019	393,232
Thereafter	4,336,049
	\$6,018,178

NOTE 8. MAKE-WHOLE DIVIDEND LIABILITY

In June 2013, the Company entered into a Series A Preferred Stock Purchase Agreement. Holders of Series A Preferred Stock are entitled to cumulative dividends at a rate of 8.0% per annum, with the dividend rate being indexed to the Company's stock price and subject to adjustment. Conversion or redemption of the Series A Preferred Stock within 4 years of issuance requires the Company pay a make-whole dividend to the holders, whereby dividends for the full four year period are to be paid in cash or common stock (valued at 10% below market price).

The Company concluded the make-whole dividends should be characterized as embedded derivatives under ASC 815. Make-whole dividends are expensed at the time of issuance and recorded as "Deemed dividends on Preferred Stock and accretion of warrants" in the Condensed Consolidated Statements of Operations and "Make-whole dividend liability" in the Condensed Consolidated Balance Sheets.

The fair value of these dividend liabilities, which are indexed to the Company's common stock, must be evaluated at each period end. The fair value measurements rely primarily on Company-specific inputs and the Company's own assumptions. With the absence of observable inputs, the Company determined these recurring fair value measurements reside primarily within Level 3 of the fair value hierarchy. Fair value determination required forecasting stock price volatility, expected average annual return and conversion date. During the three months ended March 31, 2014, the Company recorded a net increase in fair value of the liability in the amount of \$0.7 million, recorded as "Change in fair value of derivative liabilities" in Other Income/(Expense) in the Condensed Consolidated Statements of Operations and in the Condensed Consolidated Statement of Cash Flows. During the three months ended March 31, 2015, there was no change in the fair value of the make-whole liability from the fair value at December 31, 2014.

At March 31, 2015, there were 212,390 shares of Series A outstanding. At March 31, 2015, the Company was entitled to redeem the outstanding Series A preferred shares for \$1.7 million, plus a make-whole amount of \$0.8 million, payable in cash or common shares. The fair value of the make-whole dividend liabilities for the Series A preferred shares, which approximates cash value, was \$0.8 million as of March 31, 2015.

NOTE 9. CONVERTIBLE NOTE, SERIES D PREFERRED STOCK, AND SERIES D-1 PREFERRED STOCK**Convertible Note and Series D Preferred Stock Financing Transaction**

On November 14, 2014, the Company entered into the November 2014 Purchase Agreement with the Investor. Pursuant to the terms of the November 2014 Purchase Agreement, the Company sold to the Investor (i) \$3,000,000 (3,000 shares) of Series D Convertible Preferred Stock, (ii) \$32,000,000 original principal amount of senior secured convertible notes, and (iii) Warrants to purchase up to 7,777,778 shares of the Company's common stock, par value \$0.0001 per share. At the closing of the sale of the Financing, the Company entered into (i) a registration rights agreement with the Investor, (ii) a security and pledge agreement in favor of the collateral agent for the Investor, and (iii) certain account control agreements with several banks with respect to restricted control accounts described in the November 2014 Purchase Agreement. The Financing closed on November 19, 2014.

Proceeds Received and Restricted Cash

The Company received gross proceeds of approximately \$4.5 million at closing. The remaining \$30.5 million of gross proceeds from the Financing was deposited on the closing date by the Investor into restricted control accounts. \$2.5 million of these restricted proceeds were released on December 22, 2014 to the Company. Thereafter, additional funds from the control

9

Table of Contents

accounts shall be released to the Company (i) in connection with certain conversions of the Notes and redemptions of the Series D Preferred Stock, and (ii) up to \$6 million in any 90 day period, provided that the Company meets certain equity conditions. The balance in the restricted bank account totals approximately \$28 million at March 31, 2015, \$18 million of which is expected to be released to the Company during the remainder of fiscal year 2015.

Description of the Notes and Series D Preferred Stock

The Notes will rank senior to the Company's outstanding and future indebtedness, except for certain existing permitted indebtedness of the Company. The Notes are secured by a first priority perfected security interest in all of the Company's and its subsidiaries' current and future assets (including a pledge of the stock of the Company's subsidiaries), other than those assets which already secure the Company's existing permitted indebtedness. So long as any Notes remain outstanding, the Company and its subsidiaries will not incur any new indebtedness, except for permitted indebtedness under the Notes, or create any new encumbrances on the Company's or its subsidiaries' assets, except for permitted liens under the Notes. Under certain circumstances, subsidiaries of the Company will be required to guarantee the Company's obligations under the Notes. The Series D Preferred Stock ranks pari passu with the Company's existing Series A Preferred Stock with respect to dividends and rights upon liquidation. The Series D Preferred Stock ranks senior to the Company's Common Stock with respect to dividends and rights upon liquidation. The Series D Preferred Stock ranks junior to all existing and future indebtedness. The Series D Preferred Stock is unsecured.

Unless earlier converted or redeemed, the Notes will mature 42 months after the closing date (the "Maturity Date"), subject to the right of the Investors to extend the date under certain circumstances. The Series D Preferred Stock has no fixed maturity date or mandatory redemption date.

All amounts due under the Notes and the Series D Preferred Stock are convertible at any time, in whole or in part, at the option of the Investor into shares of Common Stock at a fixed conversion price, which is subject to adjustment for stock splits, stock dividends, combinations or similar events. The Notes and the Series D Preferred Stock are convertible into shares of Common Stock at the initial price of \$2.25 per share (the "Conversion Price"). If and whenever on or after the closing date, the Company issues or sells any shares of Common Stock for a consideration per share (the "New Issuance Price"), less than a price equal to the Conversion Price in effect immediately prior to such issuance or sale (a "Dilutive Issuance"), then, immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price.

The Company may redeem all, but not less than all, of the Notes or the Series D Preferred Stock at any time after 30 calendar days after the earlier of (A) the date that a resale registration statement for the resale of a portion of the Common Stock underlying the Notes and Warrants becomes effective or (B) the date that the shares of Common Stock underlying the Notes and Warrants are eligible for resale under Rule 144, provided that the Company meets certain equity conditions. In the case of an optional redemption of Notes or Series D Preferred Stock by the Company, the Notes shall be redeemed in cash at a price with a redemption premium of 120% calculated by the formula specified in the Notes and the Series D Preferred Stock. The Company is required to provide holders of the Notes or Series D Preferred Stock with at least 90 trading days prior notice of its election to redeem the Notes or the Series D Preferred Stock.

The Investor has the option to convert a portion of the Notes or the Series D Preferred Stock into shares of Common Stock at an "Alternate Conversion Price" equal to the lowest of (i) the Conversion Price then in effect and (ii) 85% of the quotient of (A) the sum of the volume-weighted average price of the Common Stock for each of the three lowest trading days during the ten consecutive trading day period ending and including the trading day immediately prior to the date of the applicable conversion date, divided by three. During the three months ended March 31, 2015, the Investor exercised their option to convert \$1,805,000 of Notes value at an Alternate Conversion Price resulting in the

issuance of 2,860,175 Common Shares.

The Company has agreed to make amortization payments with respect to the principal amount of the Notes and the liquidation value of the Series D Preferred Stock in shares of its Common Stock, subject to the satisfaction of certain equity conditions, or at the Company's option, in cash or a combination of shares of Common Stock and cash, in equal installments payable once every month. Per the terms of the Financing, the Company is required to make pre-payments on the monthly amortization payments twenty trading days prior to the installment due date. During the three months ended March 31, 2015, the Company made installment payments towards the Series D Preferred Stock totaling \$565,341, resulting in the issuance of 1,465,972 shares of common stock. Amortization payments shall first be applied to the redemption of shares of Series D Preferred Stock until all shares of the Series D Preferred Stock have been redeemed. Thereafter, amortization payments shall be applied to pay principal and interest on the Notes. During the three months ended March 31, 2015, the Company made installment payments towards the Notes totaling \$288,659, resulting in the issuance of 583,964 shares of common stock.

10

Table of Contents

For amortization payments paid in shares of Common Stock, the number of shares of Common Stock that shall be issued as an installment conversion amount shall be determined based on an installment conversion price (the "Installment Conversion Price") of the lowest of (i) the Conversion Price then in effect and (ii) 85% of the quotient of (A) the sum of the volume-weighted average price of the Common Stock for each of the five lowest trading days during the 20 consecutive trading day period ending and including the trading day immediately prior to the applicable installment date, divided by five.

The Company classified the Series D Preferred Stock as a liability pursuant to ASC 480 at March 31, 2015 and December 31, 2014 due to the structure of the financing agreement, whereby the Company has an unconditional obligation that the Company may settle by issuing a variable number of common shares with a monetary value that is fixed and known at inception. There are 0 shares of Series D Preferred Stock outstanding as of March 31, 2015.

The Investor may elect to defer the payment of the installment amount due on any installment dates, in whole or in part, to another installment date, in which case the amount deferred will become part of such subsequent installment date and will continue to accrue interest and dividends as applicable. During an installment period, the Investor may elect to accelerate the amortization of the Notes or the Series D Preferred Stock at the Installment Conversion Price of the current installment date if, in the aggregate, all such accelerations in such period do not exceed five times the installment amount. Such accelerated amounts shall be payable in the Company's common stock. During the three months ended March 31, 2015, the Investor elected to defer \$1,707,317 of amortization payments to a later installment date. As a result of the deferral, \$351,899 of interest expense was added to the principal balance of the Notes. During the three months ended March 31, 2015, the Investor elected to accelerate \$315,375 of the Notes, resulting in the issuance of 548,990 shares of common stock.

The Notes bear interest at a rate of 7% per annum, subject to increase to 15% per annum upon the occurrence and continuance of an event of default. Holders of the Series D Preferred Stock will be entitled to receive dividends in the amount of 7% per annum, subject to increase to 15% per annum upon the occurrence and continuance of certain events of default. Interest on the Notes and dividends on the Series D Preferred Stock are payable monthly in shares of Common Stock or cash, at the Company's option. Interest on the Notes and dividends on the Series D Preferred Stock is computed on the basis of a 360-day year and twelve 30-day months and is payable in arrears monthly and is compounded monthly. During the three months ended March 31, 2015, the Company paid dividends in the amount of \$3,572 on the Series D Preferred Stock, resulting in the issuance of 11,241 shares of common stock, and interest in the amount of \$197,581 on the Note, resulting in the issuance of 487,116 shares of common stock.

The Notes and the Series D Preferred Stock contain standard and customary events of default including but not limited to: (i) failure to make payments when due under the Notes and the Series D Preferred Stock; (ii) bankruptcy or insolvency of the Company; and (iii) certain failures (in the case of the Notes) to comply with the requirements under the registration rights agreement. If there is an event of default, a holder of the Notes or the Series D Preferred Stock may require the Company to redeem all or any portion of the Notes or the Series D Preferred Stock (including all accrued and unpaid interest and dividends and all interest and dividends that would have accrued through the Maturity Date), in cash, at a price equal to the greater of: (i) up to 125% of the amount being redeemed, depending on the nature of the default, and (ii) the product of (A) the conversion rate in effect at such time multiplied by (B) the product of (1) up to 125%, depending on the nature of the default, multiplied by (2) the highest closing sale price of the Common Stock on any trading day during the period beginning on the date immediately before the event of default and ending on the date of redemption. Additionally, if there is an event of default, a holder of the Notes or the Series D Preferred Stock may convert all or any portion of the Notes or the Series D Preferred Stock into shares of Common Stock. In such event, the conversion price would be the lowest of (i) the Conversion Price then in effect and (ii) 85% of the quotient of (A) the sum of the volume-weighted average price of the Common Stock for each of the three lowest trading days during the 10 consecutive trading day period ending and including the trading day immediately prior to the date of the applicable conversion date, divided by three.

Description of Series D-1 Preferred Stock

On February 19, 2015, the Company entered into a securities purchase agreement to issue 2,500 shares of Series D-1 Preferred Stock to an investor in exchange for \$2,500,000. The proceeds were received on the closing date, February 25, 2015.

All amounts due under the Series D-1 Preferred Stock are convertible at any time, in whole or in part, at the option of the investor into shares of Common Stock at a fixed conversion price, which is subject to adjustment for stock splits, stock dividends, combinations or similar events. The Series D-1 Preferred Stock are convertible into shares of Common Stock at the initial price of \$2.31 per share. If and whenever on or after the closing date, the Company issues or sells any shares of Common Stock for a consideration per share, less than a price equal to the conversion price in effect immediately prior to such

Table of Contents

issuance or sale, then, immediately after such dilutive issuance, the conversion price then in effect shall be reduced to an amount equal to the new issuance price.

The investor has the option to convert a portion of the Series D-1 Preferred Stock into shares of Common Stock at a "D-1 Alternate Conversion Price" equal to the lowest of (i) \$2.31 per share and (ii) 85% of the lowest volume-weighted average price of the Common Stock on any trading day during the five consecutive trading day period ending and including the trading day immediately prior to the date of the applicable conversion date. During the three months ended March 31, 2015, the investor exercised their option to convert 2,500 Preferred Shares, representing a value of \$2,500,000, at a D-1 Alternate Conversion Price resulting in the issuance of 2,305,824 Common Shares.

Holders of the Series D-1 Preferred Stock were entitled to receive dividends in the amount of 7% per annum, subject to increase to 15% per annum upon the occurrence and continuance of certain events of default. Dividends on the Series D-1 Preferred Stock are payable monthly in shares of Common Stock or cash, at the Company's option. Dividends on the Series D-1 Preferred Stock is computed on the basis of a 360-day year and 12 30-day months and is payable in arrears monthly and is compounded monthly. During the three months ended March 31, 2015, the Company paid dividends in the amount of \$6,944 on the Series D-1 Preferred Stock, resulting in the issuance of 3,896 shares of common stock.

The Company classified the Series D-1 Preferred Stock as a liability pursuant to ASC 480 on the closing date due to the structure of the financing agreement, whereby the Company has an unconditional obligation that the Company may settle by issuing a variable number of common shares with a monetary value that is fixed and known at inception. There are 0 shares of Series D-1 Preferred Stock outstanding as of March 31, 2015.

Embedded derivative associated with the Notes

Pursuant to a number of factors outlined in ASC Topic 815, Derivatives and Hedging, the conversion options in the Notes were deemed to include an embedded derivative that required bifurcation and separate accounting. As such, the Company ascertained the value of the conversion option as if separate from the convertible issuance and appropriately recorded that value as a derivative liability. At December 31, 2014, the derivative liability value associated with the Notes was \$17.40 million.

The derivative liability associated with the Notes is subject to revaluation on a quarterly basis to reflect the market value change of the embedded conversion option. At March 31, 2015, the Company conducted a fair value assessment of the embedded derivative associated with the Notes. As a result of the fair value assessment, the Company recorded a \$0.27 million gain as "Change in fair value of derivative liabilities" in the Statements of Operations to properly reflect the fair value of the embedded derivative of \$17.13 million as of March 31, 2015.

The derivative associated with the Notes approximates management's estimate of the fair value of the embedded derivative liability at March 31, 2015 based on using a Monte Carlo simulation following a Geometric Brownian Motion with the following assumptions: annual volatility of 45%, present value discount rate of 12%, dividend yield of 0%, and remaining life of 3.14 years.

Embedded derivative associated with the Series D Preferred Stock

Pursuant to a number of factors outlined in ASC Topic 815, Derivatives and Hedging, the conversion options in the Series D Preferred Stock were deemed to include an embedded derivative that required bifurcation and separate accounting. As such, the Company ascertained the value of the conversion option as if separate from the convertible issuance and appropriately recorded that value as a derivative liability. At December 31, 2014, the derivative liability value associated with the Series D Preferred Stock was \$0.37 million. As of March 31, 2015, the value of the derivative liability associated with the Series D Preferred Stock is \$0 as the Series D Preferred Stock is fully converted as of March 31, 2015. A gain of \$0.37 million was recorded to "Change in fair value of derivative liabilities" in the

Statements of Operations for the three months ended March 31, 2015.

Embedded derivative associated with the Series D-1 Preferred Stock

Pursuant to a number of factors outlined in ASC Topic 815, Derivatives and Hedging, the conversion options in the Series D-1 Preferred Stock were deemed to include an embedded derivative that required bifurcation and separate accounting. As such, the Company ascertained the value of the conversion option as if separate from the convertible issuance and appropriately recorded that value as a derivative liability. At closing, a derivative liability and a corresponding debt discount in the amount of \$3.41 million was recorded. The debt discount of \$3.41 million was charged to interest expense. As of March 31, 2015, the value of the derivative liability associated with the Series D-1 Preferred Stock is \$0 as the Series D-1

12

Table of Contents

Preferred Stock is fully converted as of March 31, 2015. A gain of \$3.41 million was recorded to "Change in fair value of derivative liabilities" in the Statements of Operations for the three months ended March 31, 2015.

The derivative associated with the Series D-1 Preferred Stock approximates management's estimate of the fair value of the embedded derivative liability at the closing date based on using a Monte Carlo simulation following a Geometric Brownian Motion with the following assumptions: annual volatility of 45%, present value discount rate of 12%, dividend yield of 0%, and remaining life of 0.18 years.

Description of the Warrants Associated with the Notes and Series D Preferred Stock

The Warrants associated with the Notes and Series D Preferred Stock entitle the Investor to purchase, in the aggregate, up to 7,777,778 shares of Common Stock. The Warrants will be exercisable at any time on or after the six month anniversary of the closing date through the fifth anniversary of such date. The Warrants will be exercisable at an initial exercise price equal to \$2.25 per share. The exercise price of the Warrants is subject to adjustment for stock splits, stock dividends, combinations or similar events. In addition, the exercise price is also subject to a "full ratchet" anti-dilution adjustment, subject to customary exceptions, in the event that the Company issues securities at a price lower than the then applicable exercise price.

Pursuant to ASC 815, the Company is required to report the value of the Warrants as a liability at fair value and record the changes in the fair value of the warrant liability as a gain or loss in its statement of operations due to the price-based anti-dilution provisions. The Company utilizes the Monte Carlo simulation valuation method to value the liability classified warrants. At December 31, 2014, the value of the warrant liability associated with the Notes was calculated to be \$15.9 million. At March 31, 2015, the Company conducted a fair value assessment of the Warrants. As a result of the fair value assessment, the Company recorded a \$1.2 million loss as "Change in fair value of derivative liabilities" in the Statements of Operations to properly reflect the fair value of the warrant liability associated with the Notes of \$17.0 million at March 31, 2015.

The fair value of these Warrants is determined using Level 3 inputs. Inherent in the Monte Carlo valuation model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its common stock to be 69% based on 5.14 years, the expected remaining life of the Warrants. The risk-free interest rate of 1.37% is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the Warrants. The dividend rate is based on the historical rate, which the Company anticipates to remain at zero.

Description of the Warrants Associated with the Series D-1 Preferred Stock

The warrants associated with the Series D-1 Preferred Stock (the "D-1 Warrants") entitle the Investor to purchase, in the aggregate, up to 541,126 shares of Common Stock. The D-1 Warrants will be exercisable at any time on or after the six month anniversary of the closing date through the fifth anniversary of such date. The D-1 Warrants will be exercisable at an initial exercise price equal to \$2.31 per share. The exercise price of the D-1 Warrants is subject to adjustment for stock splits, stock dividends, combinations or similar events. In addition, the exercise price is also subject to a "full ratchet" anti-dilution adjustment, subject to customary exceptions, in the event that the Company issues securities at a price lower than the then applicable exercise price.

Pursuant to ASC 815, the Company is required to report the value of the D-1 Warrants as a liability at fair value and record the changes in the fair value of the D-1 warrant liability as a gain or loss in its statement of operations due to the price-based anti-dilution provisions. The Company utilizes the Monte Carlo simulation valuation method to value the liability classified warrants. At closing, the value of the D-1 warrant liability was calculated to be \$0.9 million. The entire D-1 warrant liability was immediately recorded as an expense as "Deemed interest expense on warrant

liability" in the Statements of Operations. At March 31, 2015, the Company conducted a fair value assessment of the D-1 Warrants. As a result of the fair value assessment, the Company recorded a \$0.3 million loss as "Change in fair value of derivative liabilities" in the Statements of Operations to properly reflect the fair value of the D-1 warrant liability of \$1.2 million at March 31, 2015.

The fair value of these D-1 Warrants is determined using Level 3 inputs. Inherent in the Monte Carlo valuation model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its common stock to be 69% based on 5.40 years, the expected remaining life of the D-1 Warrants. The risk-free interest rate of 1.37% is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the D-1 Warrants. The dividend rate is based on the historical rate, which the Company anticipates to remain at zero.

Table of Contents

NOTE 10. STOCKHOLDERS' EQUITY

Common Stock

At March 31, 2015, the Company had 450,000,000 shares of common stock, \$0.0001 par value, authorized for issuance. Each share of common stock has the right to one vote. As of March 31, 2015, the Company had 26,580,314 shares of common stock outstanding. The Company has not declared or paid any dividends related to the common stock through March 31, 2015.

Preferred Stock

At March 31, 2015, the Company had 25,000,000 shares of preferred stock, \$0.0001 par value, authorized for issuance. Preferred stock may be issued in classes or series. Designations, powers, preferences, rights, qualifications, limitations and restrictions are determined by the Company's Board of Directors. 750,000 shares have been designated as Series A preferred stock, 2,000 shares have been designated for Series B-1 and B-2 preferred stock, 690 shares have been designated as Series C preferred stock, 3,000 shares have been designated as Series D preferred stock, and 2,500 shares have been designated as Series D-1 preferred stock. As of March 31, 2015, the Company had 212,390 shares of Series A preferred stock and no shares of Series B-1, Series B-2, Series C, Series D, or Series D-1 preferred stock outstanding. The Company has no declared unpaid dividends related to the preferred stock as of March 31, 2015.

Series A Preferred Stock

In June 2013, the Company entered into a Securities Purchase Agreement with an investor to sell an aggregate of 750,000 shares of Series A Preferred Stock at a price of \$8.00 per share, resulting in gross proceeds of \$6,000,000. This purchase agreement included warrants to purchase up to 262,500 shares of common stock of the Company. The transfer of cash and securities took place incrementally, the first closing occurring on June 17, 2013 with the transfer of 125,000 shares of Series A Preferred Stock and a warrant to purchase 43,750 shares of common stock for \$1,000,000. The final closings took place in August 2013, with the transfer of 625,000 shares of Series A Preferred Stock and a warrant to purchase 218,750 shares of common stock for \$5,000,000.

Holders of Series A Preferred Stock are entitled to cumulative dividends at a rate of 8.0% per annum when and if declared by the Board of Directors in its sole discretion. 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 adjustment. In addition, the Series A Preferred Stock contains a make-whole provision whereby, conversion or redemption of the 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 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 \$11.60, 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). At March 31, 2015, the preferred shares were not eligible for conversion to common shares at the option of the Company. 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 1 common shares (subject to standard ratable anti-dilution adjustments). 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). See Note 8. Make-Whole Dividend Liability.

During the three months ended March 31, 2015, the holder of the Series A Preferred Shares converted 0 preferred shares into 0 shares of common stock.

Except as otherwise required by law (or with respect to approval of certain actions), the Series A Preferred Stock shall have no voting rights. 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 warrants offered as part of the Securities Purchase Agreement have a three year term and require payment of an exercise price of \$9.00 per common share to the Company.

The Securities Purchase Agreement for the Series A Preferred Stock required that the registration statement, filed on August 16, 2013, must be declared effective within 90 days of the filing date. If the registration statement was not declared effective by this date, damages of 1% of the total investment amount, or \$60,000, plus interest, would have been owed by the Company to the Holder for each month until registration statement effectiveness is reached or the investment amount is repaid in full. The registration

Table of Contents

statement became effective on August 30, 2013, therefore any potential registration rights liability owed to the Holder by the Company was eliminated as of September 30, 2013.

Series D and Series D-1 Preferred Stock

Refer to Note 9. Convertible Note, Series D Preferred Stock, and Series D-1 Preferred stock for descriptions of Series D and Series D-1 Preferred Stock.

NOTE 11. EQUITY PLANS AND SHARE-BASED COMPENSATION

Share-Based Compensation: The Company measures share-based compensation cost at the grant date based on the fair value of the award and recognizes this cost as an expense over the grant recipients' requisite service periods for all awards made to employees, officers, directors and consultants.

The share-based compensation expense recognized in the Condensed Consolidated Statements of Operations was as follows:

	For the three months ended March 31,	
	2015	2014
Share-based compensation cost included in:		
Research and development	\$101,310	\$103,495
Selling, general and administrative	159,831	119,319
Total share-based compensation cost	\$261,141	\$222,814

The following table presents share-based compensation expense by type:

	For the three months ended March 31,	
	2015	2014
Type of Award:		
Stock Options	\$165,500	\$132,292
Restricted Stock Units and Awards	95,641	90,522
Total share-based compensation cost	\$261,141	\$222,814

Stock Options: The Company recognized share-based compensation expense for stock options of \$166,000 to officers, directors and employees for the three months ended March 31, 2015 related to stock option awards ultimately expected to vest. The weighted average estimated fair value of employee stock options granted for the three months ended March 31, 2015 and 2014 was \$0.78 and \$5.40 per share, respectively. Fair value was calculated using the Black-Scholes Model with the following assumptions:

	For the three months ended March 31,	
	2015	2014
Expected volatility	92%	95%
Risk free interest rate	2%	2%
Expected dividends	—	—
Expected life (in years)	5.8	5.9

Expected volatility is based on the historical volatility of the Company's stock. The risk-free rate of return is based on the yield of U.S. Treasury bonds with a maturity equal to the expected term of the award. Historical data is used to estimate forfeitures within the Company's valuation model. The Company's expected life of stock option awards is derived from historical experience and represents the period of time that awards are expected to be outstanding.

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As of March 31, 2015, total compensation cost related to non-vested stock options not yet recognized was \$691,000 which is expected to be recognized over a weighted average period of approximately 2.0 years. As of March 31, 2015, 931,728 shares

15

Table of Contents

were vested or expected to vest in the future at a weighted average exercise price of \$3.97. As of March 31, 2015, 1,883,892 shares remained available for future grants under the Option Plan.

Restricted Stock: In addition to the stock options discussed above, the Company recognized share-based compensation expense related to restricted stock grants of \$96,000 for the three months ended March 31, 2015. The weighted average estimated fair value of restricted stock grants for the three months ended March 31, 2015 and 2014 was \$1.12 and \$4.30 per share, respectively.

Total unrecognized share-based compensation expense from unvested restricted stock as of March 31, 2015 was \$219,000 which is expected to be recognized over a weighted average period of approximately 0.9 years. As of March 31, 2015, 204,992 shares were expected to vest in the future. As of March 31, 2015, 978,781 shares remained available for future grants under the Restricted Stock Plan.

NOTE 12. RELATED PARTY TRANSACTIONS

TFG Radiant owns approximately 14.57% of the Company's outstanding common stock as of March 31, 2015. In February 2012, the Company announced the appointment of Victor Lee as President and Chief Executive Officer. Mr. Lee had served on the Company's Board of Directors since November 2011 and is currently the managing director of Tertius Financial Group Pte Ltd, the joint venture partner with Radiant Group in TFG Radiant. In April 2012, the Company appointed the Chairman of TFG Radiant, Mr. Winston Xu (aka Xu Biao), as a member of its Board of Directors.

In June 2012, the Company entered into a supply agreement and a contract manufacturing agreement with TFG Radiant. Under the terms of the contract manufacturing agreement TFG Radiant was to oversee certain aspects of the contract manufacturing process related to the Company's EnerPlex™ line of consumer products. The Company compensated TFG Radiant for acting as general contractor in the contract manufacturing process. Under the supply agreement TFG Radiant was to distribute the Company's consumer products in Asia. In December 2012, the Company entered into a consulting agreement with TFG Radiant for product design, product development and manufacturing coordination activities provided by TFG Radiant to the Company in connection with the Company's line of consumer electronics products. This consulting agreement was terminated effective March 31, 2014.

During three months ended March 31, 2015, the Company made no disbursements to TFG Radiant. During the three months ended March 31, 2015 and March 31, 2014, the Company recognized revenue in the amount of \$0 and \$8,050, respectively, for products sold to TFG Radiant under the supply agreement. As of March 31, 2015 and December 31, 2014, the Company held \$0 and \$0, respectively, in receivables and deposits with TFG Radiant.

NOTE 13. COMMITMENTS AND CONTINGENCIES

On October 21, 2011, the Company was notified that a complaint claiming \$3.0 million for an investment banking fee (the "Lawsuit") was filed by Jefferies & Company, Inc. ("Jefferies") against the Company in New York State Supreme Court in the County of New York. In December 2010, Ascent and Jefferies entered into an engagement agreement (the "Fee Agreement") pursuant to which Jefferies was hired to act as the Company's financial advisor in relation to certain potential transactions. In addition, Jefferies claimed an award for attorney's fees and prejudgment interest in the approximate amount of \$1.2 million.

On April 16, 2014, the parties settled the lawsuit where the Company agreed to pay Jefferies a total of \$2.0 million in equal installments over 40 months. The Company has paid \$150,000 during the 3 months ended March 31, 2015. The Company records a liability in its financial statements for costs related to claims, including settlements and judgments, where the Company has assessed that a loss is probable and an amount can be reasonably estimated. The Company accrued \$1.7 million, the net present value of the \$2.0 million settlement, as of December 31, 2013. As of March 31, 2015, \$750,000 was accrued for the long-term portion of this settlement and \$505,000 was recorded as Accrued litigation settlement, current portion, in the Balance Sheets.

On June 30, 2014, the Company entered into a Service Agreement with Swyft, Inc. Swyft will sell consumer products through automated retail stores (kiosks), provide online and mobile retail channels through a website and mobile application, and provide visual and text based advertising through both physical and digital channels. The Company

will provide financing to Swyft in the form of a three year 8% convertible note to purchase seventy five (75) automated retail stores at \$4,500 per store, or a total of \$337,500, from ZoomSystems, the manufacturer of automated retail machines. The first convertible loan financing for thirty eight (38) automated retail stores of \$171,000 was provided by the Company by July 31, 2014 and the second convertible loan financing for thirty seven (37) automated retail stores of \$166,500 will be provided by the Company during 2015. The Company also has an option to continue loan financing for each additional block of fifty (50) automated retail stores. The Service Agreement also required that the Company pay a one-time project set-up fee of \$125,000 which was paid during the third quarter of 2014.

Table of Contents

NOTE 14. JOINT VENTURE

On December 28, 2013, the Company entered into a definitive agreement for the establishment of a joint venture with the Government of the Municipal City of Suqian in Jiangsu Province, China ("Suqian").

The agreement covers a multi-faceted, three-phase project. Completion of all three phases would involve an anticipated investment of up to \$500 million over 6 years, comprised of equipment, intellectual property and cash funded by Suqian, the Company, and other supporting investors to be brought in by the Company.

During the second half of 2014, the Company and Suqian formed a joint venture entity ("JV") in which Suqian will ultimately inject approximately \$4.8 million in cash and have majority interest of 75%. The Company will inject approximately \$1.6 million in cash and hold a minority interest of 25%. In 2015, Suqian will further inject the balance of the committed \$32.5 million while the Company will contribute its proprietary technology and intellectual property, as well as certain equipment from its Colorado facility, thereby increasing the Company's shareholdings progressively up to an 80% ownership.

Under the terms of the definitive agreement, in phase 1 and phase 2 of the project, the Company is required to contribute to the JV manufacturing equipment, intellectual property assets, proprietary technology and know-how, and cash for its ownership share, and Suqian is required to contribute cash for its ownership share. Pursuant to the terms of the definitive agreement, the Company's total contribution for phase 1 and phase 2 is required to be approximately \$130 million. Suqian's total contribution for phase 1 and phase 2 is required to be approximately \$32 million.

Pursuant to the terms of the definitive agreement, Ascent and Suqian are required to ascribe a dollar value to the Company's non-cash contributions. The major milestone was the agreement by the Suqian government to credit approximately \$77 million to the Company's contribution of its proprietary technology, which represents 60% towards Ascent's total required contribution of \$130 million. In order to value the Company's intellectual property assets, the parties jointly agreed to hire an independent appraisal company located in China. The appraisal report valued the Company's intellectual property assets at approximately \$65 million, plus 20% premium added by Suqian government to bring the total value to \$77 million. The remaining 40% of the Company's contribution will be in the form of some equipment from its Colorado plant and/or cash. The exact amounts of cash and equipment will be determined at a later date. These amounts of cash and equipment will depend, among other things, on an assessment of the contributed equipment by a Chinese appraisal firm mutually selected by the Company and Suqian.

The actual contributions of cash and other assets into the JV by the Company and Suqian will happen incrementally over time. In addition, under the definitive agreement, Suqian has agreed to provide rent-free use of the 331,000-square-foot manufacturing facility and office space that is currently being built for the Company in the Suqian Economic and Industrial Development Science Park.

The JV will build a factory to manufacture the Company's proprietary photovoltaic modules. The Company is committed to purchase this factory within the first 5 years at the initial construction cost, and will also purchase Suqian's ownership interest in the JV at a cost of 1.5 times Suqian's cash investment.

The implementation of the agreement, including the formation of the JV entity, will be subject to a number of contractual conditions and governmental approvals. Such conditions and approvals must be obtained in the future in order for the Suqian factory to be built and become operational. On September 17, 2014, the Company was officially granted the Certificate of Approval for Establishment with Foreign Investment in the People's Republic of China, and on September 24, 2014, the Company was officially granted the Business License to operate the JV. Several activities, including the cash injection by Suqian into the JV and the transfer of equipment by the Company, will begin during the first half of 2015.

The Company has contributed \$320,000 in cash to the Joint Venture as of December 31, 2014, which is recorded as Investment in Joint Venture on the Balance Sheets.

In December 2013, the Company established a wholly owned legal entity in Singapore (Ascent Solar (Asia) PTE. LTD. "Ascent Asia"). Ascent Asia was established initially to manage the Company's contract manufacturing partners in Asia. In the longer term, this entity will serve as the Company's sales headquarters in Asia, in addition to providing management of regional warehousing operations. Any activity for Ascent Asia will be consolidated into the Company's Balance Sheets, Statements of Operations, Statements of Stockholders' Equity and Statements of Cash Flows.

Table of Contents

NOTE 15. SUBSEQUENT EVENTS

TFG Radiant Stock Purchase

On April 6, 2015, the Company entered into a securities purchase agreement with TFG Radiant for a private placement of a total of 1,000,000 shares of the Company's common stock which resulted in gross proceeds of approximately \$1,000,000 to the Company. Prior to entering into the purchase agreement, TFG Radiant, the Company's largest stockholder, owned approximately 14.02% of the Company's Common Stock. The transaction closed on April 17, 2015. After the closing, TFG Radiant owned approximately 17.02% of the Company's Common Stock.

Sale and Leaseback Transaction

On May 4, 2015, the Company entered into a real estate purchase and sale contract with a real estate investment firm. Pursuant to the terms of the sale agreement, at closing the Company will sell its Thornton, Colorado headquarters building to the buyer for a sales price of \$11.5 million. The closing of the sale of the building is subject to customary due diligence by the buyer and satisfaction of other conditions precedent to closing. The sale of the building is expected to close in late June or July 2015.

At closing, the Company and the buyer will enter into a 10-year lease of the building. Under the lease, the Company will lease back the building from the buyer at an initial annual rental rate of approximately \$1.1 million, subject to annual rent increases of 3.0%. Under the lease, the Company will have two options to extend the lease by five years for each such option. The annual rental rate during each option term will be based on the then fair market rental rate for the building.

The Company expects to derive net proceeds from the transaction of approximately \$2.86 million after paying (i) the existing mortgage loan on the building of \$6.12 million, (ii) the existing \$1.35 million debt owed to Jefferies & Company secured by a second lien on the building, (iii) the security deposit and six-months advance rent as required by the lease, and (iv) brokers commissions and other transaction expenses. Such net proceeds will be used by the Company for working capital and general corporate purposes.

Table of Contents

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and the notes to those financial statements appearing elsewhere in this Form 10-Q. This discussion and analysis contains statements of a forward-looking nature relating to future events or our future financial performance. As a result of many factors, our actual results may differ materially from those anticipated in these forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Overview

We are a company formed to commercialize flexible photovoltaic modules using our proprietary technology. For the three months ended March 31, 2015, we generated \$658,000 of revenue. Our revenue from product sales was \$533,000 and our revenue from government research and development contracts was \$125,000.

Our proprietary manufacturing process deposits multiple layers of materials, including a thin film of highly efficient copper-indium-gallium-diselenide ("CIGS") semiconductor material, on a flexible, lightweight, high tech plastic substrate using a roll-to-roll manufacturing process and then laser patterns the layers to create interconnected photovoltaic ("PV") cells, or PV modules, in a process known as monolithic integration. We believe that our technology and manufacturing process, which results in a lighter, flexible module package, provides us with unique market opportunities relative to both the crystalline silicon ("c-Si") based PV manufacturers that currently lead the PV market, as well as other thin film PV manufacturers that use substrate materials such as glass, stainless steel or other metals that can be heavier and more rigid than plastics.

We believe that the use of CIGS on a flexible, durable, lightweight, high tech plastic substrate will allow for unique and seamless integration of our PV modules into a variety of electronic products, building materials, defense, transportation and space applications, as well as other products and applications that may emerge. For markets that place a high premium on weight, such as consumer electronics, rooftop, defense, space, near space, and aeronautic markets, we believe our materials provide attractive increases in power-to-weight ratio, and we believe that our materials have higher power-to-area ratios and voltage-to-area ratios than competing flexible PV thin film technologies. We believe that our lightweight, flexible, and ultra-rugged technology is transformational in nature, and will provide us advantages in serving newly emerging specialty markets such as UAV's (unmanned aerial vehicles) as well as BAPV (building applied photovoltaic) and other applications where it is not possible to add solar panels to existing structures using traditional crystalline solar technology.

In 2012, we transitioned our business model adding a second business focused on developing PV integrated consumer electronics. In June of 2012, we launched our new line of consumer products under the EnerPlex™ brand, and introduced our first product, the Surfr™, a battery and a solar case for the Apple® iPhone® 4/4S smart phone featuring our ultra-light CIGS thin film technology integrated directly into the case. The case incorporates our ultra-light and thin PV module into a sleek, protective iPhone 4/4S case, along with a thin, life extending, battery. The charger adds minimal weight and size to an iPhone, yet provides supplemental charging when needed. In August of 2012, we announced the launch of the second version of Surfr for the Samsung® Galaxy S® III, which provides 85% additional battery life.

In December 2012, we launched the EnerPlex Kickr™ and EnerPlex Jumpr™ product series. The Kickr IV is an extremely portable, compact and durable solar charging device, approximately seven inches by seven inches when folded, and weighs less than half a pound. The Kickr IV provides 6.5 watts of regulated power that can help charge phones, digital cameras, and other small USB enabled devices. The Kickr IV is ideal for outdoor activities such as camping, hiking and mountain climbing as well as daily city use. To complement the Kickr IV, we also released the Jumpr™ series of portable power banks. The Jumpr™ series provides a compact power storage solution for those who need to take the power of the sun with them on the go. Throughout 2014, EnerPlex released multiple additions to the Jumpr line of

products: including the Jumpr Stack 3,6 & 9, innovative batteries equipped with tethered micro-USB and Apple Lightning cables and revolutionary Stack & Charge design, enabling batteries to be charged simultaneously when they are placed on top of one another. Also released in 2014 were the Jumpr Slate series, products which push the boundaries of how thin batteries can be, the Jumpr Slate 10k, at less than 7mm thick was the thinnest lithium polymer battery available when it was released. The Jumpr Slate 5k and 5k Lightning each come with a tethered micro-USB and Lightning cable respectively; freeing consumers from worrying about toting extra cables with them while on the move.

At Outdoor Retailer 2014, EnerPlex debuted the Generatr Series, the Generatr 1200 and Generatr 100 are lithium-ion based large format batteries; lighter and smaller than competitors the Generatr Series are targeted for consumers who require high-capacity, high-output batteries which remain ultra-portable when compared to the competition. Also debuted at Outdoor

Table of Contents

Retailer was the Commandr XII, a high output solar charger designed specifically to integrate with and charge the Generatr series, allowing consumers to stay out longer without needing to charge their Generatr batteries from a traditional power source. In August, the Kickr II+ and IV+ were also announced, these products represent another evolution in EnerPlex's line of solar products; integrated with a 500mAh battery the Kickr II+ and IV+ are able to provide a constant flow of power even when there are intermittent disruptions in sunlight.

Throughout 2013, we aggressively pursued new distribution channels for the EnerPlex™ brand; these activities have led to placement in a variety of high-traffic ecommerce venues such as www.walmart.com, www.brookstone.com, www.newegg.com as well as many others including our own e-commerce platform at www.goenerplex.com. The April 2013 placement of EnerPlex products at Fry's Electronics, a US West Coast consumer electronics retailer, represented our first domestic retail presence. EnerPlex products are carried in all of Fry's 34 stores across 9 states. Each store is provided with EnerPlex branded merchandising assets to highlight the uniqueness of our product lines. In 2014 EnerPlex products launched in multiple online and brick-and-mortar partners; including BestBuy.com, 300 premium Verizon Wireless stores via partner The Cellular Connection (TCC) and 25 Micro Center stores across 16 states. This expansion of retail partners between 2013 and 2014 represents a nearly nine-fold increase in number of stores in which EnerPlex has retail presence.

During the first quarter of 2015 we reached an agreement with Evine Live, one of the premier home shopping networks with TV programming that reaches over 87 million US homes to begin selling EnerPlex products during their broadcasts. Availability of our products will begin in the second quarter of 2015. In the United Kingdom, our products will now be offered in the second quarter of 2015 by Maplin Electronics, one of the largest electronic retailers in the UK.

We continue to design and manufacture PV integrated consumer electronics, as well as portable power applications for commercial and military users. Due to the high durability of the monolithic integration employed by our technology, the capability to customize modules into different form factors and the industry leading light weight and flexibility provided by our modules, we believe the potential applications for our products are numerous. During 2014 our partner in the United Kingdom, The Solar Cloth Company, won an award in the BIPV category for their use of Ascent Solar's modules in tensioned fabric applications; this application is an example of the high-volume opportunities which Ascent is positioned to take advantage of in the absence of other technologies which can match Ascent's industry leading durability and power-to-weight ratio.

Commercialization and Manufacturing Strategy

Our proprietary manufacturing process deposits multiple layers of materials, including a thin film of highly efficient Copper-Indium-Gallium-diSelenide ("CIGS") semiconductor material, on a flexible, lightweight, plastic substrate using a roll-to-roll manufacturing process and then laser patterns the layers to create interconnected PV cells, or PV modules, in a process known as monolithic integration. Our monolithic integration techniques enable us to form complete PV modules with less or no costly back end assembly of intercell connections. Traditional PV manufacturers assemble PV modules by bonding or soldering discrete PV cells together. This manufacturing step typically increases manufacturing costs and at times proves detrimental to the overall yield and reliability of the finished product. By reducing or eliminating this added step using our proprietary monolithic integration techniques, we believe we can achieve cost savings in, and increase the reliability of, our PV modules. We believe our technology and manufacturing process, which results in a lighter, flexible module package, provides us with unique market opportunities relative to both the crystalline silicon ("c-Si") based PV manufacturers that currently lead the PV market, as well as other thin-film PV manufacturers that use substrate materials such as glass, stainless steel or other metals that can be heavier and more rigid than plastics.

Currently, we are producing consumer oriented products focusing on charging devices powered by or enhanced by our solar modules. Products in these markets are priced based on the overall value proposition rather than a commodity-style price per watt basis. We continue to develop new consumer products and we have adjusted our utilization of our equipment to meet our near term forecast sales. We plan to continue the development of our current PV technology to increase module efficiency, improve our manufacturing tooling and process capabilities and reduce manufacturing costs. We also plan to continue to take advantage of research and development contracts to fund a portion of this development.

On December 28, 2013, we entered into a definitive agreement for the establishment of a joint venture with the Government of the Municipal City of Suqian in Jiangsu Province, China (“Suqian”).

The agreement covers a multi-faceted, three-phase project. Completion of all three phases would involve an anticipated investment of up to \$500 million over 6 years, comprised of equipment, intellectual property and cash funded by Suqian, our business, and other supporting investors brought into the project by us.

During the second half of 2014, we and Suqian formed a joint venture entity (“JV”) in which Suqian will ultimately inject approximately \$4.8 million in cash and have a majority interest of 75%. We shall ultimately inject approximately \$1.6 million in cash and hold a minority interest of 25%. In 2015, Suqian will further inject the balance of the committed \$32.5 million while we

Table of Contents

will contribute our proprietary technology and intellectual property, as well as certain equipment from our Colorado facility, thereby increasing our shareholdings progressively up to an 80% ownership.

The JV will build a factory to manufacture our proprietary photovoltaic modules. We are committed to purchase this factory within the first 5 years, at the initial construction cost, and we will also purchase Suqian's ownership interest in the JV at a cost of 1.5 times Suqian's cash investment.

The implementation of the agreement, including the formation of the JV entity, will be subject to a number of contractual conditions and governmental approvals. Such conditions and approvals must be obtained in the future in order for the Suqian factory to be built and become operational.

Related Party Activity

In February 2012, we announced the appointment of Victor Lee as President and Chief Executive Officer. Mr. Lee had served on our Board of Directors since November 2011 and is currently the managing director of Tertius Financial Group Pte Ltd, the joint venture partner with Radiant Group, in TFG Radiant. 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 15.4% of our outstanding common stock as of March 31, 2015.

The addition of TFG Radiant as a major shareholder has significantly improved our capabilities on a number of fronts. TFG Radiant's domicile in China provides us access to high quality, low cost contract manufacturing in Asia through expansion of TFG Radiant's existing relationships, developed through many years of successful operation in China. Integrating these suppliers into our supply chain enables us to bring our products to market faster. TFG Radiant also provides a global product perspective that significantly improves the product design activities of our Thornton, Colorado designers as they collaborate with designers in Asia. We continue to integrate and improve the design-to-manufacture process where we manufacture modules in our US plant, ship them to Asia for completion into finished goods at low cost and then ship products to all markets we will serve.

In June 2012, we entered into a supply agreement and a contract manufacturing agreement with TFG Radiant. Under the terms of the contract manufacturing agreement TFG Radiant was to oversee certain aspects of the contract manufacturing process related to our EnerPlex™ line of consumer products. We compensated TFG Radiant for acting as general contractor in the contract manufacturing process. Under the supply agreement TFG Radiant was to distribute our consumer products in Asia. In December 2012, we entered into a consulting agreement with TFG 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. This consulting agreement was terminated in Q1 2014. During three months ended March 31, 2015, the Company made no disbursements to TFG Radiant. During the three months ended March 31, 2015 and March 31, 2014, the Company recognized revenue in the amount of \$0 and \$8,050, respectively, for products sold to TFG Radiant under the supply agreement. As of March 31, 2015 and December 31, 2014, the Company held \$0 and \$0, respectively, in receivables and deposits with TFG Radiant.

Significant Trends, Uncertainties and Challenges

We believe the significant trends, uncertainties and challenges that directly or indirectly affect our financial performance and results of operations include:

- our ability to generate customer acceptance of and demand for our products;
- successful ramping up of commercial production on the equipment installed;
- our products are successfully and timely certified for use in our target markets;
- successful operating of production tools to achieve the efficiencies, throughput and yield necessary to reach our cost targets;
- the products we design are saleable at a price sufficient to generate profits;
- our strategic alliance with TFG Radiant results in the design, manufacture and sale of sufficient products to achieve profitability;
- our ability to raise sufficient capital to enable us to reach a level of sales sufficient to achieve profitability on terms favorable to us;

Table of Contents

we are able to successfully design, manufacture, market, distribute and sell our newly introduced line of consumer oriented products;

- effective management of the planned ramp up of our domestic and international operations;
- our ability to successfully develop and maintain strategic relationships with key partners, including OEMs, system integrators, distributors, retailers and e-commerce companies, who deal directly with end users in our target markets;
- our ability to maintain the listing of our common stock on the NASDAQ Capital Market;
- our ability to achieve projected operational performance and cost metrics;
- our ability to enter into commercially viable licensing, joint venture, or other commercial arrangements; and
- availability of raw materials.

Critical Accounting Policies and Estimates

Critical accounting policies used in reporting our financial results are reviewed by management on a regular basis. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. Processes used to develop these estimates are evaluated on an ongoing basis. Estimates are based on historical experience and various other assumptions that are believed to be reasonable for making judgments about the carrying value of assets and liabilities. Actual results may differ as outcomes from assumptions may change.

Our significant accounting policies were described in Note 3 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014.

In June 2014, FASB issued ASU No. 2014-10, Development Stage Entities (Topic 915). Amongst other things, the amendments in this update removed the definition of development stage entity from Topic 915, thereby removing the distinction between development stage entities and other reporting entities from US GAAP. In addition, the amendments eliminate the requirements for development stage entities to (1) present inception-to-date information on the statements of income, cash flows and shareholders equity; (2) label the financial statements as those of a development stage entity; (3) disclose a description of the development stage activities in which the entity is engaged; and (4) disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. The standard is effective for the Company during the first quarter of 2015. Accordingly, the Company has adopted this standard for the quarter ended March 31, 2015 and has not disclosed inception-to-date information on the statements of income and cash flows and the Company has not labeled the financial statements as those of a development stage entity.

Recent Accounting Pronouncements

See Note 3, "Summary of Significant Accounting Policies," in the Notes to Condensed Consolidated Financial Statements.

In May 2014, FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606). The update will establish a comprehensive revenue recognition standard for virtually all industries in GAAP. ASU 2014-09 will change the amount and timing of revenue and cost recognition, implementation, disclosures and documentation. ASU 2014-09 is effective for fiscal years beginning in 2017. The Company is researching whether the adoption of ASU 2014-09 will have a material effect on the Company's financial statements.

Results of Operations

Comparison of the Three Months Ended March 31, 2015 and 2014

The Company's activities from inception through December 31, 2014 consisted substantially of raising capital, research and development, establishment and development of the Company's production plant, product development and establishing a sales channel for its line of consumer products which is sold under the EnerPlex™ brand. Revenues from inception through December 31, 2014 had been primarily generated from the Company's governmental research and development contracts until EnerPlex branded products began to sell in higher volumes in 2014. During this time period the Company's primary focus was not generating significant revenue, and thus cost of revenue was not

considered a relevant number due to the development nature of the Company. As such, the majority of the Company's costs were considered to be research and development costs from inception through December 31, 2014. Beginning in 2015, due to the success of EnerPlex branded products, the Company's primary focus going forward is to build on the Company's past results and to significantly increase our revenues. As the Company's primary focus is increasing revenues by utilizing and expanding the sales channel established during prior years, the Company has determined that

22

Table of Contents

cost of revenue is a relevant number going forward. As such, the Company has included a Cost of revenues line item in the Statements of Operations for the three months ended March 31, 2015.

Revenues. Our revenues were \$658,000 for the three months ended March 31, 2015 compared to \$753,000 for the three months ended March 31, 2014, a decrease of \$95,000. Revenues for the three months ended March 31, 2015 include \$533,000 of product sales compared to \$672,000 for the three months ended March 31, 2014, a decrease of \$139,000. Revenues earned on our government research and development contracts increased by \$44,000 during the three months ended March 31, 2015 to \$125,000.

Cost of revenues. Our Cost of revenues for the three months ended March 31, 2015 was \$1,581,000, which is comprised of Materials and Freight of \$612,000, Direct Labor of \$295,000, and Overhead of \$674,000. Management believes our factory is currently significantly under-utilized, and a substantial increase in revenue would result in marginal increases to Direct Labor and Overhead. As such management's focus going forward is to improve gross margin through increased sales and the full utilization of our factory. Direct materials related to product sales were \$389,000 for the three months ended March 31, 2015, which is 73% of product sales. We are currently offering promotions and discounts in order to penetrate new markets. While these promotions and discounts have proved effective in building our brand and acquiring new customers, our gross margins have been negatively impacted. Long term we anticipate substantial improvements in gross margins for product sales.

Research, development and manufacturing operations. Research, development and manufacturing operations costs were \$1,716,000 for the three months ended March 31, 2015 compared to \$3,817,000 for the three months ended March 31, 2014, a decrease of \$2,101,000. The primary reason for the decrease is due to a new line item in the current quarter, Cost of revenues, which was \$1,581,000 for the three months ended March 31, 2015. Research, development and manufacturing operations costs include costs incurred for product development, pre-production and production activities in our manufacturing facility. Research, development and manufacturing operations costs also include costs related to technology development and governmental contracts. The following factors contributed to the decrease in research, development, and manufacturing operations expenses during the three months ended March 31, 2015:

1. Materials and Equipment Related expenses decreased \$908,000 for the three months ended March 31, 2015 as compared to the three months ended March 31, 2014. The decrease is due to the fact that materials costs are included in the Cost of revenues line item for the three months ended March 31, 2015.

2. Personnel related expenses decreased \$548,000 as compared to the first quarter of 2014. The overall decrease in personnel related costs was primarily due to direct labor that is included in the Cost of revenues line item for the three months ended March 31, 2015.

3. Consulting and Contract Services decreased by \$444,000 from comparable quarter in the prior year. The decrease in expense as compared to the the first quarter of 2014 was primarily attributed to the termination of the consulting services contract with TFGR, effective March 31, 2014. Management expects this expense to remain consistent throughout 2015.

4. Facility Related Expenses decreased \$270,000 during the three months ended March 31, 2015. The decrease is due to the fact that some overhead costs are included in the Cost of Revenue line item for the three months ended March 31, 2015.

Selling, general and administrative. Selling, general and administrative expenses were \$2,841,000 for the three months ended March 31, 2015 compared to \$3,044,000 for the three months ended March 31, 2014, a decrease of \$203,000. The following factors contributed to the decrease in selling, general, and administrative expenses during the three months ended March 31, 2015:

1. Personnel related costs increased \$499,000 during the three months ended March 31, 2015 as compared to the three months ended March 31, 2014. \$41,000 of this increase was related to non-cash stock compensation expense. The

overall increase in personnel related costs was due to additional sales and management personnel hired subsequent to March 31, 2014 in order to facilitate our expected increase in sales.

Marketing and related expenses decreased \$611,000 during the three months ended March 31, 2015 as compared to the three months ended March 31, 2014. During the the first quarter of 2014, the Company implemented aggressive marketing and advertising campaigns in order to build our brand, which included television advertisements, print advertisements, and trade shows. During the first quarter of 2015, the Company did not incur the same level of advertising and marketing related expenses as the first quarter of 2014.

Table of Contents

3. Consulting and contract services decreased \$221,000 during the three months ended March 31, 2015 as compared to the three months ended March 31, 2014. The decrease was due to decreased staffing costs associated with our retail kiosks. Management expects this expense to be lower during 2015 as compared to 2014 as we transition to automated kiosks that do not require significant staffing expense.

Other Income / (Expense), net. Other Income / (Expense) was \$10,866,000 net expense for the three months ended March 31, 2015 compared to \$1,192,000 net expense for the three months ended March 31, 2014, an increase of \$9,674,000. The following factors contributed to the increase in other income/(expense) during the three months ended March 31, 2015:

1. Interest Expense increased \$9,847,000 as compared the first quarter of 2014. The increase is due to non-cash interest expense and amortization of debt discounts related to the Notes, Series D Preferred Stock, and Series D-1 Preferred Stock. The non-cash portion of interest expense for the three months ended March 31, 2015 was \$9,820,000.

2. Loss on Extinguishment of liabilities increased \$2,259,000 as compared to the first quarter of 2014. The increase in this non-cash expense is a result of the extinguishment of liabilities related to the Notes, Series D Preferred Stock, and Series D-1 Preferred Stock. Management expects these non-cash expenses to continue throughout 2015 due to our November 2014 financing transaction.

3. We incurred \$909,000 in non-cash interest expense as a result of the liability classified warrants associated with the Series D-1 Preferred Stock. This was a one-time non-recurring expense.

4. Change in fair value of derivative liabilities fluctuated \$3,322,000 as compared to the first quarter of 2014, resulting in a net gain as of March 31, 2015. The fluctuation in this non-cash item relates to the change in fair value of our derivative liabilities associated with our warrant liabilities as well as our derivatives associated with the Notes, Series D Preferred Stock and Series D-1 Preferred Stock.

Net Loss. Our Net Loss was \$17,788,000 for the three months ended March 31, 2015 compared to a Net Loss of \$8,770,000 for the three months ended March 31, 2014, an increase of \$9,018,000.

The increase in Net Loss can be summarized in variances in significant account activity as follows:

Table of Contents

	Decrease (increase) to Net Loss For the Three Months Ended March 31, 2015 Compared to the Three Months Ended March 31, 2014
Revenues	(95,000)
Cost of Revenue	(1,581,000)
Research, development and manufacturing operations	
Materials and Equipment Related Expenses	908,000
Personnel Related Expenses	548,000
Consulting and Contract Services	444,000
Facility Related Expenses	270,000
Other Miscellaneous Costs	(69,000)
Selling, general and administrative expenses	
Personnel Related Expenses	(499,000)
Marketing Related Expenses	611,000
Legal Expenses	(26,000)
Public Company Costs	(64,000)
Consulting and Contract Services	221,000
Other Miscellaneous Costs	(40,000)
Depreciation and Amortization Expense	30,000
Other Income / (Expense)	
Interest Expense	(9,847,000)
Other Income/Expense	17,000
Non-Cash Loss on Extinguishment of Liabilities	(2,259,000)
Deemed (non-cash) Interest Expense on Warrant Liability	(909,000)
Non-Cash Change in Fair Value of Derivative Liabilities	3,322,000
Increase to Net Loss	\$(9,018,000)

Liquidity and Capital Resources

As of March 31, 2015, we had approximately \$0.2 million in cash and cash equivalents, and \$28.0 million in restricted cash.

On February 19, 2015, the Company entered into a securities purchase agreement with one institutional and accredited investor. Pursuant to the terms of the purchase agreement, the Company sold to the investor (i) \$2,500,000 (2,500 shares) of Series D-1 Convertible Preferred Stock and (ii) warrants to purchase up to 541,126 shares of the Company's common stock, par value \$0.0001 per share. The closing of the sale of the Series D-1 Preferred Stock and the warrants occurred on February 25, 2015, and the Company received gross proceeds of \$2.5 million. Holders of the Series D-1 Preferred Stock will be entitled to receive dividends in the amount of 7% per annum, which are payable monthly in shares of Common Stock or cash, at the Company's option.

On November 14, 2014, we entered into a securities purchase agreement (the "November 2014 Purchase Agreement") with one institutional and accredited investor (the "Investor"). Pursuant to the terms of the November 2014 Purchase Agreement, we sold to the Investor (i) \$3,000,000 (3,000 shares) of Series D Convertible Preferred Stock (the "Series D Preferred Stock"), (ii) \$32,000,000 original principal amount of senior secured convertible notes, and (iii) warrants (the "Warrants") to purchase up to 7,777,778 shares of our common stock, par value \$0.0001 per share. The Financing

closed on November 19, 2014. We received gross proceeds of approximately \$4.5 million at closing. The remaining \$30.5 million of gross proceeds from the Financing was deposited on the closing date by the Investor into restricted control accounts. \$2.5 million of these restricted proceeds were released on December 22, 2014. Thereafter, additional funds from the control accounts shall be released to us (i) in connection with certain conversions of the Notes and redemptions of the Series D Preferred Stock, and (ii) up to \$6 million in any 90 day period, provided that we meet certain equity conditions. The balance in the restricted bank account totals approximately \$28 million at March 31, 2015.

We have commenced production at our manufacturing facility. We do not expect that sales revenue and cash flows will be sufficient to support operations and cash requirements until we have fully implemented our new consumer products strategy.

Table of Contents

During the first quarter of 2015, we used \$5.4 million in cash for operations. In 2015, we expect to incur a base level of maintenance capital expenditures and relatively minor improvements to the existing asset base. Other than the Notes described in the preceding paragraph, our primary significant long term obligation consists of a note payable of \$6.0 million to a financial institution secured by a mortgage on our headquarters and manufacturing building in Thornton, Colorado. Total payments of \$0.6 million, including principal and interest, will come due in the remainder of 2015. Additionally, the Company owes \$1.3 million as of March 31, 2015 related to a litigation settlement reached in April 2014, which is being paid in equal installments over 40 months which began April 2014.

On June 30, 2014, the Company entered into a Service Agreement with Swyft, Inc. Swyft will sell consumer products through automated retail stores (kiosks), provide online and mobile retail channels through a website and mobile application, and provide visual and text based advertising through both physical and digital channels. The Company will provide financing to Swyft in the form of a three year 8% convertible note to purchase seventy five (75) automated retail stores at \$4,500 per store, or a total of \$337,500, from ZoomSystems, the manufacturer of automated retail machines. The first convertible loan financing for thirty eight (38) automated retail stores of \$171,000 was provided by the Company by July 31, 2014 and the second convertible loan financing for thirty seven (37) automated retail stores of \$166,500 will be provided by the Company during 2015. The Company also has an option to continue loan financing for each additional block of fifty (50) automated retail stores. The Service Agreement also required that the Company pay a one-time project set-up fee of \$125,000 which was paid during the third quarter of 2014.

Additional projected product revenues are not anticipated to result in a positive cash flow position for the year 2015 overall. As such, cash liquidity sufficient for the year ending December 31, 2015 may require additional financing. We continue to accelerate sales and marketing efforts related to our consumer products strategy through increased hiring and expansion of our sales channel. We have begun activities related to securing additional financing through strategic or financial investors, but there is no assurance we will be able to raise additional capital on acceptable terms or at all. If our revenues do not increase rapidly, and/or additional financing is not obtained, we will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on our future operations.

Statements of Cash Flows Comparison of the Three Months Ended March 31, 2015 and 2014

For the three months ended March 31, 2015, our cash used in operations was \$5.4 million compared to \$6.5 million for the three months ended March 31, 2014, a decrease of \$0.9 million. The decrease is primarily the result of decreased operating expenses during the three months ended March 31, 2015. For the three months ended March 31, 2015, our cash used in investing activities remained flat at \$0.2 million as compared to March 31, 2014. During the three months ended March 31, 2015, negative operating cash flows of \$5.4 million were funded through \$2.5 million of net funding received from issuances of preferred stock and the use of cash and cash equivalents held at December 31, 2014.

Contractual Obligations

The following table presents our contractual obligations as of March 31, 2015. Our long-term debt obligation is related to our building loan reflecting both principal and interest. Our purchase obligations include orders for equipment, inventory and operating expenses.

Contractual Obligations	Total	Payments Due by Year (in thousands)			
		Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term debt obligations	\$10,401	\$1,393	\$2,881	\$1,387	\$4,740
Operating lease obligations	43	43	—	—	—
Purchase obligations	3,183	3,183	—	—	—
Total	\$13,627	\$4,619	\$2,881	\$1,387	\$4,740

Off Balance Sheet Transactions

As of March 31, 2015, we did not have any off balance sheet arrangements as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk

Historically, we have purchased manufacturing equipment internationally, which exposes us to foreign currency risk.

26

Table of Contents

From time to time we enter into foreign currency fair value hedges utilizing forward contracts designed to match scheduled contractual payments to equipment suppliers. Our objective is to fix the dollar amount of our foreign currency denominated manufacturing equipment purchases at the time of order. Although our hedging activity is designed to fix the dollar amount to be expended, the asset purchased is recorded at the spot foreign currency rate in effect as of the date of the payment to the supplier. The difference between the spot rate and the forward rate has been reported as gain or loss on forward contract. We cannot accurately predict future exchange rates or the overall impact of future exchange rate fluctuations on our business, results of operations and financial condition. All forward contracts entered into by us have been settled on the contract settlement dates, the last of which was settled in December 2009.

Although our reporting currency is the U.S. Dollar, we may conduct business and incur costs in the local currencies of other countries in which we may operate, make sales and buy materials. As a result, we are subject to currency translation risk. Further, changes in exchange rates between foreign currencies and the U.S. Dollar could affect our future net sales and cost of sales and could result in exchange losses.

Interest Rate Risk

Our exposure to market risks for changes in interest rates relates primarily to our cash equivalents. As of March 31, 2015, our cash equivalents consisted only of federally insured operating and savings accounts held with financial institutions. From time to time we hold money market funds, investments in U.S. government securities and high quality corporate securities. The primary objective of our investment activities is to preserve principal and provide liquidity on demand, while at the same time maximizing the income we receive from our investments without significantly increasing risk. The direct risk to us associated with fluctuating interest rates is limited to our investment portfolio and we do not believe that a change in interest rates will have a significant impact on our financial position, results of operations or cash flows.

Credit Risk

From time to time we hold certain financial and derivative instruments that potentially subject us to credit risk. These consist primarily of cash, cash equivalents, restricted cash, investments and foreign currency option contracts. We are exposed to credit losses in the event of nonperformance by the counter parties to our financial and derivative instruments. We place cash, cash equivalents, investments and forward foreign currency option contracts with various high-quality financial institutions, and exposure is limited at any one institution. We continuously evaluate the credit standing of our counter party financial institutions.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission (SEC) rules and forms. Our management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation required by Rules 13a-15 and 15d-15 under the Exchange Act of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15 and 15d-15 under the Exchange Act as of March 31, 2015. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of March 31, 2015, our disclosure controls and procedures were effective.

Changes in Internal Control over Disclosure and Reporting

There was no change in our internal control over financial reporting that occurred during the quarterly period ended March 31, 2015 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

On October 21, 2011, we were notified that a complaint (the "Lawsuit") was filed by Jefferies & Company, Inc. ("Jefferies") against us in state court located in the County and State of New York.

In December 2010, we and Jefferies entered into an engagement agreement (the "Fee Agreement") pursuant to which Jefferies was hired to act as our financial advisor in relation to certain potential transactions. In the Lawsuit, Jefferies claims it is entitled to receive an investment banking fee of \$3.0 million (plus expense reimbursement of approximately \$49,000) under the Fee Agreement in connection with the August 2011 investment and strategic alliance transaction (the "Financing") between us and TFG Radiant. In addition, should it prevail at trial, Jefferies would be able to claim an award for attorney's fees and prejudgment interest in the approximate amount of \$1.2 million. On April 16, 2014, the parties settled the lawsuit where the Company agreed to pay Jefferies a total of \$2.0 million in equal installments over 40 months. The Company has paid \$150,000 during the 3 months ended March 31, 2015. The Company records a liability in its financial statements for costs related to claims, including settlements and judgments, where the Company has assessed that a loss is probable and an amount can be reasonably estimated. The Company accrued \$1.7 million, the net present value of the \$2.0 million settlement, as of December 31, 2013. As of March 31, 2015, \$750,000 was accrued for the long-term portion of this settlement and \$505,000 was recorded as Accrued litigation settlement, current portion, in the Balance Sheets.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in the updated risk factors in our Annual Report on Form 10-K filed on March 18, 2015, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K filed on March 18, 2015 are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or future results.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds
Not required.

Item 3. Defaults Upon Senior Securities
Not applicable.

Item 4. Mine Safety Disclosures
Not applicable.

Item 5. Other Information
Not applicable.

Item 6. Exhibits
A list of exhibits is found on page 30 of this report.

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on the 15th day of May, 2015.

ASCENT SOLAR TECHNOLOGIES, INC.

By: /S/ VICTOR LEE
Lee Kong Hian (aka Victor Lee)
President and Chief Executive Officer
(Principal Executive Officer, acting Principal Financial
Officer, and Authorized Signatory)

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.
EXHIBIT INDEX

Exhibit No.	Description
3.1	Certificate of Designations of Preferences, Rights and Limitations of Series D-1 Preferred Stock (filed as Exhibit 3.1 to our Current Report on Form 8-K filed February 20, 2015).
10.1	Securities Purchase Agreement, dated February 19, 2015, between the Company and the Investor named therein (filed as Exhibit 10.1 to our Current Report on Form 8-K February 20, 2015).
31.1*	Chief Executive Officer Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Chief Financial Officer Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Chief Executive Officer Certification pursuant to section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Chief Financial Officer Certification pursuant to section 906 of the Sarbanes-Oxley Act of 2002
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Exchange Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.