

Ascent Solar Technologies, Inc.
Form 424B4
July 11, 2006

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[INDEX TO FINANCIAL STATEMENTS](#)

Filed Pursuant to 424(b)(4)
Commission File No. 333-131216

PROSPECTUS

3,000,000 Units
Each unit consisting of one share of common stock,
one redeemable Class A warrant
and two non-redeemable Class B warrants

This is a firm commitment initial public offering of 3,000,000 units by Ascent Solar Technologies, Inc. Each unit consists of one share of common stock, one redeemable Class A warrant and two non-redeemable Class B warrants, each warrant to purchase one share of common stock. The common stock and warrants will trade only as part of a unit through August 9, 2006, which is 30 days following the date of this prospectus, after which the common stock and public warrants each will trade separately.

Prior to this offering, there has been no public market for our securities. The units, the common stock, the Class A warrants and the Class B warrants will be listed and traded on the Nasdaq Capital Market under the symbols ASTIU, ASTI, ASTIW and ASTIZ, respectively, and on the Boston Stock Exchange under the symbols AKC/U, AKC, AKC&L and AKC&Z, respectively.

The initial public offering price of our units will be \$5.50 per unit.

These are speculative securities. Investing in these units involves significant risks. You should purchase these securities only if you can afford a complete loss of your investment. See "Risk Factors" beginning on page 5.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Per Unit	Total
Public offering price	\$ 5.50	\$ 16,500,000
Underwriting discount	\$ 0.36575	\$ 1,097,250
Proceeds to us, before expenses	\$ 5.13425	\$ 15,402,750

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

The expenses for this offering will include (in addition to the underwriting discount) a non-accountable expense allowance of 3% of the gross proceeds of this offering payable to Paulson Investment Company, Inc. Additionally, we have granted the underwriters a 45-day option to purchase up to an additional 450,000 units to cover over-allotments and have agreed to issue the representative of the underwriters a warrant to purchase up to 300,000 units.

Paulson Investment Company, Inc.

The date of this prospectus is July 10, 2006

TABLE OF CONTENTS

PROSPECTUS SUMMARY

RISK FACTORS

FORWARD-LOOKING STATEMENTS

USE OF PROCEEDS

DIVIDEND POLICY

CAPITALIZATION

DILUTION

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

PROPOSED BUSINESS

MANAGEMENT

PRINCIPAL STOCKHOLDERS

RELATED PARTY TRANSACTIONS

DESCRIPTION OF SECURITIES

SHARES ELIGIBLE FOR FUTURE SALE

UNDERWRITING

LEGAL MATTERS

EXPERTS

WHERE YOU CAN FIND MORE INFORMATION

INDEX TO FINANCIAL STATEMENTS

Until August 4, 2006 (the 25th day after the date of this prospectus), all dealers effecting transactions in our units, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Notice to Arizona investors: Each purchaser of units in Arizona must meet one of the following suitability standards: (1) annual gross income of at least \$100,000 (\$150,000 when combined with spouse) with a reasonable expectation of such income in the current year; or (2) minimum net worth of at least \$250,000 (\$300,000 when combined with spouse), exclusive of home, home furnishings and automobiles, with the investment not exceeding 10% of the net worth of the investor, together with spouse, if applicable.

Notice to California investors: Each purchaser of units in California must meet one of the following suitability standards: (1) annual gross income of at least \$65,000 and liquid net worth of at least \$250,000 (exclusive of home, home furnishings and automobiles); (2) liquid net worth of at least \$500,000 (exclusive of home, home furnishings and automobiles); (3) net worth of at least \$1,000,000 (inclusive of home, home furnishings and automobiles); or (4) annual gross income of at least \$200,000. This offering was approved in California on the basis of a limited offering qualification where offers/sales can only be made to investors who meet the foregoing suitability standards. The company did not

have to demonstrate compliance with some or all of the merit regulations of the Department of Corporations as found in Title 10, California Code of Regulations, Rule 260.140 et seq. Furthermore, the exemptions for secondary trading available under California Corporations Code Section 25104(h) will be withheld, but there may be other exemptions available to cover private sales.

Notice to New Jersey investors: Each purchaser of units in New Jersey must meet one of the following suitability standards: (1) annual gross income of at least \$65,000 and liquid net worth of at least \$250,000 (exclusive of home, home furnishings and automobiles); (2) liquid net worth of at least \$500,000 (exclusive of home, home furnishings and automobiles); (3) net worth of at least \$1,000,000 (inclusive of home, home furnishings and automobiles); or (4) annual gross income of at least \$200,000. Furthermore, there will be no secondary sales of the securities to persons in New Jersey who do not meet the foregoing suitability standards for 90 days after the date of this offering.

PROSPECTUS SUMMARY

This is only a summary and does not contain all the information that may be important to you. You should read the more detailed information contained in this prospectus, including the risk factors beginning on page 5. References to "we," "us," "our," "Ascent" or the "Company" mean Ascent Solar Technologies, Inc.

Our Company

Ascent, a development stage company, was formed in October 2005 to commercialize certain photovoltaic ("PV") technology developed by ITN Energy Systems, Inc. ("ITN") for space and near-space applications. By leveraging this technology inherited from ITN, we intend to be the first company to manufacture PV modules in commercial quantities that use a highly efficient thin-film Copper-Indium-Gallium-diSelenide ("CIGS") absorbing layer on a flexible high-temperature plastic substrate. We have produced and tested small-scale demonstration samples of our CIGS PV products at the laboratory level, but we have not yet produced any products in commercial quantities nor have we yet received any revenues from the proposed products that we intend to commercialize as our principal business activity. We intend to use the majority of the net proceeds of this offering to establish a production line that will enable us to transition into full-scale, commercial manufacturing of our CIGS PV products.

When used on space satellites and near-space aircraft, PV devices convert sunlight into the electricity needed to reliably power instruments, communications systems and the like. Currently, most PV devices used for space and near-space applications are rigid, bulky and relatively heavy, posing significant challenges to scientists and designers wishing to minimize volume and weight in order to maximize payload and reduce deployment costs. In addition to these shortcomings, PV devices traditionally used for such applications are expensive to manufacture and require the time-consuming and labor-intensive task of connecting individual solar cells together to create a complete PV module.

We hope to overcome many of these limitations by offering a flexible, lightweight PV product suitable for space and near-space applications. By employing a proprietary monolithic integration fabrication process, we intend to manufacture our PV devices on the module level, rather than the cell level, thereby avoiding the time-consuming and weight-additive cell-to-cell interconnect procedures utilized by other PV device manufacturers. We believe that our choice of substrate materials and proprietary monolithic integration fabrication processes should permit us to achieve cost, volume and weight performance advantages over competitors in our target markets. As a result, we believe that we will be well-positioned to capture opportunities in markets that require or desire highly efficient, lightweight and flexible PV power sources, including the markets for military and commercial spacecraft and satellites and the emerging high-altitude airship ("HAA") initiatives under the supervision of the U.S. Department of Defense.

Although we anticipate making slight variations to address specific market or customer requirements, such as optimized space coatings and protection diode methods, the basic design and architecture of our CIGS PV cells and modules are complete. We are continuing to develop and optimize our monolithic integration fabrication process and plan to complete such developments by October 2006, after which we intend to demonstrate larger area, fully integrated prototype modules for pre-manufacturing testing.

We intend to use the majority of the net proceeds from this offering to establish a 500 kilowatt ("kW") per shift annual capacity production line. Using this production line, we hope to begin fabrication of rolls and sheets of thin-film PV modules by 2008. We intend to distribute the rolls or sheets of PV modules to system integrators and manufacturers of spacecraft, satellites and HAAs, who may then integrate the materials into their unique systems and applications. By running more than one

shift daily, we anticipate having annual capacity to manufacture PV modules capable of generating over 1 megawatt ("MW"), or 1,000 kW, of power.

ITN, a private company incorporated in 1994, is an incubator dedicated to the development of cutting-edge thin-film, PV, battery and fuel cell technologies. Through its work on contracts for private and government entities, ITN developed proprietary processing and manufacturing know-how applicable to PV products generally and to CIGS PV products in particular. ITN formed Ascent to commercialize this investment in CIGS PV technologies for the space and near-space markets. In January 2006, ITN assigned to us its key CIGS PV technologies and trade secrets and granted to us an exclusive, worldwide license to use certain of ITN's proprietary process, control and design technologies in the production of CIGS PV solar modules for our target markets. ITN also agreed to seek permission to assign certain third-party research and development contracts to us, and we expect that a number of ITN employees with experience in CIGS PV technology will join Ascent in the future. ITN also has agreed to design and build our initial production line, which will utilize ITN's proprietary roll-to-roll processing tools, real-time intelligent processing controls and thin-film processing technologies, and to provide us at cost with administrative services such as facilities management, equipment maintenance, human resources, procurement, information technology services and accounting. See "Related Party Transactions" for details about our agreements with ITN.

Our principal business office is located at 8120 Shaffer Parkway, Littleton, Colorado, and our telephone number is (303) 420-1141. Our website address is www.ascentsolartech.com. Information contained in our website or any other website does not constitute part of this prospectus.

This Offering

Securities offered 3,000,000 units. Each unit consists of one share of common stock, one redeemable Class A warrant and two non-redeemable Class B warrants, each warrant to purchase one share of common stock. The common stock and warrants will trade only as a unit for 30 days following the effective date of this offering, after which the common stock and public warrants each will trade separately.

Class A warrants The Class A warrants included in the units will be exercisable commencing 30 days after the effective date of this offering. The exercise price of each Class A warrant will be \$6.60, which is 120% of the public offering price of the units. The Class A warrants expire on the fifth anniversary of the effective date of this offering, but if the warrants are not exercisable at that time because a current registration statement for the underlying shares is not available, then the expiration date will be extended for 30 days following notice from us that the warrants are again exercisable. Nevertheless, there is a possibility that the warrants will never be exercisable when in-the-money or otherwise, and that warrant holders will never receive shares or payment of cash in settlement of the warrants. See page 12 of "Risk Factors" for more detail.

We will have the right to redeem the Class A warrants issued in this offering at a redemption price of \$0.25 per warrant at any time after (i) 180 days from the effective date of this offering and (ii) the date on which the closing price of our common stock, as reported on the Nasdaq Capital Market, has equaled or exceeded \$9.35, which is 170% of the public offering price of the units for five consecutive trading days. We are required to provide 30 days' prior written notice to the Class A warrant holders of our intention to redeem the warrants.

Class B warrants The Class B warrants included in the units will be exercisable commencing 30 days after the effective date of this offering. The exercise price of a Class B warrant will be \$11.00, which is 200% of the public offering price of the units. The Class B warrants expire on the fifth anniversary of the effective date of this offering, but if the warrants are not exercisable at that time because a current registration statement for the underlying shares is not available, then the expiration date will be extended for 30 days following notice from us that the warrants are again exercisable. Nevertheless, there is a possibility that the warrants will never be exercisable when in-the-money or otherwise, and that warrant holders will never receive shares or payment of cash in settlement of the warrants. See page 12 of "Risk Factors" for more detail.

The Class B warrants are not redeemable.

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

Common stock outstanding after this offering	5,290,909 shares, including shares underlying units issued to certain bridge lenders
--	--

Use of proceeds	Build production line, repayment of bridge loans, sales and marketing, research and development and working capital.
-----------------	--

Nasdaq Capital Market symbols	Units:	ASTIU
-------------------------------	--------	-------

	Common stock:	ASTI
--	---------------	------

	Class A warrants:	ASTIW
--	-------------------	-------

	Class B warrants:	ASTIZ
--	-------------------	-------

Boston Stock Exchange symbols	Units:	AKC/U
-------------------------------	--------	-------

	Common stock:	AKC
--	---------------	-----

	Class A warrants:	AKC&L
--	-------------------	-------

	Class B warrants:	AKC&Z
--	-------------------	-------

Risk factors	Investing in the units involves a high degree of risk. You should be able to bear a complete loss of your investment. You should carefully consider the information set forth in the "Risk Factors" section.
--------------	--

We have 2,000,000 shares of common stock issued and outstanding as of June 30, 2006. Unless the context indicates otherwise, all share and per-share common stock information in this prospectus:

assumes a public offering price of \$5.50 per unit;

assumes the issuance of up to 290,909 units to certain bridge lenders;

assumes no exercise of the warrants underlying the units issued to certain bridge lenders;

assumes no exercise of the Class A and Class B warrants;

assumes no exercise of the underwriters' over-allotment option to purchase up to 450,000 units;

assumes no exercise of the representative's warrants; and

excludes 750,000 shares reserved under our 2005 Stock Option Plan.

RISK FACTORS

An investment in our securities involves a high degree of risk and many uncertainties. You should carefully consider the specific factors listed below, together with the cautionary statement that follows this section and the other information included in this prospectus, before purchasing our units. If one or more of the possibilities described as risks below actually occurs, our operating results and financial condition would likely suffer and the trading price of our securities could fall, causing you to lose some or all of your investment in the securities we are offering. The following is a description of what we consider to be our key challenges and all material risks to our business and securities.

Risks Relating to Our Business

We have no history of operations and are therefore subject to various startup company risks.

We were formed in October 2005 and our business to date has consisted of initial setting up of operations to pursue our business plan. In order to pursue our plan, we will have to continue to establish internal infrastructure, hire additional personnel, adopt company plans and procedures, set up a sales organization, oversee the design and construction of our initial production line and otherwise establish the functional capabilities of an operating company. Accomplishing this task may take longer or cost more than expected, and it is likely that problems that we cannot now anticipate will require solution. We cannot assure you that we will be successful in establishing ourselves as an operating company.

We intend to address an unproven market that may not justify our commitment to it.

We intend to develop and offer flexible, lightweight, high efficiency PV products for use in space and near-space applications. Because existing PV technology has suffered from weight, volume and cost constraints that have limited its use in these applications, there is no established market for our flexible thin-film CIGS technology. Our business plan assumes that such a market will develop as a result of the technological improvements that we have made and expect to continue to make. We cannot assure you that such a market will develop or, if it does develop, that it will meet our expectations.

Many of the applications for which we intend to compete will require further technological development, which we cannot guarantee.

Discussions with some potential purchasers of our PV products have been based on the assumption that we will continue to improve the cost, performance/weight and performance/volume characteristics of our planned products. While we believe that the assumptions on which these discussions have been based are reasonable, we cannot assure you that we will be able to achieve these improvements. If we are not able to achieve these improvements, the use of our PV products may be unfeasible or economically unattractive to our potential customers, in which case the sales assumptions underlying our business plan would be incorrect.

If we are not selected to participate in Lockheed Martin's HAA program, we would be forced to either generate revenue or seek funds from other sources to support our operations.

In October 2005, we submitted a written proposal to supply CIGS on high-temperature plastic substrate PV modules to Lockheed Martin Corporation ("Lockheed Martin") for use in an operational prototype HAA program. The operational prototype program, which contemplates the construction and launch of an operational HAA vehicle, would follow the assembly of a prototype "test" HAA ("Test HAA") currently sponsored by the Missile Defense Agency. Lockheed Martin announced last year that it expects to launch the Test HAA in 2009 for a limited duration flight. The development and launch of the operational prototype HAA are expected to follow that of the Test HAA. Our written proposal is divided into several development phases and a production phase. Participation in and throughout each

phase generally is dependent upon continued satisfactory performance. However, our planned products may not meet Lockheed Martin's technical specifications in each phase of the project, and we may not be able to produce an adequate amount of satisfactory product within the time frames contemplated by Lockheed Martin. If Lockheed Martin does not select us as a supplier for the planned operational prototype project or if it eliminates us as a supplier of the project, we would be forced to seek alternate customers or other sources of funding to support our operations after the net proceeds from this offering are consumed. Without revenues from such customers or funding, we might be forced to curtail or even cease operations.

Failure of the HAA market to develop as quickly as we envision would adversely affect our projected sales, growth and revenues.

The HAA market is in its infancy, and should the market opportunity not materialize, opportunities for growth may be limited. In particular, there is not yet long-term government funding for HAA projects. Because HAA projects will be subject to the size and priorities of government budgets, the funding for HAA projects always will be at risk. For example, there is a risk that Lockheed Martin's prototype projects could be curtailed, delayed or cancelled as a result of budgetary constraints, political considerations, emergence of competing technologies or other events. Also, technical or other obstacles encountered by Lockheed Martin during its Test HAA program may impact the timing, funding or viability of the planned operational prototype HAA in connection with which we have submitted a written proposal. As a small, start-up company, we have little opportunity to exert significant influence on the technical, economic and policy issues that will determine the nature, scope and timing of the Lockheed Martin projects or the HAA market as a whole. If our expectations with respect to the project or the HAA market are not justified, our business would be adversely impacted, we would be forced to rely more heavily on sales in other markets, our growth would be slower than planned and we may be forced to curtail or even cease operations.

We have no contracts for PV products and have recorded no sales of such products; we expect that significant PV product sales will not occur for some time.

We have recorded no sales of PV products and have no contracts for such sales. Because of the nature of the projects in which such products may be used, we expect that the sales cycle will be quite long; therefore, we believe that it will be at least 18 months before we record any PV product sales, although we expect to record revenue from the performance of research and development contracts in the interim. As a result, we expect that it will be some time before we can determine whether our expectations relating to our planned products and their target markets are justified. Also, as a result, we will be required to invest substantial resources in pursuing these markets in advance of any significant revenue stream that may result from such investments. An unanticipated or longer than expected delay revenue ramp-up could put a strain on our capital resources and require us to seek additional capital.

We intend to sell our PV modules to contractors of government-funded projects, which will be subject to political, scheduling and funding risks.

We intend initially to sell our PV modules to system integrators and manufacturers of spacecraft, satellites and HAAs participating in government-funded projects. We would be a subcontractor or supplier on these projects. The government agencies overseeing the projects are subject to economic and political pressures that dictate the manner in which they spend money. As a result, even if a contractor or government agency wants to purchase our PV modules, it may be unable to do so due to budgetary or political constraints. Orders may be canceled or substantially delayed due to budgetary, political or other scheduling delays that frequently occur in connection with government-funded projects. Any such cancellations or delays would likely adversely affect our business.

Because the nature of our operations will be different than that of ITN, the financial statements of the transferred assets of ITN that are included in this prospectus are not representative of our business or prospects.

ITN has been and is a research and development company that performs development contracts for private and government entities. ITN derives no significant revenue from commercial manufacturing and sales. In contrast, Ascent was formed to commercialize CIGS PV technologies for the space and near-space markets. Over time, we expect that our revenues will result primarily from commercial sales of our planned products. Consequently, the historical financial statements of Ascent and for the Transferred Assets that are part of this prospectus are not indicative of our prospects as a manufacturing company and do not represent our historical operations.

A failure by ITN to transfer PV research and development contracts to us could impair our revenues and hamper our research and development efforts.

Development contracts with third parties provide a source of revenue and enable us to develop new technologies more rapidly than we would be able to do otherwise. In a typical year, ITN historically has realized annual revenues between \$1 million and \$3 million from PV research and development programs. These contracts with third-parties include Small Business Innovation Research ("SBIR") contracts sponsored by government agencies, non-SBIR government contracts and agreements with non-governmental entities. Although we currently have no such programs, ITN has agreed to seek permission to assign certain third-party research and development contracts to us with a full-year value in 2006 of approximately \$2.5 million and a value in 2007 of approximately \$500,000. However, \$1.7 million in 2006 and \$500,000 in 2007 are attributable to SBIR contracts for which we may not be eligible due to foreign ownership and size requirements in the regulations governing SBIR contracts. Furthermore, there is a possibility that the parties to ITN's non-SBIR contracts will deny ITN permission to transfer some of the contracts to us. Either scenario would prevent us from collecting revenue under at least some of these contracts and might hamper our ability to develop technologies as quickly as planned or at all.

Because we may be ineligible to apply for or service SBIR contracts, we may be forced to seek alternate sources to fund our research and development efforts.

Many PV companies, including some of our competitors, rely on SBIR contracts to develop new technologies. In fact, the majority of funding associated with ITN's third-party research and development projects results from SBIR contracts. After we become a publicly traded company, we may be ineligible to apply for or service SBIR contracts, in which case we would need to find alternate sources to help fund our research and development efforts.

Contracts involving government agencies are subject to the government's authority to unilaterally cancel or modify the contracts.

Contracts involving government agencies may be terminated or modified at the convenience of the agency. Other risks include potential disclosure of our confidential information to third parties and the exercise of "march-in" rights by the government. March-in rights refer to the right of a United States government agency to require us to grant a license to the technology to a responsible applicant or, if we refuse, the government may grant the license itself. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the technology or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give the United States industry preference. ITN's and our government-sponsored research contracts are subject to audit and require that ITN or we provide regular written technical updates as well as a final report on the results of our technical research. Because these reports are generally available to the public, third parties may obtain some aspects of our sensitive

confidential information. Moreover, the failure to provide these reports or to provide inaccurate or incomplete reports may provide the government with rights to any intellectual property arising from the related research. Funding from government contracts also may limit when and how we can deploy technology developed under those contracts.

We initially will be substantially dependent on the administrative and engineering resources of our parent company ITN Energy Systems, Inc.

ITN will be responsible for designing and building our production line, which we anticipate will require a majority of the net proceeds from this offering. We also will be dependent on ITN, at least initially, to provide administrative services such as facilities management, equipment maintenance, human resources and accounting. Furthermore, ITN has agreed to seek permission from third parties to transfer certain research and development contracts to us. There is a possibility that a party to one or more of these contracts will reject ITN's request, in which case ITN intends to continue to service the contracts for which permission to transfer is denied and, to the extent possible, assign to us the ownership of any inventions developed under those contracts. Although we are entitled to assume ownership of any inventions developed under these government contracts, the inventions themselves largely are predicated on ITN's ability to carry out those contracts successfully. If our relationship with ITN falters or if ITN fails to carry out its services or contracts in a satisfactory manner, our business may suffer.

Conflicts of interest may arise from our close relationship with ITN.

For the foreseeable future, we will be substantially dependent on the administrative and engineering resources of our parent company ITN. Two members of our Board of Directors, Dr. Mohan Misra and Mr. Ashutosh Misra, also serve as directors or officers of ITN. Although we do not expect a conflict of interest due to the dual roles of these individuals, it nevertheless is conceivable that conflicts may arise with respect to, for example, the pricing of services provided by ITN to us, the sharing of resources and the allocation of each individual's time. Furthermore, because Dr. Misra and Mr. Misra may be asked to secure government contracts not only for us, but also for other companies in which they serve as directors or officers, actual or perceived conflicts of interest may arise.

Failure to build or operate our production line successfully would adversely impact our business and financial condition.

We plan to produce our thin-film PV modules using a custom-built 500 kW per shift annual capacity production line beginning in 2008. Design, building and testing of this production line, which has not yet been built, will require a substantial investment of capital, currently estimated by us to be approximately \$8.2 million, which we intend to fund with the net proceeds from this offering. We believe that, if our PV modules are manufactured in large quantities, we will be able to demonstrate manufacturing yields, equipment capability, product performance and product quality that will enable us to produce PV modules for the space and near-space markets at costs lower than those of competitors. However, the successful completion and operation of the production line will require substantial engineering resources and will be subject to significant risks, including risks of cost overruns and delays and the possibility that the production line may never be completed or operational. We may never be able to operate our production processes in high volume, make planned process and equipment improvements, attain projected manufacturing yields or desired annual capacity, obtain timely delivery of equipment to build the production line or hire and train the additional employees and management needed to operate the production line. We also may face insurmountable challenges or incur unforeseen expense as when we try to achieve performance results from our planned products produced on a large-scale roll-to-roll production line compared to the results we have achieved in

small-scale laboratory samples. Failure to meet our manufacturing objectives could materially and adversely affect our business, results of operations and financial condition.

If we fail to clear certain technical hurdles, we may not be able to begin commercial production of our CIGS PV modules in 2008 as planned.

Several technical matters must be resolved in order for us to begin commercial production of CIGS PV modules in 2008 as planned. In particular, the Dow Corning Corporation ("DCC"), which we hope will supply us with high-temperature plastic substrate material, must develop capacity to produce the substrate material in commercial quantities. To date, the DCC substrate material is not commercially available, but DCC has informed us that it is making improvements in its ability to provide the material in larger quantities. We also must complete final testing and integration of our monolithic integration technology by early 2007 and implement the intelligent process controls developed by ITN. We inherited both technologies from ITN, but need to tailor them for use in our planned production line. Finally, additional development may be required as we scale up from small laboratory-level batches to large area continuous roll-to-roll production using much larger manufacturing equipment. Scaling up may present us with unforeseen or unexpected technical challenges that we cannot now identify. Our inability to quickly overcome these technical hurdles could delay the timeline for the commercial production of our planned products and adversely affect our anticipated revenues and plan of operations.

Our planned products may not gain market acceptance, in which case we would be unable to sell our products or achieve profitability.

The development of demand for our proposed products and our ability to sell them may be adversely affected by a number of factors, many of which are beyond our control, including:

our failure to produce PV modules that compete favorably against competing products on the basis of cost, quality, weight, efficiency and performance;

our failure to develop or maintain successful relationships with aerospace industry leaders, systems integrators and strategic partners; and

the failure of our planned products to achieve qualification or certification by customers for use in space or near-space applications.

If our planned products fail to gain market acceptance, we would be unable to sell those products or achieve profitability.

Our future success depends on retaining our existing management and hiring and assimilating new key employees, and our inability to attract or retain key personnel would materially harm our business and results of operations.

Our success depends on the continuing efforts and abilities of Matthew Foster, our President and Chief Executive Officer, and Dr. Joseph Armstrong, our Chief Technology Officer. Our success also will depend, in part, on our ability to attract and retain highly skilled employees, including management, technical and sales personnel. The loss of services of any of our key personnel, the inability to attract, retain or assimilate key personnel in the future, or delays in hiring required personnel could materially harm our business.

Upon becoming a reporting company, we will be required to disclose detailed aspects of our business on a regular and ongoing basis that our competitors might use against us.

The United States Securities and Exchange Commission requires that all public companies disclose certain detailed financial information including the discussion of known trends, demands, events and

uncertainties with specific disclosure about liquidity, capital resources, and critical accounting estimates. In the course of conducting our business, it may on occasion be necessary to publicly disclose certain financial, market, production, technology, product, or other material information that we would otherwise consider proprietary and competitively sensitive. As a result, our competitors may use this information in ways that would adversely affect our earnings, growth and revenues and hamper our ability to adequately protect our intellectual property and carry out our strategic plans.

We may be unable to adequately protect or enforce our proprietary information, which may result in its unauthorized use or reduced sales or otherwise reduce our ability to compete.

Our business and competitive position depend upon our ability to protect our proprietary technology. Despite our efforts to protect this information, unauthorized persons may attempt to obtain and use information that we regard as proprietary. Any patents issued in connection with our efforts to develop new technology for solar power products may not be broad enough to protect all of the potential uses of the technology.

When others are responsible for the control, prosecution, maintenance and enforcement of certain important intellectual property, such as technology licensed to us, the protection of the intellectual property rights may be outside of our control. If the entity that controls the intellectual property rights does not adequately protect those rights, our rights may be impaired, which may impact our ability to develop, market and commercialize our planned products.

Our means of protecting our proprietary rights may not be adequate, and our competitors may:

independently develop substantially equivalent proprietary information, products and techniques;

otherwise gain access to our proprietary information; or

design around our patents or other intellectual property.

Our employees, consultants and advisors execute proprietary information and invention agreements when they begin working for us. However, these agreements may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. Failure to maintain trade secret and patent protection may adversely affect our business.

Successful infringement claims by third parties could result in substantial damages, lost product sales and the loss of important proprietary rights.

There has been substantial litigation regarding patent and other intellectual property in various high technology industries. In the future, we may be notified of allegations that we may be infringing on intellectual property rights possessed by others. Should litigation be brought against us, such litigation could be extremely expensive and time consuming and could materially adversely affect our business, financial condition and results of operations, regardless of the outcome of the litigation. Such litigation could also result in loss of certain proprietary rights, significant monetary liability and barriers to product manufacturing. Any of these outcomes could materially harm our business and have a material negative impact on the value of your investment.

We are a party to confidentiality agreements that the breach of which may lead to termination of important contracts, injunctive relief or damages.

In the course of our business, we enter into nondisclosure and other types of agreements whereby we, and typically the other party to the agreements, agree not to disclose confidential information. These confidentiality obligations are particularly important in the defense industry where we intend to operate. We have instituted internal procedures to ensure that we do not violate nondisclosure covenants, but we cannot assure that these procedures will be effective in protecting sensitive

information. Moreover, our disclosure obligations as a public company may create a conflict between our duty to disclose material information to the public and our obligation to keep certain proprietary information confidential. Our failure to abide by our confidentiality obligations may lead to termination of our relationship with contracting parties, imposition of injunctive relief against us or damages. In May 2006, we received notification from Lockheed Martin that ITN had breached its data exchange agreement with Lockheed Martin and consequently the agreement would be terminated. Lockheed Martin has since entered into a new agreement with ITN and us to protect confidential information, based on Lockheed Martin's satisfaction with the procedures we have adopted to protect confidential information. While we intend to take all reasonable measures to protect confidential information of parties with whom we contract, there can be no assurance that our procedures will be effective and that we will not breach our confidentiality agreements.

Risks Related to Investment in Our Securities

As a public company, we will be subject to complex legal and accounting requirements that will require us to incur substantial expense and will expose us to risk of non-compliance.

As a public company, we will be subject to numerous legal and accounting requirements that do not apply to private companies. The cost of compliance with many of these requirements is substantial, not only in absolute terms but, more importantly, in relation to the overall scope of the operations of a small company. Our inexperience with these requirements may increase the cost of compliance and may also increase the risk that we will fail to comply. Failure to comply with these requirements can have numerous adverse consequences including, but not limited to, our inability to file required periodic reports on a timely basis, loss of market confidence, delisting of our securities and/or governmental or private actions against us. We cannot assure you that we will be able to comply with all of these requirements or that the cost of such compliance will not prove to be a substantial competitive disadvantage vis-à-vis our privately held and larger public competitors.

There currently is no public trading market for our securities, and an active market may not develop or, if developed, be sustained. If a public trading market does not develop, you may not be able to sell any of your securities.

There currently is no public trading market for our common stock, and we cannot assure you that an active market will develop or be sustained. If an active public trading market for our stock does not develop or is not sustained, it may be difficult or impossible for you to resell your securities at any price. Even if a public market does develop, the market price could decline below the amount you paid for your securities.

While the Class A and Class B warrants are outstanding, it may be more difficult to raise additional equity capital.

While the Class A and Class B warrants are outstanding, the holders of those warrants are given the opportunity to profit from a rise in the market price of our common stock, and we may not redeem the Class A warrants except under certain conditions or the Class B warrants at all. We may find it more difficult to raise additional equity capital while these warrants are outstanding. At any time during which these warrants are likely to be exercised, we may be able to obtain additional equity capital on more favorable terms from other sources. Accordingly, any exercise of the warrants likely would be dilutive to existing stockholders.

If we seek additional capital in the future, your investment could be diluted.

If we are forced to seek additional capital in pursuit of our business objectives, such additional capital, if available, could substantially dilute our then-existing investors.

If we issue shares of preferred stock, your investment could be diluted or subordinated to the rights of the holders of preferred stock.

Our Board of Directors is authorized by our Certificate of Incorporation to establish classes or series of preferred stock and fix the designation, powers, preferences and rights of the shares of each such class or series without any further vote or action by our stockholders. Any shares of preferred stock so issued could have priority over our common stock with respect to dividend or liquidation rights. Although we have no plans to issue any shares of preferred stock or to adopt any new series, preferences or other classification of preferred stock, any such action by our Board of Directors or issuance of preferred stock by us could dilute your investment in our common stock and warrants or subordinate your holdings to the shares of preferred stock.

Future sales or the potential for future sales of our securities may cause the trading price of our common stock and Class A and Class B warrants to decline and could impair our ability to raise capital through subsequent equity offerings.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. Immediately after this offering, 5,290,909 shares of our common stock will be issued and outstanding, 5,740,909 shares if the underwriters' over-allotment option is exercised in full. The 3,000,000 units (and constituent shares and warrants) sold in this offering (or 3,450,000 units if the underwriters' over-allotment option is exercised in full) will be freely tradable without restriction or further registration under the federal securities laws unless purchased by our affiliates. All of the shares outstanding immediately prior to this offering will be subject to one or more contractual lock-up agreements. However, we cannot assure you that these agreements will be adequately enforced.

If we do not maintain an effective registration statement or comply with applicable state securities laws, you may not be able to exercise the Class A or Class B warrants.

For you to be able to exercise the Class A or Class B warrants, the shares of our common stock to be issued to you upon exercise of the Class A or Class B warrants must be covered by an effective and current registration statement and qualify or be exempt under the securities laws of the state or other jurisdiction in which you live. We cannot assure you that we will continue to maintain a current registration statement relating to the shares of our common stock underlying the Class A or Class B warrants. If at their expiration date the warrants are not currently exercisable, the expiration date will be extended for 30 days following notice to the holders of the warrants that the warrants are again exercisable. If we cannot honor the exercise of warrants and the securities underlying the warrants are listed on a securities exchange or if there are three independent market makers for the underlying securities, we may, but are not required to, settle the warrants for a price equal to the difference between the closing price of the underlying securities and the exercise price of the warrants. In sum, the Company and you may encounter circumstances in which you will be unable to exercise the Class A or Class B warrants. In those circumstances, the Company may, but is not required to, redeem the warrants by payment in cash. Consequently, there is a possibility that you will never be able to exercise the Class A or Class B warrants, and that you will never receive shares or payment of cash in settlement of the warrants. This potential inability to exercise the Class A or Class B warrants, and the possibility that the Company will never opt to settle warrants in shares or cash, may have an adverse effect on demand for the warrants and the prices that can be obtained from reselling them.

FORWARD-LOOKING STATEMENTS

We make forward-looking statements in this prospectus that are subject to risks and uncertainties. These forward-looking statements include information about possible or assumed future results of our business, financial condition, liquidity, results of operations, plans and objectives. In some cases, you may identify forward-looking statements by words such as "may," "should," "plan," "intend," "potential," "continue," "believe," "expect," "predict," "anticipate" and "estimate," the negative of these words or other comparable words. These statements are only predictions. You should not place undue reliance on these forward-looking statements. The forward-looking statements are qualified by their terms and/or important factors, many of which are outside our control, involve a number of risks, uncertainties and other factors that could cause actual results and events to differ materially from the statements made. The forward-looking statements are based on our beliefs, assumptions and expectations of our future performance, taking into account information currently available to us. These beliefs, assumptions and expectations can change as a result of many possible events or factors, including those events and factors described in "Risk Factors," not all of which are known to us. Neither we nor any other person assumes responsibility for the accuracy or completeness of these statements. We will update this prospectus only to the extent required under applicable securities laws. If a change occurs, our business, financial condition, liquidity and results of operations may vary materially from those expressed in our forward-looking statements.

USE OF PROCEEDS

The net proceeds from the sale of the 3,000,000 units that we are selling in this offering will be approximately \$13,985,000, after deducting the underwriting discount of \$1,097,250 and estimated offering expenses of approximately \$1,417,750.

We intend to use the net proceeds of this offering as follows:

	<u>Amount</u>	<u>Percentage</u>
Design, building and testing of production line and other non-recurring engineering costs	\$ 8,200,000	58.6%
Repayment of bridge loans	1,664,000	11.9
Business development and product qualifications	1,000,000	7.2
Research and technology development	1,781,000	12.7
General corporate purposes	1,340,000	9.6
	<u> </u>	<u> </u>
Total:	\$ 13,985,000	100.0%
	<u> </u>	<u> </u>

The bridge loans being repaid consist of principal and interest owed to a group of lenders who provided us with short-term working capital in January 2006. The loans, in a principal amount of \$1,600,000, accrue interest at an annual rate of 10% and are due and payable on the earlier of January 2007 or the completion of a public offering of equity securities with gross proceeds of at least \$5,000,000.

Design, building and testing of production line includes purchase and installation of capital equipment, facility modifications, laboratory equipment, test equipment, quality control equipment, and the labor associated with the engineering, installation, commissioning, and product certification and test.

Business development and product qualifications includes marketing activities, preparation of customer bids and proposals, product prototypes, product qualification and testing, and salaries and wages of associated staff.

Research and technology development includes, internal research and development projects, bid and proposal for research and development contracts, performance of those contracts, and salaries and wages of associated scientists, engineering, and technician staff.

General corporate purposes consist of general and administrative costs, including salaries, accounting and legal fees, rent and other facilities expenses, and other working capital expenses.

The foregoing information is an estimate based on our current business plan. Other than repayment of the bridge loans, we may find it necessary to shift funds reserved for one category of uses to another. For example, if our non-recurring engineering and other costs exceed current estimates (due to sharp increases in costs of materials or equipment), we may be forced to draw from funds budgeted for research and technology development or business development. In such cases, we may find it necessary or advisable to re-allocate portions of the net proceeds we receive from this offering, and we will have broad discretion in doing so. Pending these uses, we intend to invest the net proceeds of the offering in short-term, interest-bearing securities.

Some of the net proceeds will be used to pay ITN for equipment and services as detailed in our Service Center Agreement, Manufacturing Line Agreement, Sublease Agreement and Administrative Services Agreement with ITN. Notably, in connection with our contract with ITN to design and build our 500 kW/shift/year production line, we have budgeted approximately \$6,700,000 in payments to ITN through 2007 for equipment, engineering, labor, plant commissioning, production readiness and qualification. We also sublease approximately 9,500 square feet of office and manufacturing space at

cost from ITN and currently pay \$11,997 per month (or a total of approximately \$300,000 through 2007) in rent, plus pass-through expenses such as taxes, insurance, water and utilities, which we estimate will total approximately \$250,000 for the subleased space through the end of 2007. ITN also has agreed to perform administrative services for us at cost, including services such as facilities maintenance, payroll, human resources, accounting and information technology services. Although actual costs may vary from month to month, we estimate that the average monthly cost of such services will be approximately \$20,000. Payments to ITN under our Sublease Agreement and Administrative Service Center Agreement will draw from proceeds allocated to "general corporate purposes." A portion of proceeds allocated to "business development and product qualification" and "research and technology development" also may be paid to ITN under our Service Center Agreement, which gives us the right to use, on an as needed and as available basis, certain of ITN's laboratories, equipment and research and development tools. If and when we use the laboratories, equipment and tools, we will pay ITN in accordance with the standard rates that ITN charges its other customers.

DIVIDEND POLICY

We have not declared or paid any dividends and do not intend to pay any dividends in the foreseeable future. We intend to retain any future earnings for use in the operation and expansion of our business. Any future decision to pay dividends on common stock will be at the discretion of our Board of Directors and will depend upon our financial condition, results of operations, capital requirements and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our:

Actual capitalization as of March 31, 2006; and

Pro forma capitalization as of March 31, 2006 after giving effect to: (i) the sale of 3,000,000 units in this initial public offering at a price of \$5.50 per unit, less the underwriting discount and offering expenses; (ii) the issuance of 290,909 units to certain bridge lenders; and (iii) the repayment of bridge loan financing and the recognition to accumulated deficit of remaining bridge loan discount and deferred financing costs.

	March 31, 2006	
	Actual	Pro Forma as Adjusted
DEBT		
Bridge loan, net of discount and amortization of \$159,140	\$ 959,140	\$
STOCKHOLDERS' EQUITY		
Preferred stock, \$0.0001 par value: 25,000,000 shares actual authorized: no shares issued and outstanding	\$	\$
Common stock, \$0.0001 par value: 75,000,000 shares actual authorized: 2,000,000 shares issued and outstanding March 31, 2006 actual; 5,290,909 shares issued and outstanding pro forma as adjusted	200	529
Additional paid-in capital	1,892,084	15,876,755
Accumulated deficit	(1,940,748)	(2,740,673)
Total capitalization	\$ (48,464)	\$ 13,136,611

You should read this table in conjunction with the sections of this prospectus captioned "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as the financial statements and related notes included elsewhere in this prospectus.

DILUTION

For purposes of the dilution computation and the following tables, we have attributed the full purchase price of a unit to the share of common stock included in the unit and nothing to the warrants included in the unit. If you invest in our units, your interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our capital stock after this offering. Our net tangible book deficiency as of March 31, 2006 was \$48,464 without giving effect to any changes in the net tangible book value after March 31, 2006 other than (i) the sale of 3,000,000 units in this initial public offering at a price of \$5.50 per unit, less the underwriting discount and offering expenses; and (ii) the issuance of 290,909 units to certain bridge lenders; and (iii) the repayment of bridge loan financing and the recognition to accumulated deficit of remaining bridge loan discount. Our pro forma net tangible book value as of March 31, 2006 was \$13,136,611, or \$2.48 per share of outstanding capital stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by the purchasers of our units in this offering and the net tangible book value per share of our capital stock immediately afterwards. This represents an immediate increase of \$2.50 per share of capital stock to existing stockholders and an immediate dilution of \$3.02 (or 54.9%) per share of common stock to the new investors who purchase units in this offering. The following table illustrates this per share dilution:

Initial price to public		\$ 5.50
Pro Forma net tangible book value (deficiency) as of March 31, 2006		\$ (0.01)
Increase in net tangible book value per share attributable to:		
Bridge investor conversion	\$ (0.15)	
New investors	2.64	
	<u> </u>	
Increase in net tangible book value per share to existing stockholders		<u>2.49</u>
Proforma as adjusted net tangible book value per share after this offering		<u>2.48</u>
Dilution in net tangible book value per share to new investors		<u>\$ 3.02</u>

If the underwriters' over-allotment option is exercised in full, dilution per share to new investors would be \$2.82 (or 51.2%) per share of common stock instead of \$3.02 (or 54.9%) per share of common stock.

The following table summarizes the differences between the existing stockholders and the new investors with respect to the number of shares of common stock purchased, the total consideration paid, and the average price per share paid:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Founders stock	972,000	18.4%	\$ 38,880	0.2%	\$ 0.04
ITN stock for transferred assets	1,028,000	19.4%	31,200	0.2%	0.03
Bridge investors	290,909	5.5%			
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Subtotal	2,290,909	43.3%	70,080	0.4%	0.03
New investors	3,000,000	56.7%	16,500,000	99.6%	5.50
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Total	5,290,909	100.0%	\$ 16,570,080	100.0%	\$ 3.13

**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 the financial statements and related notes to the financial statements included elsewhere in this prospectus. This discussion contains forward-looking statements that relate to future events or our future financial performance. 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. These risks and other factors include, among others, those listed under "Risk Factors" and those included elsewhere in this prospectus.

Introduction

Ascent was formed to commercialize CIGS PV technology developed by ITN for the space and near-space markets. For over a decade, ITN had been engaged in the research and development of PV technologies and devices. Funded largely by contracts sponsored by government agencies such as the U.S. Air Force Research Laboratory, the National Science Foundation, the National Renewable Energy Laboratory, the Defense Advanced Research Projects Agency, the Missile Defense Agency and NASA, ITN developed roll-to-roll fabrication of a CIGS absorbing layer on a stainless steel metal substrate in the late 1990s. ITN then developed the technology necessary to put a CIGS absorbing layer on high-temperature plastic and produced and tested small area demonstration cells of CIGS on high-temperature plastic. This new technology has been transferred to us and will comprise the technical foundation for our initial product line and business in the near-term.

Unlike ITN, we intend primarily to be a commercial manufacturing company engaged in the production of CIGS PV on high-temperature plastic modules. Our near-term objective is to assemble a 500 kW/shift/year production line by the end of 2007 and begin commercial production of CIGS PV on high-temperature plastic modules by 2008. We expect to remain substantially dependent upon the net proceeds from this offering until commencement of commercial production, after which we hope that revenues from sales will be sufficient to sustain all or a substantial portion of our ongoing operations.

Our most serious near-term challenges and uncertainties relate to product development and manufacturing, on the one hand, and to sales and marketing, on the other.

Product Development and Manufacturing

Meeting the 2008 production deadline with products that satisfy the technical specifications demanded by potential customers, including by Lockheed Martin in the early stages of its HAA prototype project, will require timely resolution of certain technical matters. These matters relate to the supply of our substrate material, further testing of our monolithic integration technology and our intelligent process controls.

We currently obtain the majority of our high-temperature plastic substrate material from Ube Industries, Ltd. (Japan) ("Ube"). We believe the supply of this material from Ube will be available to us in commercial quantities. However, we also have tested our CIGS absorbing layer on a relatively new high-temperature silicone resin (also a form of plastic) substrate material developed by the Dow Corning Corporation ("DCC"). The DCC substrate material can be processed at a higher temperature than the Ube substrate material, a feature that typically results in higher PV efficiencies. We therefore believe that the DCC substrate can be successfully used in our CIGS PV products in space and near-space applications, where efficiencies and weight are a critical measurement. To date, however, the DCC substrate is not commercially available, but DCC has informed us that it is improving on its ability to provide the material in larger quantities. However, if sufficient quantities are not available when we begin production, we will be forced to rely on Ube and other suppliers to provide substrate

materials that may result in lower efficiencies for our planned products. Although we do not expect serious technical difficulties in the use of materials from these alternate suppliers, the impact on efficiencies may affect evaluation and qualification of our planned product by prospective customers and force us to boost efficiencies through implementation of other technologies, some of which (such as tandem-junction devices) already are under development by us.

Meeting the projected deadlines also requires final testing and integration of our monolithic integration technology by early 2007. In general, solar cells generate electrical power in small voltage increments; in order to provide a usable voltage and current, individual cells must be interconnected in series to increase voltage (similar to batteries stacked in a flashlight) and in parallel to increase current. In 2000, ITN demonstrated an automated solar cell interconnect technology that takes a large area of plastic coated with solar cell material, then patterns cells and connects them at the same time without cutting through the substrate material. This process, called monolithic integration, eliminates the need for connecting individual cells and thus simplifies the manufacturing process. In 2005, ITN established a next-generation, laser patterning operation to further improve its monolithic integration technology. Now that we own the technology, we intend to tailor it for use in our planned production line. All laser patterning steps and printing steps (which entail the deposition or application of insulating ink layers) have been separately demonstrated, and the first monolithically integrated module (solar cells interconnected by laser patterning) has been produced. We are optimizing the monolithic integration process with Ube's substrate materials for space and near space applications, while ITN is modifying the process for use with DCC's silicone resin substrate material, with the technical aspects of ITN's development to be assigned to us. We expect to be able to demonstrate monolithic integration processes for both substrate materials by the third quarter of 2006, but if we are unable to do so before the latter half of 2007, we might opt to manufacture discrete cells instead of modules. We would then integrate the cells into modules employing approaches developed for use with CIGS on stainless steel substrates. The additional interconnect steps would add cost to our end products, leaving product weight and efficiencies as the primary advantages we believe that our planned products would have over those of competitors. The financial impact of these additional costs cannot be quantified at this time.

We also need to tailor the automated manufacturing control technology developed by ITN, which we refer to as intelligent process controls, for use in our planned production line. We believe that implementation of intelligent process controls, which continuously monitor the manufacturing process, will help to control and maximize product yields and device efficiencies. In addition, the manufacturing process parameters that have demonstrated promising results in small batches at laboratory level may require additional development as we scale up to large area continuous roll-to-roll production methods in much larger manufacturing equipment.

These challenges must be addressed in order for us to execute out our business plan, which contemplates completion of our 500 kW/shift/year production line by the end of 2007. Although we believe that the project can be completed within the contemplated time frame, events such as unforeseen shortages in supplies or equipment or variations in materials costs could force us to modify our development calendar or reallocate funds, which may affect our anticipated cash flow in 2008. Significant delays could require us to seek additional capital in 2008 to sustain operations. Furthermore, because one of our challenges will be to meet the product performance and manufacturing metrics including yield, rate and efficiencies of prospective customers such as Lockheed Martin within their own project calendars, a delay in our own development calendar or our inability to timely resolve one or more of the technical challenges above might jeopardize our ability to attract and retain customers and generate revenues.

Sales and Marketing

The market's acceptance of our planned products poses a significant challenge to our success. Although system developers in the space and near-space markets are in search of efficient, lightweight, flexible and less-expensive PV products, we will be attempting to introduce a new technology into a field dominated by large, established companies that may be reluctant to quickly adopt our newer technologies.

The Missile Defense Agency has awarded Lockheed Martin a contract to deliver the first prototype HAA. Lockheed Martin has begun development and has announced plans to launch a prototype Test HAA in 2009 for a limited duration flight. The launch of an operational prototype HAA is expected to follow; this planned operational prototype program presents a timely opportunity for us to enter the near-space market. Lockheed Martin's timeline is consistent with our development calendar. In October 2005 and in response to a request for proposal, we, together with ITN and with the support of DCC, submitted a written proposal to supply our CIGS on high-temperature plastic substrate PV modules to Lockheed Martin for use on its planned operational prototype HAA program. Our proposal is divided into several development phases and a production phase. Participation in and throughout each phase generally will be dependent upon continued satisfactory performance. We expect that Lockheed Martin will select suppliers for the planned operational prototype vehicle in the summer of 2006.

We believe that we will be a successful bidder in the program because our planned products are designed to meet the specific power and power density requirements of the prototype project. If we are not initially selected to participate in the prototype program, we intend to work with Lockheed Martin to pursue opportunities in later stages of the program. To participate in these later stages without having participated in earlier stages, we would need to outperform the contractor or contractors that Lockheed Martin initially selected, requiring us to fund the initial development stages with our own resources, which would largely come from our internal research and technology development budget.

We expect the space satellite market to be more difficult to penetrate than the HAA near-space market. Although we believe that our planned products will offer cost and performance advantages over others available on the market, we will first be challenged to find customers willing to use our planned products on their platforms, each of which is likely to have different product requirements. Although we intend to manufacture and package our planned products in such a way that they can easily be integrated in a variety of diverse platforms, the space market we believe is more uncertain than the near-space market in terms of gaining customer confidence and acceptance. In addition to these challenges, we also need to adopt and undertake quality control processes, procedures and tests to qualify and validate our planned products for use in the harsh environmental conditions of space and near-space.

Information Presented

Historical financial information in this prospectus consists of:

An audited historical balance sheet of Ascent as of December 31, 2005 and audited statements of operations, stockholder's equity and cash flows for the period from inception (October 18, 2005) through December 31, 2005 and unaudited statements as of March 31, 2006 and for the three months ended March 31, 2006 and for the period from inception (October 18, 2005) through March 31, 2006.

Unaudited pro forma statements of operations of Ascent for the three months ended March 31, 2006 and for the year ended December 31, 2005, reflecting the transfer of the Transferred Assets (described below under "Overview") from ITN in consideration of 1,028,000 shares of common stock, as if such transactions had occurred on January 1, 2005.

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

Audited statements of selected assets and liabilities of ITN as of December 31, 2005 and December 31, 2004, and audited statements of revenues and expenses, changes in net assets and cash flows relating to the Transferred Assets, for the years ended December 31, 2005 and December 31, 2004.

The assets, liabilities and operations reflected in these financial statements reflect a portion of the assets and liabilities of ITN and the conduct of a portion of ITN's business, specifically the portion relating to PV technology, research and development. ITN is a relatively mature company engaged in the business of developing technology, in part through obtaining and performing governmental research and development contracts. Ascent proposes to continue to perform under the government contracts that have been transferred to it, but its principal business is expected to consist of commercial sales of PV devices for use in space and near-space applications.

Because of the substantially different nature of the businesses conducted by ITN and proposed to be conducted by us, we believe that the historical financial data presented in this prospectus are not predictive of our future financial condition or results of operations.

Overview

ITN formed Ascent to commercialize CIGS PV technology for the space and near-space markets. In January 2006, in exchange for 1,028,000 shares of common stock of Ascent, ITN: (i) assigned its CIGS PV technologies and trade secrets ("Transferred Assets") to Ascent; (ii) licensed certain proprietary process, control and design technologies to Ascent; (iii) agreed to seek permission to assign certain contract rights relating to its CIGS PV business to Ascent; (iv) transferred certain key personnel to Ascent; (v) executed a contract to design and build Ascent's initial production line, which will utilize ITN's proprietary roll-to-roll processing tools, real-time intelligent processing controls and thin-film processing technologies; and (vi) executed a contract to provide administrative services such as facilities management, equipment maintenance, human resources and payroll at cost.

The statements of selected assets and liabilities, of revenues and expenses, of changes in net assets and of cash flows of the Transferred Assets have been presented in the accompanying financial statements. These selected assets and liabilities directly correspond to contracts related to ITN's PV business. Because of uncertainty surrounding the novation of SBIR to Ascent, the SBIR contracts were not included in the Transferred Assets financial statements. The following table reflects total revenues from ITN's PV contracts, including revenues from SBIR contracts, for the financial periods reported:

	For the Years Ended December 31,	
	2005	2004
Contract revenue from PV non-SBIR contracts	\$ 1,050,502	\$ 1,425,886
Contract revenue from PV SBIR contracts	\$ 2,056,347	\$ 1,893,769
Total ITN PV contracts	\$ 3,106,849	\$ 3,319,655

During 2004, ITN partnered with government agencies such as the National Renewable Energy Laboratory ("NREL"), a division of the Department of Energy. The NREL contracts are cost-reimbursable contracts with no profit and also include a cost-sharing arrangement where ITN contributes its own internal funds for technology development. In 2004 and 2005, ITN received additional significant awards of SBIR contracts from the Air Force Research Laboratory along with a non-SBIR award from NASA. These research and development ("R&D") contracts do not have a cost-sharing arrangement and have profit margins of 6 to 7%. We intend to pursue government contracts in 2006 and beyond for continued R&D related to our PV devices. However, our business plan does not rely on the acquisition of any such new government contracts. We do not anticipate meaningful revenue until we are able to begin sales of PV products produced by our proposed

manufacturing facility. We plan to offer standard pricing of our planned products to both commercial and government customers and will use portions of our earnings for continued R&D purposes.

Our historical statement of operations for the period ended December 31, 2005 reflects a loss of approximately \$1,207,000, of which \$959,000 relates to a non-cash recording of stock based compensation.

As a result of the investment required to develop our proposed manufacturing facility, we expect our indirect costs to increase substantially in 2006 and 2007 as we hire new personnel and invest in new equipment. We therefore expect that our net losses will increase substantially until 2008, when we anticipate they will be offset to a limited degree by revenue from the sale of PV devices.

We expect to be dependent on additional capital infusions, such as the net proceeds of this offering, to execute our business plan, and we may require additional capital if we wish to further expand capacity.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements will require us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosures. A summary of accounting policies that have been applied to the historical financial statements presented in the prospectus can be found in the footnotes thereto. We consider certain of these accounting policies to be critical as they are both important to the portrayal of our financial condition and results of operations and require judgments on the part of management about matters that are uncertain. We have identified the following accounting policies that are important to the presentation of the financial information in this Prospectus.

Revenue Recognition

Revenue from cost-type R&D contracts is recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the fixed fee. Revenue from fixed price-type R&D contracts is recognized under the percentage-of-completion method of accounting, with costs and estimated profits included in contract revenue as work is performed. If actual and estimated costs to complete a contract indicate a loss, provision is made currently for the loss anticipated on the contract. Revenue from time and materials contracts is recognized as costs are incurred at amounts represented by the agreed-upon billing amounts.

Certain of the US government R&D contracts require that the contracting party contribute to the R&D effort under a cost-sharing arrangement. The contracting party's share of costs is expensed as incurred.

Stock based compensation

In December 2004, the FASB issued SFAS No. 123(R), "Share-Based Payment," which is a revision of SFAS No. 123, Accounting for Stock-Based Compensation. SFAS No. 123(R) is effective for public companies for interim or annual periods beginning after June 15, 2005, supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and amends SFAS No. 95, Statement of Cash Flows.

SFAS No. 123(R) requires all share-based payments, including grants of stock options and issuances of stock to employees, to be recognized in the income statement based on their fair values. Proforma disclosure is no longer an alternative. The Company adopted the new standard October 18, 2005.

In connection with the valuation of our stock at various points in time, including at the times of stock issuances and option grants, we followed guidance provided by the American Institute of Certified Public Accountants ("AICPA") Task Force's Audit and Accounting Practice Aid *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (the "AICPA Practice Aid"). As a development stage company without significant resources and no current revenue-generating operations, our management concluded that the expenditure of limited available funds to engage an outside valuation specialist to perform contemporaneous and comprehensive valuations at key dates between inception and the date of this offering was not an appropriate use of financial resources. We instead derived relevant valuations internally using the AICPA Practice Aid and evaluated those figures in light of Generally Accepted Accounting Principles ("GAAP") to establish book values for our accounting and book purposes.

Chapter 6 of the AICPA Practice Aid recommends three general approaches to valuation: (i) the market approach, which compares a company's financial data and ratios to other companies with similar characteristics in order to draw correlations relevant to valuation (the "Guideline Public Company Method") or which examines transactions in a company's equity securities with unrelated investors (the "Guideline Transactions Method"); (ii) the income approach, which develops an estimate of value for a company based on its historical or expected future financial performance ("Income Method"); and (iii) the asset (or replacement cost) approach, which uses an estimate of value for a company's net assets (the "Asset Method").

According to the AICPA Practice Aid, "[o]ne of the principal elements contributing to a change in an enterprise's fair value over time is the stage of development of the enterprise and, typically, value is created as an enterprise advances through the various stages of development." Bearing this in mind, we considered the AICPA Practice Aid's guidance on stages of enterprise development. The AICPA Practice Aid describes a "Stage 1" enterprise as one that has not yet generated product revenue and has a limited expense history. It also typically has an incomplete management team with a plan for initial product development and perhaps has secured seed capital or first round financing. A "Stage 2" enterprise is described as one that has no product revenue, but has substantive expense history, as product development is underway and business challenges are thought to be understood. Typically, a second or third round of financing occurs during Stage 2. We believe that, at least until the completion of this offering, these stage descriptors accurately describe our business, and we consider the Guideline Public Company Method and the Income Method to be inappropriate valuation methods because (under the Guideline Public Company Method) little relative comparative data for non-public companies in our industry are available to us and because (under the Income Method) projections of our cash flow or income are limited and subject to many assumptions that may be affected by factors beyond our control. We therefore were compelled to use either the Guideline Transactions Method or the Asset Method in our analysis.

Bearing in mind the AICPA Practice Aid's description of stages of enterprise development, we identified the following key dates and events, among others, as relevant to the valuation analysis:

Developmental Stage 1

October 18, 2005 (date of inception)

October 26, 2005 (our Board of Directors appointed certain key members of management)

November 3, 2005 (we issued stock to our founders)

November 11, 2005 (we received a \$200,000 loan to fund initial operations)

November 18, 2005 (we issued stock options to certain employees)

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

January 17, 2006 (we entered into several agreements with ITN, whereby ITN assigned and licensed several key technologies to us and agreed to seek permission to assign certain third-party research and available contracts)
Developmental Stage 2

January 18, 2006 (we closed our \$1.6 million bridge loan with outside lenders)

January 23, 2006 (we first filed a registration statement for our initial public offering)

January 27, 2006 through March 1, 2006 (we granted additional stock options to employees and consultants)

The date of effectiveness of the registration statement associated with this offering.

To value our common stock for book purposes, we examined the circumstances existing on each relevant date, and relied in particular on the \$1.6 million (face value) bridge loan obtained from 23 outside investors on January 18, 2006. The principal terms of this loan included: (i) a maturity date of the earlier of a qualified public offering or January 2007; (ii) an annual interest rate of 10%; (iii) the issuance of bridge rights to receive equity of the company regardless of whether a qualified public offering occurs; and (iv) a conversion right to permit issuance of equity if a qualified public offering does not occur and the loan cannot be repaid in cash. We believe that this loan transaction represents a contemporaneous and objective assessment of the value of our common stock by third parties because, among other things:

The investor group consisted of accredited and sophisticated investors capable of assessing the risks involved with our business and the transaction;

The lenders anticipated that repayment of the loan would come only from the proceeds of a qualified public offering and that, in the absence of such an offering, they would be forced to receive our common stock in lieu of cash;

In the absence of a qualified public offering, the lenders agreed to accept up to 16,666 shares of our common stock for each \$25,000 of principal and interest, resulting in an effective per share value of \$1.50; and

In the absence of a qualified public offering, the accredited lenders would be forced to accept the equity interest and wait for a liquidity event to recover their investment, and it is reasonable to assume that the lenders priced the equity investment (i.e., the conversion ratios) at a value that they considered commensurate with the risks involved.

Using the Guideline Transactions Method referenced in the AICPA Practice Aid, and based upon the notion that fair value can be identified as "[t]he price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of the relevant facts" (*IRS Revenue Ruling 59-60*), we concluded that the \$1.6 million bridge loan by third parties establishes a fair value of our enterprise and of our common stock as of January 18, 2006 and accordingly arrived at an implied minority non-marketable per share value of \$1.50.

After arriving at this arms-length valuation, we examined the events that occurred in the months prior to the bridge loan, including: (i) the execution of a letter of intent with our underwriters, our incorporation and formation and the election of management, all of which occurred prior to the sale of founders' stock on November 3, 2005; (ii) a loan of \$200,000 from Paulson Investment Company to help fund initial operations and the execution of employment agreements with certain of our executive officers, all of which occurred prior to the issuance of stock options on November 18, 2005; and (iii) the execution of agreements with, and assignment of assets from, ITN, which occurred prior to the closing of the \$1.6 million bridge loan transaction. Attributing relative weights or perceived importance

to each event and distributing these weights across a spread of \$0.00 (inception) to \$1.50 (January 18, 2006), we determined that the fair value of our common stock for book purposes on November 3, 2005 should be \$1.00 and on November 18, 2005 should be \$1.20. In particular, we attached significant weight to the completion of critical milestones that occurred before November 3, 2005, such as the execution of a letter of intent with Paulson Investment Company, Inc. and the selection and appointment of our key management. Because these accomplishments represented prerequisites to events that followed, we believe that approximately two-thirds of our common stock's fair value on January 18, 2006, or \$1.00 per share, was created by November 3, 2005. Between November 3, 2005 and November 18, 2005, we entered into a short-term loan with Paulson Investment Company, and Paulson Investment Company completed its preliminary due diligence. Between November 18, 2005 and January 18, 2006, we executed our agreements with ITN and also closed our bridge loan transaction with outside investors. Attaching relatively more importance to the later events than to the earlier, and based upon fair values for book purposes on November 3, 2005 of \$1.00 per share and on January 18, 2006 of \$1.50 per share, we derived a fair value for book purposes on November 18, 2005 of \$1.20 per share.

We also concluded that the fair value of our common stock between January 27 and March 31, 2006 should be recorded for book purposes at \$2.95. This conclusion was reached by examining the events that occurred after the bridge loan transaction, which included the initial filing of our registration statement on January 26, 2006, a critical milestone that required the concurrence of our auditors and underwriters and represented an essential step in the offering process. The same conclusion was reached by extrapolating backwards from \$5.50, the midpoint of the anticipated offering range that we negotiated with our underwriters. Each unit comprises one share of common stock and three warrants. We examined the trading patterns of the shares and warrants of another early-stage company in the PV industry in the initial weeks after its initial public offering (in which each offered unit, like ours, comprised one share and three warrants, and each warrant had comparable terms as the warrants being offered by us) and found that, during that period, the trading price of that company's common stock represented between 50% to 57% of the aggregate trading price of its common stock and three warrants. Based upon this empirical data, we concluded that the value of our common stock for book purposes from January 27 through at least March 31, 2006 should be approximately 53.5% of our unit offering price, or \$2.95 per share. Using the anticipated public offering price of our units as a starting point, we also attempted to validate the fair values on November 3 and November 18, 2005 that we derived for book purposes, and we concluded that the \$1.00 and \$1.20 fair values fell within reasonable ranges after considering adjustments for milestones and key events, and after applying discounts for lack of marketability. In sum, we have for book purposes used the following fair values on certain dates for our common stock, and our financial statements reflect and in the future will reflect these values:

October 31, 2005	\$0.00 per share
November 3, 2005	\$1.00 per share
November 18, 2005	\$1.20 per share
January 18, 2006	\$1.50 per share
January 27 through March 31, 2006	\$2.95 per share

Results of Operations

Transferred Assets of ITN Energy Systems Inc.:

Comparison of years ended December 31, 2005 and 2004

Revenues. Total revenues related to the Transferred Assets were \$1,050,502 for the year ended December 31, 2005, a decrease of \$375,384 or 26% from the corresponding period in 2004. All revenues for both periods were from government research and development contracts ("R&D contracts"). R&D contracts in 2004 were cost-reimbursable contracts with no profit. A few of the R&D

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

contracts also had cost-sharing arrangements where ITN contributed their own internal funds for technology development. The decrease is due to several contracts completed during late 2004 and early 2005. A new contract awarded in April 2005 partially offset the decrease from the completed contracts in 2004.

Direct contract costs. Direct contract costs were \$529,218 for the year ended December 31, 2005, a decrease of \$154,212 or 23% from the corresponding period in 2004. This 23% decrease is in direct relationship to the 26% decrease in revenues and overall contract volume.

Gross margin on revenues. Gross margin on revenue was \$521,284 for the year ended December 31, 2005, or 50% of contract revenues. Gross margin for the year ended December 31, 2004 was \$742,456, or 52% of contract revenues. The slight increase in gross margin for the year ended December 31, 2005 was due to proportionately lower direct labor costs in the period compared with the prior year.

Indirect costs. Indirect costs were \$513,678 for the year ended December 31, 2005, a decrease of \$309,788 or 38% from the previous period. Indirect costs include: general and administrative expenses; overhead expenses; and subcontract, material and handling expenses. Indirect costs are allocated to all contracts based on an approved government allocation method. The decrease of indirect costs from 2004 to 2005 was due to the decrease in contract volume and the significant decrease in direct labor. A majority of indirect costs are allocated based on direct labor incurred on the contract.

Net income (loss). Net income of \$7,706 for the year ended December 31, 2005 represented an increase of \$88,616 or 110% from the year ended December 31, 2004. This increase in net income was due to a decrease in cost-share commitments on contracts from 2004 to 2005 of approximately \$120,000, profit from the new contract awarded in April 2005, and lower indirect expenses.

Ascent Solar Technologies, Inc.

The Company's activities to date have substantially consisted of raising capital, research and manufacturing development. The Company's total general & administrative expenses can be summarized as follows:

	For the Three Months ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005
	<u> </u>	<u> </u>
Business development & product qualification	\$ 160,502	\$ 54,291
Manufacturing development	48,331	
General corporate purposes	254,529	1,150,203
	<u> </u>	<u> </u>
General & administrative expenses	\$ 463,362	\$ 1,204,494

Business development and product qualification costs for the three months ended March 31, 2006 of \$160,502 and for the period from inception (October 18, 2005) through December 31, 2005 of \$54,291 are associated with efforts related to identifying and bidding on government and commercial contracts. If won these contracts will be utilized to help further define our product for space and near space applications. Manufacturing development costs of \$48,331 for the three months ended currently consist of coordinating with equipment manufacturers and equipment component suppliers in order to provide the manufacturing equipment required for our plant. Additional manufacturing development costs consist of coordinating design requirements for the manufacturing equipment. General corporate purpose expenses relate to facility costs and administrative support costs along with other normal operating expenses. Included in general corporate purpose costs is a non-cash transaction for stock based compensation related to the issuance of the Company's stock and stock options at fair value. Stock based compensation for the three months ended March 31, 2006 and for the period from

inception (October 18, 2005) through December 31, 2005 was \$63,080 and \$959,124, respectively. Also included in general corporate purpose costs for the three months ended March 31, 2006 are additional costs of approximately \$23,000 over normal corporate expenses for travel associated with the road show in connection with this offering. General corporate expenses for the period from inception (October 18, 2005) through December 31, 2005 include approximately \$106,000 related to legal fees incurred in the formation of the Company.

Research and technology development costs for the three months ended March 31, 2006 of \$40,223 consists of activities related to process and product development of our thin film PV technology. There were no research and technology costs incurred for the period from inception (October 18, 2005) through December 31, 2005.

	For the Three Months ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005
Research and technology development	\$ 40,223	\$

Other income (expense) for the three months ended March 31, 2006 and for the period from Inception (October 18, 2005) through December 31, 2005 of \$230,738 and \$2,740, respectively, consists of interest expense on financing activities. The Company's other/income (expense) is comprised of the following:

	For the Three Months ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005
Interest Expense-Note Payable	\$ 1,398	\$ 2,740
Interest Expense-Bridge Loan	30,701	
Interest Expense-Amortization of Bridge Loan Discount	159,140	
Interest Expense-Amortization of Deferred Financing Costs	39,499	
Other Income/Expense (Interest-Expense)	\$ 230,738	\$ 2,740

Interest Expense Note Payable for the three months ended March 31, 2006 and for the period from Inception (October 18, 2005) through December 31, 2005 of \$1,398 and \$2,740, respectively, consists of interest expense on the \$200,000 short term note from Paulson Investment Company, Inc. This note was paid in full on February 1, 2006. Interest expense-Bridge Loan is the 10% interest computed for the first quarter on the \$1,600,000 bridge loan financing completed on January 18, 2006. Interest expense-Amortization of Bridge Loan Discount is the bridge loan discount recorded of \$800,000 for the value of the bridge rights amortized over the life of the bridge loan financing (1 year). Interest Expense-Amortization of Deferred Financing Costs represents the amortization of direct costs associated with obtaining the bridge loan financing, including \$160,000 for commission to Paulson, over the life of the bridge loan financing (1 year).

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

For the three months ended March 31, 2006 the company recorded revenues of \$3,380 and direct costs of \$2,571 associated with support services performed by the Company on behalf of ITN. The Company bills ITN for any support activities at cost.

	For the Three Months ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005
	<u> </u>	<u> </u>
Related Party Contract Revenue	\$ 3,380	
Direct Contract Costs	\$ 2,571	

Liquidity and Capital Resources

We currently do not have manufacturing capabilities or other means to generate revenues or cash. The net proceeds from the offering will be utilized to build our operational infrastructure and to develop the manufacturing capacity necessary to produce PV products for sale into our target markets. We do not anticipate that we will develop such capability until the second quarter of 2008, but we believe that the net proceeds from this offering, less the \$1.6 million plus accrued interest to be repaid to bridge lenders, will be sufficient to sustain our operations until then. We anticipate that our cash requirements for operating activities will be approximately \$500,000 per quarter in 2006 and 2007, and we expect to expend an average of \$950,000 per quarter to acquire capital equipment in 2006 and 2007 (a calendar of our projected capital outlays appears below). However, even after we begin production as scheduled in 2008, it is unlikely that our initial sales revenue will be sufficient to immediately support all of our operations and cash requirements, which we estimate will be approximately \$750,000 per quarter in 2008. Consequently, unless we receive additional infusions of cash from, for example, the exercise of the Class A or Class B warrants being issued in this offering, we may have to raise additional capital from outside sources.

Our principal business will be to manufacture and sell CIGS PV modules into the space and near-space markets. To realize this objective, we intend to use the majority of the net proceeds from this offering to construct a 500 kW per shift annual capacity production line to fabricate rolls and sheets of thin-film PV modules. We have budgeted approximately \$8.2 million for the design, building, and testing of our production line, including related non-recurring engineering costs, according to the following development calendar. The capital outlays shown in this calendar represent payments to be made pursuant to our Manufacturing Line Agreement with ITN; however, only the first \$200,000 has been agreed to by the parties, the balance of \$6.5 million is only an estimate we have made for purposes of planning.

Development Stage	Completion Milestone	Estimated Capital Outlay
	<u> </u>	<u> </u>
Completion of engineering	3 rd QTR 2006	\$ 200,000
Facility and equipment build		
Progress payment 1	4 th QTR 2006	\$ 2,000,000
Progress payment 2	1 st QTR 2007	\$ 2,000,000
Progress payment 3	2 nd QTR 2007	\$ 2,000,000
Plant commissioning	3 rd QTR 2007	\$ 300,000
Production readiness, qualification	1 st QTR 2008	\$ 200,000
Commencement of production	2 nd QTR 2008	
Total		\$ 6,700,000

The remaining \$1.5 million of the \$8.2 million budgeted includes labor and management reserves. Until plant commissioning, labor initially will be limited to a project engineer and head of manufacturing, yielding an expected operating cost of approximately \$80,000 per quarter. After the plant is commissioned in 2007, we plan to hire additional engineers, process technicians and operators

in anticipation of commencement of production during the second quarter of 2008, which we expect will yield an operating cost of approximately \$325,000 per quarter to support single shift production operations.

Although over-hiring or hiring personnel too soon can put untimely demands on cash, we believe that such a risk is within management's control and can be managed virtually on a daily basis. In contrast, the capital outlay of \$6.7 million for plant and equipment represents our single largest cash risk, both because of the amounts involved and the difficulty in "turning back" once the project is started. To manage this risk, we have divided the project into three phases—engineering, build and commissioning, and qualification—and have contracted with ITN to carry out the project. The engineering and qualification phases involve principally labor, so, in an effort to minimize our expenses, our Manufacturing Line Agreement with ITN contemplates a cost-only arrangement for engineering services. During the build and commissioning phase of the project, which we believe will consume approximately \$6.3 million, we may be exposed to risk of delays and cost-overruns, but we intend to manage these risks by adopting progress payments and a fixed-price contract with ITN.

We have budgeted \$1.3 million for general corporate purposes, which consists of general and administrative costs, accounting and legal fees, rent and other facility expenses, and other working capital expenses. We have entered into contracts with ITN to have ITN provide us with many administrative services such as facilities management, information technology, payroll and human resources, on a cost-only basis. We believe that this cost-effective arrangement enables us to avoid the overhead and risks associated with the hiring of our own personnel to perform these functions. We estimate that the operating costs for our general corporate purposes will be approximately \$168,000 per quarter through 2007.

We have budgeted \$1.0 million of the net proceeds for business development and product qualifications, which include marketing activities, preparation of customer bids and proposals, product prototypes, product qualifications and associated labor expenses. We expect that these initiatives will require approximately \$125,000 per quarter, which will include portions of our senior management's labor insofar our Chief Executive Officer and Chief Technology Officer will be active in our business development efforts. However, our spending in this category of activities may be impacted by the emergence of unforeseen customer or project opportunities and changes in existing customer programs.

We consider our \$1.8 million research and technology development account to be discretionary as our immediate cash needs in this area are relatively low while we concentrate our efforts on building our production line. Nevertheless, our longer-term objective is to assemble a research and technology development team to research new technologies and develop enhancements to our planned products.

As discussed elsewhere in this prospectus, ITN is a party to several R&D contracts and has agreed to seek permission to transfer some of these contracts to us. The full-year revenues associated with the R&D contracts are approximately \$2.5 million in 2006 and approximately \$500,000 in 2007; the year-on-year decrease is due to the fact that a majority of the existing R&D contracts end in the last quarter of 2006 and the first quarter of 2007. As of December 31, 2005, none of the remaining R&D contracts had cost-share arrangements whereby ITN was required to contribute its own funds to develop the technology. Of the \$3 million remaining revenues from R&D contracts at December 31, 2005, approximately \$800,000 are from non-SBIR contracts and \$2.2 million are from SBIR contracts. We anticipate that if and as each R&D contract is transferred, some of the scientists, engineers and technicians staffing the contract will be transferred to our payroll as well. However, each transferred R&D contract should bring funds sufficient to support the costs associated with our performance of that contract, including labor, facilities and other expenses. Because our projections for research and technology development spending do not assume that any R&D contracts will be transferred to us, transferred R&D contracts should allow us to build a research and technology development team without drawing large amounts from the \$1.8 million budgeted. We also intend to pursue development contracts in our own right, which also should permit us to hire or retain research and technology development staff at little or no net expense. Currently, we expect to spend approximately \$125,000 per quarter on operating costs for research and technology development in 2006, but our needs in 2007 and beyond largely will depend on certain contingencies (such as our proposal to Lockheed Martin), the outcomes of which we cannot predict at this time.

PROPOSED BUSINESS

Overview

On space satellites and near-space aircraft, photovoltaic ("PV") devices convert sunlight into the electricity needed to reliably power instruments, communications systems and the like. Currently, most PV devices used for space and near-space applications are rigid, bulky and relatively heavy, posing significant challenges to scientists and designers wishing to minimize volume and weight in order to maximize payload and reduce deployment cost. In addition to these shortcomings, PV devices traditionally used for such applications are expensive to manufacture and typically require the time-consuming and labor-intensive task of connecting individual solar cells together to create a complete PV module.

We are working to overcome these limitations by creating a flexible, lightweight PV product suitable for space and near-space applications. We intend to be the first company to manufacture PV modules in commercial quantities that use a highly efficient thin-film Copper-Indium-Gallium-diSelenide ("CIGS") absorbing layer on a flexible high-temperature plastic substrate. By employing a proprietary monolithic integration fabrication process, we intend to manufacture our PV devices on the module level, rather than the cell level, allowing us to avoid time-consuming and weight-additive cell-to-cell interconnect procedures utilized by other PV device manufacturers. We believe that our choice of substrate materials and proprietary monolithic integration fabrication processes should permit us to achieve cost, volume and weight performance advantages over competitors in our target markets. As a result, we believe that we will be well-positioned to capture opportunities in markets requiring highly efficient, lightweight and flexible PV power sources, including the markets for military and commercial spacecraft and satellites and the emerging high-altitude airship ("HAA") initiatives under the supervision of the U.S. Department of Defense ("DoD").

Photovoltaic Technology

Thin-film devices are manufactured by depositing a thin film of material onto a substrate or onto previously deposited layers. We intend to use thin-film techniques to manufacture PV modules for space and near-space applications.

Solar cells are the most elementary component of a PV device; they absorb light and convert it into electrical power. Solar cells consist of a light-absorbing layer mounted on a substrate, together with top and back electrical contact points, much like a household battery. There are three materials currently considered by the PV industry as candidates for thin-film production: amorphous silicon ("a-Si"), cadmium telluride and CIGS. We intend to use a CIGS absorbing layer in our products because of that technology's excellent performance attributes. An absorbing layer can be deposited on a substrate that is either rigid or flexible. A majority of companies currently use rigid glass substrates. The few companies that incorporate flexible substrates in their devices typically opt for stainless steel (or other metal) foil. We believe that the deposition of a CIGS absorbing layer on a high-temperature plastic substrate best meets the rigorous specifications and unusual demands of the space and near-space markets.

Once fabricated, individual solar cells must be interconnected to form PV modules. Historically, this interconnection has been done manually using welding, soldering or bonding techniques that add both complexity and cost to the manufacturing process. We intend to avoid manual interconnects by utilizing a proprietary form of "monolithic integration," whereby we intersperse laser patterning and printing steps during the thin-film deposition steps. We intend to create the interconnects at the same time we create the cells, and we fabricate our PV devices at the module level, while most of our competitors manufacture at the cell level. We believe that the use of monolithic integration in our fabrication process will offer us cost and device weight savings over our competitors. The PV devices we intend to sell commercially will be complete modules with protective thermal and environmental

coatings, mechanical and electrical interconnects, diode protection and the like. These modules can then easily be hooked together to create PV arrays in a variety of desired patterns, shapes or sizes.

In sum, as the beneficiary of ITN's substantial investment in research and development of CIGS PV technology, we intend to manufacture monolithically integrated CIGS on high-temperature plastic substrate modules for use in the space and near-space markets.

The Space and Near-Space Markets

Our thin-film PV modules are designed for space and near-space applications. We envision installation of our planned products on satellites and other spacecraft, as well as near-space instruments such as the HAAs being developed by Lockheed Martin and others. The target customers for our PV modules therefore include traditional aerospace companies, companies in the defense and communications industries and domestic and foreign government entities. We believe that the HAA industry presents attractive opportunities for us, insofar as companies such as Lockheed Martin are searching for standard suppliers of PV subsystems for use with their HAA designs. Also, although the market for satellites is relatively well-established, we believe that significant opportunities exist there as companies search for lighter, cheaper and more efficient PV devices.

Space Applications: Satellites and Spacecraft

The U.S. satellite industry is dominated by four major manufacturers: Lockheed Martin, The Boeing Company, Orbital Sciences Corporation and Loral Space & Communications Ltd. In a recent publicly available study titled "Satellite Manufacturing Report," Futron Corporation, a space and telecommunications consulting firm, reports that these four manufacturers together accounted for 16 of the 19 U.S. satellites launched in 2004. These and major foreign satellite manufacturers represent our target customers in the space market.

The vast majority of satellites currently use rigid and heavy PV array panels with market prices of approximately \$1,000 per watt generated. The industry, however, is pursuing new, lightweight, flexible and less expensive PV products that can lower power costs, reduce the overall weight of satellites, increase payload capacity and permit the use of smaller, less expensive launch systems for placing satellites in orbit. As noted in a recent Small Business Innovative Research program announcement (AF06-274, titled "Next Generation Solar Cells Based on Nanostructures") published on behalf of the U.S. Air Force:

"Higher efficiency solar cells are needed to reduce solar array mass, stowed volume, and cost for Air Force (AF) space missions. Conventional crystalline multijunction solar cells are currently limited in efficiency by the complexity of adding more junctions to increase absorption of the solar spectrum, and the necessity to match lattice parameter and current for each junction. The ideal new solar cell would be flexible and lightweight. However, efforts should be focused on significantly increased metrics (W/m² and W/Kg) over state of the art (SOA) multijunction solar cells at lower costs. Current array level costs are ~\$1000/watt. A threshold cost for early systems based on the new technology would be comparable or less than current systems, with costs dropping to <\$250/watt with continued development. Current state-of-the-art crystalline multijunction solar cells are ~30% efficient, >350 W/m², and ~70 W/Kg at the array level. Thresholds for the new technology would be >40% efficiency, >450 W/m², and >250 W/kg."

We believe that flexible thin-film PV devices generally, and our CIGS on high-temperature plastic substrate modules in particular, are primed to take advantage of these evolving market requirements.

Near-Space Applications: High-Altitude Airships

The DoD and the militaries of U.S. allies have long been interested in solar-powered HAAs as low-cost platforms to augment sensor-carrying unmanned aerial vehicles, aircraft and space satellites. As currently conceived, HAAs resemble giant blimps roughly 500 feet long and 150 feet in diameter. Cheaper to launch than space satellites, which orbit the planet outside the earth's atmosphere, HAAs, which are filled with lighter than air gases, operate within the atmosphere but at an altitude above the reach of many aircraft and conventional weapons systems. Operating at these near-space altitudes affords opportunities attractive to the communications and surveillance industries. For example, military commanders could park one or more HAAs equipped with advanced surveillance instruments at 65,000 to 100,000 feet in a stationary position over a combat zone to facilitate 24/7 surveillance. At an altitude of 65,000 to 100,000 feet (less than 20 miles), images generated and data gathered by a stationary HAA likely would offer greater resolution and detail than that from a geostationary surveillance satellite in space, which typically orbits the earth at a distance of 22,000 miles. Even a non-geostationary satellite, which has the disadvantage of making only infrequent passes over a given area of the earth's surface, operates hundreds of miles up, far higher than the anticipated realm of HAAs. Furthermore, HAAs should be more easily moved and deployed from one geographic region to another compared with space satellites. This is a valuable feature since some experts propose the deployment of HAAs equipped with signal repeaters or transmission equipment over areas victimized by a terrorist attack or by a natural disaster such as a tornado, flood or hurricane and in which conventional communications systems are incapacitated. Stationary HAAs could afford responders and government officials a means for rapid communication.

Despite the potential of HAAs, prohibitively high costs and immature technology made HAAs a relatively low priority until the terrorist attacks of September 11, 2001. Since then, the DoD, Missile Defense Agency, Department of Homeland Security and North American Aerospace Defense Command have initiated plans to accelerate development of the HAA concept. A contract to deliver the first prototype HAA was awarded by the Missile Defense Agency to Lockheed Martin, which has begun development and plans to launch a prototype Test HAA in 2009. The development and launch of an operational prototype HAA are expected to follow. In October 2005, we, together with ITN and with the support of the Dow Corning Corporation, which plans to provide high-temperature silicone substrate materials in connection with our proposed participation in the operational prototype HAA project, submitted a written proposal to supply CIGS on high-temperature plastic substrate PV modules to Lockheed Martin for use on its operational prototype craft. Our proposal is divided into several development phases and a production phase. Participation in and throughout each phase generally is dependent upon performance. The production phase will follow completion of the development phase. Selection of suppliers is expected in the summer of 2006. We expect that if and when Lockheed Martin's planned operational prototype HAA is successfully demonstrated, the number of HAA systems will grow and PV power requirements will increase as the industry moves into full-scale production. We expect to be able to satisfy such increases in demand by growing our proposed production line, which will incorporate a modular design for relatively easy expansion, subject to the size of our facilities. Expansion of production also should permit us to recognize economies of scale, which should enable us to achieve lower manufacturing costs and thereby generate additional market opportunities. We also may supply PV modules to companies other than Lockheed Martin, including some commercial ventures, who also are developing their own HAA concepts and systems.

Technical Demands of Space and Near-Space Applications

Space and near-space systems require sources of energy to power communications, propulsion and other subsystems. PV technology is a logical choice for generating power because it is renewable and does not depend on an imported fuel source that would reduce other payload. Weight, volume, relative efficiency and cost play crucial roles in the selection of PV technology for space and near-space

applications. Because satellites, spacecraft and other orbiting systems must be launched into space or to very high altitudes, it is desirable to minimize both the weight and volume of PV devices so as to accommodate greater instrument payloads. At the same time, specific power (the amount of PV power produced relative to PV device weight, expressed as W/Kg), power density (the amount of PV power produced relative to the PV device area, expressed as W/m²) and efficiency (a measure of sunlight-to-energy conversion, measured as a percentage) need to be maximized, while the cost per watt generated (\$/W) needs to be minimized.

PV devices geared toward the terrestrial market, where weight and volume generally are not critical, typically employ traditional crystalline silicon solar cell technologies at prices less than \$5/W at the array level. Because space and near-space markets require much more sophisticated PV technology, array-level prices of PV devices for space applications currently approach or exceed \$1,000/W. Notwithstanding this premium in price, existing PV systems typically generate only about 70 W/Kg, requiring substantial weight in order to meet the power needs of the instruments to which the devices are attached and making them unlikely candidates for any space or near-space applications requiring a significant amount of power. Moreover, while the crystalline PV panels that currently dominate the market for space applications are very efficient (up to about 30%), they require flat, rigid and relatively heavy substrates that make them unsuitable for HAA. Thin-film PV technology offers a potential solution to these shortcomings.

Ascent's Technology: Thin-Film CIGS on Flexible High-Temperature Plastic Substrate

In the last decade, ITN has performed approximately 35 contracts for private and government entities in advanced PV technologies. Government sponsors of these contracts include the U.S. Air Force Research Laboratory, the National Science Foundation, the National Renewable Energy Laboratory ("NREL"), the Defense Advanced Research Projects Agency, the Missile Defense Agency and NASA. Through its work on these contracts, ITN has developed useful and proprietary processing and manufacturing know-how applicable to PV products generally and CIGS PV products in particular, including the creation and adoption of key processing technologies and the development of a monolithic integration fabrication process. ITN formed Ascent to commercialize this investment in CIGS PV technologies for the space and near-space markets. In January 2006, ITN assigned to us its key CIGS PV technologies and trade secrets and granted to us an exclusive, worldwide license to use certain of ITN's proprietary process, control and design technologies that we believe will be useful in our production of solar modules for our target markets. ITN also has agreed to design and build our initial production line, which will utilize ITN's proprietary roll-to-roll processing tools, real-time intelligent processing controls and thin-film processing technologies.

We believe that our use of CIGS on a flexible high-temperature plastic substrate will offer the best combination of efficiency, specific power and power density among competing technologies in the space and near-space markets. Furthermore, we believe that our proprietary fabrication process which, among other things, incorporates monolithic, cell-to-cell integration techniques will allow us to manufacture our planned products with significant cost savings compared with our competitors.

Ascent's Technical Advantages Over Competitors

Most PV companies employing thin-film techniques in commercial production currently use a-Si as an absorbing layer. Instead we have chosen CIGS because it offers inherent performance and physical advantages over the a-Si and cadmium telluride technologies. CIGS displays the highest efficiency of the three thin-film technologies, with a demonstrated cell efficiency of 19.5% by NREL in a terrestrial laboratory environment (compared with 12.9% demonstrated cell efficiency for a-Si under similar conditions). Unlike CIGS, a-Si exhibits inherent inefficiencies and measurable degradation when exposed to ultraviolet light, including ultraviolet light present in natural sunlight. To mitigate these effects, manufacturers using a-Si are forced to employ steps that add cost and complexity to the

manufacturing process. By using CIGS, we avoid these issues. While cadmium telluride has demonstrated efficiencies approaching that of CIGS, cadmium telluride currently requires use of a rigid, transparent substrate, which virtually disqualifies it as a candidate for a multitude of applications, such as Lockheed Martin planned operational prototype HAA project. We believe that our choice of CIGS therefore will provide us a significant technical advantage over competitors who use the alternative technologies of a-Si and cadmium telluride.

We also believe that we will hold a technical advantage over our competitors through our choice of high-temperature plastic as a substrate material. This flexible plastic is among the lightest materials currently available for PV modules and should offer us a substantial advantage in achieving the specific power and power density requirements of the planned operational prototype HAA project, as well as the more aggressive targets likely to be adopted for future HAA projects. We believe that our CIGs on high-temperature plastic devices should result in superior specific power and power density performance relative to competing devices that incorporate heavier substrate materials such as stainless steel or other metal foils.

Our planned use of a roll-to-roll manufacturing process (which enables us to fabricate our flexible PV modules in large format or continuous operations), together with our use of proprietary monolithic, cell-to-cell integration techniques (which allows us to avoid the time-consuming, weight-additive and labor-intensive step of manually connecting individual solar cells), also should afford us technical and cost advantages over our competitors. Over the past 12 years, ITN has developed proprietary sensor-based controls and intelligent process controls for use in the roll-to-roll production of thin-film CIGS PV modules, and we are now a beneficiary of that expertise.

In sum, the technical advancements that we believe will distinguish us from our competitors in the space and near-space markets include:

Our use of CIGS, which we believe will offer the highest efficiencies of the three candidate thin-film technologies and which can be deposited on variety of flexible substrates;

Our use of high-temperature plastic as a substrate material, which not only is flexible, lightweight and relatively inexpensive but also provides us the ability to achieve the challenging specific power and power density requirements for space and near-space programs;

Our experience with, and ITN's demonstrated ability to implement, roll-to-roll manufacturing in the context of thin-film CIGS PV modules; and

Our use of proprietary monolithic integration techniques, which eliminates an entire back-end processing step in the assembly of a PV module, and that should save us time, labor and money relative to our competitors while also potentially offering measurable performance and weight advantages.

We are pursuing improvements and enhancements to bolster performance of our PV modules including use of a high-temperature substrate, which allows for a higher CIGS processing temperature and, hence, higher efficiencies and incorporation of a two-junction (tandem) thin-film technology using a novel high-efficiency top cell in conjunction with proven high-efficiency CIGS PV bottom cell. Our longer-term objective is to develop flexible, low-weight, low-cost PV modules with efficiencies exceeding 15%, specific power in excess of 1,000 W/kg and packaging of one-tenth the volume of existing systems.

Finally, although our products will be designed and manufactured specifically for the rigorous demands of the space and near-space markets, in the future it is possible that some of our technologies and advancements may be used in a line of products geared toward terrestrial applications. Although we currently have no plans to initiate sales into the terrestrial market, we believe that significant improvements over time in our manufacturing processes and technical enhancements to our planned

products could substantially decrease our incremental manufacturing costs to a point where entry into the terrestrial market becomes economically viable.

Although we believe that we will hold technical advantages over our competitors in the aspects described above, we still face a number of technical challenges if we are to meet our planned 2008 production deadline with products that satisfy the technical specifications demanded by prospective customers. These challenges are detailed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and also are described below.

We currently obtain the majority of our high-temperature plastic substrate material from Ube Industries, Ltd. (Japan). We believe the supply of this material from Ube will be available to us in commercial quantities. However, we also have tested our CIGS absorbing layer on a relatively new high-temperature silicone resin (also a form of plastic) substrate material developed by the Dow Corning Corporation. The DCC substrate material can be processed at a higher temperature than the Ube substrate material, a feature that typically results in higher PV efficiencies. We therefore believe that the DCC substrate can be successfully used in our planned CIGS PV products in space and near-space applications, where efficiencies and weight are a critical measurement. To date, the DCC substrate is not commercially available. However, DCC has informed us that it is improving on its ability to provide the material in larger quantities. If sufficient quantities are not available when we begin production, we will be forced to rely on Ube and other suppliers to provide substrate materials that may result in lower efficiencies for our planned products. Although we do not expect serious technical difficulties in the use of materials from these alternate suppliers, the impact on efficiencies may affect evaluation and qualification of our planned products by our customers and force us to boost efficiencies through implementation of other technologies, some of which (such as tandem-junction devices) already are under development by us.

Meeting the projected deadlines also requires final testing and integration of our monolithic integration technology by early 2007. We intend to tailor monolithic integration technology developed by ITN for use in our planned production line. All laser patterning steps and printing steps have been separately demonstrated, and the first monolithically integrated module has been produced. We are optimizing the monolithic integration process with Ube's substrate materials for space and near space applications, while ITN is modifying the process for use with DCC's silicone resin substrate material, with the technical aspects of ITN's development to be assigned to us. We expect to be able to demonstrate monolithic integration processes for both substrate materials by the third quarter of 2006, but if we are unable to do so before the latter half of 2007, we might opt to manufacture discrete cells instead of modules. We would then integrate the cells into modules employing approaches developed for use with CIGS on stainless steel substrates. The additional interconnect steps would add cost to our end products, leaving product weight and efficiencies as the primary advantages we believe that our planned products would have over those of competitors.

We also need to tailor the automated manufacturing control technology developed by ITN, which we refer to as intelligent process controls, for use in our planned production line. We believe that implementation of intelligent process controls, which continuously monitor the manufacturing process, will help to control and maximize product yields and device efficiencies. The manufacturing process parameters that have demonstrated promising results in small batches at laboratory level may require additional development as we scale up to large area continuous roll-to-roll production methods in much larger manufacturing equipment.

Ascent's Strategic Advantages Over Competitors

We believe that we can introduce a product into the HAA market that delivers superior performance at a lower cost than competing technologies. If we are successful in doing so, we believe

that the following factors, together with the technical advantages of our PV products, will offer us a competitive advantage in the space and near-space markets:

We intend to be the first to market with a flexible thin-film PV product that meets the specific power and power density requirements of the planned operational prototype HAA project and future HAA systems;

We intend to offer the lowest-cost solution to ensure that our PV modules becomes the *de facto* standard for full-scale HAA systems;

We have the benefit of, and draw upon, the extensive experience and expertise of our key personnel in the thin-film, PV and aerospace industries;

We benefit from our close and continuing business relationships with ITN and MicroSat Systems, Inc. ("MicroSat"), another ITN-initiated business, which designs and builds small, high performance satellites for military and commercial applications;

Our key management and that of ITN and MicroSat share long-standing relationships with the U.S. Air Force Research Laboratory, NASA and other government agencies;

Our PV modules are designed specifically for the unique requirements of the space and near-space markets, and our production line will be custom-built for that purpose; and

We aggressively pursue improvements and enhancements to our existing technology and development of new technologies.

By way of illustration, our close relationship with ITN and MicroSat may offer us testing or marketing opportunities typically unavailable through third parties. We are pursuing flight demonstration opportunities with MicroSat, including one involving a MicroSat-developed patented, foldable array known as a "Fold Integrated Thin-film Stiffener" solar array deployment system ("FITS") that can incorporate our thin-film PV modules. We may choose to jointly market FITS with MicroSat to commercial and government customers. We believe that successful early demonstration of FITS in the space satellite market will help validate our CIGS on high-temperature plastic PV modules for future space applications.

Key Competitors

Competition in the near-space market currently is limited to other flexible thin-film PV device manufacturers, while competition in the space market also includes rigid PV device manufacturers. We believe that our primary competitors include United Solar Ovonic, a subsidiary of Energy Conversion Devices, Inc. ("Uni-Solar"), Global Solar Energy, Inc., a subsidiary of UniSource Energy Corporation ("GSE"), and DayStar Technologies, Inc. ("DayStar"). Uni-Solar, which employs a-Si technology, is an established participant in terrestrial market for solar power. Despite Uni-Solar's commercial success in that market, and although Uni-Solar is providing PV modules for use on the Test HAA that Lockheed Martin has announced is scheduled to be launched in 2009, we believe that our flexible CIGS on high-temperature plastic PV modules will prove technically superior to Uni-Solar's devices when used on operational vehicles in space and near-space applications and that our focus on these markets will provide an advantage over Uni-Solar.

GSE was established in 1996 as a venture between ITN and Tucson Electric Power Company, which was later acquired by UniSource Energy Corporation. Now wholly owned by UniSource, GSE, together with DayStar are, to our knowledge, the only other companies actively exploring the production of a CIGS-based product on a flexible substrate for the space and near-space markets. Both DayStar and GSE's baseline products use a metal foil substrate for space and HAA applications. Given comparable efficiencies, our CIGS on high-temperature plastic substrate cells will have a higher specific power than a CIGS product on metallic foil due to our choice of lightweight material. Furthermore,

CIGS on a metallic foil must be interconnected, either by hand or by automation equipment, resulting in added weight and complexity. Our use of a high-temperature plastic substrate and monolithically interconnected devices avoids these issues.

Intellectual Property

In January 2006, ITN assigned to us its key CIGS PV technologies, including a pending patent application titled "Apparatus and Method of Production of Thin Film Photovoltaic Cell," filed on July 19, 2002 (Serial No. 10/197,813), certain unpublished invention disclosures relating to the design and fabrication of CIGS PV solar cells, and trade secrets relating to proprietary manufacture, process and control steps in the CIGS PV field. ITN also granted to us a perpetual, exclusive, worldwide license to use certain of ITN's proprietary process, control and design technologies that, although non-specific to CIGS PV, we believe will be useful in our production of solar modules for our target markets.

In early April 2006, we entered into a non-exclusive patent license agreement with Midwest Research Institute ("MRI"). MRI manages and serves as operating contractor for NREL under a prime contract with the U.S. Department of Energy ("DOE"). Pursuant to the prime contract, MRI acquired the rights to license certain inventions developed at NREL. We have acquired a world-wide, non-exclusive commercial license to the following U.S. patents and their foreign counterparts: U.S. Patent Nos. 5,356,839, 5,441,897 and 5,436,204; European Patent No. EP0694209 and European patent application serial no. 95929367.1 (for the EU, Belgium, France, United Kingdom, Germany and Netherlands); Japanese Patent Nos. 3130943 and 3258667 and Japanese patent application serial no. 8-508088. The license is effective so long as any claim of the licensed inventions is enforceable. We also are in the process of obtaining, and have signed a letter of intent regarding, a non-exclusive license from the University of Delaware's Institute of Energy Conversion ("IEC") for U.S. Patent Nos. 6,310,281, 6,372,538, 6,537,845 and 6,562,405, as well as U.S. patent application serial No. 60/620,352. These patents and patent applications relate to the fabrication of CIGS on flexible plastic substrates, the use of laser patterning and thin-film deposition during the fabrication of flexible monolithically-integrated CIGS PV devices and certain process steps that we intend to use during the manufacturing process. We expect that a non-exclusive license agreement will be finalized and executed after this offering.

Suppliers

We rely on several unaffiliated companies to supply certain ingredients and materials used during the fabrication of our PV modules. We acquire these materials on a purchase order basis and do not have long-term contracts with the suppliers, although we may enter such contracts. We acquire our high-temperature plastic from Ube Industries, Ltd. (Japan), although alternative suppliers of similar materials exist. In particular, we are working with the Dow Corning Corporation ("DCC") to ascertain whether commercial quantities of DCC's new silicone resin substrate material will be available by the time we intend to begin production in 2008. We purchase component copper, indium, gallium and selenium from a variety of suppliers. Our production line will be assembled using off-the-shelf components, custom processing tools and software developed by ITN and other commercially available equipment and tools.

Employees

As of June 30, 2006, we had four full-time employees, including three executive officers of the Company and a project engineer. The number of employees should grow significantly as we install manufacturing capacity and as ITN's R&D contracts with third parties are transferred to us along with some of the scientists, engineers, and technicians working on those projects. The current PV programs at ITN support approximately two senior scientists, six engineers, and two process technicians. Transfer

of the research and development contracts is predicated on obtaining consent from the government agencies and entities that are party to the contracts, which may in some cases take several months. If and when ITN secures the necessary consents, it will transfer the contracts and employees to us.

In contrast to these R&D activities described above, our core business will involve the manufacturing of PV modules, initially for space and near-space applications. As such, we anticipate that most of our employees will be involved in production, operation, and related product development and product support functions. During the first year of operations, we will focus on the development and installation of a 500 kW/shift/year production line. Once the line has been installed, we intend to hire technicians, product technical engineers and quality control engineers to staff the facility. We plan to hire a vice president of operations after this offering to manage the development and installation of the manufacturing line.

Initially, ITN will provide us with general and administrative support services, at cost, such as human resources, facility management, information technology support, government contract administration, and payroll processing. This should permit us to avoid the cost of hiring individual employees and related infrastructure expenses in the near-term.

Property

Our facilities are located in Littleton, Colorado. We sublease approximately 9,500 square feet of office and manufacturing space at cost from ITN, which occupies space adjacent to ours. The sublease expires in June 2010. In 2006, we will pay \$11,997 per month in rent, plus pass-through expenses such as taxes, insurance, water and utilities. We may sublease additional space from ITN as the need arises and as contracts are transferred to us.

Legal Proceedings

We do not know of any pending or threatened legal proceedings to which we are or would be a party or any proceedings being contemplated by governmental authorities against us, or any of our executive officers or directors relating to their services on our behalf.

Company History

Ascent was formed in October 2005 to commercialize certain PV technology developed by our parent company ITN for space and near-space applications. ITN, a private company incorporated in 1994, is an incubator dedicated to the development of cutting-edge thin-film, PV, battery and fuel cell technologies. Dr. Mohan Misra, Chairman of our Board, owns the majority of the stock in ITN.

MANAGEMENT

Directors, Executive Officers and Key Employees

Our executive officers, directors and key employees, and their ages as of June 30, 2006, are as follows:

Name	Age	Position
Matthew Foster	49	President and Chief Executive Officer
Joseph Armstrong, Ph.D.	49	Vice-President and Chief Technology Officer
Janet Casteel	45	Chief Accounting Officer and Treasurer
Mohan S. Misra, Ph.D.	62	Chairman of the Board
Stanley Gallery	48	Director
Ashutosh Misra	41	Director
T.W. Fraser Russell, Ph.D.	71	Director
Mark T. Waller	55	Director

Matthew Foster has served as our President and Chief Executive Officer since October 2005. From March 2004 until Ascent's formation in October 2005, Mr. Foster served as Executive Vice President of ITN Energy Systems, Inc., where he developed and implemented plans to commercialize other ITN technologies such as thin-film battery systems and microsatellites, which developed into companies Infinite Power Solutions, Inc. and MicroSat Systems, Inc., respectively. From January 2001 until March 2004, he served as President and Chief Executive Officer of Infinite Power Solutions. Mr. Foster holds a B.S. degree from Rensselaer Polytechnic Institute.

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

Janet Casteel has served as our Chief Accounting Officer and Treasurer since February 2006. She served on a part-time basis as our Treasurer and Controller between October 2005 and February 2006, during which time she also served as the part-time business manager of ITN. From 1996 until February 2006, Ms. Casteel served in the capacity of controller and business manager of ITN. At ITN, she supervised the financial and accounting staffs and was responsible for negotiation and administration of ITN's government and commercial contracts, as well as its agreements with subcontractors. She is a member of the American Institute of Certified Public Accountants and is a CPA (inactive) in Colorado. Ms. Casteel holds an Associate Degree in Business Administration from Nebraska College of Business and a B.S. degree in Accounting from Metropolitan State College in Denver.

Mohan S. Misra, Ph.D. has served as Chairman of our Board of Directors since October 2005. He founded and has served as chief executive officer of ITN since 1994. Dr. Misra has helped develop and implement several key technologies for aerospace applications including thin-film PVs, smart materials, advanced composites and lightweight structures. Dr. Misra holds a B.S. degree in Metallurgical Engineering from Benaras Hindu University in India, a M.S. degree in Metallurgical Engineering from the University of Washington and a Ph.D. in Metallurgical Engineering from the Colorado School of Mines. Dr. Misra is the uncle of Ashutosh Misra, a director.

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

Ashutosh Misra has served on our Board of Directors since October 2005. Mr. Misra is Vice President of Operations and General Manager of ITN where he is responsible for ITN's accounting and finance, human resources, facilities, information technology and laboratory operations. He has served in that role since 1998. He also presided over the prior separation of three separate companies from ITN. From November 2002 until March 2005, Mr. Misra also served as the president and chief executive officer of Data Access America, a wholly owned subsidiary of Data Access India, Limited, a telecommunications carrier based in India. Mr. Misra holds a Bachelor of Engineering Degree in Electronics and Telecommunications from Bangalore University in India, and a M.S. degree in Electrical Engineering from the University of Wisconsin, Milwaukee. Mr. Misra is the nephew of Dr. Misra, our Chairman.

T.W. Fraser Russell, Ph.D. has served on our Board of Directors since October 2005. Dr. Russell has served as the Allan P. Colburn Professor in the Department of Chemical Engineering at the University of Delaware since 1981. Dr. Russell is a member of the National Academy of Engineering and a fellow of the American Institute of Chemical Engineers. He is the inventor on four U.S. patents on thin-film continuous deposition and has authored numerous engineering and scientific articles on thin-film photovoltaics. He directed the Institute of Energy Conversion at the University of Delaware where he directed the research which led to the first ever deposition of semi-conductor continuously on a moving substrate. Dr. Russell served as a member and chairman of a committee of the National Renewable Energy Laboratory that was charged with reviewing and recommending PV research programs. Dr. Russell holds a B.Sc. degree and a M.Sc. degree from the University of Alberta in Canada and a Ph.D. from the University of Delaware.

Mark T. Waller has served on our Board of Directors since October 2005. He is the president and founder of BridgeWorks Capital, which he co-founded in 1988, a specialized merchant bank focusing on the organization and financing of small- and micro-cap companies. He attended Reed College in Portland, Oregon.

Technical Advisory Group

We have a Technical Advisory Group ("TAG") currently comprised of no more than five individuals with technical expertise, experience and industry knowledge that may benefit us. Members of our TAG are selected by our Board of Directors and are expected to make themselves available, upon request, for consultation with our management and employees for up to 40 hours each year. The role of our TAG is to provide, upon request, objective analysis and critique of our technical approaches and to advise us on the soundness of our production plans, processes and controls. Although members of the TAG may be approached individually by management or employees for consultation, the TAG is expected to meet periodically as a group to discuss their assessments and to report recommendations, if any, to our Board of Directors. Because members of our TAG are not employees of Ascent, they are not obligated to assign their inventions to the Company, nor must they offer business opportunities that they encounter to the Company. In addition to Dr. Mohan Misra, our Chairman, the members of our TAG, all of whom joined the TAG in November 2005, are:

Rajeewa R. Arya, Ph.D. is the principal of Arya International, Inc., which provides consulting services in the area of solar technology and business. Dr. Arya previously spent almost 19 years with BP Solar and its predecessor companies, where he oversaw technology teams and spearheaded PV

research programs involving amorphous silicon, copper-indium-diselenide and cadmium telluride. Dr. Arya has co-authored more than 100 technical papers and is a named inventor on several U.S. patents. Dr. Arya holds an M.Sc. degree in Solid State Physics from Jadavpur University in India, an M. Tech. degree in Materials Science from the Indian Institute of Technology and a Ph.D. in Engineering from Brown University.

Bruce Lanning, Ph.D. is the manager of the thin-film technologies group at ITN, a group he also managed until 2002. From 2002 until November 2005, Dr. Lanning was the principal scientist at the Southwest Research Institute, where he investigated the development of a wireless thin-film sensor system for the U.S. Department of Energy. Dr. Lanning holds a B.S. degree, M.S. degree and Ph.D. in Metallurgical Engineering from the Colorado School of Mines.

Robert W. Birkmire, Ph.D. is the Director of the University of Delaware's Institute of Energy Conversion which is devoted to research and development of thin-film PV solar cells and other photonic devices. Dr. Birkmire is the co-author of numerous technical papers and is a named inventor on several U.S. patents. Dr. Birkmire holds a B.S. degree in Physics from the Lowell Technological Institute in Massachusetts and a Ph.D. in Physics from the University of Delaware.

Each member of our TAG receives an option to purchase up to 15,000 shares of our common stock upon appointment.

Board of Directors

Our Bylaws provide that the authorized size of our Board of Directors, which currently is five members, is to be determined from time to time by resolution of the Board of Directors, but shall consist of at least two and no more than eight members. Our Board of Directors is divided into three classes as nearly equal in number as possible. Each year the shareholders elect the members of one of the three classes to three-year terms of office. Currently, Messrs. Ashutosh Misra and Waller serve as Class 1 directors, whose terms expire in 2009, Mr. Gallery and Dr. Russell serve as Class 2 directors, whose terms expire in 2007, and Dr. Mohan Misra serves as a Class 3 director, whose term expires in 2008.

Committees of the Board of Directors

Our Board of Directors has three standing committees: an Audit Committee, a Compensation Committee and a Nominating and Governance Committee.

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

selecting, hiring and terminating our independent auditors;

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

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

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

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

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

preparing the report that the Securities and Exchange Commission requires in our annual proxy statement.

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

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

approving the compensation and benefits of our executive officers;

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

administering our stock option and other equity compensation plans.

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

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

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

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

evaluating and recommending candidates for election to our Board.

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

Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee will be one of our officers or employees. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

Director Compensation

Our non-employee directors each receives an annual fee of \$5,000 for his or her service on our Board, plus \$1,000 for each meeting of our Board or board committee that the director attends in person and \$250 for each meeting attended by telephone or videoconference. Each non-employee director also receives reimbursement of travel and other expenses incurred to attend a meeting in person. Each of our directors has been granted an option to purchase 20,000 shares of our common

stock as compensation for service on our Board, and each of our non-employee directors has received an additional option to purchase 12,000 shares for service on the committees of our Board.

Executive Compensation

Because we were incorporated in October 2005, no compensation was paid by us to our officers in 2003 and 2004. The following table sets forth information concerning total compensation that we paid to our Chief Executive Officer in 2005. No officer has yet earned more than \$100,000 in total compensation from us in any fiscal year. For information about annual compensation arrangements with our executive officer, see "Employment Agreements."

Summary Compensation Table

Name and Principal Position	Fiscal Year	Long-Term Compensation		
		Annual Compensation	Awards	
		Salary (\$)	Securities Underlying Options/ SARs (#)	All Other Comp. (\$)
Matthew Foster, Chief Executive Officer	2005	\$ 9,511	30,000	(1)

(1)

In our financial statements for the period from our inception to December 31, 2005, we have reported a value for our common stock of \$1.00 on the date shares were sold to Mr. Foster and \$1.20 on the date options with an exercise price of \$0.10 per share were granted to Mr. Foster. For the period, we therefore recorded cash compensation to Mr. Foster of \$9,511 in salary and \$70,812 in non-cash compensation attributable to the sale of stock and grant of options to him.

Option Grants in Last Fiscal Year

The following table sets forth information concerning stock option grants to our Chief Executive Officer during 2005. The percentage of total options is based on an aggregate of 90,000 options granted to employees for the year ended December 31, 2005.

Option Grants in Fiscal Year 2005 (Individual Grants)

Name	Number of Securities Underlying Options/SARs granted (#)	Percent of total options/SARs granted to employees in fiscal year	Exercise or base price (\$/sh)	Expiration Date
Matthew Foster	30,000	33.3%	\$ 0.10	November 18, 2015

Option Exercises and Holdings

The following table sets forth, as to our Chief Executive Officer, certain information concerning the number of shares subject to both exercisable and unexercisable stock options as of December 31, 2005, and the number of shares of common stock received upon exercise of options during the year ended December 31, 2005.

**Aggregated Option Exercises in Fiscal Year 2005
and Fiscal Year-End Option Values**

Name	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Shares Underlying Unexercised Options at December 31, 2005 (#) Exercisable/Unexercisable	Value of Unexercised In-the-Money Options at December 31, 2005 (\$) Exercisable/Unexercisable(1)
Matthew Foster	0	n/a	0 / 30,000	\$0 / \$162,000

(1) Assumes a share price of \$5.50, the offering price per unit.

Employment Agreements

We have executive employment agreements with Matthew Foster, our Chief Executive Officer, Janet Casteel, our Chief Accounting Officer and Treasurer, and Joseph Armstrong, our Vice-President and Chief Technology Officer. Each executive employment agreement has a term of three years and expires in December 2008 in the cases of Mr. Foster and Dr. Armstrong, and in February 2009 in the case of Ms. Casteel. Under the terms of his agreement, Mr. Foster is entitled to a base salary of \$175,000 per year and a discretionary bonus of up to 30% of that base salary based upon his individual performance and our performance as a company. Ms. Casteel earns a base salary of \$108,000 per year and may receive a discretionary bonus of up to 15% of that base salary based upon her individual performance and our performance as a company. Dr. Armstrong earns a base salary of \$120,000 per year and may receive a discretionary bonus of up to 15% of that base salary based upon his individual performance and our performance as a company. Bonuses are not ensured and are awarded at the discretion of the Board. Each agreement may be terminated without notice if for cause, but 30 days' advance notice is required for termination without cause. Further, if either Mr. Foster is terminated without cause during the term of his employment agreement, he will be entitled to receive his base salary for a period of twelve months after termination. If either Dr. Armstrong or Ms. Casteel is terminated without cause during the term of his or her agreement, he or she will be entitled to receive his or her base salary for a period of six months after termination.

Stock Option Plan

In October 2005, our Board of Directors approved our 2005 Stock Option Plan (the "Option Plan"). The Option Plan was then approved by our stockholders in November 2005. The Option Plan authorizes the grant and issuance of options and other equity compensation to employees, officers and consultants. A total of 750,000 shares of common stock are reserved for issuance under the Option Plan.

The Option Plan is administered by the Compensation Committee of the Board of Directors. Subject to the provisions of the Option Plan, the Committee determines who will receive the options, the number of options granted, the manner of exercise and the exercise price of the options. The term of incentive stock options granted under the Option Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of our voting stock. The exercise price of an incentive stock option granted under the Option Plan must be equal to or greater than the fair market value of the shares of our common stock on the date the option is granted. The exercise price of a non-qualified option granted under the Option Plan must be equal to or greater than 85% of the fair market value of the shares of our common stock on the date the option is granted. An incentive stock option granted to an optionee owning more than 10% of our voting stock must have an exercise price equal to or greater than 110% of the fair market value of our common stock on the date the option is granted.

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

As of June 30, 2006, there were outstanding options to purchase 594,000 shares of common stock under the Option Plan. The following table sets forth information as of June 30, 2006 relating to all of our equity compensation plans:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plan approved by security holders	594,000	\$ 1.50	156,000
Equity compensation plans not approved by security holders			
TOTAL:	594,000	\$ 1.50	156,000

Limitation of Liability and Indemnification

Our Certificate of Incorporation, as amended, contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our shareholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

Any breach of their duty of loyalty to our company or our stockholders.

Acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law.

Unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law.

Any transaction from which the director derived an improper personal benefit.

Our Bylaws provide that we are required to indemnify our directors and officers and may indemnify our employees and other agents to the fullest extent permitted by Delaware law. Our Bylaws also provide that we shall advance expenses incurred by a director or officer before the final disposition of any action or proceeding upon receipt of an undertaking from or on behalf of that director or officer to repay the advance if it is ultimately determined that he or she is not entitled to be indemnified. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the Board of Directors. These agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our Certificate of Incorporation and Bylaws may discourage shareholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as we may permit indemnification for liabilities arising under the Securities Act to directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy, as expressed in the Securities Act and is, therefore, unenforceable.

PRINCIPAL STOCKHOLDERS

Set forth below is information regarding the beneficial ownership of our common stock, as of June 30, 2006 and as adjusted to reflect the sale of 3,000,000 units in this offering and the issuance of 290,909 units to bridge lenders, by (i) each person whom we know owned, beneficially, more than 5% of the outstanding shares of our common stock, (ii) each of our directors, (iii) our Chief Executive Officer, and (iv) all of the current directors and executive officers as a group. We believe that, except as otherwise noted below, each named beneficial owner has sole voting and investment power with respect to the shares listed. Unless otherwise indicated herein, beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission, and includes voting or investment power with respect to shares beneficially owned. Shares of common stock to be received upon conversion of preferred stock, or subject to options or warrants currently exercisable or exercisable within 60 days of June 30, 2006, are deemed outstanding for computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for computing the percentage ownership of any other person.

Name of Beneficial Owner	No. of Shares Beneficially Owned	Before This Offering(1)	After This Offering
Officers and Directors			
Matthew Foster	86,286(2)	4.3%	1.6%
Joseph Armstrong	53,572(3)	2.7%	1.0%
Janet Casteel	18,572(4)	*	*
Dr. Mohan S. Misra	1,433,000(5)	71.7%	27.1%
Stanley Gallery	33,000(6)	1.7%	*
Ashutosh Misra	55,000(7)	2.8%	1.0%
Dr. T.W. Fraser Russell	8,000(8)	*	*
Mark T. Waller	98,000(9)	4.9%	1.9%
<i>All directors and officers as a group (8 persons)</i>	1,785,430(10)	89.3%	33.7%
5% Stockholders			
ITN Energy Systems, Inc.	1,028,000	51.4%	19.4%

*

Less than 1%

(1)

Assumes 2,000,000 shares outstanding prior to this offering.

(2)

Does not include options to purchase 115,714 shares that will not be exercisable within 60 days of June 30, 2006.

(3)

Does not include options to purchase 46,428 shares that will not be exercisable within 60 days of June 30, 2006.

(4)

Does not include options to purchase 41,428 shares that will not be exercisable within 60 days of June 30, 2006.

(5)

Includes options to purchase 5,000 shares that are vested within 60 days of June 30, 2006. Also includes 1,028,000 shares of the Company held by ITN, which is 100% owned by Inica, Inc., a Colorado corporation that is wholly owned by Dr. Misra and an immediate family member.

(6)

Includes options to purchase 8,000 shares that are exercisable within 60 days of June 30, 2006.

(7)

Includes options to purchase 5,000 shares that are exercisable within 60 days of June 30, 2006.

(8)

Includes options to purchase 8,000 shares that are exercisable within 60 days of June 30, 2006.

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

(9)

Includes options to purchase 8,000 shares that are exercisable within 60 days of June 30, 2006.

(10)

Includes options to purchase 55,430 shares that are exercisable within 60 days of June 30, 2006.

RELATED PARTY TRANSACTIONS

Transactions Involving ITN Energy Systems, Inc.

We were formed in October 2005 to commercialize certain technologies developed by ITN. ITN and its affiliates own a majority of the outstanding shares of our common stock. ITN is wholly owned by Inica, Inc. Dr. Mohan Misra, Chairman of our Board of Directors, and an immediate family member own all of the outstanding shares of Inica, Inc.

On January 17, 2006, ITN assigned or licensed certain thin-film PV technology and intellectual property to us and signed a Manufacturing Line Agreement, Sublease Agreement, Administrative Services Agreement and Service Center Agreement with us. In consideration for these asset transfers, licenses and agreements, and after negotiation with ITN, we agreed to issue 1,028,000 shares of our common stock to ITN. The equity consideration paid by us was negotiated with ITN, and the transaction was reviewed and approved by our Audit Committee, which is comprised of all of our independent directors. Although we are unaware of any comparables by which to evaluate the amount or type of consideration, we believe that the transaction with ITN had the following characteristics: (i) the technology assigned and licensed by ITN was proprietary to ITN and was and remains necessary to our business; and (ii) in practice, when a technology license is negotiated with a third party, the licensor typically extracts upfront cash payment and ongoing cash royalties, neither of which was demanded by ITN. For these reasons, our Audit Committee concluded not only that the transaction with ITN was fair and reasonable, but also that it likely was on more favorable terms than could have been negotiated with an unaffiliated party.

Manufacturing Line Agreement. We have contracted with ITN to design and build our 500 kW/shift/year CIGS PV production line on a turnkey basis. We have agreed to pay ITN its costs for work performed under the Manufacturing Line Agreement and to reimburse ITN for all materials and equipment purchased. We estimate that we eventually will pay ITN an aggregate of approximately \$6.7 million over the life of the project, the development phases of which are detailed in "Management's Discussion and Analysis of Financial Condition and Results of Operation," above. The parties, though, have agreed only to our estimate of \$200,000 for the first phase of the project; the balance of \$6.5 million is our estimate only for completion of the other phases.

Sublease Agreement. We sublease approximately 9,500 square feet of office and manufacturing space at cost from ITN. Under the Sublease Agreement, our rent payments are \$11,997 per month until June 2007 and \$13,216 beginning July 2007, resulting in aggregate rent payments of \$701,288 until expiration of the agreement in June 2010. We also are responsible for certain pass-through expenses, such as taxes, insurance, water and utilities, which we estimate currently total approximately \$8,500 per month. The building and space that we sublease from ITN is leased to ITN by an entity of which Stanley Gallery, one of our directors, is an investor and manager.

Administrative Services Agreement. ITN has agreed to perform administrative services for us at cost, including services such as facilities maintenance, payroll, human resources, accounting and information technology services. Although actual costs may vary from month to month, we estimate that the average monthly cost of such services will be approximately \$20,000. The Administrative Services Agreement expires in January 2007.

Service Center Agreement. From time to time, we may find our own facilities inadequate or unsuitable to handle specific or special tasks or processes, but discover that ITN has such capability. Under the Service Center Agreement, we have the right to use, on an as needed and as available basis, certain of ITN's laboratories, equipment and research and development tools. If an when we make periodic use of the laboratories, equipment and tools, we will pay ITN in accordance with the standard rates that ITN charges its other customers. Although the Service Center Agreement expires in December 2009, it is automatically renewable on a month-to-month basis.

Executive Employment Agreements

We have executive employment agreements with Matthew Foster, our Chief Executive Officer, Janet Casteel, our Chief Accounting Officer and Treasurer, and Joseph Armstrong, our Vice-President and Chief Technology Officer. Please see "Employment Agreements" for a summary of these executive employment agreements. Our Compensation Committee approved these agreements.

Issuance of Common Stock and Grant of Stock Options

In connection with our formation, we sold a total of 702,000 shares of our common stock and granted a total of 271,000 options to our directors and executive officers. The shares were sold for \$0.04 per share and the exercise price of the options is \$0.10 per share. On February 27, 2006, we granted a total of 150,000 additional options to three of our executive officers with an exercise price of \$4.25 per share. The following table summarizes the shares and options held by each of our directors and executive officers as a result of these transactions:

Name	Shares Purchased	Options Granted	
		\$0.10	\$4.25
Matthew Foster	72,000	30,000	100,000
Joseph Armstrong	50,000	25,000	25,000
Janet Casteel	15,000	20,000	25,000
Dr. Mohan S. Misra	400,000	80,000	
Stanley Gallery	25,000	32,000	
Ashutosh Misra	50,000	20,000	
Dr. T.W. Fraser Russell		32,000	
Mark T. Waller	90,000	32,000	

Future Transactions

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

DESCRIPTION OF SECURITIES

Our authorized capital stock consists of 75,000,000 shares of common stock, \$0.0001 par value, and 25,000,000 shares of preferred stock, \$0.0001 par value. As of June 30, 2006, we had 2,000,000 shares of common stock and no shares of preferred stock outstanding. Immediately after this offering, we will have 5,290,909 shares of common stock outstanding, including shares issued to our bridge lenders. If the over-allotment option is exercised in full, we will have 5,740,909 shares outstanding.

The following is a summary of the rights of certain of our securities as provided in our Certificate of Incorporation and Bylaws, as they will be in effect upon the closing of this offering. For more detailed information relating to our capital stock, please see our Certificate of Incorporation and Bylaws, which have been filed as exhibits to the registration statement of which this prospectus is a part.

Units

Each unit consists of one share of common stock, one redeemable Class A warrant and two non-redeemable Class B warrants, each warrant to purchase one share of common stock. The common stock and warrants will trade only as part of a unit for at least 30 days following the date of this prospectus. After separation of the units, the common stock and public warrants will trade as separate securities, and trading of the units will cease.

At the closing of this offering, we will deliver certificates representing the units to the representative of the underwriters through the facilities of the Depository Trust Company. Thereafter, investors may request physical delivery of unit certificates at any time before the securities comprising the units begin trading separately from the common stock included in the units. An investor also may request delivery of separate physical certificates for the public warrants and the common stock comprising the units, but we will not be obligated to make delivery of the separate certificates until after the common stock and warrants begin trading separately. Until that time, investors will be unable to make separate delivery of certificates for the public warrants and common stock comprising a unit and will be unable to settle trades in those securities.

Class A Warrants

General. The Class A warrants issued in this offering may be exercised after they become separately tradable until the expiration date, which is the fifth anniversary of the effective date of this offering. Each Class A warrant entitles the holder to purchase one share of common stock at an exercise price of \$6.60 per share, which is 120% of the public offering price of the units. This exercise price will be adjusted if specific events, summarized below, occur. A holder of warrants will not be deemed a holder of the underlying stock for any purpose until the warrant is exercised. If at their expiration date the Class A warrants are not currently exercisable, the expiration date will be extended for 30 days following notice to the holders of the warrants that the warrants are again exercisable. If we cannot honor the exercise of Class A warrants and the securities underlying the warrants are listed on a securities exchange or if there are three independent market makers for the underlying securities, we may, but are not required to, settle the warrants for a price equal to the difference between the closing price of the underlying securities and the exercise price of the warrants. Because we are not required to settle the warrants by payment of cash, and because there is a possibility that warrant holders will not be able to exercise the warrants when they are in-the-money or otherwise, there is a risk that the warrants will never be settled in shares or payment of cash. This may have an adverse effect on the demand for the warrants and the prices that can be obtained from reselling them.

Redemption. We will have the right to redeem the Class A warrants at a price of \$0.25 per warrant, after providing 30 days prior written notice to the Class A warrant holders, at any time after (i) 180 days after the effective date of this offering and (ii) the date on which the closing price of our

common stock, as reported on Nasdaq, equals or exceeds \$9.35, which is 170% of the public offering price of the units, for five consecutive trading days. We will send a written notice of redemption by first class mail to holders of the Class A warrants at their last known addresses appearing on the registration records maintained by the transfer agent. No other form of notice or publication will be required. If we call the Class A warrants for redemption, the holders will then have to decide whether to sell their Class A warrants, exercise them before the close business on the business day preceding the specified redemption date or hold them for redemption.

Class B Warrants

The Class B warrants issued in this offering may be exercised after they become separately tradable until the expiration date, which is the fifth anniversary of the effective date of this offering. Each Class B warrant entitles the holder to purchase one share of common stock at an exercise price of \$11.00 per share, which is 200% of the public offering price of the units. This exercise price will be adjusted if specific events, summarized below, occur. A holder of warrants will not be deemed a holder of the underlying stock for any purpose until the warrant is exercised. If at their expiration date the Class B warrants are not currently exercisable, the expiration date will be extended for 30 days following notice to the holders of the warrants that the warrants are again exercisable. If we cannot honor the exercise of Class B warrants and the securities underlying the warrants are listed on a securities exchange or if there are three independent market makers for the underlying securities, we may, but are not required to, settle the warrants for a price equal to the difference between the closing price of the underlying securities and the exercise price of the warrants. Because we are not required to settle the warrants by payment of cash, and because there is a possibility that warrant holders will not be able to exercise the warrants when they are in-the-money or otherwise, there is a risk that the warrants will never be settled in shares or payment of cash. This may have an adverse effect on the demand for the warrants and the prices that can be obtained from reselling them.

No Redemption. The Class B warrants are non-redeemable.

Provisions Applicable to the Class A and Class B Warrants

Exercise. The holders of the warrants may exercise them only if an appropriate registration statement is then in effect. To exercise a warrant, the holder must deliver to our transfer agent the warrant certificate on or before the expiration date or the redemption date, as applicable, with the form on the reverse side of the certificate executed as indicated, accompanied by payment of the full exercise price for the number of warrants being exercised. Fractional shares of common stock will not be issued upon exercise of the warrants.

Adjustments in Certain Events. The warrants provide for adjustment of the number of shares for which each warrant is exercisable if certain events occur. If we distribute to our stockholders additional shares of common stock through a dividend or distribution, or if we effect a stock split of our common stock, the total number of shares of common stock purchasable on exercise of a warrant will be adjusted so that the holder of a warrant thereafter exercised will be entitled to receive the number of shares of common stock the holder would have owned or received after such event if the warrant holder had exercised the warrant before the event causing the adjustment and held the securities received on such exercise through the record date for the event. The aggregate exercise price of the warrant will remain the same in that circumstance, but the effective purchase price per share of common stock purchasable upon exercise of the warrant will be proportionately reduced because a greater number of common stock shares will then be purchasable upon exercise of the adjusted warrant. We will make equivalent changes in the warrants if we effect a reverse stock split.

In the event of a capital reorganization or reclassification of our common stock, the warrants will be adjusted so that thereafter each warrant holder will be entitled to receive upon exercise the same number and kind of securities that such holder would have received if the warrant had been exercised before the capital reorganization or reclassification of our common stock and the securities received on such exercise had been held through the record date of the recapitalization.

If we merge or consolidate with another corporation, or if we sell our assets as an entirety or substantially as an entirety to another corporation, we will make provisions so that warrant holders will be entitled to receive upon exercise of a warrant the kind and number of securities, cash or other property that would have been received as a result of the transaction by a person who was our stockholder immediately before the transaction and who owned the same number of shares of common stock for which the warrant was exercisable immediately before the transaction. No adjustment to the warrants will be made, however, if a merger or consolidation does not result in any reclassification or change in our outstanding common stock.

Preferred Stock

Our Board of Directors is authorized by our Certificate of Incorporation to establish classes or series of preferred stock and fix the designation, powers, preferences and rights of the shares of each such class or series and the qualifications, limitations or restrictions thereof without any further vote or action by our stockholders. Any shares of preferred stock so issued could have priority over our common stock with respect to dividend or liquidation rights. Any future issuance of preferred stock may have the effect of delaying, deferring or preventing a change in our control without further action by our stockholders and may adversely affect the voting and other rights of the holders of our common stock. At present we have no plans to issue any shares of preferred stock or to adopt any new series, preferences or other classification of preferred stock.

The issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could be used to discourage an unsolicited acquisition proposal. For instance, the issuance of a series of preferred stock might impede a business combination by including class voting rights that would enable a holder to block such a transaction. In addition, under certain circumstances, the issuance of preferred stock could adversely affect the voting power of holders of our common stock. Although our Board of Directors is required to make any determination to issue preferred stock based on its judgment as to the best interests of our stockholders, our Board could act in a manner that would discourage an acquisition attempt or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which such stockholders might receive a premium for their stock over the then market price of such stock. Our Board presently does not intend to seek stockholder approval prior to the issuance of currently authorized stock, unless otherwise required by law or applicable stock exchange rules.

Bridge Loans and Bridge Rights

In January 2006, we completed a \$1.6 million bridge loan from lenders ("Bridge Noteholders") to help us meet our working capital needs. The loans ("Bridge Loans") accrue interest at an annual rate of 10% and are due and payable on the earlier of January 2007 or the completion of a public offering of equity securities with gross proceeds of at least \$5,000,000 ("Qualified Public Offering"). If a Qualified Public Offering is not completed by January 2007, the Bridge Noteholders will have the right to convert the principal and unpaid interest into shares of our common stock at a price of \$3.00 per share.

In connection with the Bridge Loans, we issued rights ("Bridge Rights") to the Bridge Noteholders. One Bridge Right was issued for every \$25,000 loaned. At the closing of a Qualified Public Offering before January 2007, holders of Bridge Rights will be entitled to receive restricted units

otherwise identical to the units being offered in this offering. We intend to register the shares and warrants underlying these bridge units after completion of this offering. The holder of each Bridge Right will be entitled to receive that number of units equal to \$25,000 divided by the initial public offering price of the units. If a Qualified Public Offering is not completed by January 2007, then each Bridge Right may be exercised for 8,333 shares of our common stock; provided, however, that if at any time before expiration of the Bridge Rights, we have a class of equity securities traded on any exchange or quotation system, then each Bridge Right may be exercised for \$25,000 of such equity securities. The Bridge Rights expire in January 2008.

2005 Stock Option Plan

The Option Plan currently authorizes the grant of up to 750,000 shares of common stock (subject to adjustment for stock splits and similar capital changes) in connection with restricted stock awards, incentive stock option grants and non-qualified stock option grants. Employees and, in the case of nonqualified stock options, directors, consultants or any affiliate are eligible to receive grants under our plans. As of June 30, 2006, there were outstanding options to purchase 594,000 shares under our Option Plan.

Authorized but Unissued Shares

The authorized but unissued shares of common and preferred stock are available for future issuance without stockholder approval. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares could hinder or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Certificate of Incorporation and Bylaws

Our Certificate of Incorporation and Bylaws contain a number of provisions that could make our acquisition by means of a tender or exchange offer, a proxy contest or otherwise more difficult. These provisions are summarized below.

Removal of Directors. Our Bylaws provide that our directors may only be removed by the affirmative vote of the shares entitled to vote at an election of directors; provided, however, that if less than the entire board of directors is to be removed, no one director may be removed if the vote cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire Board of Directors. Although our Bylaws do not give the Board the power to approve or disapprove stockholder nominations for the election of directors or of any other business stockholders desire to conduct at an annual or any other meeting, the Bylaws may have the effect of precluding a nomination for the election of directors or precluding the conduct of business at a particular annual meeting if the proper procedures are not followed, or discouraging or deterring a third party from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control, even if the conduct of that solicitation or attempt might be beneficial to our stockholders.

Staggered Board. Staggered terms tend to protect against sudden changes in management and may have the effect of delaying, deferring or preventing a change in our control without further action by our stockholders. Our Board of Directors is divided into three classes, with one class of directors elected at each year's annual stockholder meeting.

Special Meetings. Our Bylaws provide that special meetings of stockholders can be called by the President, at the request of a majority of the Board of Directors at the written request of holders of at least 50% of the shares outstanding and entitled to vote.

Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for our Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Delaware Anti-Takeover Statute. We will be subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging under certain circumstances in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

Prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder.

Upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer.

On or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66²/₃% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law, our Certificate of Incorporation and our Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent, Warrant Agent and Registrar

The transfer agent and registrar for our common stock and warrant agent for the public warrants is Computershare Investor Services, 350 Indiana Street, Suite 800, Golden, Colorado 80401.

Listing

Our units, common stock, Class A warrants and Class B warrants will be listed on the Nasdaq Capital Market and the Boston Stock Exchange.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our securities. Sales of our securities in the public market, or the perception that those sales may occur, could cause the prevailing market price to decrease or to be lower than it might be in the absence of those sales or perceptions.

This Offering

Upon completion of this offering, we expect to have 5,290,909 shares of common stock outstanding, assuming the issuance of 290,909 units to certain bridge lenders. This number assumes no exercise of the underwriters' over-allotment option, the public warrants, the representative's warrants or any other outstanding options and warrants. We expect to 5,740,909 shares of common stock outstanding if the underwriters' over-allotment is exercised in full.

The 3,000,000 shares of common stock issued as part of the units sold in this offering, together with the up to 9,000,000 shares issued upon exercise of the Class A warrants and Class B warrants comprising part of the units sold in this offering, will be freely tradable, except by any of our "affiliates" as defined in Rule 144(a) under the Securities Act, without restriction or registration under the Securities Act. After completion of this offering, we intend to register the 290,909 units (and the 290,909 shares, 290,909 Class A warrants and 581,818 Class B warrants underlying the units) to be issued to certain bridge lenders. All remaining shares, and all shares subject to outstanding options and warrants, were issued and sold by us in private transactions and are eligible for public sale if registered under the Securities Act or sold in accordance with Rule 144 or Rule 701 under the Securities Act. These remaining shares are considered "restricted" within the meaning of Rule 144.

Restricted Stock, Lock-Up Agreements and Rule 144

The 2,000,000 shares of restricted stock may not be sold in the absence of registration under the Securities Act unless an exemption from registration is available, including the exemption from registration offered by Rule 144. The holders of these shares, and the bridge lenders who will receive 290,909 units concurrently with the closing of this offering, have agreed not to sell or otherwise dispose of any of their shares of common stock (or any securities convertible into shares of common stock) for a period of one year after completion of this offering, without the prior written consent of Paulson Investment Company, Inc., the representative of the underwriters, subject to certain limited exceptions. After the expiration of this lock-up period, or earlier with the prior written consent of Paulson Investment Company, Inc., all of the outstanding restricted shares subject to the lock-up may be sold in the public market pursuant to Rule 144.

In addition to the foregoing, of the 2,000,000 shares subject to lock-up agreements with Paulson Investment Company, Inc., 59,000 shares are subject to contractual lock-up agreements with the Company preventing the sale of those shares until the third anniversary of this offering; and 970,500 shares are subject to contractual lock-up agreements preventing the sale of those shares until the second anniversary of this offering.

In general, under Rule 144, as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned restricted shares for at least one year, including a person who may be deemed to be our affiliate, may sell within any three-month period a number of shares of common stock that does not exceed a specified maximum number of shares. This maximum is equal to the greater of 1% of the then outstanding shares of our common stock or the average weekly trading volume in the common stock during the four calendar weeks immediately preceding the sale. Sales under Rule 144 are also subject to restrictions relating to manner of sale, notice and availability of current public information about us. In addition, under Rule 144(k) of the Securities Act, a person who is not our affiliate, has not been an affiliate of ours within three months prior to the sale and has beneficially owned shares for at least two years would be entitled to sell such shares immediately

without regard to volume limitations, manner of sale provisions, notice or other requirements of Rule 144.

Stock Options

As of June 30, 2006, we had granted and had outstanding stock options to purchase 594,000 shares of common stock under our Option Plan. A total of 750,000 shares of common stock currently are reserved for issuance under our Option Plan, and we intend to file a registration statement on Form S-8 to register these shares under the Securities Act. However, none of the shares registered on Form S-8 will be eligible for resale until expiration of the lock-up agreements to which they are subject.

Bridge Rights

In connection with the Bridge Loans made in January 2006, we issued Bridge Rights, the holders of which will be entitled to receive units identical to the units being offered in this offering. The holder of each Bridge Right will be entitled to receive that number of units equal to \$25,000 divided by the initial public offering price of the units. After this offering, the shares and warrants underlying the units to be issued in connection with the Bridge Rights will be registered for resale on behalf of the bridge lenders, but the bridge lenders each have agreed not to sell the units or the securities underlying the units, before the first anniversary of this offering without the consent of Paulson Investment Company, Inc.

Representative's Warrants

In connection with this offering, we have agreed to issue to the representative of the underwriters warrants to purchase 300,000 units. The representative's warrants will be exercisable for units at any time beginning 180 days after the effective date of this offering until the fifth anniversary of the effective date. However, neither the representative's warrants nor the underlying securities may be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except to any member participating in the offering and the officers or partners thereof, and only if all securities so transferred remain subject to the 180-day lock-up restriction for the remainder of the lock-up period. We will cause the registration statement of which this prospectus is a part to remain effective until the earlier of the time that all of the representative's warrants have been exercised and the date which is five years after the effective date of the offering or will file a new registration statement covering the exercise and resale of those securities. If we cannot honor the exercise of representative's warrants and the securities underlying the warrants are listed on a securities exchange or if there are three independent market makers for the underlying securities, we may, but are not required to, settle the representative's warrants for a price equal to the difference between the closing price of the underlying securities and the exercise price of the warrants. Because we are not required to settle the representative's warrants by payment of cash, it is possible that the representative's warrants will never be settled in shares or payment of cash. The common stock and public warrants issued to the representative upon exercise of these representative's warrants will be freely tradeable.

UNDERWRITING

Paulson Investment Company, Inc. is acting as the representative of the underwriters. We and the underwriters named below have entered into an underwriting agreement with respect to the units being offered. In connection with this offering and subject to certain conditions, each of the underwriters named below has severally agreed to purchase, and we have agreed to sell, the number of units set forth opposite the name of each underwriter.

Underwriters	Number of Units
Paulson Investment Company, Inc.	2,350,000
Chicago Investment Group LLC	100,000
Joseph Gunnar and Company LLC	100,000
I-Bankers Securities Inc.	150,000
J.P. Turner & Co. LLC	100,000
Pali Capital Inc.	100,000
Newbridge Securities Corp.	100,000
	<hr/>
Total	3,000,000
	<hr/>

The underwriting agreement provides that the underwriters are obligated to purchase all of the units offered by this prospectus, other than those covered by the over-allotment option, if any units are purchased. The underwriting agreement also provides that the obligations of the several underwriters to pay for and accept delivery of the units is subject to the approval of certain legal matters by counsel and certain other conditions. These conditions include, among other things, the requirements that no stop order suspending the effectiveness of the registration statement be in effect and that no proceedings for this purpose have been instituted or threatened by the SEC.

The representative has advised us that the underwriters propose to offer our units to the public initially at the offering price set forth on the cover page of this prospectus and to selected dealers at that price less a concession of not more than \$0.22 per unit. The underwriters and selected dealers may reallow a concession to other dealers, including the underwriters, of not more than \$0.10 per unit. After completion of the public offering of the units, the offering price, the concessions to selected dealers and the reallowance to their dealers may be changed by the underwriters.

The underwriters have informed us that they do not expect to confirm sales of our units offered by this prospectus on a discretionary basis.

Over-allotment Option

Pursuant to the underwriting agreement, we have granted the underwriters an option, exercisable for 45 days from the date of this prospectus, to purchase up to an additional 450,000 units on the same terms as the other units being purchased by the underwriters from us. The underwriters may exercise the option solely to cover over-allotments, if any, in the sale of the units that the underwriters have agreed to purchase. If the over-allotment option is exercised in full, the total public offering price, underwriting discount and proceeds to us before offering expenses will be \$18,975,000, \$1,261,838 and \$17,713,162, respectively.

Stabilization

The rules of the SEC generally prohibit the underwriters from trading in our securities on the open market during this offering. However, the underwriters are allowed to engage in some open market transactions and other activities during this offering that may cause the market price of our securities to be above or below that which would otherwise prevail in the open market. These activities

may include stabilization, short sales and over-allotments, syndicate covering transactions and penalty bids.

Stabilizing transactions consist of bids or purchases made by the managing underwriter for the purpose of preventing or slowing a decline in the market price of our securities while this offering is in progress.

Short sales and over-allotments occur when the managing underwriter, on behalf of the underwriting syndicate, sells more of our units than it purchases from us in this offering. In order to cover the resulting short position, the managing underwriter may exercise the over-allotment option described above or may engage in syndicate covering transactions. There is no contractual limit on the size of any syndicate covering transaction. The underwriters will deliver a prospectus in connection with any such short sales. Purchasers of units sold short by the underwriters are entitled to the same remedies under the federal securities laws as any other purchaser of units covered by the registration statement.

Syndicate covering transactions are bids for or purchases of our securities on the open market by the managing underwriter on behalf of the underwriters in order to reduce a short position incurred by the managing underwriter on behalf of the underwriters.

A penalty bid is an arrangement permitting the managing underwriter to reclaim the selling concession that would otherwise accrue to an underwriter if the common stock originally sold by the underwriter was later repurchased by the managing underwriter and therefore was not effectively sold to the public by such underwriter.

If the underwriters commence these activities, they may discontinue them at any time without notice. The underwriters may carry out these transactions on the Nasdaq Capital Market, the Boston Stock Exchange or otherwise.

Indemnification

The underwriting agreement provides for indemnification between us and the underwriters against specified liabilities, including liabilities under the Securities Act, and for contribution by us and the underwriters to payments that may be required to be made with respect to those liabilities. We have been advised that, in the opinion of the SEC, indemnification for liabilities under the Securities Act is against public policy as expressed in the Securities Act and is therefore unenforceable.

Underwriters' Compensation

We have agreed to sell the units to the underwriters at the initial offering price of \$5.13425 per unit, which represents the initial public offering price of the units set forth on the cover page of this prospectus less the 6.65% underwriting discount. The underwriting agreement also provides that Paulson Investment Company, Inc. will be paid a nonaccountable expense allowance equal to 3% of the gross proceeds from the sale of the units offered by this prospectus, excluding any units purchased on exercise of the over-allotment option. We have paid Paulson Investment Company, Inc. a \$35,000 advance against the nonaccountable expense allowance.

On completion of this offering, we will issue to the representative of the underwriters warrants to purchase up to 300,000 units, for a price per unit of \$6.60, which is equal to 120% of the initial offering price of the units. The representative's warrants will be exercisable for units at any time beginning 180 days after the effective date of this offering, and will expire on the fifth anniversary of the effective date. Neither the representative's warrants nor the underlying securities may be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of

sales of the offering, except to any member participating in the offering and the officers or partners thereof, and only if all securities so transferred remain subject to the 180-day lock-up restriction for the remainder of the lock-up period. If we cannot honor the exercise of representative's warrants and the securities underlying the warrants are listed on a securities exchange or if there are three independent market makers for the underlying securities, we may, but are not required to, settle the representative's warrants for a price equal to the difference between the closing price of the underlying securities and the exercise price of the warrants. Because we are not required to settle the representative's warrants by payment of cash, it is possible that the representative's warrants will never be settled in shares or payment of cash.

The holder of these warrants will have, in that capacity, no voting, dividend or other stockholder rights. Any profit realized on the sale of the units issuable upon exercise of these warrants may be deemed to be additional underwriting compensation. The securities underlying these warrants are being registered pursuant to the registration statement of which this prospectus is a part. During the term of these warrants, the holder thereof is given the opportunity to profit from a rise in the market price of our common stock. We may find it more difficult to raise additional equity capital while these warrants are outstanding. At any time at which these warrants are likely to be exercised, we may be able to obtain additional equity capital on more favorable terms.

The following table summarizes the underwriting discount we will pay to the underwriters and the non-accountable expense allowance we will pay to the representative of the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

	Total		
	Per Unit	Without Over-Allotment	With Over-Allotment
Underwriting discount	\$ 0.36575	\$ 1,097,250	\$ 1,261,838
Non-accountable expense allowance	\$0.165	\$ 495,000	\$ 495,000

Lock-Up Agreements

Our officers, directors and all stockholders (including holders of securities convertible into common stock) have agreed that for a period of one year from the date this registration statement becomes effective they will not sell, contract to sell, grant any option for the sale or otherwise dispose of any of our equity securities, or any securities convertible into or exercisable or exchangeable for our equity securities, other than through existing Rule 10b5-1 trading plans, intra-family transfers or transfers to trusts for estate planning purposes, without the consent of Paulson Investment Company, Inc., as the representative of the underwriters, which consent will not be unreasonably withheld. Paulson Investment Company, Inc. may consent to an early release from the one-year lock-up period if, in its opinion, the market for the common stock would not be adversely impacted by sales and in cases of an officer, director or other stockholder's financial emergency. We are unaware of any officer, director or current stockholder who intends to ask for consent to dispose of any of our equity securities during the lock-up period.

In addition, the holders of the 2,000,000 shares of common stock outstanding prior to this offering have agreed that they will not sell 970,500 of those shares before the second anniversary, and 59,000 of those shares before the third anniversary, of the effective date of this offering

Determination of Offering Price

The public offering price of the units offered by this prospectus and the exercise price of the public warrants have been determined by negotiation between us and the underwriters. Among the

factors considered in determining the public offering price of the units and the exercise price of the warrants were:

our prospects;

the industry in which we operate;

the status and development prospects for our proposed products;

the previous experience of our executive officers; and

the general condition of the securities markets at the time of this offering.

The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the units. That price is subject to change as a result of market conditions and other factors, and we cannot assure you that the units, or the common stock and warrants contained in the units, can be resold at or above the initial public offering price.

LEGAL MATTERS

Holland & Knight LLP will pass upon the validity of the common stock offered by this prospectus on our behalf. Certain legal matters will be passed upon for the underwriters by Stoel Rives LLP.

EXPERTS

The financial statements in this prospectus for the years ended December 31, 2005 and 2004 relating to the assets transferred from ITN to us, and the financial statements of Ascent Solar Technologies, Inc. for the period ended December 31, 2005, have been audited by Hein & Associates LLP, an independent registered public accounting firm, to the extent and for the periods set forth in their report, and are set forth in this prospectus in reliance upon such report given upon the authority of them as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

In connection with the units offered by this prospectus, we have filed a registration statement on Form SB-2 under the Securities Act with the SEC. This prospectus, filed as part of the registration statement, does not contain all of the information included in the registration statement and the accompanying exhibits and schedules. For further information with respect to our units, shares and warrants, and as you should refer to the registration statement and the accompanying exhibits and schedules. Statements contained in this prospectus regarding the contents of any contract or any other document are not necessarily complete, and you should refer to the copy of the contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by the actual contents of the contract or other document referred to. You may inspect a copy of the registration statement and the accompanying exhibits and schedules without charge at the SEC's public reference facilities, 100 F Street, N.E., Washington, D.C. 20549, and you may obtain copies of all or any part of the registration statement from those offices for a fee. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically. The address of the site is <http://www.sec.gov>.

You should rely only on the information contained in this prospectus and in any free writing prospectus that states that it has been provided with our approval. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Information contained on our website does not constitute a part of this prospectus. The information in this prospectus may only be accurate as of the date appearing on the cover page of this prospectus, regardless of the time this prospectus is delivered or our units are sold.

We are not, and the underwriters are not, making an offer to sell the units in any jurisdiction where the offer or sale is not permitted.

We own no registered trademarks. Brand names or trademarks appearing in this prospectus are the property of their respective owners.

INDEX TO FINANCIAL STATEMENTS

Unaudited Pro Forma Financial Statements:

Ascent Solar Technologies, Inc.

Introduction

Unaudited Pro Forma Combined Statement of Operation for the Three Months Ended March 31, 2006

Unaudited Pro Forma Combined Statement of Operations for the Year Ended December 31, 2005

Notes to Unaudited Proforma Combined Statements of Operations

Historical Financial Statements:

Ascent Solar Technologies, Inc. (a Development Stage Company as defined by SFAS No. 7)

Report of Independent Registered Public Accounting Firm

Balance Sheets as of March 31, 2006 (unaudited) and December 31, 2005

Statements of Operations for the Three Months Ended March 31, 2006 (unaudited) and for the Period from Inception (October 18, 2005) through March 31, 2006 (unaudited) and for the Period from Inception (October 18, 2005) through December 31, 2005

Statements of Stockholder's Deficit for the Period from Inception (October 18, 2005) through December 31, 2005 and for the Three Months Ended March 31, 2006 (unaudited)

Statements of Cash Flows for the Three Months Ended March 31, 2006 (unaudited) and for the Period from Inception (October 18, 2005) through March 31, 2006 (unaudited) and for the Period from Inception (October 18, 2005) through December 31, 2005

Notes to Financial Statements

Transferred Assets of ITN Energy Systems, Inc.

Report of Independent Registered Public Accounting Firm

Statements of Selected Assets and Liabilities As of December 31, 2005 and December 31, 2004

Statements of Revenues and Expenses For the Years Ended December 31, 2005 and 2004

Statements of Changes in Net Assets For the Years Ended December 31, 2005 and 2004

Statements of Cash Flows For the Years Ended December 31, 2005 and 2004

Notes to Financial Statements

Ascent Solar Technologies, Inc.

Unaudited Pro Forma Financial Statements

Introduction

On January 18, 2006, ITN Energy Systems, Inc. ("ITN") assigned or licensed certain photovoltaic technologies and transferred certain personnel to Ascent Solar Technologies, Inc. ("Ascent"). In particular, ITN assigned inventions and trade secrets relating to copper-indium-gallium-diselenide photovoltaic ("CIGS PV") technology. ITN also granted Ascent an exclusive, perpetual, worldwide and royalty-free license to technologies, inventions, trade secrets and patents not assigned, but that are reasonably necessary to Ascent's CIGS PV business, ITN agreed to seek government approvals to transfer government-sponsored CIGS PV research and development contracts to Ascent. The Transfer of Assets was recorded at historical cost in a manner similar to a reorganization of entities under common control.

The accompanying unaudited pro forma statements of operations for the three months ended March 31, 2006 and for the year ended December 31, 2005 is presented as if the transfer of the Transferred Assets had occurred as of January 1, 2005. The adjustments to the statements of operations reflect those necessary to show the effect of the Bridge Loan transaction coincident with the transfer of assets. Ascent's balance sheet as of March 31, 2006, presented elsewhere in this registration statement, reflects the acquisition of the Transferred Assets and the consummation of the bridge loan and therefore a proforma balance sheet has not been presented.

The unaudited pro forma financial information is not necessarily indicative of what the Company's results of operations actually would have been had the acquisition been completed as of January 1, 2005. Additionally, the unaudited pro forma financial information does not attempt to project the future results of operations of the Company. In the opinion of management, all significant adjustments necessary to reflect the effects of the acquisition have been made. The unaudited pro forma combined financial statements should be read in conjunction with the historical financial statements of Ascent and the Transferred Assets included elsewhere in this registration statement.

ASCENT SOLAR TECHNOLOGIES, INC.

UNAUDITED PRO FORMA COMBINED STATEMENT OF OPERATIONS

	Historical		Pro Forma	
	Ascent for the Three Months Ended March 31, 2006	Transferred Assets for the Period January 1, 2006 Through January 18, 2006 (Date transfer occurred)	Adjustments	Combined
Contract revenues	\$ 3,380	\$ 2,055		\$ 5,435
Direct contract costs:				
Direct labor	2,571	435		3,006
Subcontractors & Materials		523		523
Total direct costs	2,571	958		3,529
Gross margin on revenue	809	1,097		1,906
Indirect Costs (G&A)	508,462	1,024		509,486
Research & Development Expense	40,223			40,223
Income (Loss) from Operations	(547,876)	73		(547,803)
Other Income/(Expense):				
Interest Expense	(230,738)		(A) (7,890)	(238,628)
Net income (loss)	\$ (778,614)	\$ 73	\$ (7,890)	\$ (786,431)
Net loss per share (basic and diluted)	\$ (0.43)	NA		\$ (0.43)
Weighted average common shares outstanding (basic and diluted)	1,805,822	NA		1,789,838

See accompanying notes to unaudited pro forma combined financial statements.

ASCENT SOLAR TECHNOLOGIES, INC.

UNAUDITED PRO FORMA COMBINED STATEMENT OF OPERATIONS

	Historical		Pro Forma	
	Ascent for the Period from inception (October 18, 2005 through December 31, 2005)	Transferred Assets for the year ended December 31, 2005	Adjustments	Combined
Contract revenues		\$ 1,050,502		\$ 1,050,502
Direct contract costs:				
Direct labor		230,246		230,246
Subcontractors & Materials		298,972		298,972
Total direct costs		529,218		529,218
Gross margin on revenue		521,284		521,284
Indirect Costs (G&A)	\$ 1,204,494	513,678		1,718,172
Income (Loss) from Operations	(1,204,494)	7,606		(1,196,888)
Other Income/(Expense):				
Interest Expense	(2,740)		(B) (1,158,565)	(1,161,305)
Net income (loss)	\$ (1,207,234)	\$ 7,606	\$ (1,158,565)	\$ (2,358,193)
Net loss per share (basic and diluted)	\$ (1.58)	NA		\$ (1.31)
Weighted average common shares outstanding (basic and diluted)	761,838	NA		1,789,838

See accompanying notes to unaudited pro forma combined financial statements.

ASCENT SOLAR TECHNOLOGIES, INC.

NOTES TO UNAUDITED PRO FORMA

COMBINED STATEMENTS OF OPERATIONS

For the Three Months Ended March 31, 2006 (Ascent) and for the Period January 1, 2006 through January 18, 2006 (Transferred Assets)

Adjustment to Pro Forma Combined Statement of Operations:

- (A) To reflect 10% interest expense related to the Bridge Loan Financing for the period January 1, 2006 through January 18, 2006.

For the period from inception (October 18, 2005) through December 31, 2005 (Ascent) and for the year then ended December 31, 2005 (Transferred Assets)

Adjustments to Pro Forma Combined Statement of Operations:

- (B) To reflect Bridge Loan Financing costs associated with the \$1,600,000 Bridge Loan amortized into interest expense over the life of the loan.

Interest Expense:

10% annual interest expense	\$	160,000
Deferred Financing Costs (includes 10% commission to placement agent)		198,565
Bridge Loan Discount related to value of Bridge Rights		800,000
		<u>1,158,565</u>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and
Stockholders of Ascent Solar Technologies, Inc.

We have audited the accompanying Balance Sheet of Ascent Solar Technologies, Inc. (a Development Stage Company as defined by SFAS No. 7) as of December 31, 2005, and the related statements of operations, stockholders' deficit and cash flows for the period from inception (October 18, 2005) through December 31, 2005. This financial statement is the responsibility of the Company's management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement preparation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Ascent Solar Technologies, Inc. as of December 31, 2005, and the results of its operations and its cash flows for the period from inception (October 18, 2005) through December 31, 2005 in conformity with U.S. generally accepted accounting principles.

HEIN & ASSOCIATES LLP
Denver, Colorado

March 2, 2006

ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company as Defined by SFAS No. 7)

BALANCE SHEETS

	March 31, 2006 (unaudited)	December 31, 2005
ASSETS		
Current Assets:		
Cash	\$ 648,973	\$ 28,059
Deferred financing costs, net of amortization of \$39,499 (unaudited) and \$0	159,065	27,165
Related party receivable	3,380	
Other current assets	19,614	
	<hr/>	<hr/>
Total current assets	831,032	55,224
Fixed Assets, at Cost	21,018	
Less accumulated depreciation	(1,313)	
	<hr/>	<hr/>
	19,705	
Other Assets:		
Patents	29,477	
Deferred Offering Costs	475,753	141,007
	<hr/>	<hr/>
Total other assets	505,230	\$ 141,007
	<hr/>	<hr/>
Total Assets	\$ 1,355,967	\$ 196,231
	<hr/>	<hr/>
LIABILITIES & STOCKHOLDERS' DEFICIT		
Current Liabilities:		
Accounts payable	\$ 125,963	\$ 42,974
Related party payable	141,149	48,878
Accrued expenses	178,179	113,609
Note payable		200,000
Bridge loan, net of discount and amortization of \$159,140 (unaudited) and \$0	959,140	
	<hr/>	<hr/>
Total current liabilities	1,404,431	405,461
Commitments and Contingencies (Note 8)		
Stockholders' Deficit:		
Preferred Stock, \$0.0001 par value, 25,000,000 shares authorized, no shares outstanding		
Common Stock, \$0.0001 par value, 75,000,000 shares Authorized; 2,000,000 (unaudited) and 972,000 shares outstanding	200	97
Additional Paid in Capital	1,892,084	997,907
Deficit accumulated during the development stage	(1,940,748)	(1,207,234)
	<hr/>	<hr/>
Total stockholders' deficit	(48,464)	(209,230)
	<hr/>	<hr/>
Total Liabilities and Stockholders' Deficit	\$ 1,355,967	\$ 196,231
	<hr/>	<hr/>

See accompanying notes to financial statements.

ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company as Defined by SFAS No. 7)

STATEMENTS OF OPERATIONS

	For the Three Months ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005	For the Period from inception (October 18, 2005) through March 31, 2006 (Unaudited)
Related Party Contract Revenue	\$ 3,380	\$	\$ 3,380
Direct contract costs	2,571		2,571
Gross Margin on Revenue	809		809
General & Administrative Expenses	463,362	1,204,494	1,667,856
Research & Development Expenses	40,223		40,223
Loss from Operations	\$ (502,776)	(1,204,494)	\$ (1,707,270)
Other Income/(Expense):			
Interest expense	(230,738)	(2,740)	(233,478)
Net Loss	\$ (733,514)	\$ (1,207,234)	\$ (1,940,748)
Net Loss Per Share (Basic and diluted)	\$ (0.41)	\$ (1.58)	N/A
Weighted Average Common Shares Outstanding (Basic and diluted)	1,805,822	761,838	N/A

See accompanying notes to financial statements.

ASCENT SOLAR TECHNOLOGIES, INC.

(Development Stage Company as Defined by SFAS No. 7)

STATEMENTS OF STOCKHOLDERS' DEFICIT

For the Period from inception (October 18, 2005) through December 31, 2005
and for the Three Months ended March 31, 2006 (unaudited)

	Common Stock		Preferred Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at inception, October 18, 2005							
Proceeds from sale of common stock (November 3, 2005 @ \$.04 per share)	972,000	\$ 97			\$ 38,783		\$ 38,880
Stock Based Compensation:							
Founders Stock					933,120		933,120
Stock Options					26,004		26,004
Net loss						\$ (1,207,234)	(1,207,234)
Balance, December 31, 2005	972,000	\$ 97			\$ 997,907	\$ (1,207,234)	\$ (209,230)
Transfer of assets at historical costs (January 17, 2006 @ \$.03 per share) (unaudited)	1,028,000	103			31,097		31,200
Bridge loan rights (unaudited)					800,000		800,000
Stock Based Compensation:							
Stock Options (unaudited)					63,080		63,080
Net loss (unaudited)						(733,514)	(733,514)
Balance, March 31, 2006 (unaudited)	2,000,000	\$ 200			\$ 1,892,084	\$ (1,940,748)	\$ (48,464)

See accompanying notes to financial statements.

ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company as Defined by SFAS No. 7)

STATEMENTS OF CASH FLOWS

	For the Three Months Ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005	For the Period From inception (October 18, 2005) through March 31, 2006 (Unaudited)
Operating Activities:			
Net loss	\$ (733,514)	\$ (1,207,234)	\$ (1,940,748)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	1,313		1,313
Stock based compensation	63,080	959,124	1,022,204
Charge off of deferred financing costs to interest expense	39,499		39,499
Charge off of Bridge loan discount to interest expense	159,140		159,140
Changes in operating assets and liabilities:			
Related party receivables	(3,380)		(3,380)
Current assets	(19,614)		(19,614)
Accounts payable	82,989	42,974	125,963
Related party payable	92,271	48,878	141,149
Accrued expenses	64,570	113,609	178,179
Net cash used in operating activities	(253,646)	(42,649)	(296,295)
Investing Activities:			
Purchase of equipment	(14,774)		(14,774)
Patent activity costs	(4,520)		(4,520)
Net cash used in investing activities	(19,294)		(19,294)
Financing Activities:			
Proceeds from Bridge loan financing	1,600,000		1,600,000
Deferred financing costs	(171,400)	(27,165)	(198,565)
Deferred offering costs	(334,746)	(141,007)	(475,753)
Proceeds from note		200,000	200,000
Repayment of note	(200,000)		(200,000)
Proceeds from sale of common stock		38,880	38,880
Net cash provided by financing activities	893,854	70,708	964,562
Net Change in Cash and Cash Equivalents	620,914	28,059	648,973
Cash and Cash Equivalents at Beginning of Period	28,059		
Cash and Cash Equivalents at End of Period	\$ 648,973	\$ 28,059	\$ 648,973
Supplemental Cash Flow Information:			
Cash paid for interest	\$ 4,138	\$	\$ 4,138

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

	For the Three Months Ended March 31, 2006 (Unaudited)	For the Period from inception (October 18, 2005) through December 31, 2005	For the Period From inception (October 18, 2005) through March 31, 2006 (Unaudited)
Cash paid for income taxes	\$	\$	\$

See accompanying notes to financial statements.

F-10

ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company as Defined by SFAS No. 7)

(The Period Subsequent to December 31, 2005 is unaudited)

NOTE 1. ORGANIZATION AND BASIS OF PRESENTATION

Ascent Solar Technologies, Inc. ("Ascent" or the "Company") was incorporated on October 18, 2005 to commercialize certain PV technologies developed by ITN Energy Systems, Inc. ("ITN"), a Colorado corporation dedicated to the development of thin-film, photovoltaic ("PV"), battery and fuel cell technologies. ITN has invested considerable resources in the research and development of Copper-Indium-Gallium-Diselenide ("CIGS") PV technology. ITN formed Ascent to commercialize this CIGS PV technology for the space and near-space markets. In January 2006, in exchange for 1,028,000 shares of common stock of Ascent (bringing to 2,000,000 the total number of outstanding shares in the Company), ITN: (i) assigned its CIGS PV technologies and trade secrets ("Transferred Assets") to Ascent; (ii) licensed certain proprietary process, control and design technologies to Ascent; (iii) assigned or agreed to seek permission to assign certain contract rights relating to its CIGS PV business to Ascent; (iv) transferred certain key personnel to Ascent; (v) agreed to design and build Ascent's initial production line, which will utilize ITN's proprietary roll-to-roll processing tools, real-time intelligent processing controls and thin-film processing technologies; and (vi) agreed to provide administrative services such as facilities management, equipment maintenance, human resources and accounting.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation: The Company's activities to date have substantially consisted of raising capital and research and development. Accordingly, the Company is considered to be in the development stage, as defined in Statement of Financial Accounting Standards No. 7 ("SFAS No. 7"), Accounting and Reporting by Development Stage Enterprises.

Revenue Recognition: Revenue from cost-type contracts is recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the fixed fee. Revenue from fixed price-type contracts is recognized under the percentage-of-completion method of accounting, with costs and estimated profits included in contract revenue as work is performed. If actual and estimated costs to complete a contract indicate a loss, provision is made currently for the loss anticipated on the contract. Revenue from time and materials contracts is recognized as costs are incurred at amounts represented by the agreed-upon billing amounts.

Patents: To the extent the Company obtains or is awarded patents, patent costs will be amortized on a straight line basis over the legal life, or, over their estimated useful lives, whichever is shorter.

Deferred Financing Costs: Costs incurred in connection with obtaining debt are capitalized as deferred financing costs and are amortized to interest expense over the life of the related debt. As of March 31, 2006 and December 31, 2005, deferred financing costs were \$159,065 and \$27,165, respectively. For the three months ended March 31, 2006, amortization of deferred financing costs of \$39,499 was recognized as interest expense. No interest expense was recognized for the period from inception (October 18, 2005) through December 31, 2005 as the Bridge Loan financing was not completed until January 2006 (Note 9).

Deferred Offering Costs: The company capitalizes costs associated with the issuance of stock as they are incurred. Upon issuance of the stock, such issue costs are treated as a reduction of the offering proceeds and accordingly charged to common stock. During 2005, the Company incurred costs of \$141,007 related to a proposed initial public offering of stock that is to be completed subsequent to

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

March 31, 2006 (Note 9). Additional deferred offering costs were incurred for the three months ended March 31, 2006 of \$334,746.

Income taxes: Current income tax expense is the amount of income taxes expected to be payable for the current year. Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable earnings. Valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be related.

Risks and uncertainties: The Company's operations are subject to certain risks and uncertainties, including those associated with: the ability to meet obligations; continuing losses, fluctuation in operating results; funding expansions; strategic alliances; financing arrangement terms that may restrict operations; regulatory issues and competition. Additionally, U.S. government contracts may be terminated prior to completion of full funding by the U.S. government.

Use of estimates: The preparation of financial statements in conformity with generally accepted accounting principles 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Unaudited Information: The accompanying interim financial information as of March 31, 2006 and for the three months ended March 31, 2006 and the period from inception (October 18, 2005) through March 31, 2006 was taken from the Company's books and records without audit. However, in the opinion of management, such information includes all adjustments (consisting only of normal recurring accruals), which are necessary to properly reflect the financial position of the Company as of March 31, 2006 and the results of operations for the three months ended March 31, 2006 and the period from inception (October 18, 2005) through March 31, 2006. The results of operations for the three months ended March 31, 2006 are not necessarily indicative of those to be expected for the year ended December 31, 2006.

Net loss per common share: Statement of Financial Accounting Standards No. 128, "Earnings Per Share", provides for the calculation of "Basic" and "Diluted" earnings per share. Basic earnings per share includes no dilution and is computed by dividing income available to common stockholders by the weighted-average number of shares outstanding during the period. Diluted earnings per share reflect the potential of securities that could share in the earnings of the Company.

For the three months ended March 31, 2006 and for the period from inception (October 18, 2005) through December 31, 2005, total stock options in the amount of 594,000 and 408,000, respectively, are not considered in the computation of diluted earnings per share as their inclusion would be anti-dilutive.

Research and development costs: Research and development costs are expensed as incurred.

Stock based compensation: In December 2004, the FASB issued SFAS No. 123(R), "Share-Based Payment," which is a revision of SFAS No. 123, Accounting for Stock-Based Compensation. SFAS

No. 123(R) is effective for public companies for interim or annual periods beginning after June 15, 2005, supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and amends SFAS No. 95, Statement of Cash Flows. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro-forma disclosure is no longer an alternative. The Company adopted the new standard October 18, 2005 (Note 4).

Recent accounting pronouncements: In November 2004, the FASB issued SFAS 151, Inventory Costs, which revised ARB 43, relating to inventory costs. This revision is to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and wasted material (spoilage). This Statement requires that these items be recognized as a current period charge regardless of whether they meet the criterion specified in ARB 43. In addition, this Statement requires the allocation of fixed production overheads to the costs of conversion be based on normal capacity of the production facilities. SFAS 151 is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not believe the adoption of SFAS 151 will have a material impact on the Company's financial statements.

The FASB issued SFAS 153, Exchanges of Nonmonetary Assets, which changes the guidance in APB Opinion 29, Accounting for Nonmonetary Transactions. This Statement amends Opinion 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. SFAS 153 is effective during fiscal years beginning after June 15, 2005. The Company does not believe the adoption of SFAS 153 will have a material impact on the Company's financial statements.

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections a replacement of APB Opinion No. 20 and FASB Statement No. 3* ("Statement 154"). SFAS 154 requires retrospective application to prior periods' financial statements for changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS 154 also requires that a change in depreciation, amortization, or depletion method for long-lived, non-financial assets be accounted for as a change in accounting estimate effected by a change in accounting principle. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. The implementation of FAS 154 is not expected to have a material impact on the Company's financial statements.

NOTE 3: DEBT

Note payable

In advance of the Bridge Financing, on November 11, 2005 the Company took a \$200,000 short-term, 10% accrued interest loan from Paulson Investment company. At December 31, 2005 the Company had \$200,000 due on the Note and accrued interest payable of \$2,740. On February 1, 2006, the loan was repaid using proceeds from the Bridge Financing.

Bridge Financing

On January 18, 2006, the Company completed a \$1.6 million bridge loan ("Bridge Financing") from lenders ("Bridge Noteholders") to help meet the Company's working capital needs. The loans ("Bridge Loans") accrue interest at an annual rate of 10% and are due and payable on the earlier of January 2007 or the completion of a public offering of equity securities with gross proceeds of at least \$5,000,000 ("Qualified Public Offering"). If a Qualified Public Offering is not completed by January 2007, the Bridge Noteholders will have the right to convert the principal and unpaid interest into shares of the Company's common stock at a price of \$3.00 per share.

In connection with the Bridge Loans, the Company issued rights ("Bridge Rights") to the Bridge Noteholders. One Bridge Right was issued for every \$25,000 loaned. If a Qualified Public Offering occurs before January 2007, holders of Bridge Rights will be entitled to receive units (or other securities) identical to the units (or other securities) being offered in the Qualified Public Offering. The holder of each Bridge Right will be entitled to receive that number of units (or other securities) equal to \$25,000 divided by the initial public offering price of the units or other securities. If a Qualified Public Offering is not completed by January 2007, then each Bridge Right may be exercised for 8,333 shares of the Company's common stock; provided, however, that if at any time before expiration of the Bridge Rights, the Company has a class of equity securities traded on any exchange or quotation system, then each Bridge Right may be exercised for \$25,000 of such equity securities. The Bridge Rights expire in January 2008.

Paulson Investment Company, Inc. acted as the placement agent for the Bridge Financing for a commission fee equal to 10% of the gross proceeds from the Bridge Financing. The Company received the \$1,600,000 Bridge Financing net of the commission to Paulson of \$160,000. The Company has classified this cost as deferred financing costs.

The bridge loan and the bridge rights were allocated for accounting purposes based on the relative fair values of the bridge loan without the bridge rights and the bridge rights themselves at the time of issuance. The actual value of the bridge loan and the bridge rights was computed at \$1,600,000 each for a total value of \$3,200,000. Since they were each of equal value, the \$1,600,000 of proceeds was allocated 50% to the bridge loan and 50% to the bridge rights (i.e. \$800,000 each). The bridge rights of \$800,000 were accounted for as paid-in capital. The discount to the bridge loan of \$800,000 is reflected on the balance sheet net of the \$1,600,000 bridge loan.

The discount for the bridge rights (\$800,000) is being amortized into interest expense over the life of the loan. For the three months ended March 31, 2006, the Company recorded \$159,140 in interest expense related to this discount.

NOTE 4: STOCKHOLDERS' DEFICIT

The Company's authorized capital stock consists of 75,000,000 shares of common stock, \$0.0001 par value, and 25,000,000 shares of preferred stock, \$0.0001 par value. As of December 31, 2005, the Company had 972,000 shares of common stock and no shares of preferred stock outstanding.

In November 2005, the Company issued 972,000 shares of common stock at a price of \$0.04 per share. The Company has recorded for financial statement purposes the 972,000 shares at a fair value of

\$1.00 per share. The statement of operations reflects compensation expense of \$933,120 related to the recording of this stock transaction. In January 2006, in consideration of certain asset transfers, licenses and service agreements (see Note 1), the Company issued 1,028,000 shares of common stock to ITN Energy Systems, Inc.

Preferred stock, \$0.0001 par value per share, may be issued in classes or series. Designations, powers, preferences, rights, qualifications limitations and restrictions are determined by the Company's Board of Directors.

NOTE 5: STOCK BASED COMPENSATION

Stock Option Plan

The Company's 2005 Stock Option Plan (the "Option Plan"), as amended, provides for the grant of incentive or non-statutory stock options to the Company's employees, directors and consultants. A total of 750,000 shares of common stock are reserved for issuance under the Option Plan. The Board of Directors and the Company's stockholders approved the plan in October and November 2005, respectively.

The Option Plan is administered by the Compensation Committee of the Board of Directors, which determines the terms of the options, including the exercise price, expiration date, vesting schedule and number of shares. The term of any incentive stock option granted under the Option Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of the Company's voting stock. The exercise price of an incentive stock option granted under the Option Plan must be equal to or greater than the fair market value of the shares of the Company's common stock on the date the option is granted. An incentive stock option granted to an optionee owning more than 10% of the Company's voting stock must have an exercise price equal to or greater than 110% of the fair market value of the Company's common stock on the date the option is granted. The exercise price of a non-statutory option granted under the Option Plan must be equal to or greater than 85% of the fair market value of the shares of the Company's common stock on the date the option is granted.

In November 2005, the Company granted options to purchase 408,000 shares of common stock under the Option Plan, all at an exercise price of \$0.10 per share. Of these options, 34,000 are to vest on December 31, 2005; 146,000 of such options are to vest on December 31, 2006; 114,500 of such options are to vest on December 31, 2007 and 113,500 of such options are to vest on December 31, 2008. As of December 31, 2005, 342,000 shares remain available for future grants under the Option Plan.

Subsequent to December 31, 2005, an additional 201,000 options were granted and 15,000 shares were cancelled. As of March 31, 2006, there were outstanding options to purchase 594,000 shares of common stock under the Option Plan.

Stock Based Compensation

The Company accounts for share-based payments under the provisions of Statement of financial Accounting Standards No. 123 (revised 2004), "Share-Based Payment," ("SFAS 123(R)") which

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors including employee stock options based on estimated fair values.

SFAS 123(R) requires companies to estimate the fair value of share-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service period in our Statement of Operations. Stock-based compensation expense recognized in the Statement of Operations for the period from inception (October 18, 2005) through December 31, 2005 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

For purposes of determining estimated fair value of share-based payment awards on the date of grant under SFAS 123(R), we used the Black-Scholes option-pricing model ("Black-Scholes Model"). The Black-Scholes Model requires the input of highly subjective assumptions. Because our employee stock options may have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models may not provide a reliable single measure of the fair value of its employee stock options. In addition, Management will continue to assess the assumptions and methodologies used to calculate estimated fair value of share-based compensation. Circumstances may change and additional data may become available over time, which result in changes to these assumptions and methodologies, which could materially impact our fair value determination.

The weighted average estimated fair value of employee stock options granted for the three months ended and during the period from inception (October 18, 2005) through December 31, 2005 was \$2.13 and \$1.94 per share, using the Black-Scholes Model with the following weighted average assumptions:

	For the three months Ended March 31, 2006	For the Period from inception (October 18, 2005) through December 31, 2005
Expected volatility	86.1%	81.1%
Risk free interest rate	4.75%	4.50%
Expected dividends		
Expected life (in years)	6.6	6.1

We based our estimate of expected volatility, risk free interest rate and expected term on disclosures made by peers. Forfeitures were estimated, based on historical employee retention experience among staff of similar position to those granted options in our plan.

Stock based compensation recognized under SFAS 123(R) for the three months ended March 31, 2006 was \$63,080 of which \$22,668 related to options granted to officers and directors and \$40,412 to outside providers. Stock-based compensation recognized under SFAS 123(R) for the period from inception (October 18, 2005) through December 31, 2005 was \$26,004, of which \$12,704 related to options granted to officers and directors and \$13,300 to outside providers. The stock-based

Edgar Filing: Ascent Solar Technologies, Inc. - Form 424B4

compensation expense is calculated on a straight-line basis over the vesting periods of the related options.

In future periods, the compensation expense that we record under SFAS 123(R) may differ significantly from what we have recorded in the current period, as we build company-specific performance history.

As of December 31, 2005, we have approximately \$664,000 of total compensation cost (\$324,000 to officers and directors and \$340,000 to outside providers) related to nonvested awards not yet recognized and expect to recognize these costs over a weighted average period of 3.0 years.

The following schedule summarizes activity in our stock-option plan (shares in thousands):

	<u>Stock Option Shares</u>	<u>Stock Options Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Life in Years</u>
Outstanding at October 18, 2005	0	\$ N/A	
Grant	408	0.10	
Exercised			
Restrictions lapsed			
Canceled			
Outstanding at December 31, 2005	408	\$ 0.10	9.62
Grant	201	\$ 4.25	
Exercised			
Restrictions lapsed			
Canceled	(15)	(.10)	
Outstanding at March 31, 2006	594	\$ 1.50	8.89
Exercisable at December 31, 2005	34	\$ 0.10	9.62
Exercisable at March 31, 2006	61	\$ 3.10	8.49