

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

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

For the transition period from _____ to _____

Commission file number 000-55184

NORTHERN POWER SYSTEMS CORP.

(Exact name of registrant as specified in its charter)

British Columbia, Canada

(State or other jurisdiction of
incorporation or organization)

29 Pitman Road

Barre, Vermont

(Address of principal executive offices)

98-1181717

(I.R.S. Employer
Identification No.)

05641

(Zip Code)

Registrant's telephone number, including area code: (802) - 461-2955

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class
Common Shares, no par value per share

Name of Each Exchange On Which Registered
Toronto Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

N/A
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-K (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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

The aggregate market value of common shares held by non-affiliates of the registrant based on the price at which the common shares were last sold as of June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter, and based on an exchange rate of CDN \$0.77 per \$1.00, was approximately \$1.7 million. For purposes of this computation, all executive officers and directors have been deemed to be affiliates. Such determination should not be deemed to be an admission that such executive officers and directors are, in fact, affiliates of the Registrant.

As of March 30, 2017, there were 23,613,884 shares of the registrant's common shares, no par value, outstanding.

Documents Incorporated by Reference

The registrant intends to file a proxy statement pursuant to Regulation 14A not later than 120 days after the close of the fiscal year ended December 31, 2016. Portions of such proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. You can generally identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions that concern our expectations, strategy, plans or intentions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition or results of operations. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in “Risk Factors” and elsewhere in this Annual Report on Form 10-K. Accordingly, you should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those projected in the forward-looking statements. Forward-looking statements contained in this Annual Report on Form 10-K include statements about:

- our ability to compete with other companies that are developing or selling products and services that are competitive with ours;
- our ability to grow our active customer base;
- our ability to establish new partnerships;
- our ability to expand into new markets;
- our ability to maintain or source third-party manufacturing and supply chains;
- the timing of expected announcements regarding feed-in-tariff and other governmental programs;
- our ability to attract and retain key personnel; and
- other factors discussed elsewhere in this Annual Report on Form 10-K.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Annual Report on Form 10-K. In addition, in light of these risks and uncertainties, the matters referred to in the forward-looking statements contained in this Annual Report on Form 10-K may not occur.

The forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This Annual Report on Form 10-K also contains statistical data, estimates and forecasts that are based on independent industry publications or other publicly available information, while other information is based on our internal sources. Although we believe that these third-party sources referred to in this Annual Report on Form 10-K are reliable, we have not independently verified the information provided by these third parties. While we are not aware of any misstatements regarding any third-party information presented in this Annual Report on Form 10-K, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under “Risk Factors.”

Unless the context otherwise requires, the terms “we,” “us,” “the Company” and “our” in this Annual Report on Form 10-K refer to Northern Power Systems Corp. and its subsidiaries.

PART I

Item 1. Business

Company Overview

We are a provider of advanced renewable power generation and power conversion technology for the distributed energy sector. We design, manufacture and service a suite of proven permanent magnet direct-drive (“PMDD”) wind turbine platforms for the distributed wind market, as well as power converters for battery energy storage applications. We are now developing integrated energy storage solutions to provide end users with turn-key distributed energy solutions. Historically we licensed our utility-class wind turbine platform, which uses the same PMDD technology as our distributed turbines, to large manufacturers. In October 2016 we completed the transfer of these technology rights to one of our partners, which will enable us to focus our efforts on the distributed energy segment. With our predecessor companies dating back to 1974 we have decades of experience in developing proven innovative energy solutions in the power generation and conversion space.

Our PMDD wind turbine technology is based on a simplified architecture that utilizes a unique combination of a permanent magnet generator and direct-drive design. The permanent magnet generator provides higher efficiency and higher energy capture than units that utilize a traditional gearbox design. Importantly, our direct-drive turbine design requires significantly fewer moving parts than traditional geared turbines, which increases reliability due to reduced maintenance and downtime costs. Since our early days of pioneering this technology, PMDD has become an industry standard.

The substantial majority of our current sales are in the small wind subset of the distributed wind market, which is commonly known to consist of turbines with rated capacities of 500 kW output or smaller. Based on the number of turbines that we have sold and installed to date, we consider ourselves a leader in the U.S., U.K., and Italy in the largest sub-segment of this market in terms of energy output, turbines ranging in size from 50 kW to 100 kW. Since the introduction of our second generation 60 kW and 100 kW PMDD wind turbines in late 2008, we have shipped over 600 of these turbines. To date, these units have run for over fourteen million hours in the aggregate. Our distributed wind customers include financial investors and project developers, but also the end users themselves in application that provide power for farms, schools, municipalities, small business, remote villages, and U.S. military installations.

We had developed a 2 MW turbine platform with three wind-speed regime variants based upon our PMDD technology, of which the 2.3 MW variant is certified to International Electrotechnical Commission, or IEC, standard 61400-1 by Det Norske Veritas, or DNV, a globally recognized certification firm.

On October 26, 2016, we entered into a definitive agreement for WEG Electric Corp. and WEG Equipamentos Eléctricos S.A. (collectively, “WEG”), a former licensor of our 2 MW turbine platform to acquire certain of our utility wind assets. Under the agreement, the proven utility scale direct drive technology we developed for applications over 1.5 MW will be solely owned by WEG and its affiliates. All related assets and liabilities, including the patent portfolio for utility wind applications greater than 1.5 MW and the engineering team largely responsible for developing this technology, was acquired by WEG. WEG will continue to compensate us under the existing arrangement paying royalties for sales in South America resulting in future payments of up to approximately \$10.0 million, of which a minimum of \$3.0 million were guaranteed and have been collected. Additionally, should WEG be successful in its plans to expand its utility wind business internationally, it will pay us up to \$17.5 million in royalty payments over the next decade for turbines shipped anywhere outside of its current market in South America.

Regarding the power electronics side of our business, we have been developing our power converter technology since the early 2000s. Our capabilities in this area resulted from the complex power conversion technology required for wind power generations. We currently sell our MW power converters for a range of applications under the branded name of FlexPhase. Our power electronics products are incorporated into our distributed wind

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turbines, and also sold independently for use in microgrids and energy storage projects. Our FlexPhase products are modular in nature allowing for a common platform to service multiple applications. As of December 31, 2016, we have deployed over 155 MW of products based on this technology, primarily in connection with our wind turbine designs. Currently, we are actively commercializing sales of our power converters products as part of integrated battery energy storage systems (“BESS”), working with various battery manufactures and systems integrators.

In addition to wind turbine and productized energy storage solutions, we are capable of providing technology development services to customers for more complex energy storage, microgrid, and grid stabilization situations. While we do not focus on this as a part of our core business, these capabilities and expertise serve as a differentiator for our company with our customers.

For the years ended December 31, 2016 and 2015, we generated \$35.9 million and \$54.0 million in revenue, respectively. For the years ended December 31, 2016 and 2015 we incurred net losses of \$8.9 million and \$7.8 million, respectively.

We are headquartered in Barre, Vermont, and lease additional office space in Burlington, Massachusetts, Zurich, Switzerland, Bari, Italy, and Cornwall, U.K. We were originally incorporated in Delaware on August 12, 2008 as Wind Power Holdings, Inc., or WPHI. In February 2014, WPHI filed a Registration Statement on Form 10 (File No. 001-36317) with the SEC to register the shares of common stock of WPHI, which became effective on June 3, 2014. On April 16, 2014, we (as WPHI) completed a reverse takeover transaction, or RTO, with Mira III Acquisition Corp., or Mira III, a Canadian capital pool company incorporated in British Columbia, Canada, whereby all of the equity securities of WPHI were exchanged for common shares and restricted voting shares of Mira III, which became the holding company of our corporate group. In connection with the RTO, Mira III changed its name to Northern Power Systems Corp., the WPHI business became Mira III’s operating business, and the WPHI directors and officers became Mira III’s directors and officers.

Upon completion of the RTO, Northern Power Systems Corp. succeeded to WPHI’s status as a reporting company under the U.S. Securities and Exchange Act of 1934, as amended, or the Exchange Act, which permits us to continue to prepare our financial statements in accordance with generally accepted accounting principles in the U.S., or GAAP. Our common shares were listed on the Toronto Stock Exchange under the Symbol “NPS”.

Our Products and Services

We have had three operating business lines, which include product sales and service, technology licensing, and technology development, in addition to a shared services segment.

Product Sales and Service

Distributed Wind

We have developed two wind turbine platforms for the distributed wind market which we manufacture and sell on a global basis. Our 100 kW and 60 kW turbines, which we market under the names NPS 100 and NPS 60, generate electricity for use by farms, remote villages, schools, small businesses and U.S. military installations. These wind turbines are currently generating electricity in the U.S., U.K., Italy, Canada, South Korea, and certain Caribbean nations, including the Bahamas and the U.S. Virgin Islands. The NPS 100-21 is designed for high wind sites and is also available in an Arctic configuration for use in extreme temperatures. The NPS 100-24 is designed to deliver optimal power generation in low to moderate wind speeds. For the European market, we offer the NPS 60 turbine, which is designed to capture optimal power generation at lower wind speeds and targeted at markets where grid connection capacity is a constraint. All of our distributed-class wind turbines are available with three different tower heights to maximize the benefits from siting conditions and comply with permitting requirements.

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Our third generation of turbines has a larger swept area and superior aerodynamic blade technology over our previous models, which, based on our engineering modeling, yields improvements in energy capture of approximately 15% over our second generation turbine. It also reduces our customers' total cost of ownership as the cost of installation has reduced. In addition, we designed the turbine nacelle to be smaller and require fewer components, and as such it reduced our costs to produce the turbines.

Our customers are typically responsible for installing turbines they purchase from us, and we generally perform commissioning services to ensure that the turbine has been properly installed and is ready to begin generating power upon installation. We also provide, through our employees or contract with third-party professional full scope installation as an additional service offering. We typically provide a two-year warranty for our wind turbines that commences after commissioning and offer three more years of extended warranty for an additional charge. During the warranty period, we monitor the turbines 24 hours a day and cover parts and labor for unscheduled repairs and replacement.

We also enter into operations and maintenance, or O&M, agreements with customers under which we provide scheduled and unscheduled maintenance. These O&M agreements typically range from one to three years, and the customer pays us a fixed fee for scheduled maintenance and receives a 20% discount from our commercial rates for unscheduled maintenance. In certain markets, we have begun offering a ten-year O&M agreement under which we provide scheduled and unscheduled maintenance and guarantee the performance of the turbine to particular specifications during the term, and we receive a variable fee based on the electricity generated by the turbines subject to the agreement. We utilize both our employees and certified third-party contractors to provide warranty, maintenance and support services. Our use of a network of certified service partners who are located in geographic proximity to our customers reduces our costs of providing these services and also enables us to quickly dispatch components and technicians to the particular site.

We may offer annual availability guarantees to customers who exceed minimum unit purchase requirements and purchase an O&M agreement. The offer guarantees annual availability as a percentage of total possible availability adjusted based on factors including downtime for scheduled maintenance, grid unavailability, and wind speed and weather conditions falling outside of operation range. We may also guarantee power output levels at varying wind speeds. The settlement of claims against the guaranty may take the form of liquidated damages or discounts on future product purchases. To date, we have not had to pay any significant monetary damages for non-performance or underperformance.

Utility Wind

To serve the utility wind market, we had developed a platform of turbines with different power ratings in the 2 MW range and different rotor sizes designed to meet customer requirements in a range of wind classes, which were marketed under the name NPS 2.X. Two prototypes of our 2.3 MW turbine, which has received type certification to IEC standard 61400-1 from DNV, were sold and installed to operators of a Michigan wind farm. Based on the success of our prototypes, in 2013, we entered into a strategic partnership with WEG pursuant to which we licensed our 2.1 MW, 2.2 MW and 2.3 MW turbine designs to WEG in Brazil on an exclusive basis and in the rest of South America on a non-exclusive basis.

On October 26, 2016, we entered into a definitive agreement for WEG to acquire certain of our utility wind assets. Under the agreement, the proven utility scale direct drive technology we developed for applications over 1.5 MW will be solely owned by WEG and its affiliates. All related assets and liabilities, including the patent portfolio for utility wind applications greater than 1.5 MW and the engineering team largely responsible for developing this technology, was acquired by WEG. WEG will continue to compensate us under the existing arrangement paying royalties for sales in South America resulting in future payments of up to approximately \$10.0 million, of which a minimum of \$3.0 million were guaranteed and have been collected. Additionally, should WEG be successful in its plans to expand its utility wind business internationally, it will pay us up to \$17.5 million in royalty payments over the next decade for turbines shipped anywhere outside of its current market in South America.

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Power Converters, Energy Storage Solutions

In addition to wind turbines, we are commercializing sales of our power converters based on our proprietary FlexPhase technology for complex energy applications ranging from 250 kW to over 5 MW. These energy applications include both grid-connected and off-grid energy storage markets as well as microgrid applications, grid stabilization and power quality enhancement. FlexPhase is our modular power converter platform and uses a proprietary architecture to reduce stress on critical power components. We have upgraded our FlexPhase converter platform such that it can better integrated into BESS applications.

In 2016 we commenced commercializing integrated energy storage solutions with certain battery storage technology partners. Our primary focus is to develop integrated solutions involving their battery technology and management software with our FlexPhase converters, controls expertise and ability to provide full-scope installation services. Currently we are seeing areas in the North America market where the demand for such offerings is evolving. This is a more nascent market for us and as such we will continue to evaluate our investment, approach to market and partners in this space.

Services

We provide technical support for our SmartView supervisory control and data acquisition system. SmartView is a remote monitoring and control system which we developed to allow users to monitor and manage system operation, issue control commands, respond to faults and alarms, and capture energy system data.

Technology Licensing

WEG Equipamentos Elétricos S.A.

Before the sale of our utility wind assets in October 2016, we had a license agreement with WEG in which we provided WEG with the designs for our 2.1 MW, 2.2 MW and 2.3 MW wind turbines in the South American market. Our contract with this customer provided for payment of \$3.4 million in milestone-based license fees. The Company also expected to recognize approximately \$10 million to \$15 million in revenue for royalties on turbines shipped by WEG over a period of time not to exceed ten years for the license of our 2.X MW platform exclusively in Brazil and non-exclusively in the rest of South America. Prior to the sale that was discussed above, WEG had paid the Company \$3.4 million in license fees and approximately \$2.4 million in royalties. We completed a number of technology transfer milestones under the agreement, and WEG had accumulated a backlog of orders comprising over 600 MW of turbine installations for the sale of turbines built using our design.

Technology Development Services

Our engineering team has provided technology development services that are targeted to the global wind power market as well as other advanced energy markets. Our team of engineers has expertise in the power systems and wind turbine design, manufacturing and deployment experience with core competencies in power electronics, testing, and diagnostics. Applications of our technology development services have included energy storage, microgrids, and grid stabilization and have been delivered to a wide range of industries. When we have provided these services, our customers have typically owned the developed technology for a limited field of use, but we typically maintain a license for all other applications and all other markets.

In February 2014, we entered into a development agreement with WEG to design and develop a 3.3 MW wind turbine. The development agreement provided for milestone-based development fees payable to us by WEG. This agreement was cancelled as part of the utility asset sale to WEG discussed above.

Shared Services

Our shared services segment represents our general and administrative departments. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — How We Conduct Our Business — Shared Services.”

Wind Industry Overview

Wind power has been one of the fastest growing sources of electricity generation globally over the past decade. The Global Wind Energy Council, or GWEC, in its Global Wind Statistics 2016 report, states that installed capacity of wind power deployments globally has increased more than 300% since 2008. Furthermore, according to the U.S. Department of Energy, or the DOE, 2015 Distributed Wind Market Report, between 2003 and the end of 2015, over 75,000 wind turbines were deployed in distributed application across all 50 states, Puerto Rico, and the U.S. Virgin Islands, totaling 934 MW in cumulative capacity. In 2015, 28 states added 28 MW of new distributed wind capacity, representing 1,713 units and \$102 million in investment. The growth in the industry is largely attributable to increasing cost competitiveness with other power generation technologies and growing public and governmental support for renewable energy driven by concerns regarding the security of conventional fossil fuel energy supply, as well as the environmental benefits of wind power. National targets for wind and other renewables are also driven by individual countries' efforts to produce energy domestically, increase employment, build domestic industries, and replace other forms of power generation, such as coal and nuclear.

As global demand for electricity generation from wind power has increased, technology enhancements — supported by government incentives — have yielded increased power output while the cost of wind power has dropped by more than 90% since the 1980s, according to the Revolution Now 2016 Update (September 2016) report, or the Revolution Now report, by the DOE. According to the Renewables 2016 Global Status Report, or the 2016 Renewables Report, published by the Renewable Energy Policy Network, or REN21, wind power is playing a major role in power supply in an increasing number of countries, including: China, the U.S., Germany, India, Spain, the U.K., Canada and France. The majority of this wind power expansion is currently being driven by installations of utility-class wind turbine farms. These farms generate electricity to feed into the electrical grid, supplying a utility company with energy that can be sold to customers. The utilities that purchase such power still have additional costs to deliver the electricity to the source of use. As such, utility-class power costs are measured as only costs to generate power.

Wind power also is expanding in the distributed wind market. This market is made up of turbines connected on the customer side of the power meter, designed to meet onsite electrical loads as well as to feed into distribution or microgrids, thereby reducing energy costs at the site of use. The comparable cost of distributed wind energy is the cost for landed power, which is the cost for other forms of energy generation to be produced as well as delivered to the location of consumption.

A subset of the distributed wind market is the small wind market, with small wind turbines commonly defined as those with rated capacities between 1 kW and 500 kW. We currently sell distributed wind turbines with rated capacities of 60 kW and 100 kW. We estimate that our current target addressable market in distributed wind is approximately 50% of the market in Italy and 20% of the market in the U.K. and in the U.S. We believe there are addressable geographic markets for our distributed wind products outside of these three geographic markets, and to date have sold products in certain of these other geographies such as the Caribbean and South Korea, but we are not able to estimate the size of these markets.

Both utility and distributed wind energy generation have seen comparable improvements in technology driving their cost effectiveness and expanding adoption.

Key Drivers of Demand for Wind Power and Power Systems

We believe the following factors have driven, and will continue to drive, the growth of wind power globally:

Requirement for New Electricity Generating Capacity

The IEA in its World Energy Outlook 2016 Factsheet says that as a result of transformations in the global energy system taking place over the next several decades and with the current low natural gas price environment, along with the increased sensitivity regarding environmental concerns, it is expected that natural gas and renewable energy, including wind power, will be the future choice for new electricity generating capacity.

Governmental Policies and Incentives

Government incentives continue to be one of the main drivers for developing wind energy technology and increasing capacity. Although government support programs differ from country to country, a number of countries have implemented incentive schemes, thus providing various types of subsidies to wind power developers and long-term tariffs. Historically, we and our customers have benefited from fiscal incentives applicable to investments in the wind power industry by federal, state and local governments in the U.S. and Europe. Changes in these policies have affected, and will continue to affect, the investment plans of our customers and us, as well as our business, financial condition and results of operations.

Currently there are certain feed-in-tariff regimes in Italy, the U.K. and Indiana, U.S. supporting the installation and operation of distributed-class wind turbines. Since these regimes were clarified recently relative to the sales cycles of our distributed-class turbines well suited for these installations, our orders for distributed-class turbines continues to be strong. Published information from the U.K. indicates that the feed-in-tariff rates and deployment caps by rated capacity have declined as recent as January 1, 2017 and will decline further on a quarterly basis. The Italian authorities have extended the feed-in-tariff until December 31, 2016 with an ability to grid connect turbines and an eligibility to the current feed-in-tariff until June 30, 2017.

With bipartisan support the Renewable Electricity Production Tax Credit (PTC) phasedown has been enacted. These tax credits are now being phased out on an 80-60-40 schedule, ending after 2019. Eligible properties, generally personal, that begin construction before December 31, 2018, December 31, 2019 and December 31, 2020 will have their Investment Tax Credit (ITC) amounts reduced from 24%, 18% and 12% thereafter.

Our third generation distributed turbine offers customers meaningfully improved economics that make the turbines more relevant for regions that do not have economic incentives. As we continue sales in our core markets we expect to continue to expand our product offering and sales force to increase our sales in other regions.

Continued Improvements in Wind Power Technologies

Wind turbine technology has evolved significantly over the last 20 years and technological advances are expected to continue in the future. These technological advances include:

- advances in wind power generation technology, particularly the introduction and advancement of permanent magnet direct-drive wind turbines, which have increased power production and efficiency per turbine;
- advances in wind turbine blade aerodynamics and development of variable speed generators to improve conversion of wind energy to electricity over a range of wind speeds, resulting in higher capacity factors and increased capacity per turbine;
- advances in turbine height, resulting in the ability to benefit from greater wind speeds at higher elevations;
- advances in remote operation and monitoring systems;
- improvements in wind monitoring and forecasting tools, allowing for more accurate prediction of electricity generation and availability and for better system management and reliability; and
- advances in turbine maintenance, resulting in longer turbine life.

Global Commitment to Reduce Climate Change

Growing Environmental Concerns

The growing concern over the environmental consequences of greenhouse gas emissions has contributed to the growth of wind power generation. According to the World Meteorological Organization, 2016 ranked as the

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warmest year on record, and sixteen of the seventeen warmest years have all occurred in the 21st Century. Among the largest emitters of greenhouse gases in the world, the U.S. and the E.U. have experienced growing awareness of climate change and other effects of greenhouse gas emissions, which has resulted in increased demand for emissions-free electricity generation. As an emissions-free electricity source, wind power is an attractive alternative that is capable of addressing these growing environmental concerns. Globally, GWEC, in its Global Wind Energy Outlook 2016, estimates that annual reductions in CO₂ from existing wind power plants were about 521 million tons in 2015. By 2030 wind power could reach 2,110 GW, and supply up to 20% of global electricity, creating 2.4 million new jobs and reducing CO₂ emissions by more than 3.3 billion tons per year, and attract annual investment of about €200 billion.

In December 2015, at the U.N. Framework Convention on Climate Change in Paris, known as COP 21, an agreement was reached creating a fundamentally new course in the global climate control effort. The agreement reaffirmed the goal of limiting the increase in global temperatures to below 2 degrees Celsius, while urging countries to limit the increase to 1.5 degrees Celsius. To achieve this goal, the agreement also addressed establishing binding commitments to achieve the overall goal as well as regular reporting on progress, reaffirmed the obligations of developed countries to support developing countries, extend the annual support to 2025 as well as several other initiatives.

During the U.S. presidential election campaign, President Trump made comments suggesting that he was not supportive of various clean energy programs and initiatives including the U.N. Framework Convention on Climate Change in Paris, designed to curtail global warming. It remains unclear what the Trump Administration will or will not do with respect to these programs and initiatives.

Increasing Obstacles for Conventional Power Projects

Coal and nuclear power projects continue to face significantly increasing capital costs due to steep environmental hurdles and regulatory uncertainty. These hurdles range from complications relating to the disposal of spent fuel to concerns over operational safety and the need to fulfill carbon control requirements. Wind power, in contrast, does not create solid waste by-products, emit greenhouse gases or deplete non-renewable resources during operation, and, as a result, is an attractive alternative to fossil fuel-fired power projects. The USEIA in its Annual Energy Outlook 2016 examined its Reference case and projected that electricity consumption will increase at an average annual rate of 0.4% from 2015 to 2040, nearly in line with expected population growth. Continuing a recent trend toward lower levels of carbon-intensive generation, natural gas and renewable generation meet almost all of the increase.

Wind and solar generation account for nearly two-thirds of the growth in renewable generation. Solar is the fastest-growing renewable generation source, but wind accounts for the largest absolute increase in generation. Wind becomes the single largest source of renewable generation by 2040, supplanting hydropower as the largest renewable generation source.

Outlook for Energy Prices

We expect that increased demand for electricity coupled with a finite supply of fossil fuels, and capacity and distribution constraints, including volatility in fossil-fuel prices, will result in volatility, but generally continued increases, in electricity prices. The recent shale gas boom has kept current natural gas prices in the U.S. relatively low, while the rest of the world continues to see significantly higher prices. Increasing demand from Asia and a future export market for liquefied natural gas from the U.S. is expected to drive gas price increases throughout the world in coming years. The IEA estimates a reversal of excess gas in the U.S. beginning in 2017 as exports pick up, combined with more gas use in transportation, to drive prices steadily higher into the 2020s. Additionally, electricity generation from natural gas is either exposed to volatility in natural gas prices or is priced at a premium for medium-term, fixed-price gas supply contracts. Wind power projects, in contrast, typically contract for long periods (e.g., 20 years) at fixed prices. As a result, and given the lack of fuel costs

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associated with wind power projects, we believe that utility-class wind power has become cost competitive with conventional power projects, and that this cost competitiveness will contribute to further growth in wind power.

In the distributed generation market for smaller turbines, we expect that the opportunity for land owners to generate electricity both for personal and business use, as well as to sell net energy produced back to the local utility, will continue to drive demand for wind power. In remote, off-grid locations where a connection to the utility grid is not available, we believe that hybrid systems that combine a wind turbine with an energy source such as a diesel generator, battery energy storage, or photovoltaic system, will continue to proliferate to provide an alternative to higher energy prices.

Price of Other Renewables

As highlighted in the Bloomberg New Energy Outlook 2016, LCOE for renewables, including distributed wind and solar, continues to decrease while the same measure for fossil fuel increases. The LCOE — which includes the capital, operating, and any financing costs of an NPS 100 kW wind turbine over at least a 20-year operating life — has reached parity or better with electricity purchased from the grid. As highlighted in the Bloomberg New Energy Outlook 2016, looking out to 2040 wind and solar costs drop. These two technologies become the cheapest ways of producing electricity in many countries during the 2020s and in most of the world in the 2030s. It is expected that onshore wind costs fall by 41% by 2040.

Our Strategy

We are focused on being a leader in the commercialization of distributed-wind turbines, and strategically leveraging our proprietary technology by expanding our product offerings in power generation and power conversion. Key elements of our strategy include:

Continuing to drive sales growth in distributed wind

We intend to expand our business in the growing distributed wind power market, by improving the economics of our product offerings for our customers and deepening our relationships with our existing customers as well as adding new customers. In addition, we plan to capitalize on the growth opportunities for distributed wind power by furthering our technology leadership, assisting in third-party financing solutions, and customizing our offerings to efficiently reach targeted new geographies.

Pursue growth opportunities for power conversion product line

We have developed and qualified our FlexPhase modular power converters to meet varying energy management and storage system needs by engineering a highly flexible, modular system architecture and integrating scalable controls. Since these power converters were developed under constrained spatial specifications, they have greater power density and represent more advanced technology than most utility-scale power converters currently in the market. As a result, we believe that our power converters can be adapted to a wide variety of applications. Going forward, we intend to continue to customize our proprietary power conversion technology for developing applications and market our products to pursue revenue opportunities outside of use in wind turbines, such as the battery energy storage system (BESS) market. With the increase in use of renewable energy coupled with the improved price and performance of batteries, the need for battery energy storage is growing and we are pursuing opportunities to use our FlexPhase technology to address this need. These energy applications include both grid-connected and off-grid energy storage markets, as well as microgrid applications, grid stabilization and power quality enhancement. We are currently working with advanced battery technology suppliers and energy management companies to cost-effectively market our products and technologies in BESS and related markets. As we proceed, we will continue to review our performance within these applications and markets to determine the appropriate level of resources we commit.

Maintain our technology leadership and expand our intellectual property position

We believe that we have established technology leadership through decades of experience in designing, manufacturing, and deploying wind turbines ranging in size from 60 kW to 2.3 MW, all of which utilize our PMDD technology. This technology leadership resulted in over 85 patents and patent applications worldwide covering power electronics, generator and turbine design, turbine servicing, manufacturing methods, energy storage and turbine operation, and further includes significant copyrights, know-how and trade secrets in these fields. As part of the utility wind asset sale on October 26, 2016, WEG acquired the portion of this technology and associated intellectual property directed to utility wind scale products of greater than 1.5 MW, and has licensed us back under patents and other intellectual property assigned for all other uses. We currently own 29 patents and patent applications, throughout the world.

Optimize supply chain management

We will continue to build our supplier network by identifying new suppliers, directly or through relationships established by our strategic partners, and working with our existing suppliers to develop relevant technological advancements. In addition, we intend to continue to target an optimal balance between in-house production and sourcing from external suppliers. We expect that these supply chain initiatives, in combination with our engineering efforts, will continue to reduce the cost to manufacture our products, lower our customers' overall costs, and permit us to gain access to new markets that are not dependent on incentive programs or other government policies.

Our Competitive Strengths

We believe that the following strengths enable us to compete effectively in the wind power technology and renewable energy industries and to capitalize on the growth of those industries.

Extensive Research and Development Expertise

Over the past several decades, we have developed a broad portfolio of intellectual property. Notable technologies we have developed include our highly efficient, but low cost, permanent magnet generator, our modular turbine design, our full power converter, and our voltage stabilization capabilities. In addition, we have expanded our capabilities by offering development services in the renewable energy sector for a variety of complex energy applications, including energy storage, microgrids, and grid stabilization. Our engineering team has worked together extensively in designing and building turbines ranging in size from 60 kW to 2.3 MW, as well as power conversion systems for turbines and other applications. Going forward, we expect to leverage our core research and development capabilities to pursue continued advances in our current products as well as the development and refinement of new products and applications.

Advanced Product Offerings

Our wind turbines are designed for high availability, high energy output and low energy production cost per kWh in a wide range of wind conditions throughout the world. In our distributed-class wind platforms, we offer a range of power ratings, rotor sizes and tower heights to meet customer and siting requirements in a range of wind classes. For example, our NPS 100-24 and NPS 60-23 turbines are designed with a larger rotor diameter and longer blades to capture more energy at lower wind speeds, while their lower RPM and tip speed make for quieter operation to comply with permitting restrictions. The longer blades provide our wind turbines a larger swept area and a lower cut-in wind speed, the minimum speed at which the turbine can start rotating and generating power. This feature increases the overall output of our wind turbines, particularly under low wind conditions.

Our FlexPhase power converter technology is based on a modular architecture that is configurable for a wide range of energy storage usages including lithium-ion, lead acid, flow battery chemistry, aqueous chemistries,

flywheel and ultracapacitors. The configurable nature of the platform will enable Northern Power to pursue business with a wide range of OEM's without incurring excessive R&D expenses to support the different technologies. The FlexPhase platform is also compact, efficient, and serviceable, all of which make it attractive for integration with a broad range of technologies.

Robust Products

Since the introduction of our second generation 60 kW and 100 kW PMDD wind turbines in late 2008, we have shipped over 600 of these turbines, which have run for over fourteen million hours in the aggregate. Our fleet of warranted turbines is performing at greater than 98% availability. We engineer our wind turbines to withstand a variety of harsh conditions in severe environments, such as those in Alaska, the Caribbean and Scotland, by designing in features such as reinforced blades and a triple braking system. For example, certain turbines of our distributed wind fleet have several million run time hours without incident despite being in locations that have experienced hurricane speed winds, including two of our turbines installed on an island in the Bahamas that withstood winds of over 107 miles per hour during Hurricane Irene in 2011 and again in 2012 during Hurricane Sandy. More recently, several of our turbines continued performance through both Hurricane Matthew in the Caribbean, as well as Typhoon Chaba in the Jeju region of South Korea, and then returned to normal operation, as designed. In addition, the Arctic models of our turbines operate safely in temperatures as low as -40°F during the winter months and have special design and safety features to assure high levels of uptime even at such extreme temperatures. Therefore, we believe that our products are well-suited for reliable operation in nearly all environments.

Established Customer Relationships with Large Developers

We serve a global customer base for our distributed-class wind turbines that includes project developers and financial investors, primarily located in the U.K. and Italy. We have developed deep customer relationships with a number of our customers, each of which has extensive experience developing wind and other renewable energy projects in Europe, and we expect these customers will continue to have strong demand for our products in near- and medium-term to take advantage of the feed-in-tariff programs. With our track record of on-time delivery and our turbines' successful operating history, which is a direct contributor to our customers' ability to finance the purchase of our turbines, we believe we will continue to generate substantial orders from existing and future customers.

Our Technology

We believe that our proprietary PMDD and full power converter technology differentiates us from other wind turbine companies and provides us with a competitive advantage. In addition, we believe that our systems engineering approach to advanced power system architectures, combined with real world experience with hybrid energy applications, gives us a competitive advantage in the emerging fields of microgrid, hybrid power, and battery energy storage solutions.

Gearless Direct-Drive Technology

Our turbine's generator and rotor are directly coupled and move together at the same speed, without the need for a gearbox. By eliminating the gearbox, we have simplified the drivetrain design and reduced the number of moving parts and wear items. We believe that this gearless design benefits our customers with high-reliability turbines that have lower operating costs and greater efficiency. Geared turbines typically operate at high speeds of 1,000 to 1,800 RPM and involve a complex drivetrain with many gears, bearings and ancillary lubrication and cooling systems. By comparison, our direct-drive turbines are simple in design and operate at slow speeds of approximately 10 to 20 RPM for utility wind applications and 50 to 60 RPM for distributed wind applications. The simplicity of the design is demonstrated by the fact that our turbines only have two drive bearings, as

opposed to the more than 50 drive bearings that most geared turbines require. Our turbines outperform traditional gearbox competitor technology in three critical areas:

- **Improved reliability** : Due to the slower speed of rotating hardware, all critical rotating components and their associated electronics experience much lower physical stress and fewer cycles than those in traditional gearbox turbines. Additionally, the inherently simpler direct-drive construction requires far fewer parts than a traditional turbine design. The substantially lower part count, reduced stress and lower cycle count in the direct-drive platform eliminate many opportunities for part failure while also reducing the complexity of procurement, construction and operation. These elements contribute to our turbines achieving greater than 98% availability, as compared to 95% or lower for traditional turbines.
- **Lower operating and maintenance costs** : Due to the simplicity of our drivetrain and the overall lower part count of our turbines, maintenance costs are greatly reduced. Geared turbines typically require gearbox replacement every seven to nine years, which results in both high costs and significant downtime. These costs are avoided with our gearless turbines, the drive trains of which are designed to operate over their full design life without major component replacements.
- **Higher efficiency** : Directly coupling the generator and rotor increases mechanical efficiency versus traditional geared turbines. Further, there is no friction lost in the meshing of gear teeth. Electrical efficiency is maximized in the generator because the magnetic field is supplied by permanent magnets, which means there is no need to recirculate power from the generator to excite the field. Additionally, the presence of cabling, power conversion and the main transformer inside the nacelle rather than down in the tower reduces copper losses from the long, low voltage cable running down the tower and permits ventilation allowing the wind to help cool electronics. These increased mechanical and electrical efficiencies allow our turbines to yield a higher net energy capture than traditional turbines.

Permanent Magnet Generator

Our proprietary permanent magnet generator is central to our innovative drivetrain design. In addition, our power converters enable our wind turbines to operate at variable speeds for higher energy capture, which we believe provides greater stability to the electrical transmission system than other wind turbines. Our proprietary low speed permanent magnet generator is optimized for efficient energy capture.

Our permanent magnet generator was designed at a systems level in conjunction with our power converter to create an optimized solution tailored for high energy capture and low operating costs. The generator in the NPS 60 and NPS 100 turbine models is cooled directly by the wind.

We continue to be a leading provider of permanent magnet direct-drive turbine in the distributed wind market. Furthermore, we believe that our utility-class permanent magnet generators, now marketed by WEG for applications over 1.5 MW, have three primary advantages over other utility-class permanent magnet technology:

- Advanced cooling systems which improve thermal conditions, thus increasing robustness and extending turbine life;
- Improved electrical efficiency due to our patented power converter as well as a unique turbine architecture with all electronics up-tower; and
- Proprietary modular generator and power converter design, which combined with an on-board crane, greatly reduces operating risk and lowers the cost of service.

Full Power Converter

Another key element of our innovative direct-drive wind turbine design is the power converter used to connect the permanent magnet generator output to the local power system. We currently design and manufacture the power converters for our wind turbines at our Barre, Vermont facility, with complete hardware, control design

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and software capabilities. Our full power conversion provides high quality power while also isolating the generator turbine from grid disturbances that could cause damage and downtime, as well as removing the requirement for any external energy for excitation in the energy generation process. Our power converter technology and platform offers these key benefits:

- Our proprietary FlexPhase power converter combines a unique circuit design with a high bandwidth control system to provide generator management, power quality, and grid support features.
- Our power converter has controls that can be tuned to optimize operation in multiple non-wind applications and has a liquid-cooled design that can be adapted to any environment.
- Our FlexPhase circuit architecture lowers ripple current at the DC side of the converter, minimizing battery heat generation in energy storage applications.
- Our liquid-cooled design allows the converters to be environmentally sealed and offer high power density and a smaller footprint.
- The FlexPhase converter also provides improved efficiency over a wide range of power levels and high power quality to support multiple applications. The FlexPhase converter platform offers a modular approach with a small footprint and 20-year design life.
- The NPS 60 and NPS 100 wind turbine power converters use the same advanced control systems platform found in the FlexPhase platform, providing reliable and high efficiency operation even on the weak grid systems found in remote village applications.
- The features and benefits of our FlexPhase power converter platform make it well suited for other non-wind energy applications, including utility-scale energy storage, advanced grid support, and critical load support applications.

Advanced Power Systems Architectures

We believe that through our use of advanced modeling, the incorporation of modern power electronics and rapid prototyping, we are able to effectively and efficiently meet the varied demands of emerging applications for products and services such as energy storage, voltage and frequency regulation, renewable generation integration and other advanced demand response and grid stabilization applications. In addition, our power conversion and controls technologies are well suited to balancing supply with demand, increasing power quality and reliability for the end-use customer, and reducing distribution losses to create a more efficient system. We have applied the same system-level approach that we have mastered in the design of our wind turbines and considered both the generation and the demand side together to engineer a cost-effective, robust system for cost effective stable power generation throughout the grid.

Customers

Our distributed wind customers include financial investors and project developers, but also the end users themselves in applications that provide power for farms, schools, municipalities, small businesses, remote villages, and U.S. military installations.

Financial investors provide equity capital and raise debt capital, typically from a commercial bank, to build and deploy wind turbines. Financial investors typically look to generate a leveraged return by selling the electricity back to the grid in the form of a feed-in-tariff where the regulatory jurisdiction permits, or sell power to end users who can reduce the cost of electricity by switching away from higher priced power sources.

Owners and operators of projects invest in wind power to reduce the cost that they pay for electricity by switching away from higher priced power sources. These project developers tend to finance through commercial banks and hope to generate a payback over the first few years of operation of the asset.

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For the year ended December 31, 2016, ElectroGroup accounted for approximately 11% of our total revenues. For the year ended December 31, 2015, WEG and CWE Norwin LTD accounted for approximately 18% and 12%, respectively, of our total revenues.

Competition

In domestic and international markets for renewable energy sources served by wind energy, we face competition from companies offering various types of wind turbines.

Our primary competitors in the distributed wind market are GHRE, ESPE and other emerging market entrants. We also compete with several smaller providers of distributed-class wind products including C&F, Criel, Enerwings, EolArt, Ergo Wind, Greenstorm, Orenda, Polaris, Rago, Stoma, Svecom PE, WES, Xant and Xzeres. We may face increased competition in the future, including from large, multinational companies with significant resources.

In the area of power converter systems (PCS) or inverters for energy storage or for energy storage systems (ESS) which includes controls and other balance of system elements to support batteries Northern Power competes against the following companies; Dynapower, Parker, ABB, Siemens, Ideal Power, Princeton Power, Eaton, S&C Electric, SMA, and others. These competitors are primarily for power electronics or energy storage systems in 250kW to 1000kW configurations which in some cases will be used for multi-megawatt projects.

With respect to our wind turbine products, we also face competition from other sources of renewable energy, such as solar, hydro, biomass, wave and geothermal, and from conventional energy sources, including natural gas, oil, and nuclear.

Intellectual Property

Our intellectual property portfolio includes 29 patents and patent applications worldwide, know-how, copyrights, registered trademarks and trade secrets, covering many aspects of our products including power electronics, generator and turbine design, energy storage and turbine operation. We recently assigned 58 patents and patent applications to WEG as part of the utility wind asset sale, and received a license back to make, use and sell distributed wind products, and utility wind products of 1.5 MW or less, covered by these patents. Our currently issued patents expire on dates ranging from July 2022 to July 2032. We believe our current patent portfolio, our patent license from WEG, and our expected ability to obtain licenses from other parties to the extent necessary, along with our other intellectual property protections noted below, will provide us with sufficient proprietary rights to develop and sell our products.

We control access to our proprietary technology by entering into confidentiality and invention assignment agreements with employees, consultants, partners, vendors and customers. However, policing unauthorized use of our technologies, services and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the U.S. and where mechanisms for enforcement of intellectual property rights may be weak. We may be unable to determine the extent of any unauthorized use or infringement of our services, technologies or intellectual property rights.

From time to time, legal action by us may be necessary to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the intellectual property rights of others or to defend against claims of infringement or invalidity. We may also be subject to claims by third parties alleging that we infringe upon their intellectual property rights or have misappropriated other proprietary rights. Such litigation could result in substantial costs and diversion of resources and could negatively affect our business, operating results and financial condition. If we are unable to protect our intellectual property rights, we may find ourselves at a competitive disadvantage to others who need not incur the additional expense, time and effort required to create the innovative services that have enabled us to be successful to date.

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We use various trademarks and trade names in our business, including Northern Power Systems, Northern Power, NPS, FlexPhase and SmartView, some of which we have registered in the U.S. and in various other countries. This Annual Report on Form 10-K also contains trademarks and trade names of other businesses that are the property of their respective holders. We have omitted the ® and ™ designations, as applicable, for the trademarks we name in this Annual Report on Form 10-K.

Employees

As of December 31, 2016, we had 71 full-time employees, a decrease of 24 full-time, or approximately 25%, from December 31, 2015. The major part of this reduction was due to the transfer of engineers to WEG as part of the sale of the utility scale business assets. We also rely on temporary hourly employees to staff our manufacturing operations at levels targeted to meet our production needs during any given period. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have not experienced any employee-initiated work stoppages and we consider our relations with our employees to be good.

Financial Information

The financial information required under this Item 1 is incorporated herein by reference to Part II, Item 8 of this Annual Report on Form 10-K.

Where You Can Find More Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available through the investor relations portion of our website (www.northernpower.com) free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or SEC. Information on our investor relations page and on our website is not part of this Annual Report on Form 10-K or any of our other securities filings unless specifically incorporated by reference. In addition, our filings with the SEC may be accessed through the SEC's EDGAR system at www.sec.gov. All statements made in any of our securities filings, including all forward-looking statements or information, are made as of the date of the document in which the statement is included, and we do not assume or undertake any obligation to update any of those statements or documents unless we are required to do so by law.

Item 1A. Risk Factors

You should carefully consider all of the information in this Annual Report on Form 10-K, including the risks and uncertainties described below, any of which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Risk Factors Related to Our Operating Business

We have incurred significant operating losses since inception and may not be able to achieve, or maintain profitability.

With a few exceptions, we have incurred operating losses each of our previous quarters, including a net loss of \$8.9 million for the year ended December 31, 2016 and an accumulated deficit of \$177.3 million as of December 31, 2016. We may not be able to generate operating income and we could continue to incur net losses for the foreseeable future. In the reporting period covered by this Annual Report on Form 10-K and to date, we have encountered business challenges disclosed in these risk factors that have contributed to our operating losses, including currency fluctuations that have made our prices less competitive in certain global markets, uncertainty surrounding certain tariff regimes relied upon by international customers, and challenges

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with our suppliers resulting in difficulties getting additional cost out of our products. Our ability to be profitable in the future depends upon the continued implementation of successful strategies to address these business challenges.

Our ability to be profitable further depends upon continued demand for our distributed-class wind and power technology products and services. In addition, our profitability will be affected by, among other things, our ability to develop and commercialize next generation product offerings and enhance existing products. We could incur significant operating costs relating to our research and development initiatives for our new and existing products, and for the expansion of our sales and marketing operations as we add additional sales and business development personnel and increase our marketing efforts. Furthermore, we may incur significant losses in the future for a number of reasons, including the other risks described in this Annual Report on Form 10-K, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown events. We may fail to generate revenues in the future. If we cannot attract a significant number of purchasers for our distributed wind and power technology products, we will not be able to generate any significant revenues or income. If we continue to incur significant operating losses and fail to generate significant revenues, we will not have the money to pay our ongoing expenses and we may be required to restructure our business or go out of business. These conditions among others raise substantial doubt about our ability to continue as a going concern, unless additional financing is obtained in the near future. The Company evaluated these conditions as well as actions taken in 2016 to improve profitability. These actions included cost reductions by reducing headcount and restructuring management, reducing the cost of our core distributed wind products, optimizing our supply chain, and monetizing certain of our utility wind assets. In addition, we have begun commercializing our sales of our power converters, we are expanding our service offerings to include full turnkey wind turbine installations and have increased sales staff to expand into additional markets, especially the U.S. The Company believes that the actions taken have alleviated the substantial doubt about the Company's ability to continue as a going concern.

We will require additional financing, including equity or debt offerings, to continue expansion of our operations. Funding from these sources may be limited, unavailable, or not available on favorable terms. There is no assurance that we will be successful developing markets to further monetize our distributed wind and power conversion products and technology. There are no assurances that we will succeed in obtaining funds in sufficient amounts to proceed with our strategy when capital is needed. If such capital and financing cannot be obtained for any reason, we may not be able to proceed with our business plans and may be required to scale back our strategic initiatives or reduce the size of our organization.

Our sales cycles of our distributed turbines and power converters are complex and lengthy and the timing of our distributed wind installations are subject to seasonal variations, each of which may impact operating results from quarter to quarter and make results difficult to predict.

The size and timing of our revenue from sales of products to our customers is difficult to predict and is dependent on many factors, including market conditions, customer financing, permitting and weather conditions, all of which may combine to result in high variability in revenue trends and projections. Our sales efforts in distributed wind markets often require us to educate our customers about the use and benefits of our products, including their technical and performance characteristics. Customers typically undertake a significant evaluation process that has generally resulted in a lengthy sales cycles for us, typically many months. Furthermore, installation of our turbines is often under the direction and control of end users or third-party contractors. The regulatory approval, permitting, construction, startup and operation of turbine sites may involve unanticipated changes or delays that could negatively impact our business and our results of operations and cash flows. The long sales cycles require us to delay revenue recognition until certain milestones or technical or implementation requirements have been met.

We have commenced selling our power converters into the developing battery energy storage market. We face competition in this market by larger and more well established power converter suppliers. Although we believe

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that our converters offer superior performance attributes to those of our competitors and we have identified a pipeline of customers, these sales cycles are long and unpredictable making our ability to predict when such sales will occur difficult.

Wind turbine sales in the regions in which we currently sell our turbines are affected by seasonal variations and the timing and availability of government incentive structures. To satisfy the delivery schedules, we generally manufacture and sell most of our wind turbines during the second and third quarters of each year for delivery and installation in the third and fourth quarters. This schedule is due primarily to variations in the weather conditions in the northern areas where we supply most of our wind turbines.

We maintain a sizable backlog and the timing of our conversion of revenue out of backlog is uncertain.

Our backlog is subject to unexpected adjustments and cancellations and thus may not be timely converted to revenue in any particular fiscal period or be indicative of our actual operating results for any future period. Although we have not experienced significant cancellations in 2015 and 2016, there can be no assurances that customers will not face challenges in the future and cancel some or all of their orders. We have managed past order cancellations by curtailing production at our Barre, Vermont facility and closely monitoring inventory levels to conserve cash, but this left underutilized manufacturing overhead in product cost, which lowered our gross margins. Our inability to convert backlog into revenue, whether or not due to factors within our control, could adversely affect our revenue and profitability.

Because we depend on a limited number of single source suppliers for certain components, third-party business and relationship interruptions could harm our operations.

We currently depend on sole source suppliers for certain precisely manufactured components in our turbines. These components may not be readily available on a cost-effective basis from other sources or on short notice, as some are custom-designed for our turbines. As a result, there can be no assurance that a continuing source of supply of these components will be available on a timely basis or on commercially viable terms in the future. In addition, our supply chain could be negatively impacted in the event one of our key single source suppliers has a business interruption. Any interruptions in our third-party manufacturing suppliers or supply chain, or the refusal or inability by such parties to produce necessary product components, could have an adverse impact on our business or financial results of operations. We have identified the sole source suppliers and are in the process of mitigating the risk by identifying alternative suppliers or negotiating with suppliers to ensure they have sufficient inventory levels to support production.

If our working capital is insufficient to meet customer demand, we may have difficulty arranging for financing.

Wind power companies, and manufacturing companies generally, are capital intensive businesses. To fulfill the product delivery requirements of our customers, we plan for working capital needs in advance of customer orders. If we experience sales in excess of our estimates, our working capital needs may be higher than those currently anticipated. Our ability to meet this excess customer demand depends on our ability to arrange for additional financing for any ongoing working capital shortages, since it is likely that cash flow from sales will lag behind these investment requirements. Our capacity to borrow under our current working line-of-credit, is guaranteed by the U.S. Export-Import bank and is subject to restrictions based upon U.S. content of our products, as well as the balance of our accounts receivables and inventory meeting certain conditions. Our ability to obtain this guarantee would be impacted if we source products in lower cost foreign countries. Our current working line-of-credit with Comerica Bank, or Comerica, expires in December 2017, if we are unable to renew this line-of-credit under similarly favorable terms, this could impact our ability to meet customer demand or pursue other strategic initiatives.

Our international expansion efforts are impacted by foreign currency fluctuations, which could harm our profitability.

As part of our international expansion, a significant amount of our sales transactions in 2016 was euro while the majority of our costs were denominated in U.S. dollars, that trend could continue in 2017. In addition, we have and expect to continue to be entering into extended duration operations and maintenance contracts, which obligate us to perform services in the future based upon currently negotiated non-U.S. dollar denominated pricing terms. Although we have pursued certain economic hedging strategies, including increasing our euro-denominated costs and entering into financial hedging strategies, we may experience negative economic exposure of currency movements and there can be no assurance that we can execute effective strategies to control this exposure in the future. Negative movements in the exchange rate between foreign currencies and the U.S. dollar, such as those recently affecting the euro and sterling, could have an adverse effect on our revenues and delay our achieving profitability.

The distributed wind market is in the early stages of development and its future is uncertain. If the market is not as large as we expect or we are unable to compete effectively in the distributed wind market, our business and operating results could be harmed.

A substantial portion of our revenues have been and continues to be derived from sales of our distributed-class wind turbines. We anticipate that sales of these distributed-class wind turbines will continue to account for a significant portion of our revenue for the foreseeable future. The distributed wind market is still in the early stages of development. Any catastrophic product failure, significant damage, or injury that could arise in this market, whether or not related to our products, may have a disproportionately negative impact on public perception of the efficiency, safety or general merits of distributed-class wind turbines, which could have an adverse effect on our revenues and our business.

We may suffer reputational harm or other damages as a result of unreliable wind resource data. In the distributed wind market, there is at present insufficient reliable data for the wind resource available by geographic location at the tower heights of our turbines. In siting these turbines, purchasers may make decisions based upon insufficiently precise data, which could result in turbines being sited in geographic locations that do not provide optimal wind conditions for the production of electric power. As a result, purchasers may not receive the expected economic benefits of ownership of wind turbines that we produce and our reputation could suffer. We also may be liable for liquidated damages, warranty claims or other costs if our turbines do not perform to contractual requirements or to customer expectations.

We experience significant competition in the distributed wind market, particularly in Italy and the U.K. Our primary competitors in the distributed wind market are GHRE, ESPE and other smaller providers and emerging market entrants. The wind turbines being offered by competitors are typically offered with lower upfront pricing. In early 2014, we introduced a lower cost but higher energy output product in the market to compete more effectively on price while still maintaining high durability and reliability. We may experience lower gross margins than forecast if we cannot maintain a price premium for our products and may be unable to successfully compete against lower-cost competitors. We may also face increased competition in the future, including from large, multinational companies with significant resources who may also be able to scale production and provide similar products at lower costs. Our inability to successfully compete against better capitalized companies or raise sufficient capital in the form of equity or debt to effectively compete may adversely affect our business, operations and revenue.

In addition, if our competitors market products that are more effective, safer, quieter or less expensive than our current or other future products, if any, or that reach the market sooner, we may not achieve commercial success or substantial market penetration. Products developed by our competitors may render our existing technology or any future product candidates obsolete. Any decrease in sales of our distributed-class wind turbines would have an adverse effect on our business, financial condition and results of operations.

Strategic partnerships are essential to our business growth and the inability to secure these relationships could adversely impact revenue and operations.

Expansion of product sales is dependent on our ability to effectively create partnerships to help sell our distributed wind and power converter products. If these partnerships cannot be identified and effectively developed and executed both domestically and internationally, our ability to expand our distributed wind and power converter markets will be impacted.

To gain access to certain target markets and customers, we are pursuing strategic partnerships with various companies with complimentary expertise, particularly in the battery energy storage technology. The aim of such strategic partnerships is to reach and to collaborate on power solutions for potential customers in the U.S. as well as parts of Europe and Asia. By expanding into a new product line, we must divert certain internal resources from our core business of wind turbines to design and produce the power converter line of products and to develop the business channels required to translate into sales. If these strategic partnerships fail to materialize or if our efforts fail to produce the level of sales anticipated, our business could be materially affected.

Our inability to develop new markets for our power converters could adversely impact our business, revenue and operations.

We have been developing our power converter technology since the early 2000s. Historically we have supplied these products as part of our distributed wind and utility class turbines. We are actively seeking to commercialize sales of our power converters outside of the wind industry, such as the battery energy storage system and microgrid project markets. Entering new markets beyond the wind industry involve significant risks and uncertainties, including the possible lack of demand or acceptance of the product, distraction of management from current operations, insufficient revenue to offset liabilities assumed and expenses associated with the strategy, inadequate return of capital, and unidentified issues we have not discovered in evaluating this market opportunity. Because entering new markets is inherently risky, no assurance can be given that our efforts to enter new markets with our power conversion products will be successful and will not materially adversely affect the Company's financial condition and operating results. We have not traditionally sold products outside of the wind industry. There can be no assurance that our power converters will achieve market acceptance beyond the wind industry. In addition, potential customers for our power converters in the battery energy storage system and microgrid project market generally impose very high quality and reliability standards, which often change and may be difficult or costly to satisfy. Any inability to acquire new customers or satisfy customer quality and reliability standards or comply with standards and technical requirements may adversely affect demand for our power converter products and our results of operations.

The success of our strategic transaction with WEG is dependent on WEG's ability to operate effectively in South America and other territories.

In 2016, we completed a strategic transaction with WEG pursuant to which WEG acquired some of our utility wind assets, including a patent portfolio for utility wind greater than 1.5 MW. Under the transaction agreement, WEG agreed to pay royalties to us for sales in South America resulting in future payments of up to approximately \$10.0 million, of which \$3.0 million are fixed payments. Additionally, WEG agreed to pay us up to \$17.5 million in royalty payments over the next decade for turbines shipped anywhere outside of South America. The success of this strategic transaction with WEG will depend on WEG's future success in the manufacture and sale of turbines utilizing this platform in these territories. We have no control over WEG's decisions regarding investment in manufacturing infrastructure or sales and marketing efforts relating to these designs. Any inability of WEG to manufacture and sell of our turbines in South America or elsewhere may adversely affect our results of operations.

The success of our strategic transaction with WEG, in part, will be subject, to risks associated with WEG's operating in South America, particularly Brazil. The Brazilian and other South American economies are currently

in recession. The strategic transaction with WEG and our business and its financial performance and prospects may be adversely affected by, among others, political, economic, diplomatic or social instability in or affecting Brazil and other South American nations. Brazilian and other South American economies have recently experienced quarters of slow or negative gross domestic product growth and have experienced high inflation and growing fiscal deficits. We cannot predict whether the current or future Brazilian or other South American governments will implement changes to existing policies on taxation, exchange controls, monetary strategy, labor relations and the like, nor can we estimate the impact of any such changes on the Brazilian or other South American economies or WEG's operations.

If we fail to expand effectively in international and U.S. markets, our revenue and business will be harmed.

Successful continued advancement and implementation of our plan to sell our products in Europe and Asia Pacific continues to be a strategic priority. European markets, particularly Italy continues to lead growth in the purchase and installation of distributed-class wind turbines. However, we expect the regulatory policies that have driven the growth in European markets such Italy and previously in the U.K to diminish over time and we therefore will need to continue developing and expanding into new markets to supplement our sales in Italy and the U.K. Developing the European and U.S. markets and expanding into new markets for our turbines is expected to entail a number of risks, including the need for appropriate management of our efforts, successful negotiation on terms advantageous to us of agreements facilitating our profitable expansion of this business, including logistics, installation and commissioning, and post-sales support service efforts. Sophisticated engineering, procurement and construction providers are moving into the distributed wind market and demanding that wind turbine manufacturers such as us provide a turnkey offering that includes supply, installation and long-term support of the turbines. Similarly, development companies in the U.K. which have historically been responsible for siting, permitting, installation, and connecting turbines to the utility grid are retreating from providing these services, as the U.K Feed-in Tariff regime is evolving to make such business less financially viable. As a result, we are seeing increased opportunities for turbine sales directly to customers, rather than through a developer. While we have experience in turbine supply, and have experienced some success in winning orders, we have limited experience in installation and long-term international support and may not be able to provide the services required to fulfill them. Failure to obtain or effectively execute a large volume of orders in Italy and the U.K., to develop additional European, U.S. and Asia Pacific markets, and to expand into new markets would have an adverse effect on our ability to reach profitability.

Our international business development efforts generally include risks relating to management of currency exchange rate exposure, international enforceability of contracts, potential exposure of intellectual property to misuse or misappropriation, compliance and operational challenges that may delay or add complexity to sales and support efforts, and the potential of local taxation above that which is currently forecast. If we are unsuccessful in managing these challenges, our efforts to sell our turbines and services on a global basis may expend our resources without significant contribution to the results of our operations and may not contribute to the value of our business.

If we fail to effectively execute a U.S. market strategy our sales in that region may not develop as we have planned.

As part of our strategic plan to grow in regions outside our core markets, we are focusing our sales efforts on selling our distributed class turbines and power conversion products into the U.S. market, leveraging a third-party lease model, and identifying new market opportunities. In the case of leasing, we believe that providing a financing offering in conjunction with the sale of our products is an important component in the overall offering. We have identified a third party leasing partner who is prepared to offer financing to qualified customers, and therefore we are making investments in sales and marketing to identify business that would benefit from this offering. If we are unable to identify customers that meet the lessor's credit requirements or the lease offering is not viewed as advantageous by customers, our ability to expand in this market will be impacted, as such

potentially harming our profitability. If we are unable to execute on our strategic plans in the power conversion market, or if the market does not develop quickly enough for us to capitalize on opportunities in the near term, our profitability may be impacted.

There are a number of risks associated with our international operations that could harm our business.

We sell products and provide services on a global basis and plan to expand into additional countries. Our ability to grow in international markets could be harmed by a number of factors, including:

- changes in political and economic conditions and potential instability in certain regions;
- currency control and repatriation issues;
- changes in regulatory requirements or in foreign policy, including the adoption of domestic or foreign laws, regulations and interpretations detrimental to our business;
- changes to regulatory incentives to purchase wind turbines or produce or utilize wind energy;
- possible increased costs and additional regulatory burdens imposed on our business;
- burdens of complying with a wide variety of laws and regulations;
- difficulties in managing the staffing of international operations;
- increased financial accounting and reporting burdens and complexities;
- laws and business practices favoring local competitors;
- terrorist attacks and security concerns in general;
- changes to tax laws, compliance costs and challenges to our tax positions that may have adverse tax consequences to us;
- changes, disruptions or delays in shipping or import/export services;
- reduced protection of our intellectual property rights; and
- unfavorable tax rules or trade barriers, including import duties or other import/export restrictions.

In addition, we conduct certain functions, including customer sales and service operations, in regions outside of the U.S. We are subject to both U.S. and local laws and regulations applicable to our offshore activities, and any factors which reduce the anticipated benefits associated with providing these functions outside of the U.S., including cost efficiencies and productivity improvements, could harm our business.

Problems with quality or performance in our products or products based on our technology could have a negative impact on our relationships with customers and our reputation and cause reduced market demand for our products.

Customers for our products regularly expect vendors to have a history of reliable production or creditworthy warranty coverage of meaningful duration. From commencement of our current operations in August 2008, we have received over 800 orders for distributed-class wind turbines to date with more than 600 shipped through December 2016. Of the units shipped, over 600 have been commissioned and are producing power at customer sites. This short history of operating in the field means that it will be some time before we will be able to determine the durability and reliability of our products after sale. We cannot be certain that substantial warranty expense will not occur in the future in our distributed-class wind turbines or in our other products. If our distributed wind or power converter products are not sufficiently durable and reliable or otherwise perform below expectations, we could incur additional substantial warranty expenses, we could be required to pay liquidated or other contractual damages, our reputation could be harmed and our revenues could decline.

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Problems with the quality or performance of our products, including those manufactured by third parties, like WEG, could likewise adversely affect us due to warranty claims or other contractual damages. Issues with our products whether manufactured by us, WEG or other parties in the future could result in significant negative publicity and materially and adversely affect the marketability of our products and our reputation.

Any defect, underperformance or problem with our wind turbines or any perception that our products may contain errors or defects, or claims related to errors or defects, may adversely impact our customer relationships and harm our reputation and credibility, resulting in a decrease in market demand for our wind turbines, decrease in our revenue, increase in our expenses and loss of market share.

Our customers' inability to obtain financing to make purchases from us or maintain their businesses could harm our business, and negatively impact revenue, results of operations, and cash flow.

Some of our customers require substantial financing to finance their business operations, including capital expenditures on new equipment and equipment upgrades, and to make purchases from us. The potential inability of these customers to access the capital needed to finance purchases of our products and to meet their payment obligations to us could adversely impact our financial condition and results of operations. If our customers become insolvent due to market and economic conditions or otherwise, it could have an adverse impact on our business, financial condition and results of operations.

If we fail to successfully develop, expand and introduce new products and technologies, our business, financial condition and results of operations could be adversely affected.

Our success depends, in part, upon our ability to anticipate industry evolution and introduce or acquire new products and technologies to keep pace with technological developments. However, we may not be able to develop, introduce, acquire and integrate new products and technologies in response to our customers' changing requirements in a timely manner or on a cost-effective basis, or that sufficiently differentiate us from competing solutions such that customers choose to purchase our products and solutions. If any of our competitors implement new technologies before we are able to implement them or better anticipates the innovation opportunities in related industries, those competitors may be able to provide more effective or more cost-effective solutions than ours. In addition, we may experience technical problems and additional costs as we introduce new products and technologies. If any of these problems were to arise, our business, financial condition and results of operations could be adversely affected. We are expanding our product offerings into power converter equipment for hybrid energy solutions, including solutions incorporating battery energy storage systems and micro-grid technology.

If we fail to effectively expand our manufacturing, production and service capacity, our business and operating results could be harmed.

There is risk in our ability to continue to effectively scale production processes and effectively manage our supply chain requirements. If we are unable to maintain our internal manufacturing and production capacity for our turbines in a timely, cost-effective and efficient manner, we may be unable to further expand our business, decrease costs or become profitable. Our ability to further expand production capacity efficiently and on schedule is subject to significant challenges, risks and uncertainties, any one of which could substantially increase costs and delay or reduce production. If we are unable to achieve expected production yields and decrease costs, we could experience considerable operating losses.

Our global service structure is composed of regional support teams that are fully staffed to provide installation, commissioning, performance monitoring, warranty and non-warranty service, and where appropriate site development services. These support teams are currently mapped to our three main installed base geographies in Italy, the U.K. and the U.S. If we are unable to expand our service offerings in a timely and cost effective manner to meet demand, we may be unable to expand our business, be subject to increased warranty obligations and risk our ability to become profitable.

Due to our large customer concentration, a loss of one or more of our significant customers could harm our business, and negatively impact revenue, results of operations, and cash flow.

We are dependent on a relatively small number of customers for our sales, and a small number of customers have historically accounted for a material portion of our revenue. Our largest customer accounted for approximately 11% of revenue for the year ended December 31, 2016, and approximately 18% of revenue for the year ended December 31, 2015. For the near future, we may continue to derive a significant portion of our net sales from a small number of customers. Accordingly, loss of a significant customer or a significant reduction in pricing or order volume from a significant customer could materially reduce net sales and operating results in any reporting period.

Failure to comply with the requirements of certain grant programs may result in a significant financial penalty.

The Defense Contract Audit Agency and an independent auditing firm, each on behalf of the Department of Energy and the National Renewable Energy Laboratory, respectively, are auditing various renewable energy development grant programs previously awarded to us, or which we agreed to assume in our acquisition of certain assets and liabilities from Distributed Energy Systems Corporation, or DESC. These audits are in various stages of completion and will eventually cover all years from 2003 until the grant project was completed or closed. Management believes that as of the date of these financial statements these audits have been delayed or placed on hold. Based upon the lack of a final determination from NREL on the 2004 audit and lack of activity on later audits, the Company does not have adequate information at the date of issuance of these financial statements to determine if the outcome of any of these remaining open audits will result in a cost to the Company. The Company, however, does not expect a material impact based on the results of previous audits.

Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services, and brand.

If we are unable to protect our intellectual property, our competitors could use our intellectual property to market similar products, which could reduce the demand for our products. Our success depends substantially upon the internally developed technology that is incorporated in our products. We rely on a combination of patent, trademark and copyright laws, trade secret protection and confidentiality or license agreements with our employees, customers, strategic partners, suppliers, and others to protect our intellectual property rights. The steps we take to protect our intellectual property rights may, however, be inadequate. Any breach or violation of our intellectual property rights by any of our licensees could adversely affect our competitive position and the value of our assets.

Intellectual property rights claims are expensive and time consuming to defend, and if resolved adversely, could have a significant impact on our business, financial condition, and operating results. In the event of a conflict between our patents or future patent applications and the activities of other parties, infringement proceedings may be pursued by or against us. The legal proceedings necessary to defend the validity of patents and to prevent infringement by others can be complex and costly, and the outcomes of these legal proceedings is often uncertain. These legal proceedings might adversely affect our competitive position and the value of our assets, and there can be no assurance that the outcomes of the proceedings would be successful.

Assertions by third parties of infringement or other violations by us of their intellectual property rights could result in significant costs and substantially harm our business and operating results.

Some companies in the wind power technology and power conversion industries, including some of our competitors, own large numbers of patents, which they may use to assert claims against us. Additionally, we may be subject to patent litigation and may be required to defend our patents against claims of holders of competitive patents. Third parties may assert claims of infringement, misappropriation or other violations of intellectual

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property rights against us. As the number of our product offerings in our markets increase and as we expand into additional markets, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violation of intellectual property rights by a third party — even those without merit — could cause us to incur substantial costs defending against the claim and could distract our management.

The patent portfolios of our most significant competitors in the utility wind manufacturing market are larger than ours and this disparity may increase the risk that they may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may therefore provide little or no deterrence or protection. We cannot assure you that we are not infringing or otherwise violating any third-party intellectual property rights.

An adverse outcome of a dispute may require us to:

- pay substantial damages, including treble damages, if we are found to have willfully infringed a third party's patents or copyrights;
- cease making, licensing or using solutions that are alleged to infringe or misappropriate the intellectual property of others;
- expend additional development resources to attempt to redesign our services or otherwise to develop non-infringing technology, which may not be successful;
- enter into potentially unfavorable royalty or license agreements to obtain the right to use necessary technologies or intellectual property rights; or
- indemnify our disbursement partners and other third parties.

An adverse determination may also result in the invalidation of patents that may be valuable to us. Royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Any of these events could harm our business, financial condition and results of operations.

We may not be able to receive patents on all of our pending patent applications.

Patent applications in the U.S. are maintained in secrecy until the patents are published or are issued. Since publication of discoveries in the scientific or patent literature tends to lag behind actual discoveries by several months, we cannot be certain that we are the first creator of inventions covered by pending patent applications or the first to file patent applications on these inventions. Accordingly, we cannot be certain that the patent applications that we file will result in patents being issued.

Our business is subject to the risks of earthquakes, fires, floods and other natural catastrophic events and to interruption by man-made problems such as computer viruses or terrorism, any of which could result in system failures and interruptions that could harm our business.

Although our systems have been designed to reduce downtime in the event of outages or catastrophic occurrences, they remain vulnerable to damage or interruption from earthquakes, floods, fires, power loss, rolling blackouts, telecommunication failures, terrorist attacks, cyber-attacks, computer viruses, computer denial-of-service attacks, human error, hardware or software defects or malfunctions (including defects or malfunctions of components of our systems that are supplied by third-party service providers) and similar events or disruptions. Despite any precautions we may take, system interruptions and delays could occur if there is a

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natural disaster, if a third-party provider closes a facility we use without adequate notice for financial or other reasons, or if there are other unanticipated problems at our facilities. We do not carry business interruption insurance sufficient to compensate us for losses that may result from interruptions in our service as a result of system failures. A system outage or data loss could harm our business, financial condition and results of operations.

Our insurance policies and financial resources may not be sufficient to cover the costs associated with personal injury, property damage, product liability and other types of claims brought against us.

We are exposed to potentially significant risks associated with product liability or other claims if our products or manufacturing activities cause personal injury or property damage, whether by product malfunctions, defects or other causes. If product liability claims are brought against us in the future, any resulting adverse publicity could hurt our competitive standing and reduce revenues from sales of our products. The assertion of product liability, personal injury or property damage claims against us could result in significant legal fees and monetary damages and require us to make large payments. Any business disruption or natural disaster could result in substantial costs, lost revenues and diversion of resources. Our insurance coverage is limited for product liability and other claims against us, as well as for business disruption and natural disasters. Therefore, we may not have adequate insurance and financial resources to pay for our liabilities or losses from any such claim or cause.

Covenants under our credit facility agreements impose significant operating and financial restrictions, and failure to comply with these covenants could have an adverse effect on our business, financial condition, results of operations or cash flows.

Our credit facility with Comerica contains various covenants that limit or prohibit our ability, among other things, to:

- incur or guarantee additional indebtedness;
- pay dividends on our capital shares or redeem, repurchase, retire or make distributions in respect of our capital shares or subordinated indebtedness or make certain other restricted payments;
- make certain loans, acquisitions, capital expenditures or investments;
- sell certain assets;
- create or incur certain liens;
- consolidate, merge, sell, transfer or otherwise dispose of all or substantially all of our assets; and
- enter into certain transactions with our affiliates.

The Comerica loan agreement contains a financial covenant that requires us to maintain unencumbered liquid assets having a value of at least \$1.0 million at all times. For more information regarding these covenants, please see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Comerica Credit Facility.”

A violation of loan covenants may result in default or an event of default under the loan agreement. Upon the occurrence of an event of default under the loan agreement, Comerica could elect to declare all indebtedness outstanding under that agreement to be immediately due and payable and terminate any commitments to extend further credit. If we are unable to repay those amounts, Comerica may proceed against the collateral granted to them to secure the indebtedness. Substantially all of our assets are pledged as collateral under the Comerica credit facility. If Comerica were to accelerate the repayment of borrowings, such acceleration would have an adverse effect on our business, financial condition, results of operations, liquidity or cash flows.

Our business is dependent on rare earth metals and other commodities, and volatility in these markets could be harmful to our business and operations.

Our products utilize magnets formulated with rare earth metals. These magnets are supplied by a limited number of producers and have, in the past, been subject to significant price volatility. These components are procured from non-U.S. producers, and as such their pricing is subject to the variability in currency exchange rates, such as those recently affecting the euro. Our products also are comprised of copper, steel and iron components, the prices of which are also subject to market fluctuation. We do not presently hedge either our costs of production or product sales, and as such we may be adversely affected by significant swings in the prices of necessary components between the time of pricing our products for sale and the delivery of completed products. Furthermore, if we implement a hedging strategy in the future, there can be no assurance that these arrangements would be effective. Our failure to obtain in a timely manner sufficient quantities of components that meet our quality, quantity and cost requirements could delay or impair our ability to manufacture products and could increase our manufacturing costs.

We depend on highly skilled personnel to grow and operate our business, and if we are not able to hire, retain and motivate our personnel, we may not be able to grow effectively.

Competition for talented senior management, as well as middle management and engineers, is intense, and our future success will depend to some extent upon the contribution of a small number of key executives and personnel. Moreover, our ability to successfully develop and maintain a competitive market position will depend in part on our ability to attract and retain highly qualified and experienced management. The failure to attract and retain necessary personnel could have an adverse impact on our business, development, financial condition, results of operations and prospects.

Risk Factors Related to Operating as a Public Company

The requirements of being a U.S. public company may strain our resources, divert management's attention and affect our ability to attract and retain executive management and qualified board members.

As a U.S. public company, we are subject to the reporting requirements of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, as well as the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and other applicable securities rules and regulations. We also continue to be subject to the reporting requirements of applicable Canadian securities laws and the rules and policies of the Toronto Stock Exchange, or TSX. Compliance with these rules and policies increases our legal and financial compliance costs, makes some activities more difficult, time consuming or costly and increases demand on our systems and resources — costs that will increase further, particularly after we are no longer considered an “emerging growth company,” as defined in the Jumpstart Our Business Startup Acts of 2012, or the JOBS Act. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. To maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire more employees in the future or engage outside consultants, which will increase our costs and expenses.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty

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regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to continue to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected.

As a U.S. public company subject to these rules and regulations, we may find it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation and corporate governance committee, and qualified executive officers.

Our management team has limited experience managing a U.S. public company. Our management team may not successfully or efficiently manage a public company that is subject to significant regulatory oversight and reporting obligations under the federal securities laws. In particular, these new obligations will require substantial attention from our senior management and could divert their attention away from the day-to-day management of our business.

We have identified material weaknesses in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements.

In connection with our preparation of our financial statements for the period ended December 31, 2016 and 2015, our management identified material weaknesses in our internal control over financial reporting. A material weakness is defined as a deficiency or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

As disclosed in Item 9A, the material weaknesses pertained to 1.) inadequate and ineffective controls for reviewing and analyzing revenue transactions related to certain international turbine sales that remained in logistics warehouses while certain logistics events were completed, 2.) inadequate and ineffective controls for reviewing and analyzing complex or non-routine transactions, and 3.) our inventory reconciliation control was not properly designed as it did not include the reconciliation of all non-system generated entries recorded to the general ledger our inability to process and ensure timely and accurate preparation and reviews of reconciliations necessary to provide reasonable assurance that financial statements and related disclosures was prepared in accordance with generally accepted accounting principles,

Management is committed to continuous improvement of our internal control processes and will continue to diligently review our reporting controls and procedures. We took steps to remediate the underlying causes of the material weakness, primarily through the continued development and implementation of formal policies, improved processes and documented procedures, the implementation of a number of new controls over financial reporting and accounting, the enhancement of our month end close and financial reporting review process, as well as the hiring of additional experienced resources in the accounting department with appropriate accounting and internal control knowledge. We expect our remediation efforts will continue throughout 2017. The actions that were taken are subject to ongoing senior management review, as well as oversight by the Audit Committee of our Board of Directors.

If additional significant deficiencies or material weaknesses in our internal control over financial reporting are discovered or occur in the future, we may be unable to report our financial results accurately or on a timely basis, which could cause our reported financial results to be materially misstated and result in the loss of investor confidence or delisting and adversely affect the market price of our common shares.

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As a result of becoming a U.S. public company, we are obligated to develop and maintain proper and effective internal control over financial reporting, but we may not complete our analysis of our internal control over financial reporting in a timely manner, or these internal controls may not be determined to be effective, either of which may harm investor confidence in us and the value of our common shares.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting for the year ending December 31, 2016. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles in the U.S., or GAAP. We have completed the process of documenting, reviewing and improving our internal controls and procedures for compliance with Section 404, which require that we evaluate, test and document our internal controls and, as a part of that evaluation, testing and documentation, identify areas for further attention and improvement. As noted above, management has concluded that our internal controls over financial reporting are not effective as of December 31, 2016 and 2015. As a Canadian public company, we also are required to provide quarterly certification pursuant to Canadian Securities Administrators' National Instrument 52-109, *Certification of Disclosure in Issuers' Annual and Interim Filings*, with respect to, among other things, the design and operation of our internal controls.

We have completed the process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404. We have used dedicated internal resources, and we have engaged outside consultants, to adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, to identify steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. These changes may not, however, be effective in maintaining the adequacy of our internal controls. Any failure to maintain the adequacy of our internal controls, consequent inability to produce accurate financial statements on a timely basis, or identification of one or more material weaknesses could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

We will be required to disclose changes made in our internal control over financial reporting on a quarterly basis. However, as an "emerging growth company", our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 as long as we are an "emerging growth company." We will remain an "emerging growth company" for up to five years from date of the reverse takeover transaction in April 2014, although if the market value of our common shares that are held by non-affiliates exceeds \$700 million as of any June 30 before that time, we would cease to be an "emerging growth company" as of the following December 31. After this five-year period, our independent registered public accounting firm will be required to report on our internal controls over financial reporting if the market value of our common shares held by non-affiliates exceeds \$75 million. To comply with the requirements of being a public company, we may need to undertake various actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff.

Financial reporting and applicable regulations are complex, and failure to correctly interpret and abide by these standards could result in inaccurate financial information or reporting delays, which would have a significant impact on our reputation and value.

Our consolidated financial statements are prepared in accordance with GAAP. We adopted multi-element revenue recognition for product sales entered into or materially changed on or after January 1, 2011. Our current contracts are composed of three or four units of accounting: (i) the turbine product; (ii) commissioning services; and (iii) frequently, but not always, installation and/or extended warranty services. Turbine revenue is typically recognized when title and risk of loss transfer to the customer, commissioning service revenue is recognized when performed, and extended warranty revenue is recognized over the extended warranty period when that period begins. Upon entering into licensing and development contracts, complex revenue recognition accounting

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issues need to be considered, and could result in us collecting significant cash milestone payments prior to being able to recognize revenue in accordance with GAAP. This could impact our ability to show demonstrated revenue expansion relative to our expected plans.

In addition, GAAP-based revenue recognition rules require a business to be able to reasonably estimate its warranty experience prior to recognizing revenues. The performance of all commissioned units experienced during the year will impact our estimates for our warranty obligations. In the event that we conclude we cannot reasonably estimate our warranty experience, we may not recognize revenues for GAAP purposes in the financial statements for a given period and all revenues and costs associated with units shipped through year end would be deferred on the balance sheet until we determine that we can reasonably estimate warranty costs.

The application of certain elements of GAAP can result in significant non-cash charges. Employee share option plans can require fair-value accounting under GAAP, which can result in such charges.

Changes or modifications in financial accounting standards, including those related to revenue recognition, may harm our results of operations.

From time to time, the Financial Accounting Standards Board, or FASB, either alone or jointly with the International Accounting Standards Board, or IASB, promulgates new accounting principles that could have an adverse impact on our results of operations. For example, the FASB is currently working together with the IASB to converge certain accounting principles and facilitate more comparable financial reporting between companies who are required to follow GAAP, and those who are required to follow International Financial Reporting Standards, or IFRS. These efforts may result in different accounting principles under GAAP, which may have a material impact on the way in which we report financial results in areas including, among others, revenue recognition and financial statement presentation.

For example, in connection with this initiative, the FASB issued a new accounting standard for revenue recognition in May 2014 — Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers* (Topic 606) — that supersedes nearly all existing GAAP revenue recognition guidance. Furthermore, in August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers* (Topic 606) : *Deferral of the Effective Date* (“ASU 2015-14”). ASU 2015-14 defers the effective date of the new revenue recognition standard by one year. As such, it now takes effect for public entities in fiscal years beginning after December 15, 2017. We have begun evaluating the impact of the new standard on our core revenues, and continue to evaluate its effect on our financial statement disclosures. We expect to have our preliminary evaluation, including the selection of an adoption method, completed by the end of 2017.

We expect the Securities and Exchange Commission, or the SEC, to make a determination in the future regarding the incorporation of IFRS into the financial reporting system for U.S. companies. A change in accounting principles from GAAP to IFRS would be costly to implement and may have a material impact on our financial statements and may retroactively impact previously reported transactions. Implementation of accounting regulations and related interpretations and policies, particularly those related to revenue recognition, could cause us to defer recognition of revenue or recognize lower revenue, which may affect our results of operations.

Our treatment as a U.S. corporation for U.S. federal income tax purposes may result in us being subject to income taxes in both the U.S. and Canada.

On April 16, 2014, we, as Wind Power Holdings, Inc., or WPHI, completed a reverse takeover transaction, or RTO, as described in “Certain U.S. Federal Income Tax Considerations — The Company as a U.S. Corporation for U.S. Federal Income Tax Purposes.” We believe Section 7874(b) of the Internal Revenue Code of 1986, as amended, or the Code, applied to the RTO to treat our company as a U.S. domestic corporation for all U.S. federal income tax purposes. Accordingly, we are subject to U.S. federal income tax as a U.S. domestic corporation on our worldwide income and any dividends paid by us to non-U.S. holders may be subject to U.S.

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federal income tax withholding at a 30% rate or such lower rate as provided in an applicable treaty. We currently do not intend to pay any dividends on our securities in the foreseeable future, however. As a Canadian corporation, we are also generally subject to Canadian income taxes on our worldwide income and dividends paid to non-Canadian holders may be subject to Canadian withholding taxes. Our currently anticipated activities and operations as a holding company generally are not expected to result in significant taxable income for Canadian tax purposes. Distributions made to us by our U.S. subsidiaries out of active business income previously taxed in the U.S. generally would not be expected to subject us to additional taxation in Canada. However, in the event that a U.S. subsidiary is sold, or we otherwise earn income from other sources, or if our U.S. subsidiaries earn certain types of passive income, such proceeds or other income, we could be subject to Canadian income tax. Though we do not expect Northern Power Systems Corp. to have significant taxable income for Canadian tax purposes in the foreseeable future, if it did, the combined taxes we may be required to pay in the U.S. and Canada could be significant and could adversely affect our ability to attain or sustain profitable operations going forward.

Our ability to use net operating loss carryforwards and other tax assets to reduce future tax payments may be limited by provisions of the U.S. Tax Code.

As of December 31, 2016, we had net operating loss carryforwards for federal and state income tax purposes of approximately \$133.4 million and \$79.2 million, respectively, which expire between 2016 and 2028. We also had federal research tax credit carryforwards of approximately \$1.5 million, which begin to expire in 2028. These net operating loss and research tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our profitability.

The annual use of our net operating losses may be limited following certain ownership changes under provisions of the Code and applicable state tax laws. In general, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. In general, an ownership change occurs if the aggregate share ownership of certain shareholders (generally 5% shareholders, applying certain look-through and aggregation rules) increases by more than 50% over such shareholders’ lowest percentage ownership during the testing period (generally three years). Purchases of our equity securities in amounts greater than specified levels, which will be beyond our control, could create a limitation on our ability to utilize our NOLs for tax purposes in the future. We have completed a Section 382 study, through November 30, 2014, to assess whether an ownership change would have caused limitations to our net operating loss carryforwards. Based on that study, we have concluded an ownership change occurred on September 19, 2008 and therefore there is potential for \$2.6 million of net operating loss to be limited. For the period of September 20, 2008 through November 30, 2014, we have determined that it is more likely than not that there has not been an ownership change under Section 382. We have not completed an updated Section 382 study, since November 30, 2014, and as such are not able to assess whether an ownership change has occurred that could cause limitations to our net operating loss carryforwards. Accordingly, our ability to use our net operating loss carryforwards to reduce future tax payments may be currently limited or may be limited as a result of any issuance of shares of our common shares. Limitations imposed on our ability to utilize NOLs could cause U.S. federal and state income taxes to be paid earlier than would be paid if such limitations were not in effect and could cause such NOLs to expire unused, in each case reducing or eliminating the benefit of such NOLs. Furthermore, we may not be able to generate sufficient taxable income to utilize our NOLs before they expire. If any of these events occur, we may not derive some or all of the expected benefits from our NOLs. It is possible that any future ownership change could have a material effect on the use of our net operating loss carryforwards or other tax attributes, which could adversely affect our profitability. In addition, at the state level there may be periods during which the use of NOLs is suspended or otherwise limited, which would accelerate or may permanently increase state taxes owed.

Risk Factors Related to Our Industry and its Regulation

We operate in a volatile industry and government-regulated market, which makes it difficult to evaluate our future prospects and may increase the risk that we will not be successful.

The growth and development of the wind power industry in the U.S., as in much of the world, has been supported through a variety of financial incentives and subsidies offered by governmental and regulatory bodies. The reduction or removal of the availability of these incentives would likely have an adverse effect on our business and prospects. The expiration and curtailment of these incentives in the U.S. resulted in significant contraction of our distributed-class wind turbine sales in the last four years. This market is expected to provide modest growth, driven by favorable financing solutions available to our customers, to our sales for the foreseeable future.

Since we commenced operations in August 2008, we have experienced unpredictability in our operating environment, which poses significant risk to our ability to forecast financial results and have a significant impact on our ability to sell products and services. In the distributed wind markets, lack of incentives in the U.S. create challenges in developing a robust market in North American. A delay in an expected announcement by the Italian governmental authorities clarifying the feed-in-tariff applicable to distributed-class turbines during the quarter ended December 31, 2014 caused a delay of our Italian existing order installations and new order negotiations, impacting our 2015 revenue. Incentives across multiple European countries, particularly Italy and the U.K., are currently stimulating demand in the European marketplace. These incentives are each subject to actions of legislative bodies in the respective jurisdictions, and there can be no assurance that incentives effectively enhancing the demand for wind power equipment will remain in place, or that any changes in policy may not serve to clarify the economic return anticipated for new wind power equipment in various jurisdictions. If governmental authorities do not continue to support, or reduce or eliminate their support for, the development of wind energy projects, our revenues may be adversely affected, our financing costs may increase, it may become more difficult to obtain financing, and our business and prospects may otherwise be adversely affected.

The unpredictable changes to government subsidies and financing sources in both the U.S. and global markets requires us to adjust our strategy to keep up with the changing landscape of favorable geographic markets. Because we have to tailor our product features to effectively suit individual target markets, the developing market requirements necessitate a significant and continued investment in design and product offerings and may require us to enter into new markets that we may not have previously considered.

Due to the volatility of the markets, we have a diversified set of products and services, including a suite of wind and power technology products, as well as renewable energy development services. This requires that a minimum level of engineering personnel be maintained, even if all personnel are not fully leveraged at points in time. The cost of maintaining this engineering team is expensive and if we are not able to achieve an adequate amount of business revenues, cash consumption could be significant and profitability delayed.

We are subject to various laws and regulations governing protection of the environment and the use of real property, and the failure to comply with, or a change to, such laws and regulations could adversely affect our business, financial condition, future results and cash flow.

We are subject to numerous federal, regional, state and local statutory and regulatory standards relating to the use, storage and disposal of hazardous substances, and protection of the environment. If we fail to comply with those statutory or regulatory standards (or any changes thereto), we could be subject to civil or criminal liability, the imposition of liens or fines, and large expenditures to bring us into compliance. We use certain substances at our Barre, Vermont facility that are or could become classified as hazardous substances. If any hazardous substances are found to have been released into the environment by us or our predecessors, or if such substances are found at our current facilities, we could become liable for the investigation and removal of those substances, regardless of their source and time of release. Furthermore, we can be held liable for the cleanup of releases of hazardous substances at other locations where we arranged for disposal of those substances, even if we did not cause the release at that location. The cost of any remediation activities in connection with a spill or other release of such substances could be significant.

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In addition, private lawsuits or enforcement actions by federal, state, or foreign regulatory agencies may materially increase our costs. Certain environmental laws could make us potentially liable on a joint and several basis for the remediation of contamination at or emanating from properties or facilities that we may acquire. Although we will seek to obtain indemnities against liabilities relating to historical contamination at the facilities we occupy, we cannot provide any assurance that we will not incur liability relating to the remediation of contamination, including contamination we did not cause.

We are also required to obtain and maintain governmental permits and approvals under environmental and other laws for the operation of our Barre, Vermont facility. Some of the governmental permits and approvals contain conditions and restrictions or may have limited terms. We may not at all times comply with all conditions established by existing permits and approvals, and we may not be able to renew, maintain, or obtain all permits and approvals required to operate our facilities. Although we believe we have obtained and are in compliance with all permits and approvals necessary for the operation of our facilities, our failure to renew, maintain, or obtain any required permits or approvals, our inability to satisfy any requirement of any permits, or a change in law requiring new permits or approvals, may result in increased compliance costs (including potential fines or penalties), the need for additional capital expenditures or a suspension of operations.

Our anticipated future generation assets and construction projects will be required to comply with numerous federal, regional, state, provincial and local statutory and regulatory standards and to maintain numerous licenses, permits and governmental approvals required for operation. Some of the licenses, permits and governmental approvals will contain conditions and restrictions, or may have limited terms. If these assets and projects fail to satisfy the conditions or comply with the restrictions imposed by the licenses, permits and governmental approvals, or the restrictions imposed by any statutory or regulatory requirements, they may become subject to regulatory enforcement action and the operation of the assets and projects could be adversely affected or be subject to fines, penalties or additional costs or revocation of regulatory approvals, permits or licenses. In addition, we may not be able to renew, maintain or obtain all necessary licenses, permits and governmental approvals required for the continued operation or further development of our projects, as a result of which the operation or development of our assets may be limited or suspended. Our failure to renew, maintain or obtain all necessary licenses, permits or governmental approvals may have an adverse effect on our assets, liabilities, business, financial condition, results of operations and cash flow.

We and our customers operate in a highly regulated industry.

The market for electricity generating products is heavily affected by government regulations and policies concerning the electric utility industry, as well as policies promulgated by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation with the electric utility power grid, which could result in additional costs to our end-users. These regulations and policies could deter end-user purchases of wind energy products.

As legal requirements frequently change and are subject to interpretation and discretion, we may be unable to predict the demand for our products.

Additionally, we could be subject to new laws or, in certain markets, be subject to certification requirements. Any new law, rule or regulation could require additional expenditure to achieve or maintain compliance or could adversely impact our ability to generate and deliver energy. Also, operations that are not currently regulated may become subject to regulation that could result in additional cost to our business. Further, changes in wholesale market structures or rules, such as generation curtailment requirements or limitations to access the power grid, could have an adverse effect on our ability to generate revenues from our facilities.

The results of the 2016 U.S. presidential and congressional elections may create regulatory uncertainty for the wind energy sector and may materially harm our business, financial condition and results of operations.

Various legislation, regulations and incentives designed to support the growth of wind energy have been implemented or proposed by the U.S. government such as the Production Tax Credit for Renewable Energy

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(PTC) and the Clean Power Plan. In addition, states and foreign governments also have adopted various legislations, regulations and incentives also designed to support the growth of wind energy.

Donald Trump's victory in the U.S. presidential election, as well as the Republican Party maintaining control of both the House of Representatives and Senate of the U.S. in the congressional election, may create regulatory uncertainty with respect to climate change, the clean energy sector and wind energy sector in particular. During the election campaign, President Trump made comments suggesting that he was not supportive of various clean energy programs and initiatives including the U.N. Framework Convention on Climate Change in Paris, designed to curtail global warming. It remains unclear what specifically President Trump will or will not do with respect to these programs and initiatives, and what support the Trump Administration would have for any potential changes to such legislative programs and initiatives in the United Nations or U.S. Congress. If the Trump Administration and/or the U.S. Congress take action or publicly speak out about the need to eliminate or further reduce existing programs like the U.N. Framework Convention on Climate Change in Paris the PTC, the Clean Power Plan or other legislation, regulations and incentives supporting wind energy, such actions may result in a decrease in demand for wind energy in the U.S. and other geographical markets and materially harm our business, financial condition and results of operations.

Further, if the Trump Administration or U.S. Congress increases or imposes duties, taxes, tariffs or other cost on our products that include components obtained from foreign suppliers, margin on sale of our products could be materially adversely affected.

Future demand for wind energy may be limited. Wind energy must compete with other renewable energy sources.

While wind has been a leading source of new electrical generation capacity installed in the U.S. and Europe in recent years, the market for products that generate wind energy is still at a relatively early stage of development in the U.S. when compared to conventional sources of energy. Wind energy technology may not be suitable for widespread adoption and the reduction or termination of incentive programs in the U.S. has already had an adverse impact on our future growth in this market. Other market uncertainties may also affect our ability to generate and increase sales, including the future of deregulation of the domestic U.S. electricity market, prevailing and future prices of oil and natural gas, and domestic and international policy responses to environmental issues. If market demand for wind energy products in general, and for our products in particular, fails to develop sufficiently or in the time frame that we expect, or if an oversupply of turbines available to the market from various competitors causes a prolonged decrease in the prevailing prices for turbines, we may be unable to generate sufficient revenues to achieve and maintain profitability.

In addition to competition from other industry participants and to traditional fossil fuel sources, we face competition from other renewable energy sources such as solar power, hydroelectric and geothermal power technologies. While factors such as deregulation, legislative mandates for renewable energy, and consumer preference for environmentally more benign energy sources are leading more consumers to choose renewable energy options for their power needs, wind must compete with other sources of renewable energy to derive benefit from these factors. The competition depends on the resources available within the specific markets. Although the cost to produce clean, reliable, wind energy is becoming more competitive, we must also compete with the production of solar power, hydroelectric, geothermal, and other forms of renewable energy. However, deregulation, legislative mandates for renewable energy, and consumer preference for environmentally more benign energy sources are becoming important factors in increasing the development of wind energy projects.

A material drop in the retail price of utility-generated electricity or electricity from other sources would harm our business, financial condition and results of operations.

We believe that our customers' decisions to invest in renewable energy technology is driven in part by their desire to reduce the price they pay for electricity over time. The customers' decisions may be affected by

decreases in the costs of both conventional and renewable energy sources, such as oil, natural gas, or solar energy. If the global price of oil remains at its current prices, or continues to decline, traditional utilities may be able to provide electricity at rates low enough to dissuade businesses and other entities and individuals from seeking alternatives to conventional electricity sources. Such decreases in the price of electricity from utilities and other sources, including other renewable technologies, could harm our ability to offer a competitive return on investment for our customers.

Changes in weather patterns may affect our ability to operate our proposed projects.

Changes in weather patterns may affect our ability to operate our proposed projects. Meteorological data we collect during the development phase of a project may differ from actual results achieved after wind turbines are erected. While long-term wind patterns have not varied significantly, short-term patterns, either on a seasonal or on a year-to-year basis, may vary substantially. These variations may result in lower revenues and higher operating losses.

Risks Related to Ownership of our Common Shares

Existing executive officers, directors and holders of 5% or more of our common shares will continue to have substantial control over us, which will limit your ability to influence the outcome of important transactions, including a change in control.

Our directors, executive officers and holders of more than 5% of our common shares, together with their affiliates, beneficially own, in the aggregate, approximately 65.4% of our outstanding common shares. A limited number of these significant shareholders may have the ability to control or substantially influence all aspects of our business, including decisions regarding mergers, consolidations, the sale of all or substantially all of our assets and other significant corporate actions. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could deprive our shareholders of an opportunity to receive a premium for their shares as part of a sale of our company. These actions may be taken even if they are opposed by our other shareholders.

The price of our common shares may fluctuate significantly, which may make it difficult for investors to sell such shares at a time or price they find attractive.

Our share price may fluctuate significantly as a result of a variety of factors, many of which are beyond our control. In addition to those described in “Special Note Regarding Forward-Looking Statements,” these factors include:

- Actual or anticipated quarterly fluctuations in our operating results and financial condition;
- Changes in financial estimates or publication of research reports and recommendations by financial analysts with respect to us or other financial institutions;
- Reports in the press or investment community generally or relating to our reputation or the reputation of the renewable energy industry;
- Strategic actions by us or our competitors, such as acquisitions, restructurings, dispositions, or financings;
- Fluctuations in the share price and operating results of our competitors;
- Future sales of our equity or equity-related securities;
- Proposed or adopted regulatory changes or developments;
- Domestic and international economic factors unrelated to our performance; and
- General market conditions and, in particular, developments related to market conditions for the renewable energy industry.

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In addition, in recent years, the stock market in general has experienced extreme price and volume fluctuations. This volatility has had a significant effect on the market price of securities issued by many companies, including for reasons unrelated to their operating performance. These broad market fluctuations may adversely affect our share price, notwithstanding our operating results. We expect that the market price of our common shares will continue to fluctuate and there can be no assurances about the levels of the market prices for our common shares. Our current low stock price may greatly impair our ability to raise any future necessary capital through equity or debt financing and significantly increase the dilution of our current shareholders caused by any issuance of equity in financing or other transactions. The price at which we would issue shares in such transactions is generally based on the market price of our common shares, and, in the event of further decline, the share price could result in the need to issue a greater number of shares to raise a given amount of funding.

We are an “emerging growth company,” and the reduced reporting requirements applicable to emerging growth companies may make our common shares less attractive to investors.

We are an emerging growth company. For as long as we are an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404, certain reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years from date of the reverse takeover transaction in April 2014, although circumstances could cause us to lose that status earlier, including if the market value of our shares held by non-affiliates exceeds \$700 million as of any June 30 before that time, in which case we would no longer be an emerging growth company as of the following December 31. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Emerging Growth Company.” We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such standards apply to private companies. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards that have different effective dates for public and private companies. In other words, an emerging growth company can delay the adoption of such accounting standards until those standards would otherwise apply to private companies until the first to occur of the date the subject company (i) is no longer an emerging growth company, or (ii) affirmatively and irrevocably opts out of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act. We have elected to take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards that have different effective dates for public and private companies and, as a result, our financial statements may not be comparable to the financial statements of other public companies. In addition, we have availed ourselves of the exemption from disclosing certain executive compensation information in this Annual Report on Form 10-K pursuant to Title 1, Section 102 of the JOBS Act. We cannot predict if investors will find our common shares less attractive because we will rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

The market price of our common shares may decline due to the large number of our authorized common shares eligible for future sale.

Sales of substantial amounts of our common shares in the public market or the perception that such other future sales could occur, could cause the market price of our common shares to decline. These sales could also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

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As of December 31, 2016, we had an aggregate of 23,613,884 common shares outstanding. All of these shares are tradable on the TSX without restriction, subject in some cases to the expiration of lock-up agreements, as described below, and, to volume and other restrictions under the escrow requirements of the TSX.

We may also issue common shares or securities convertible into our common shares from time to time in connection with a financing, acquisition or otherwise. Any such issuance could result in substantial dilution to our existing shareholders and cause the trading price of our common shares to decline.

We may issue additional equity securities, or engage in other transactions that could dilute our book value or affect the priority of the common shares, which may adversely affect the market price of our common shares.

Our board of directors may determine from time to time that we need to raise additional capital by issuing additional common shares or other securities. Except as otherwise described in this Annual Report on Form 10-K, we are not restricted from issuing additional common shares, including securities that are convertible into or exchangeable for, or that represent the right to receive, common shares. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future offerings, or the prices at which such offerings may be affected. Additional equity offerings may dilute the holdings of our existing shareholders or reduce the market price of our common shares, or both. Holders of our common shares are not entitled to preemptive rights or other protections against dilution. New investors also may have rights, preferences and privileges that are senior to, and that adversely affect, our then-current common shareholders. Additionally, if we raise additional capital by making additional offerings of debt or preferred equity securities, upon liquidation of our company, holders of our debt or preferred equity securities, and lenders with respect to other borrowings, will receive distributions of our available assets before the holders of our common shares. Furthermore, sales of a substantial number of our common shares or other equity-related securities, or the perception that we may sell a substantial number of our common shares, could depress the market price of our common shares and impair our future ability to raise capital through the sale of additional equity securities.

We currently do not intend to pay dividends on our common shares for the foreseeable future.

We currently do not plan to declare dividends on our common shares in the foreseeable future. See “Dividend Policy” for more information. Any determination to pay dividends in the future will be at the discretion of our board of directors. Consequently, an investor’s only opportunity to achieve a return on the investment in us will be if the market price of our common shares appreciates and the investor sells our common shares at a profit. There is no guarantee that the price of our common shares that will prevail in the market will ever exceed the price that an investor pays.

Canadian laws differ from the laws in effect in the U.S. and may afford less protection to holders of our securities.

We are a company that exists under the laws of the Province of British Columbia, Canada and are subject to the provisions of the *Business Corporations Act* (British Columbia), S.B.C. 2002, c.57, or the BCBCA, and applicable Canadian securities laws, which laws may differ from those governing a company formed under the laws of a U.S. jurisdiction. The provisions under the BCBCA and applicable Canadian securities laws may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our articles of association, have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance.

Item 1B. Unresolved Staff Comments

As a “smaller reporting company”, we are not required to provide the information required by this Item.

Item 2. Properties

We lease our principal manufacturing and headquarters facility in Barre, Vermont, and lease additional office space for use by certain of our finance, and business development teams in Burlington, Massachusetts, and sales offices in Zurich, Switzerland, and sales and service office in Bari, Italy, and Cornwall, U.K.

Our Barre, Vermont facility comprises approximately 115,000 square feet, including a manufacturing floor serviced by a 90-ton overhead industrial crane and multiple shipping bays. This facility includes executive offices and provides the base of operations for our engineers, manufacturing of certain key components, supply chain and customer service functions. We currently assemble all of our NPS 60 and NPS 100 nacelles in our Barre, Vermont facility which includes equipment and tooling to assemble and test these turbines. In addition, this facility allows us to manufacture generators and power converters both for incorporation into our turbines and on a contract basis. We believe that the current capacity of our Barre, Vermont facility is approximately \$100 million in revenue at current prices and assuming one shift of production.

Following our sale of the facility for \$1.3 million in June 2014, we entered into a five-year leaseback at \$3.00 per square foot plus the cost of certain maintenance expenses, insurance and property taxes. We have the right to extend the lease term for three years, and also have the right to terminate the lease at the end of years two, three and four with six months prior notice. We have exercised the right to cancel the lease as of December 31, 2016 and are in the process of renegotiating a revised lease at the facility for less square footage and lower overall price per square foot.

Item 3. Legal Proceedings

We are not a party to any material pending legal proceedings. We may be involved from time to time in various legal proceedings in the normal course of business.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares began trading on the Toronto Stock Exchange, or TSX on April 22, 2014 under the symbol “NPS” following the reverse takeover transaction described elsewhere in this Annual Report on Form 10-K. Prior to this time, there was no public market for our common stock. The following table sets forth information relating to the trading of our common shares on the TSX:

<u>Year Ended December 31, 2015</u>	<u>High (CDN)</u>	<u>Low (CDN)</u>
First Quarter	\$ 3.40	\$ 1.00
Second Quarter	\$ 1.75	\$ 0.52
Third Quarter	\$ 0.85	\$ 0.10
Fourth Quarter	\$ 0.46	\$ 0.25
<u>Year Ended December 31, 2016</u>	<u>High (CDN)</u>	<u>Low (CDN)</u>
First Quarter	\$ 0.27	\$ 0.11
Second Quarter	\$ 0.26	\$ 0.19
Third Quarter	\$ 0.31	\$ 0.21
Fourth Quarter	\$ 0.28	\$ 0.15

On March 24, 2017, the last reported sale price for our common stock on the TSX was CDN\$0.18 per share or, based on an exchange rate of CDN \$0.75 per \$1.00, \$0.13.

Holders

As of March 24, 2017, there were approximately 50 holders of record of our common shares. The actual number of shareholders is greater than this number of record holders, and includes shareholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include shareholders whose shares may be held in trust by other entities.

Dividends

We have not paid any cash dividends on our common shares since inception and do not anticipate paying cash dividends in the foreseeable future.

Securities authorized for issuance under equity compensation plans

Information about our equity compensation plans is incorporated herein by reference to Item 11 of Part III of this Annual Report on Form 10-K.

Item 6. Selected Financial Data

As a “smaller reporting company”, we are not required to provide the information required by this Item.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our unaudited interim financial statements and audited consolidated financial statements and the related notes included. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under “Risk Factors” and elsewhere.

Company Overview

We are a provider of advanced renewable power generation and power conversion technology for the distributed energy sector. We design, manufacture and service a suite of proven permanent magnet direct-drive (“PMDD”) wind turbine platforms for the distributed wind market, as well as power converters for battery energy storage applications. We are now developing integrated energy storage solutions to provide end users with turn-key distributed energy solutions. Historically we licensed our utility-class wind turbine platform, which uses the same PMDD technology as our distributed turbines, to large manufacturers. In October 2016 we completed the transfer of these technology rights to one of our partners, which will enable us to focus our efforts on the distributed energy segment. With our predecessor companies dating back to 1974 we have decades of experience in developing proven innovative energy solutions in the power generation and conversion space.

Our PMDD wind turbine technology is based on a simplified architecture that utilizes a unique combination of a permanent magnet generator and direct-drive design. The permanent magnet generator provides higher efficiency and higher energy capture than units that utilize a traditional gearbox design. Importantly, our direct-drive turbine design requires significantly fewer moving parts than traditional geared turbines, which increases reliability due to reduced maintenance and downtime costs. Since our early days of pioneering this technology, PMDD has become an industry standard.

The substantial majority of our current sales are in the small wind subset of the distributed wind market, which is commonly known to consist of turbines with rated capacities of 500 kW output or smaller. Based on the number of turbines that we have sold and installed to date, we consider ourselves a leader in the U.S., U.K., and Italy in the largest sub-segment of this market in terms of energy output, turbines ranging in size from 50 kW to 100 kW. Since the introduction of our second generation 60 kW and 100 kW PMDD wind turbines in late 2008, we have shipped over 600 of these turbines. To date, these units have run for over fourteen million hours in the aggregate. Our distributed wind customers include financial investors and project developers, but also the end users themselves in application that provide power for farms, schools, municipalities, small business, remote villages, and U.S. military installations.

We had developed a 2 MW turbine platform with three wind-speed regime variants based upon our PMDD technology, of which the 2.3 MW variant is certified to International Electrotechnical Commission, or IEC, standard 61400-1 by Det Norske Veritas, or DNV, a globally recognized certification firm.

On October 26, 2016, we entered into a definitive agreement for WEG Electric Corp. and WEG Equipamentos Eléctricos S.A. (collectively, “WEG”), a former licensor of our 2 MW turbine platform to acquire certain of our utility wind assets. Under the agreement, the proven utility scale direct drive technology we developed for applications over 1.5 MW will be solely owned by WEG and its affiliates. All related assets and liabilities, including the patent portfolio for utility wind applications greater than 1.5 MW and the engineering team largely responsible for developing this technology, was acquired by WEG. WEG will continue to compensate us under the existing arrangement paying royalties for sales in South America resulting in future payments of up to approximately \$10.0 million, of which a minimum of \$3.0 million were guaranteed and have been collected. Additionally, should WEG be successful in its plans to expand its utility wind business internationally, it will pay us up to \$17.5 million in royalty payments over the next decade for turbines shipped anywhere outside of its current market in South America.

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Regarding the power electronics side of our business, we have been developing our power converter technology since the early 2000s. Our capabilities in this area resulted from the complex power conversion technology required for wind power generations. We currently sell our MW power converters for a range of applications under the branded name of FlexPhase. Our power electronics products are incorporated into our distributed wind turbines, and also sold independently for use in microgrids and energy storage projects. Our FlexPhase products are modular in nature allowing for a common platform to service multiple applications. As of December 31, 2016, we have deployed over 155 MW of products based on this technology, primarily in connection with our wind turbine designs. Currently, we are actively commercializing sales of our power converters products as part of integrated battery energy storage systems (“BESS”), working with various battery manufactures and systems integrators.

In addition to wind turbine and productized energy storage solutions, we are capable of providing technology development services to customers for more complex energy storage, microgrid, and grid stabilization situations. While we do not focus on this as a part of our core business, these capabilities and expertise serve as a differentiator for our company with our customers.

For the years ended December 31, 2016 and 2015, we generated \$35.9 million and \$54.0 million in revenue, respectively. For the years ended December 31, 2016 and 2015 we incurred net losses of \$8.9 million and \$7.8 million, respectively.

We are headquartered in Barre, Vermont, and lease additional office space in Burlington, Massachusetts, Zurich, Switzerland, Bari, Italy, and Cornwall, U.K. We were originally incorporated in Delaware on August 12, 2008 as Wind Power Holdings, Inc., or WPHI. In February 2014, WPHI filed a Registration Statement on Form 10 (File No. 001-36317) with the SEC to register the shares of common stock of WPHI, which became effective on June 3, 2014. On April 16, 2014, we (as WPHI) completed a reverse takeover transaction, or RTO, with Mira III Acquisition Corp., or Mira III, a Canadian capital pool company incorporated in British Columbia, Canada, whereby all of the equity securities of WPHI were exchanged for common shares and restricted voting shares of Mira III, which became the holding company of our corporate group. In connection with the RTO, Mira III changed its name to Northern Power Systems Corp., the WPHI business became Mira III’s operating business, and the WPHI directors and officers became Mira III’s directors and officers.

Upon completion of the RTO, Northern Power Systems Corp. succeeded to WPHI’s status as a reporting company under the U.S. Securities and Exchange Act of 1934, as amended, or the Exchange Act, which permits us to continue to prepare our financial statements in accordance with generally accepted accounting principles in the U.S., or GAAP. Our common shares were listed on the Toronto Stock Exchange under the Symbol “NPS”.

How We Conduct Our Business

We managed our business under four business segments:

- *Product Sales and Service* — Included in this business line are our sales of distributed-class turbines along with related services, power converters, and other products produced and sold to customers. This business line reflects 96% and 82% of our revenues for the years ended December 31, 2016 and 2015, respectively.
- *Technology Licensing* — Included in this business line is the licensing of packages of our developed technology. This business line reflects 1% and 9% of our revenues for the years ended December 31, 2016 and 2015, respectively.
- *Technology Development* — Included in this business line is our development of technology for specific customer needs. This business line reflects 3% and 9% of our revenues for the years ended December 31, 2016 and 2015, respectively.
- *Shared Services* — These costs and expenses are comprised mainly of the general and administrative departments including executive, finance and accounting, legal, human resources, and information technology support, as well as certain shared engineering, and in certain circumstances, sales and marketing activities.

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Unallocated costs and expenses include depreciation and amortization, stock compensation, and certain other non-cash charges, such as restructuring and impairment charges.

We have certain customer segments that are specific to each of our business offerings but we also have customers that see significant value in our ability to bring full suite licensing, development and prototype production of projects and could therefore leverage offerings across all of these capabilities.

Our international revenue was \$30.7 million and \$47.4 million for the years ended December 31, 2016 and 2015, respectively, representing 85%, and 88% of our revenues for those periods, respectively. We expect the majority of our revenue to continue to be outside of the U.S. for the foreseeable future. A portion of our revenues continue to be denominated in currencies other than our reporting currency, the U.S. dollar, which decreased to 31% of total revenues for the year ended December 31, 2016 as compared to 39% of total revenues for the same period in 2015. We expect to see a continued significant proportion of our revenues denominated in euro and other non-U.S. dollar currencies over time as we continue to expand our international sales. We are currently experiencing negative movement between the euro and the U.S. dollar, which has an adverse effect on our revenue and profitability. In October 2015, we began employing hedging strategies to reduce currency fluctuation risk. There were no foreign currency forward contracts entered into during the year ended December 31, 2016. There were no foreign currency forward contracts outstanding at December 31, 2016.

How We Evaluate Our Operations

In managing our business, we use a variety of financial and operational metrics to assess our performance, including:

- Backlog value of our offerings;
- Deferred revenues;
- Segment revenue, gross profits and income (loss) from operations; and
- Non-GAAP adjusted EBITDA.

Backlog Value of Our Offerings

We track the value of turbine product orders executed with our customers during a period, as well as the cumulative balance of backlog for all of our offerings as leading indicators of our revenue performance. We consider an order executed when a contract has been duly signed and a deposit for such contract has been received.

- *Product Sales* — We determine order value for our turbine backlog as the turbine sale price along with our best estimate of other services expected to be rendered, such as shipping, installation and other services to ensure the effective initial operation of the turbine. Our backlog of orders for distributed turbines generally, but not always, converts to revenue within a one-year period. The timing of such revenue recognition is impacted by customer specific installation conditions such as site preparation and readiness by local utilities for grid connection. In our backlog, we do not include the value of subsequent services such as operations and maintenance support that we might provide for such turbines. We track order value of other products that we sell based upon our proprietary technologies in aggregate. Other products include non-turbine products such as maintenance kits, generators and converters we assemble and sell to customers.
- *License & Development Activity* — We track the value of our license and development activity based on our best estimates on what will be earned in the next twelve months. The timing of revenue recognized is impacted by the achievement of contractual milestones or the percentage of the work completed as a percentage of the total costs.

Deferred Revenues

We believe that deferred revenue is a leading indicator of our revenue performance. We present values on our balance sheet as deferred revenue at such time as cash has been collected from our customer and certain aspects of the earnings process have been completed but recognition as revenue has not been achieved in conformity with GAAP. Each of our three customer facing lines typically has deferred revenue balances, including:

- *Product Sales and Service* — When sales of our products involve transferring title of the equipment at delivery, which we have determined to be the correct point for recognition of revenue for domestic sales and for sales in which the customer handles logistics, we present products which have been produced and billed but not delivered as deferred revenue. In cases in which we handle logistics for the sales to customers in foreign countries, we recognize revenue when we have met all significant delivery obligations, generally when the product clears customs. We also present products which have been billed prior to the point as deferred revenue. We also defer the recognition of revenue for our operations and maintenance services that are performed over a period of time; revenue from such contracts is recognized ratably over the contract period. We present cash values collected from customers of such contracts, net of the related recognized revenue, as deferred revenue.
- *Technology Licensing and Technology Development* — Our license and technology development agreements frequently result in our collection of cash for our delivery of certain milestones; however, such milestones do not always reflect the culmination of the earnings process and we therefore present the related cash collections as deferred revenue.

Segment Revenues, Gross Profits and Income (Loss) from Operations

We define segment gross profit as segment revenues less certain direct cost of sales and services. We define segment income (loss) from operations as segment gross profit less operating expenses excluding non-cash items such as depreciation, amortization, impairments, share-based compensation or restructuring charges. We use these profitability measures internally to track our business performance.

Non-GAAP adjusted EBITDA

We believe it is useful to exclude non-cash charges, such as depreciation and amortization and share-based compensation, from our non-GAAP adjusted EBITDA because the amount of such expenses in any specific period may not directly correlate to the underlying performance of our business operations. Because of the aforementioned limitations, you should consider non-GAAP adjusted EBITDA alongside other financial performance measures, including net income (loss), cash flow metrics and our financial results presented in accordance with GAAP.

We define non-GAAP adjusted EBITDA as earnings before interest expense, income taxes, depreciation, amortization, non-cash compensation expense, and certain other unusual gains or losses on transactions as applicable.

Generally, a non-GAAP financial measure is a numerical measure of a company's performance, financial position or cash flow that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with GAAP. The non-GAAP measures included in this Annual Report on Form 10-K, however, should be considered in addition to, and not as a substitute for, or superior to, the comparable measure prepared in accordance with GAAP.

Non-GAAP adjusted EBITDA is a key financial measure used by our management and by external users of our financial statements, such as investors, commercial banks and others, to:

- assess our operating performance as compared to that of other companies in our industry, without regard to financing methods, capital structure or historical cost basis;

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- assess our ability to incur and service debt and fund capital expenditures; and
- generate future operating plans and make strategic decisions.

Non-GAAP adjusted EBITDA should not be considered an alternative to net loss, loss from operations, net cash used in operating activities or any other measure of financial performance or liquidity presented in accordance with GAAP. Our non-GAAP adjusted EBITDA may not be comparable to similarly titled measures of another company because all companies may not calculate non-GAAP adjusted EBITDA in the same manner. Some of the limitations in non-GAAP adjusted EBITDA are:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future;
- non-GAAP adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- non-GAAP adjusted EBITDA does not include the impact of share-based compensation;
- non-GAAP adjusted EBITDA does not reflect income tax payments that may represent a reduction in cash available to us; and
- other companies, including companies in our industry, may calculate non-GAAP adjusted EBITDA differently or not at all, which reduces its usefulness as a comparative measure.

Factors Affecting Our Results of Operations

We believe that the most significant factors that affect our financial performance and results of operations are as follows:

UK and Italian Government Feed-in-Tariff and Blade Supply Impact

In December 2015, the U.K. Department of Energy and Climate Change announced a 40% reduction to the feed-in-tariff for wind turbines ranging in capacity from 50-100 kW. This reduction became effective on February 1, 2016 and has since seen quarterly reductions based a limited deployment cap of 300kW per quarter. The limited deployment cap and related quarterly reduction of the feed-in-tariff may have a negative impact on orders for distributed class turbines in the U.K. market during the remainder of 2017. The UK government currently considers a re-distribution of the deployment cap across various bands, which may result in an increase of the deployment cap for 50-100kW wind turbines in the second half of 2017.

The Italian governmental authorities published a revision to the law in June 2016, extending the feed-in-tariff until December 31, 2016 with an ability to grid connect turbines and an eligibility to the current feed-in-tariff until June 29, 2017, and a possibility to connect wind turbines between June 30, 2017 and December 31, 2017 at a reduced feed-in-tariff. It was announced that a new law is drafted and expected to be publicized during the second quarter of 2017. It is expected that the new laws will provide for a feed-in-tariff from January 1, 2018 until December 31, 2019.

Our revenue during 2015 was negatively impacted by our primary supplier of blades ceasing operations, which occurred in February 2015, and our resulting decision to transition to two new suppliers. We continue to work with our suppliers to manage the cost, capacity and quality of our blade supply.

Foreign Currency Fluctuations Could Impact Profitability

A substantial amount of our business in 2017 could be non-U.S. dollar denominated sales transactions, which we currently expect to be predominantly denominated in euros. This can result in a significant proportion of our receivables being denominated in foreign currencies. While a majority of our costs will be in the U.S. dollar, we

do incur a portion of our costs in euros, Chinese renminbi, Canadian dollars, Swiss francs and British pounds. In addition, we expect to be entering into extended duration operations and maintenance contracts, which would obligate us to perform services in the future based upon currently negotiated non-U.S. dollar denominated pricing terms. Although we are pursuing economic hedging strategies, including increasing our euro-denominated costs and entering into euro-based forward contracts, there can be no assurance that we can execute these strategies to effectively control the economic exposure of currency movements. Negative movements in the exchange rate between foreign currencies and the U.S. dollar, such as those recently affecting the euro, could have an adverse effect on our revenues and delay our achieving profitability.

Our Ability to Source and Manage Working Capital Requirements

Our business operations require significant working capital. Our operating results and future growth depend on our ability to optimize the working capital cycle time and to source adequate working capital commensurate with the size of our business. Some of our suppliers require us to make prepayments in advance of shipment. We have provided our customers with alternative payment options, such as letters of guarantee. Historically, we have managed to optimize our working capital cycle time and to source the required working capital from banks and capital financings.

Government Policies Including Incentives, Tariffs, Taxes and Duties Affecting the Wind Power Sector

Government incentives continue to be one of the main drivers for developing wind energy technology and increasing capacity. Although government support programs differ from country to country, a number of countries have implemented incentive schemes, thus providing various types of subsidies and long-term tariffs to wind power developers. Historically, we and our customers have benefited from fiscal benefits applicable to investments in the wind power industry by federal, state and local governments in the U.S. and Europe. Changes in these policies have affected, and will continue to affect, the investment plans of our customers and us, as well as our business, financial condition and results of operations.

Currently there are certain feed-in-tariff regimes in Italy, the U.K. and Indiana, U.S. supporting the installation and operation of distributed-class wind turbines. Since these regimes were clarified recently relative to the sales cycles of our distributed-class turbines well suited for these installations, our orders for distributed-class turbines continues to be strong. Published information from the U.K. indicates that the feed-in-tariff rates and deployment caps by rated capacity have declined as recent as January 1, 2017 and will decline further on a quarterly basis. The Italian authorities have extended the feed-in-tariff until December 31, 2016 with an ability to grid connect turbines and an eligibility to the current feed-in-tariff until June 30, 2017.

With bipartisan support the Renewable Electricity Production Tax Credit (PTC) phasedown has been enacted. These tax credits are now being phased out on an 80-60-40 schedule, ending after 2019. Eligible properties, generally personal, that begin construction before December 31, 2018, December 31, 2019 and December 31, 2020 will have their Investment Tax Credit (ITC) amounts reduced from 24%, 18% and 12% thereafter.

Our third generation distributed turbine offers customers meaningfully improved economics that make the turbines more relevant for regions that do not have economic incentives. As we continue sales in our core markets we expect to continue to expand our product offering and sales force to increase our sales in other regions.

Demand for Renewable Energy and Specifically for Wind Power Energy

Changes in prices of oil, coal, natural gas and other conventional energy sources influence the demand for electricity and for renewable energy sources. Our business expansion and revenue growth has depended, and will continue to depend, on demand for renewable energy, specifically wind power energy products and future growth of the wind turbine market which will be affected by the growth of the global and regional economies, the stability of financial markets and the ability of wind turbine manufacturers to further expand production capacity and reduce manufacturing costs.

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In addition to competition from other industry participants and to traditional fossil fuel sources, we face competition from other renewable energy sources such as solar power. The competition depends on the resources available within the specific markets. Although the cost to produce clean, reliable, wind energy is becoming more competitive, we must also compete with the production of solar power, hydroelectric, geothermal, and other forms of renewable energy. However, deregulation, legislative mandates for renewable energy, and consumer preference for environmentally more benign energy sources are becoming important factors in increasing the development of wind energy projects.

Wind Turbine Sales to Customers

We recognize revenue based on the value of the turbine product when title is transferred assuming all other criteria for revenue recognition have been met. For certain international turbine sales, we provide logistics services (including shipment and warehousing), and assistance with customer clearance if requested. These services are integral to meeting delivery and cannot be segregated from the turbine product. We recognize revenue for the turbine product once it has cleared customs and been shipped from the logistics warehouse. Consequently, our results of operations have been and will continue to be significantly affected by the number of units of wind turbines we sell and the timing of revenue recognition on such sales at any given period. In addition, since certain of our wind turbine products are sold at different prices and we are developing other models of wind turbines, we expect changes to our product mix will also affect our results of operations and margins.

Development of the Distributed Wind Market

Applications for distributed energy, and as a subset distributed wind, continue to evolve globally. In many regions of the world, notable proportions of the population have no access to electrical power, or have access to unstable power. It is important to the growth of our business to have offerings that are well suited to support such distributed energy needs. We expect to continue to invest in both research and development to refine our distributed-class turbine offerings as well as in our sales force to develop opportunities globally for the sales of our turbines.

International Expansion

We intend to invest in the expansion of our international sales and marketing efforts as we see opportunities for us to expand direct turbine sales, and development offerings. Certain regions are expanding wind power as a source of energy driven either by the natural cost of energy in such regions or by certain incentive regimes. We currently derive a significant proportion of our revenues outside of the U.S., and we expect this to continue. We currently intend to increase our sales and marketing investment on targeted regions with strong wind resources within Asia, Europe, and North America.

Pricing of Wind Turbines

Pricing of our wind turbines is principally affected by the overall demand and supply in the wind power equipment industry and by the average wind turbine manufacturing cost. We price our wind turbines with reference to the prevailing market prices when we enter into sales contracts with our customers, taking into consideration our estimated costs and an appropriate expected gross profit margin.

Prices of Raw Materials and Components and Their Availability

Raw materials and components used in the production of our wind turbines are sourced from domestic suppliers as well as international suppliers, and their prices are dependent on various factors in addition to supply and demand. The fluctuations in prices of such raw materials and components and their availability will affect our operating results. In addition, the primary raw materials used in some of our components include steel and copper. Consequently, the prices we pay to our suppliers for such components may be affected by movements in prices for these raw materials.

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We generally engage two suppliers for each of our major components to minimize the dependency on any single supplier. We currently have certain components for which we only have a single source supplier. As noted above, the primary supplier of blades for our distributed-class turbines ceased operations in February 2015, and the resulting supply constraint had an adverse effect on our 2015 revenues. We continue to work with our suppliers to manage the cost, capacity and quality of our major components.

Ability to Design and Market Technologically Advanced and Cost-Competitive Turbine Models

Although we have successfully launched three generations of our distributed-class wind turbines, our operating results and future growth depend on our ability to continue to develop technologies, and market technologically advanced and cost competitive wind turbines. We expect to continue to optimize the performance of our products under diverse operating conditions such as in low and high temperatures, low wind velocity and coastal areas, as well as reduce the cost of our offerings. Our ability to design and develop new products that meet these changing requirements has been and will continue to be critical to our ability to maintain and increase our installed capacity sold and profitability. As a result, we expect to continue to make significant investments in research and development, particularly with respect to designing and developing more technologically advanced and cost-competitive products and core components.

Seasonality in Our Operations

Wind turbine sales in the regions in which we currently sell our turbines are affected by seasonal variations and the timing of government incentive structures. To satisfy the delivery schedules, we manufacture most of our wind turbines during the second and third quarters of each year for delivery and installation in the third and fourth quarters. This schedule is due primarily to the weather conditions, which are more favorable in these quarters for installation in northern areas to which we supply most of our wind turbines. We expect that the seasonality will gradually lessen as we obtain more purchase orders for sale of wind turbines in additional geographies.

Investment in People

As of December 31, 2016, we had 71 full-time employees, a decrease of 24 full-time, or approximately 25%, from December 31, 2015. The major part of this reduction was due to the transfer of engineers to WEG as part of the sale of the utility scale business assets. We also rely on temporary hourly employees to staff our manufacturing operations at levels targeted to meet our production needs during any given period. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have not experienced any employee-initiated work stoppages and we consider our relations with our employees to be good.

Basis of Presentation

We present our financial information in accordance with accounting principles generally accepted in the United States, or GAAP. We have three operating segments: Product Sales and Service, Technology Licensing and Technology Development. We also have corporate-level activity, which consists primarily of costs associated with certain corporate administrative functions such as legal and finance which are not allocated to our reportable segments. All significant intercompany transactions and balances have been eliminated in consolidation.

Significant Accounting Estimates

We review all significant estimates affecting our consolidated financial statements on a recurring basis and record the effects of any necessary adjustments prior to their publication. Uncertainties with respect to such estimates and assumptions are inherent in the preparation of consolidated financial statements; accordingly, it is possible that actual results could differ from those estimates and changes to estimates could occur in the near

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term. The preparation of our consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of the contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. We use estimates and assumptions in accounting for the following significant matters, among others: revenue recorded from licensing and development agreements; realizability of accounts receivable; and valuation of inventory, goodwill and long-lived assets, warranty reserves, deferred income tax assets, share-based compensation and contingencies.

Results of Operations of the Year Ended December 31, 2016 compared to the Year Ended December 31, 2015**Overview**

Our general activity during the year ended December 31, 2016 was primarily focused on reducing business cost by selling the utility wind assets, reducing headcount, restructuring management and optimizing our supply chain and operations profile to improve our profit margins. We also focused on increasing our service offerings to include full turnkey wind turbine installations.

Our general activity during the year ended December 31, 2015 was primarily focused on: expanding our order backlog of distributed turbines in key European markets, especially in Italy; stabilizing our supply chain for blades with two new suppliers; continued support of our release of our third generation products turbine reducing our cost of the turbine while increasing energy capture; optimizing our supply chain and operating profile to improve our margins; and continuing to expand our technology licensing and development business. In addition, we pursued an equity capital raise in the first quarter; however, due to then current market conditions, we decided not to complete the capital raise at that time.

Revenue, Orders and Deferred Revenue (dollars in millions)

Total revenues from Product Sales and Service, Technology Licensing and Technology Development decreased by \$18.1 million to \$35.9 million for the year ended December 31, 2016 from \$54.0 million at December 31, 2015. Our overall backlog increased \$3 million as of December 31, 2016 to \$28 million from \$25 million at December 31, 2015. Our backlog of orders generally, but not always, converts to revenue for us within a one-year period. The timing of such revenue recognition is impacted by customer specific installation conditions such as site preparation and readiness by local utilities for grid connection.

A comparison of our revenues for the year ended December 31, 2016 and 2015 is as follows:

	Year Ended December 31,		Change	% Change
	2016	2015		
Product Sales and Service	\$34.3	\$44.2	\$ (9.9)	(22)%
Technology Licensing	0.4	4.7	(4.3)	(91)
Technology Development	1.2	5.1	(3.9)	(76)
Total	<u>\$35.9</u>	<u>\$54.0</u>	<u>\$ (18.1)</u>	<u>(33.5)%</u>

Product Sales and Service

Product sales and service revenue decreased by \$9.9 million to \$34.3 million for the year ended December 31, 2016, from \$44.2 million for the same period in 2015. The decrease in our Product Sales and Service revenue was primarily attributed to recognizing lower revenue on sales of our distributed-class turbines which totaled \$28.9 million along with a decrease in sales of our non-turbine products which totaled \$0.5 million for the year ended December 31, 2016 as compared to \$38.6 million and \$0.9 million for turbines and non-turbine products,

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respectively, for the year ended December 31, 2015. Declines in distributed class and non-turbine revenues were further exacerbated by a non-recurring \$0.9 million sale of a prototype 2.2 MW unit during 2015. We recognized revenue on 124 units for the year ended December 31, 2016 as compared to 147 units for the year ended December 31, 2015. Related service revenue totaled \$4.9 million for the year ended December 31, 2016 and \$3.8 million for the same period in 2015 which is an increase of \$1.1 million. In addition, the increase in the U.S. dollar relative to the Euro over the periods resulted in lower revenue for the latter period.

During the year ended December 31, 2016, we executed 134 new distributed-class turbine sales orders. During the year ended December 31, 2015, we executed 130 new distributed-class turbine sales orders. Our deferred revenue balance associated with Product Sales and Service at December 31, 2016 was \$4.2 million which is included in the backlog value disclosed above. At December 31, 2015, such balance was \$9.6 million.

Technology Licensing Revenue

Technology licensing revenue decreased by \$4.3 million to \$0.4 million for the year ended December 31, 2016 from \$4.7 million for the same period in 2015. This decrease is attributed to the sale of assets previously licensed to a significant customer. For the year ended December 31, 2015 revenues related to our licensing agreement with this customer were \$2.7 million in license fees and \$2.0 million in royalty revenues. As a result of the asset sale, future royalties will be recorded outside of Revenue as part of the Gain on Sale of Assets. Our deferred revenue balance associated with Technology Licensing was \$0 as of December 31, 2016 and 2015.

Technology Development Revenue

Technology development revenue decreased by \$3.9 million to \$1.2 million for the year ended December 31, 2016 from \$5.1 million for the same period in 2015. This decrease is attributed to recognizing \$1.2 million of revenue related to a contract with a significant customer to develop a 3.3 MW turbine in 2016 versus recognizing \$5.1 million in 2015. Our development of the technology for the 3.3 MW turbine ended due to the sale of the utility wind assets. Our total deferred revenue balance associated with Technology Development was \$0 as of December 31, 2016 and 2015.

Cost of Goods Sold and Cost of Service Revenues (dollars in millions)

Cost of goods sold and cost of services revenues collectively was \$33.1 million for the year ended December 31, 2016 and \$43.8 million for the year ended December 31, 2015. A comparison of our costs of goods sold and cost of services for the year ended December 31, 2016 and 2015 is as follows:

	Year Ended December 31,		Change	% Change
	2016	2015		
Product Sales and Service	\$31.9	\$41.6	\$ (9.7)	(23)%
Technology Licensing	0.1	0.5	(0.4)	(80)
Technology Development	0.5	0.9	(0.4)	(44)
Shared Service	0.1	0.1	—	—
Unallocated	0.5	0.7	(0.2)	(29)
Total	<u>\$33.1</u>	<u>\$43.8</u>	<u>\$ (10.7)</u>	<u>(24)%</u>

Product Sales and Service Cost of Goods and Costs of Service Sold

Product sales and service cost for the year ended December 31, 2016 decreased by \$9.7 million to \$31.9 million from \$41.6 million for the same period in 2015. The decrease is attributed to recognizing revenue on 23 fewer units in 2016 as compared to 2015 partially offset by lower blade costs incurred in 2016 as blade vendor

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relationships stabilized in 2016. Our cost of goods sold was \$28.7 million for product sales along with \$3.2 million of related service costs for the year ended December 31, 2016 and \$38.0 million for product sales and \$3.6 million for related service costs for the same period in 2015. Lower service cost of sale results from \$0.6 million in lower consulting expense partially offset by an increase of \$0.2 million in compensation and benefits as the service teams in the U.K. and Italy were expanded to bring provision of services in-house.

Technology Licensing Cost of Service

Technology licensing cost of services for the year ended December 31, 2016 decreased by \$0.4 million to \$0.1 million from \$0.5 million for the same period in 2015. The decrease is due to \$0.4 million in lower compensation and benefit expense for the year ended December 31, 2016 as compared to the same period in 2015.

Technology Development Cost of Service

Technology development cost of services for the year ended December 31, 2016 decreased by \$0.4 million to \$0.5 million from \$0.9 million for the same period in 2015. This decrease is related to decreased activity related to development of a 3.3 MW turbine, due to the sale of the utility wind assets.

Shared Service

Shared service cost of services for the year ended December 31, 2016 remained consistent at \$0.1 million compared to the same period in 2015.

Unallocated

The costs from unallocated expenses for the year ended December 31, 2016 decreased by \$0.2 million to \$0.5 million from \$0.7 million for the same period in 2015. This reflects lower fixed asset depreciation in 2016 as compared to 2015 as some assets ended their depreciable lives but are still in use.

Segment Gross Profit (Loss) (dollars in millions)

	Year Ended December 31,		Change	% Change
	2016	2015		
Product Sales and Service	\$ 2.4	\$ 2.5	\$ (0.1)	(8)%
Technology Licensing	0.3	4.3	(4.0)	(93)
Technology Development	0.7	4.2	(3.5)	(83)
Shared Service	(0.1)	(0.1)	—	—
Unallocated	(0.5)	(0.7)	0.2	22
Total	<u>\$ 2.8</u>	<u>\$10.2</u>	<u>\$ (7.4)</u>	<u>(72)%</u>

Product Sales and Service

Gross profit from product sales and service for the year ended December 31, 2016 decreased by \$0.1 million to \$2.4 million compared to \$2.5 million for the same period in 2015. This change was principally due to a decrease in sales of distributed-class turbines and non-turbine products of \$11.0 million partially offset by lower related costs cost of goods sold of \$9.3 million and an increase in service gross profit of \$1.6 million in the year ended December 31, 2016 as higher service revenues were complemented by lower cost of service as we reduced our reliance on third parties to provided services in the U.K. and Italian markets.

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Technology Licensing

Gross profit from technology licensing for the year ended December 31, 2016 decreased by \$4.0 million to \$0.3 million from \$4.3 million for the same period in 2015. The decline is principally due to lower revenue recognition in 2016 from third party licensing and royalty arrangements along with lower related cost of sales due to the sale of our utility wind assets.

Technology Development

Gross profit from technology development for the year ended December 31, 2016 decreased by \$3.5 million to \$0.7 million compared to \$4.2 million for the same period in 2015, principally due to lower revenues from contract technology development services provided to a significant customer in 2016 due the sale of our utility wind assets.

Shared Service

Gross loss from shared service for the year ended December 31, 2016 remained consistent at \$0.1 million as for the same period in 2016.

Unallocated

Gross loss from unallocated expenses for the year ended December 31, 2016 decreased by \$0.2 million to \$0.5 million from \$0.7 million for the same time period in 2015. This decline reflects lower depreciation and amortization expense in 2016.

Operating Expenses

Research and Development Expenses

Research and development expenses decreased by \$0.8 million or 24% to \$2.6 million for the year ended December 31, 2016 as compared to \$3.4 million for the same time period in 2015. The reduction in research and development expense is primarily the result of a decrease in compensation and benefits of \$0.8 million and a \$0.2 million reduction in other R&D expenses partially offset by a \$0.2 million increase in consultant expenses. The decrease in compensation and benefit expense is a result of lower headcount related to our efforts to monetize our utility wind assets.

Sales and Marketing

Sales and marketing expenses decreased by \$0.7 million or 17% to \$3.5 million for the year ended December 31, 2016 from \$4.2 million for the same period in 2015. The decrease in sales and marketing expenses was driven by consolidation of marketing efforts and related reduction in headcount.

General and Administrative Expenses

General and administrative expenses decreased by \$2.1 million, or 25% to \$6.4 million for the year ended December 31, 2016 from \$8.5 million for the same period in 2015. The decrease in our general and administrative expenses is primarily explained by a \$0.7 million reduction in compensation and benefits, \$0.5 million reduction in consulting, \$0.2 million reduction in IT expenses, \$0.2 million in human resources expenses, \$0.1 million reduction in travel expenses and \$0.4 million in other general and administrative.

Gain on sale of assets

Gain on sale of assets was \$1.0 million for the year ended December 31, 2016 as compared to \$0 for the same period in 2015. This increase reflects the gain on the sale of utility wind assets in 2016.

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Impairment of goodwill

As a result of annual impairment testing, we recorded an impairment charge of \$0.4 million for the year ended December 31, 2016, relating to the goodwill in our Product Sales and Service segment. There was no such charge in 2015.

Loss from Operations

Our loss from operations increased by \$3.1 million to \$9.0 million for the year ended December 31, 2016 compared to a loss of \$5.9 million for the year ended December 31, 2015.

Segment Income (Loss) from Operations (dollars in millions)

	Year Ended December 31,		Change	% Change
	2016	2015		
Product Sales and Service	<u>\$ (2.3)</u>	<u>\$ (2.3)</u>	<u>\$ —</u>	<u>—</u> %
Technology Licensing	1.2	3.7	(2.5)	(68)
Technology Development	0.6	4.2	(3.6)	(88)
Shared Service	(5.9)	(8.6)	2.7	31
Unallocated	<u>(2.6)</u>	<u>(2.9)</u>	<u>0.3</u>	<u>10</u>
Loss from operations	<u><u>\$ (9.0)</u></u>	<u><u>\$ (5.9)</u></u>	<u><u>\$ (3.1)</u></u>	<u><u>(53)%</u></u>

Product Sales and Service

Loss from operations from product sales and service for the year ended December 31, 2016 remained consistent at a loss of \$2.3 million with the same period in 2015. The decrease in operating expenses of \$0.5 million were offset by a decrease in gross profit of \$0.1 million from lower sales and the impairment of goodwill of \$0.4 million.

Technology Licensing

Income from operations from technology licensing for the year ended December 31, 2016 decreased by \$2.5 million to income of \$1.2 million compared to \$3.7 million for the same period in 2015, due to an decrease in gross profit of \$4.0 million from decreased revenue from license fees and royalties under our 2.X license agreement, and flat expenses for research and development expenses attributable to technology licensing, partially offset by a \$1.0 million gain on sale of utility wind assets and a \$0.5 million reduction in operating expenses in the year ended December 31, 2016.

Technology Development

Income from operations from technology development for the year ended December 31, 2016 decreased by \$3.6 million to \$0.6 million compared to \$4.2 million for the same period in 2015, due to a decrease in gross profit of \$3.5 million from decreased development revenue in 2016 and \$0.1 million in sales and marketing expense in 2016 as a result of the sale of our utility wind assets.

Shared Services

Corporate shared general and administrative loss for the year ended December 31, 2016 decreased by \$2.7 million to \$5.9 million compared to \$8.6 million for the same period in 2015 principally due to a decrease in other corporate and shared services expenses of \$2.7 million as a result of cost cutting initiatives.

[Table of Contents](#)**Unallocated**

The loss from unallocated expenses for the year ended December 31, 2016 decreased by \$0.3 million to \$2.6 million from \$2.9 million as compared to the same period in 2015 due to a decrease of \$0.4 million in stock compensation expense and a decrease of \$0.1 million in depreciation expense partially offset by an increase of \$0.2 million in other unallocated expense for the year ended December 31, 2016.

The table below breaks out the unallocated expenses by category for the periods reported (*dollars in millions*):

	Year Ended December 31,		Change	% Change
	2016	2015		
Depreciation and amortization	<u>\$(0.7)</u>	<u>\$(0.8)</u>	<u>\$ 0.1</u>	<u>13%</u>
Stock-based compensation	(0.5)	(0.9)	0.4	44
Other	<u>(1.4)</u>	<u>(1.2)</u>	<u>(0.2)</u>	<u>(17)</u>
Total charges	<u>\$(2.6)</u>	<u>\$(2.9)</u>	<u>\$ (0.3)</u>	<u>.30%</u>

Other Income (Expense) and Income Tax Expense

Other income (expense) for the year ended December 31, 2016 improved by \$0.5 million to income of \$0.3 million from expense of \$0.2 million as compared to the same time period in 2015. This improvement is primarily the result of a \$0.5 million gain on foreign currency transactions in the year ended December 31, 2016 when compared to the same time period in 2015. Income tax expense decreased to \$0.2 million for the year ended December 31, 2016 as compared to \$1.6 million for the same period in 2015. The decrease is the result of lower Brazilian tax expense incurred on certain license and royalty revenue earned in Brazil in 2016 as compared to 2015 and the goodwill impairment in 2016.

Net Loss

Net loss increased by \$1.1 million, or 14%, to \$8.9 million for the year ended December 31, 2016 from a net loss of \$7.8 million for the same period in 2015. The increase in our net loss for the year ended December 31, 2016 is primarily a result from higher loss from operations partially offset by other income and lower income tax expense in 2016.

Non-GAAP Measures

Generally, a non-GAAP financial measure is a numerical measure of a company's performance, financial position or cash flow that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with GAAP. The non-GAAP measures included in this Annual Report on Form 10-K, however, should be considered in addition to, and not as a substitute for or superior to the comparable measure prepared in accordance with GAAP. We utilize the non-GAAP measure of non-GAAP adjusted EBITDA which we define as earnings before interest expense, income taxes, depreciation, amortization, non-cash compensation expense, and certain other unusual gains or losses on transactions as applicable.

[Table of Contents](#)**Non-GAAP Adjusted EBITDA (Loss) (dollars in millions)**

	Year ended December 31,	
	2016	2015
Net loss	<u>\$(8.9)</u>	<u>\$(7.8)</u>
Provision for income tax	0.2	1.6
Interest expense	0.1	0.2
Depreciation and amortization	0.7	0.8
Stock-based compensation	0.5	0.9
Gain on sale of assets	(1.0)	—
Loss on disposal	0.3	0.2
Impairment of goodwill	0.4	—
Non-cash implied license revenue	—	(0.6)
Total noncash addbacks, net	<u>1.2</u>	<u>3.1</u>
Non-GAAP Adjusted EBITDA Loss	<u><u>\$(7.7)</u></u>	<u><u>\$(4.7)</u></u>

Non-GAAP adjusted EBITDA was a loss of \$7.7 million for the year ended December 31, 2016 and a loss of \$4.7 million for the same period in 2015. The change in non-GAAP adjusted EBITDA loss is primarily attributable to an increase in net loss resulting from lower revenues for the period ending December 31, 2016 as compared to the same period in 2015 partially offset by a \$1.0 million gain on sale of assets.

Liquidity and Capital Resources**Consolidated Statements of Cash Flows Data (dollars in millions)**

	Year ended December 31,	
	2016	2015
Net loss	<u>\$(8.9)</u>	<u>\$(7.8)</u>
Net cash used in operating activities	(0.8)	(4.4)
Net cash (used in) provided by investing activities	1.2	(1.3)
Net cash used in financing activities	(1.3)	(1.1)

Cash and Cash Equivalents

As of December 31, 2016, we had cash and cash equivalents of \$5.4 million of which \$0.4 million was held by a foreign holding company and subsidiaries. We had cash and cash equivalents of \$6.3 million of which \$0.4 million was held by a foreign subsidiary for the same period in 2015.

We have experienced recurring operating losses and had an accumulated deficit of \$177.3 million as of December 31, 2016. In addition, we have experienced recurring negative operating cash flows, which have resulted in a decrease in our cash balance. These factors raise substantial doubt regarding our ability to continue as a going concern. The Company evaluated these conditions as well as actions taken in 2016 to improve profitability. These actions included cost reductions by reducing headcount and restructuring management, reducing the cost of our core distributed wind products, optimizing our supply chain, and monetizing certain of our utility wind assets. In addition, we have begun commercializing our sales of our power converters, we are expanding our service offerings to include full turnkey wind turbine installations and have increased sales staff to expand into additional markets, especially the U.S. The Company believes that the actions taken have alleviated the substantial doubt about the Company's ability to continue as a going concern. Our financial statements do not include any adjustments that might result from this outcome of this uncertainty.

We expect a substantial amount of our business in 2017 to be non-U.S. dollar denominated sales transactions, which we currently expect to be predominantly denominated in euros. To partially mitigate this risk we have

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increased the sourcing of materials in Euro denominated currency, however there can be no assurance that we can execute these strategies to effectively control the economic exposure of currency movements.

Operating Activities

Cash used in operating activities consists of net loss adjusted for certain non-cash items including depreciation and amortization, impairment losses, share-based compensation, and changes in working capital and other activities. In addition to the increase in net loss, cash used in operations decreased as described below as a result of improvements in managing our working capital needs, specifically inventory management.

For the year ended December 31, 2016, net cash used in operating activities decreased by \$3.6 million to \$0.8 million from \$4.4 million for the year ended December 31, 2015. The decrease in cash used in operating activities for 2016 is primarily due to the net loss incurred partially offset by the effect of changes in assets and liabilities resulting in a cash inflow of \$7.1 million. Included in these changes were a \$6.0 million decrease in deferred costs, \$3.8 million increase in customer deposits, \$2.0 million decrease in other assets, \$1.8 million decrease in inventories and \$0.3 million in other balance sheet accounts, partially offset by a \$5.6 million decrease in deferred revenues and \$1.2 million decrease in payables and accrued expenses.

Investing Activities

Net cash provided by investing activities was \$1.2 million for the year ended December 31, 2016 as compared to net cash used by investing activities of \$1.3 million for the same period in 2015. In 2016, we sold our utility wind related assets resulting in proceeds of \$1.5 million in cash offset by \$0.3 million of property and equipment additions, while 2015 reflects purchases of property and equipment for \$1.3 million.

Financing Activities

For the year ended December 31, 2016, net cash used by financing activities was \$1.3 million compared to net cash used of \$1.1 million for the year ended December 31, 2015. We had repayments of \$7.0 million and borrowings of \$5.7 million on our working capital revolving line of credit for the period ended December 31, 2016 as compared to repayments of \$18.7 million and borrowings of \$17.6 million for the same period in 2015.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements and did not have any such arrangements at December 31, 2016.

Contractual Obligations

As described below, our long-term debt obligations were zero as of December 31, 2016 and December 31, 2015. We have \$1.6 million outstanding on our working capital revolving line of credit and a \$0 outstanding under our performance letter of credit and warranty guarantee, as of December 31, 2016, which is described below in the Comerica Credit Facility section. In addition, we have leased our headquarters and production facility which expires in June of 2019. Effective as of the second anniversary of the lease commencement (June 19, 2014), we have an annual right to terminate the lease without penalty. We have exercised the right to cancel the lease as of December 31, 2016 and are in the process of renegotiating a revised lease at the facility for less square footage and lower overall price per square foot.

Comerica Credit Facility

Our working capital line of credit is \$2.0 million, with the available borrowing base being limited to the amount of collateral available at the time the line is drawn. The credit facility is scheduled to mature on December 31,

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2017. This line is guaranteed by the U.S. Export-Import Bank, as well as by us. As of December 31, 2016, we had \$1.6 million outstanding on the working capital revolving line of credit. At December 31, 2016, we had a net maximum supported borrowing base of \$0.4 remaining. To facilitate certain financing arrangements that our Italian customers have with third parties, we have agreed to provide performance and warranty letters of credit to such customers. The performance letters of credit are payable if we fail to meet contractual terms such as delivery schedules. Such letters of credit decreased the borrowing base by 25% of the face value. The warranty letter of credit guarantees uptime and power curve performance over a one-year period starting at commissioning date. Such letters of credit decreased the borrowing base by 100% less the amount of cash collateral held by the bank to secure warranty letters of credit. At December 31, 2016, we had \$0 of such performance and warranty guarantees outstanding and on December 31, 2015, we had \$0.6 million of such performance and warranty guarantees outstanding with two customers.

The loan agreement with Comerica contains a financial covenant which requires us to maintain unencumbered liquid assets having a value of at least \$1.0 million at all times. At December 31, 2016, we had unencumbered liquid assets having a value of \$5.4 million.

The loan agreement also contains various covenants that limit or prohibit our ability, among other things, to:

- incur or guarantee additional indebtedness;
- pay dividends on our capital shares or redeem, repurchase, retire or make distributions in respect of our capital shares or subordinated indebtedness or make certain other restricted payments;
- make certain loans, acquisitions, capital expenditures or investments;
- create or incur certain liens;
- consolidate, merge, sell, transfer or otherwise dispose of all or substantially all of our assets; and
- enter into certain transactions with our affiliates.

As of December 31, 2016, we were in compliance with the covenants contained in our loan agreement.

Our current line of credit expires on December 31, 2017. Based on our relationship with our lender we believe that we will be able to renew our line of credit prior to December 31, 2017 or obtain alternative financing. However, we cannot guarantee that we will be able to procure additional financing upon favorable terms, if at all.

Summary of Critical Accounting Policies

In our financial statements, as included in this filing, we discuss various significant accounting policies. In this Management's Discussion and Analysis of Financial Condition and Results of Operations, we highlight certain of our most critical policies along with certain other critical disclosure as it relates to these policies, including:

Use of Estimates — The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Periodically, we evaluate our estimates, including those related to our accounts receivable, valuation allowance for inventories, useful lives of property and equipment and intangible assets, goodwill and long-lived assets, accruals for product warranty, estimates of fair value for share-based compensation, income taxes and contingencies, among others. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable at the time they are made, the results of which form the basis for making judgments about the carrying values of our assets and liabilities.

Revenue Recognition — We generate revenue from three principal sources: product sales and services, technology licensing and technology development. Related accounts receivables are stated at their estimated net realizable value. Accounts receivable are charged to the allowance for doubtful accounts when deemed uncollectible.

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We recognize revenues from product sales when delivery has occurred under completely executed sales agreements with selling prices fixed or determinable, and for which collectability is reasonably assured. For certain international turbine sales, we provide logistics services (including shipment and warehousing), and assistance with customer clearance if requested. These services are integral to meeting delivery and cannot be segregated from the turbine product. We recognize revenue for the turbine product once it has cleared customs and has been shipped from the logistics warehouse.

Revenues from service, design activities, and repair time are recognized as our work is performed and collectability is reasonably assured. Our service revenues were related primarily to commissioning activities as well as revenue generated from extended warranties and maintenance and service contracts.

Virtually all of our turbine sales contracts include multiple elements that are delivered at different points of time. A deliverable element in an arrangement qualifies as a separate unit of accounting if the delivered item has value to our customer on a stand-alone basis. Our contracts are composed of three or four units of accounting: the turbine product, commissioning services, and frequently, but not always, installation and/or extended warranty services. Typically, the final 10% – 30% of the turbine value for billing is due subsequent to the shipping/delivery of a turbine to the customer. Our current policy states that, to the extent that the value ascribed to the product value at shipment (delivery) is greater than the value billed to date the difference is recognized as unbilled revenue if no collectability questions exist.

For these arrangements, our revenue is allocated to each of the deliverables based upon their relative selling prices as determined by a selling-price hierarchy. We have determined that vendor-specific objective evidence, or VSOE, and third-party evidence, or TPE, are not currently available for our elements and therefore management's best estimate of selling price, or BEBP, is currently used. VSOE is the price at which we independently sell each unit of accounting to our customers. TPE is the price of any competitor's largely interchangeable products or services in stand-alone sales to similarly situated customers. BEBP is the price at which we would sell the deliverable if it were sold regularly on a stand-alone basis, considering market conditions and entity-specific factors. We re-evaluate the existence of VSOE and TPE in each reporting period and utilize the highest-level available pricing method in the hierarchy at any time.

Revenue related to our licensing intellectual property is recognized per ASC Topic 605-25-3, "*Revenue Recognition, Multiple Element Arrangements, Units of Accounting*" which refers to SAB 100 Subtopic 13.A.3(d), "*License Fee Revenue*", which states that delivery for revenue recognition purposes does not occur until the license term begins. Therefore, we do not recognize revenue from the licensed intellectual property until the customer has the right to use the intellectual property per the terms of the contract, physical delivery of the intellectual property has occurred and all other revenue recognition criteria have been met. There may be instances in which the intellectual property has been delivered but other services such as training, installation support, or supply chain certification are necessary for the customer to fully benefit from the intellectual property. In those cases, revenue recognition may be deferred until such services are delivered. For contracts to perform development services we record revenues using the percentage-of-completion method when applicable, if the percentage-of-completion method is not applicable we recognize revenue when all four revenue recognition criteria have been met.

For all product sales that have not yet been delivered by us, the related revenue and product costs are deferred until our delivery occurs. Customers may also elect to purchase extended warranty agreements that are deferred and recognized over the covering years, generally years three through five of the turbine's life.

Inventories — Inventories are stated at the lower of cost, determined by the standard cost method, or market value. Excess inventory is carried at its estimated net realizable value. Excess inventory is estimated using assumptions regarding forecasted customer demand, market conditions, the age of the inventory items, and likely technological obsolescence. If any of the current estimates are significantly inaccurate, losses may result, which could be material. If actual product demand and market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Accounts Receivable — Our customers operate primarily in the distributed energy market place and include wind developers and end users that cover multiple industries and geographic locations. Our products and services are sold under contracts with varying terms including contracts denominated in foreign currencies. As of December 31, 2016, 80% of our accounts receivable was denominated in euro, compared to 41% as of December 31, 2015. We expect the proportion of foreign denominated account receivable to increase as we expand sales internationally. We record all accounts receivable in U.S. dollars and adjust the U.S. dollar amount monthly to account for changes in exchange rates. Negative movements in the exchange rate between foreign currencies and the U.S. dollar, such as those recently affecting the euro, could have an adverse effect on the value of our accounts receivable. We do not currently engage in any hedging strategies, but we may consider hedging strategies in the future.

Warranty Costs — Our warranty contract with customers of our distributed-class wind turbine products is sometimes limited to repair or replacement of parts and typically expires two years from the date of shipment or commissioning. In such cases, we have typically provided non-warranty obligated services at no charge during the initial two-year period. Customers may elect to purchase from us extended warranty coverage for repair or replacement of parts for a period covering year's three to five of the product life. Extended warranties typically cover the same scope as initial warranties. Customers may also purchase a Performance Guaranty Program (PGP) which also provides maintenance and repair services over a ten-year period beginning at commissioning. The program is billed annually at a base amount with a premium for production in excess of a floor which depends on location and wind speeds. Revenues are recognized when billed and expensed as a cost of sale as incurred.

Our warranty contracts with customers of non-turbine products typically expire upon the earlier of 18 months after shipment or 12 months after commissioning by the customers and typically cover parts and labor. We record estimated warranty obligations in the earlier period of: (i) the period in which the related revenue is recognized or, (ii) the period in which the obligation is established. Warranty liabilities are based on estimated future repair costs incurred during the warranty period using historical labor, travel, shipping, and material costs, as well as estimated costs for performance warranty failures, when applicable, based upon historical performance experience. The accounting for warranties requires us to make assumptions and apply judgments when estimating product failure rates and expected costs. Adjustments are made to warranty accruals based on claim data and experience. If actual results are not consistent with the assumptions and judgments used to estimate warranty obligations, because either failure rates or repair costs differ from our assumptions, our resulting change in estimate could be material.

We also offer performance guarantees to certain customers related to minimum uptime and power generation performance. The guarantees are within the normal operating performance of similar turbines in the deployed fleet. To date we have not recorded any expense or liability related to such guarantees, as the turbines have met the performance requirement.

Income Taxes — We use the liability method of accounting for income taxes. Under this method, income taxes are provided for amounts currently payable and for deferred tax assets and liabilities, which are determined based on the differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. Deferred income taxes are measured using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is established for any deferred tax asset for which realization is not more likely than not.

We account for uncertain tax positions by determining a minimum probability threshold that a tax position must meet before a financial statement benefit is recognized. The minimum threshold is defined as a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. We do not believe material uncertain tax positions have arisen to date, and as a result, no reserves for these matters have been recorded and no interest or penalties have been recognized. Assessment of

uncertain tax positions requires significant judgments relating to the amounts, timing, and likelihood of ultimate resolution. Our actual results could differ materially from these estimates.

Share-based Compensation — For equity awards, share-based compensation expense is recognized based on the fair value of the awards on the grant date and amortized on a straight-line basis over their vesting terms. Share-based compensation expense is recognized as the greater of the fair value of the awards on the grant date or reporting date, amortized on the straight-line basis over their vesting terms. For awards initially issued as liability-based awards, we revalue the awards at each reporting period until settlement of the awards, with share-based compensation expense recognized based upon the fair value of the awards as of the reporting date, amortized on the straight-line basis over their vesting terms. Awards that have vested but are not settled are revalued at each reporting date and any excess of the current fair value over the grant-date fair value is recognized as share compensation expense in such period. We present our liability for applicable option awards based upon reporting-date fair market value for such awards.

Share-based compensation expense is recorded based on the fair value of the award at the grant date net of anticipated forfeiture rates, using the Black Scholes option pricing model. We consider many factors when estimating the share-based compensation forfeiture rate including employee class, economic environment, historical data, and anticipated future employee turnover. We review our forfeiture rate when changes in business circumstances warrant a review, and perform a full analysis annually as of December 31.

We account for share-based compensation issued to nonemployees at the fair value of equity instruments given as consideration for services rendered as a noncash expense to operations. The equity instruments are revalued on each subsequent reporting date, until the measurement date is determined. We follow modification accounting guidance under ASC Topic No. 718, “*Stock Compensation*”, when changes in the terms of granted options occur.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) (“ASU 2014-09”). The core principle of ASU 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps: identify the contract(s) with a customer; identify the performance obligations in the contract; determine the transaction price; allocate the transaction price to the performance obligations in the contract; and recognize revenue when (or as) the entity satisfies a performance obligation. ASU 2014-09 supersedes the revenue recognition requirements in Accounting Standards Codification Topic No. 605, Revenue Recognition, most industry-specific guidance throughout the industry topics of the accounting standards codification, and some cost guidance related to construction-type and production-type contracts. ASU 2014-09 is effective for public entities for annual periods and interim periods within those annual periods beginning after December 15, 2016. Early adoption is not permitted. Companies may use either a full retrospective or a modified retrospective approach to adopt ASU 2014-09.

In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers* (Topic 606) : *Deferral of the Effective Date* (“ASU 2015-14”). ASU 2015-14 defers the effective date of the new revenue recognition standard by one year. As such, it now takes effect for public entities in fiscal years beginning after December 15, 2017. Early adoption is permitted for any entity that chooses to adopt the new standard as of the original effective date (December 15, 2015). We have initiated an assessment of our revenue streams and are engaging outside consultants to perform a full assessment of the impact for implementing these standards. We have begun evaluating the impact of the new standard on our core revenues, and continue to evaluate its effect on our financial statement disclosures. We expect to have our preliminary evaluation, including the selection of an adoption method, completed by the end of 2017.

In May 2016, the FASB issued Accounting Standards Update No. 2016-12, *Revenue from Contracts with Customers* (Topic 606): *Narrow-Scope Improvements and Practical Expedients* which addresses various issues

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by making changes to the guidance originally included in ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606). The guidance in ASC 606 (as revised) is effective in the quarter and year beginning January 1, 2018, for public entities with a calendar year-end. We are currently evaluating the potential impact of adopting this guidance on the consolidated financial statements.

In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers* (Topic 606). This update clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. The Update includes targeted improvements based on input the Board received from the Transition Resource Group for Revenue Recognition and other stakeholders. The Update seeks to proactively address areas in which diversity in practice potentially could arise, as well as to reduce the cost and complexity of applying certain aspects of the guidance both at implementation and on an ongoing basis. The amendments in this update are effective at the same time as ASU 2014-09. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in Update 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. We are currently evaluating the impact this ASU will have on our consolidated financial statements.

In August 2014, the FASB issued Accounting Standards Update No. 2014-15, *Presentation of Financial Statements — Going Concern* (Subtopic 205-40): *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* ("ASU 2014-15") which provides guidance on determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity's ability to continue as a going concern. The ASU applies to all entities and is effective for annual periods ending after December 15, 2016, and interim periods thereafter, with early adoption permitted. We adopted this standard in the fourth quarter of 2016. In accordance with the guidance, we have expanded our disclosures to include the conditions that gave rise to the substantial doubt about the Company's ability to continue as a going concern as well as the actions taken to alleviate those concerns, as described in Note 1 of the accompanying notes to the consolidated financial statements.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, *Inventory* (Topic 330). Topic 330, *Inventory*, currently requires an entity to measure inventory at the lower of cost or market. Market could be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. The amendments in this update require an entity to measure inventory within the scope of this update at the lower of cost and net realizable value. Subsequent measurement is unchanged for inventory measured using last-in, first-out (LIFO) or the retail inventory method. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have an impact on our financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments — Overall* (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*. The new standard amends certain aspects of accounting and disclosure requirements of financial instruments, including the requirement that equity investments with readily determinable fair values be measured at fair value with changes in fair value recognized in our results of operations. The new standard does not apply to investments accounted for under the equity method of accounting or those that result in consolidation of the investee. This new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that fiscal year. The adoption of this standard is not expected to have an impact on our financial position or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842). The new standard requires that all lessees recognize the assets and liabilities that arise from leases on the balance sheet and disclose qualitative and quantitative information about its leasing arrangements. This new standard is effective for fiscal years beginning after December 15, 2019 and interim periods within fiscal years beginning after December 15, 2020. We are currently evaluating the potential impact of adopting this guidance on our consolidated financial statements.

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In March 2016, the FASB issued ASU No. 2016-06, *Derivatives and Hedging* (Topic 815): *Contingent Put and Call Options in Debt Instruments*. The new standard simplifies the embedded derivative analysis for debt instruments containing contingent call or put options by removing the requirement to assess whether a contingent event is related to interest rates or credit risks. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU did not have an impact on our financial statements.

In March 2016, the FASB issued ASU No. 2016-07, *Investments — Equity Method and Joint Ventures* (Topic 323): *Simplifying the Transition to the Equity Method of Accounting*. The new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have an impact on our financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation — Stock Compensation* (Topic 718): *Improvements to Employee Share-Based Payment Accounting*. The new standard involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have a material impact on our financial statements and we will not change our accounting policy in regards to forfeitures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows* (Topic 230). This update indicates that there is diversity in the practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows under Topic 230. This amendment provides guidance on eight specific cash flow issues with the objective of reducing the existing diversity in practice. Public business entities should apply the guidance in Update 2016-15 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. We are currently evaluating the impact this ASU will have on our consolidated financial statements.

Emerging Growth Company

Accounting Standards Applicable to Emerging Growth Companies: We qualify as an “emerging growth company” pursuant to the provisions of the JOBS Act, enacted on April 5, 2012. Section 102(b)(1) of the JOBS Act also provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. An “emerging growth company” can delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards would otherwise apply to private companies. We have elected to take advantage of the benefits of this extended transition period, and as a result of this election, our financial statements may not be comparable to those of companies that comply with public company effective dates for new or revised accounting standards for U.S. public companies.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

As a “smaller reporting company”, we are not required to provide the information required by this Item.

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Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
Northern Power Systems Corp.

We have audited the accompanying consolidated balance sheets of Northern Power Systems Corp. and subsidiaries (the “Company”) as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, shareholders’ equity (deficiency) and cash flows for the years then ended. Our audits also included the financial statement schedules of Northern Power Systems Corp. listed in Item 15(a)(2) as of and for the years ended December 31, 2016 and 2015. These financial statements and financial statement schedules are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements and schedules based on our audits.

We conducted our audits 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Northern Power Systems Corp. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedules as of and for the years ended December 31, 2016 and 2015, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ RSM US LLP

Boston, Massachusetts
March 31, 2017

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NORTHERN POWER SYSTEMS CORP.
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2016 AND 2015
(In thousands, except share and per share amounts)

	December 31, 2016	December 31, 2015
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 5,423	\$ 6,333
Accounts receivable — net of allowance for doubtful accounts of \$0 and \$350 at December 31, 2016 and 2015, respectively	674	3,046
Unbilled revenue	2,576	759
Inventories — net (Note 4)	7,159	9,233
Deferred costs	351	6,379
Prepaid expenses and other current assets	627	850
Assets held for sale	—	2,428
Total Current Assets	16,810	29,028
Property, plant and equipment — net (Note 5)	1,485	2,046
Intangible assets — net (Note 6)	9	80
Goodwill	361	722
Total Assets	<u>\$ 18,665</u>	<u>\$ 31,876</u>

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

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NORTHERN POWER SYSTEMS CORP.
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2016 AND 2015
(In thousands, except share and per share amounts)

	December 31, 2016	December 31, 2015
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIENCY)		
CURRENT LIABILITIES:		
Working capital revolving line of credit (Note 8)	\$ 1,600	\$ 2,892
Accounts payable	3,354	3,838
Accrued expenses (Note 9)	2,940	4,005
Accrued compensation	1,586	1,253
Deferred revenue	1,821	6,888
Customer deposits	7,419	3,596
Other current liabilities	92	196
Liabilities held for sale	—	406
Total Current Liabilities	18,812	23,074
Deferred revenue, less current portion	2,332	2,718
Deferred income taxes (Note 13)	79	175
Total Liabilities	21,223	25,967
Commitments and Contingencies (Note 16)		
SHAREHOLDERS' EQUITY (DEFICIENCY):		
Voting common shares, no par value — Unlimited shares authorized; 23,613,884 and 23,173,884 shares issued and outstanding as of December 31, 2016 and 2015, respectively.	165,642	165,568
Additional paid-in capital	9,158	8,713
Accumulated other comprehensive loss	(50)	(13)
Accumulated deficit	(177,308)	(168,359)
Total Shareholders' Equity (Deficiency)	(2,558)	5,909
Total Liabilities and Shareholders' Equity (Deficiency)	\$ 18,665	\$ 31,876

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

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NORTHERN POWER SYSTEMS CORP.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands, except share and per share amounts)

	December 31, 2016	December 31, 2015
REVENUES:		
Product	\$ 29,358	\$ 40,387
License	441	4,748
Design service	1,212	5,111
Service	4,890	3,769
Total revenues	<u>35,901</u>	<u>54,015</u>
Cost of product revenues	29,210	38,547
Cost of service revenues	3,858	5,271
Gross profit	<u>2,833</u>	<u>10,197</u>
OPERATING EXPENSES:		
Sales and marketing	3,464	4,151
Research and development	2,575	3,390
General and administrative	6,374	8,536
Gain on sale of assets	(973)	—
Impairment of goodwill	361	—
Total operating expenses	<u>11,801</u>	<u>16,077</u>
Loss from operations	(8,968)	(5,880)
Interest expense	(113)	(193)
Other income (expense)	305	(152)
Loss before provision for income taxes	(8,776)	(6,225)
Provision for income taxes	173	1,571
NET LOSS	<u>(8,949)</u>	<u>(7,796)</u>
Other comprehensive loss		
Change in cumulative translation adjustment	(37)	(13)
COMPREHENSIVE LOSS	<u>\$ (8,986)</u>	<u>\$ (7,809)</u>
Net loss applicable to common shareholders (Note 2)	\$ (8,949)	\$ (7,796)
Net loss per common share		
Basic and diluted	\$ (0.39)	\$ (0.34)
Weighted average number of common shares outstanding		
Basic and diluted	23,212,299	22,871,717

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

NORTHERN POWER SYSTEMS CORP.
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIENCY)
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands, except share and per share amounts)

	Voting Common Shares — No Par		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficiency)
	Shares	Amount				
BALANCE — December 31, 2014	22,764,353	\$ 165,386	\$ 7,972	\$ —	\$ (160,563)	\$ 12,795
Stock based compensation expense	—	—	920	—	—	920
Issuance of common stock – restricted shares	407,935	179	(179)	—	—	—
Proceeds from exercise of stock options	1,596	3	—	—	—	3
Cumulative translation adjustment	—	—	—	(13)	—	(13)
Net loss	—	—	—	—	(7,796)	(7,796)
BALANCE — December 31, 2015	23,173,884	\$ 165,568	\$ 8,713	\$ (13)	\$ (168,359)	\$ 5,909
Stock based compensation expense	—	—	519	—	—	519
Issuance of common stock – restricted shares	440,000	74	(74)	—	—	—
Cumulative translation adjustment	—	—	—	(37)	—	(37)
Net loss	—	—	—	—	(8,949)	(8,949)
BALANCE — December 31, 2016	<u>23,613,884</u>	<u>\$ 165,642</u>	<u>\$ 9,158</u>	<u>\$ (50)</u>	<u>\$ (177,308)</u>	<u>\$ (2,558)</u>

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

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NORTHERN POWER SYSTEMS CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2016 and 2015
(All amounts in thousands)

	December 31, 2016	December 31, 2015
OPERATING ACTIVITIES:		
Net loss	\$ (8,949)	\$ (7,796)
Adjustments to reconcile net loss to net cash used in operating activities:		
Provision for inventory obsolescence	259	202
Provision for (recovery of) doubtful accounts	(28)	31
Stock-based compensation expense	519	920
Depreciation and amortization	659	790
Noncash implied license revenue	—	(640)
Loss on disposal of assets	338	252
Impairment of goodwill	361	—
Gain on sale of assets	(973)	—
Deferred income taxes	(96)	14
Changes in operating assets and liabilities:		
Accounts receivable and unbilled revenue	631	1,383
Other current and noncurrent assets	1,999	591
Inventories	1,816	7,019
Deferred costs	6,028	(2,048)
Accounts payable	(484)	(315)
Accrued expenses	(736)	(2,183)
Customer deposits	3,824	(2,047)
Deferred revenue and other short term liabilities	(5,559)	(531)
Other liabilities	(406)	—
Net cash used in operating activities	<u>(797)</u>	<u>(4,358)</u>
INVESTING ACTIVITIES:		
Proceeds from sale of assets	1,501	—
Purchases of property and equipment	(285)	(1,333)
Net cash provided by (used in) investing activities	<u>1,216</u>	<u>(1,333)</u>
FINANCING ACTIVITIES:		
Payments of revolving line of credit, net of borrowings	(1,292)	(1,108)
Proceeds from the exercise of stock options	—	3
Net cash used in financing activities	<u>(1,292)</u>	<u>(1,105)</u>
Effect of exchange rate change on cash	(37)	(13)
Change in cash and cash equivalents	(910)	(6,809)
Cash and cash equivalent — Beginning of Year	6,333	13,142
Cash and cash equivalent — End of Year	<u>\$ 5,423</u>	<u>\$ 6,333</u>
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid for interest	<u>\$ 57</u>	<u>\$ 53</u>
Cash paid for income taxes	<u>\$ 22</u>	<u>\$ 45</u>
Noncash financing activity:		
Restricted stock awards	\$ 74	\$ 179

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

NORTHERN POWER SYSTEMS CORP.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands except share and per share amounts)

1. DESCRIPTION OF BUSINESS

Northern Power Systems Corp. (together with its consolidated subsidiaries, “we”, “us”, “our”, “Northern Power Systems” or the “Company”) is a provider of advanced renewable power generation and power conversion technology for the distributed energy sector. We design, manufacture and service a suite of proven permanent magnet direct-drive (“PMDD”) wind turbine platforms for the distributed wind market, as well as power converters for battery energy storage applications. We are now developing integrated energy storage solutions to provide end users with turn-key distributed energy solutions. Historically we licensed our utility-class wind turbine platform, which uses the same PMDD technology as our distributed turbines, to large manufacturers. In October 2016 we completed the transfer of these technology rights to one of our partners, which will enable us to focus our efforts on the distributed energy segment. With our predecessor companies dating back to 1974 we have decades of experience in developing proven innovative energy solutions in the power generation and conversion space.

The Company’s headquarters are in Barre, Vermont, with additional office space in Burlington, Massachusetts, Zurich, Switzerland, Bari, Italy, and Cornwall, U.K.

The Company was originally incorporated in Delaware on August 12, 2008 as Wind Power Holdings, Inc., or WPHI. In February 2014, WPHI filed a Registration Statement on Form 10 (File No. 001-36317) with the SEC to register the shares of common stock of WPHI, which became effective on June 3, 2014. On April 16, 2014, we (as WPHI) completed a reverse takeover transaction, or RTO, with Mira III Acquisition Corp., a Canadian capital pool company incorporated in British Columbia, Canada, or Mira III, whereby all of the equity securities of WPHI were exchanged for common shares and restricted voting shares of Mira III, which became the holding company of our corporate group. In connection with the RTO, Mira III changed its name to Northern Power Systems Corp., the WPHI business became Mira III’s operating business, and the WPHI directors and officers became Mira III’s directors and officers.

Liquidity — The Company has incurred operating losses since its inception, including a net loss of \$8.9 million for the year ended December 31, 2016. Management anticipates incurring additional losses until the Company can produce sufficient revenue to cover its operating costs, if ever. Since inception, the Company has funded its net capital requirements with proceeds from private equity and public and debt offerings. At December 31, 2016, the Company has cash of \$5.4 million and an accumulated deficit of \$177.3 million. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. The Company evaluated these conditions as well as actions taken in 2016 to improve profitability. These actions included cost reductions by reducing headcount and restructuring management, reducing the cost of our core distributed wind products, optimizing our supply chain, and monetizing certain of our utility wind assets. In addition, we have begun commercializing our sales of our power converters, we are expanding our service offerings to include full turnkey wind turbine installations and have increased sales staff to expand into additional markets, especially the U.S. The Company believes that the actions taken have alleviated the substantial doubt about the Company’s ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments relating to the recovery and classification of asset carrying amounts or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies followed in the preparation of these consolidated financial statements are as follows:

Basis of Presentation — The Company presents its financial information in accordance with accounting principles generally accepted in the United States, U.S. GAAP (or “GAAP”). The Company has three

operating segments: Product Sales and Service, Technology Licensing and Technology Development. The Company also has corporate-level activity, which consists primarily of costs associated with certain corporate administrative functions such as legal and finance which are not allocated to the Company's reportable segments.

All significant intercompany transactions and balances have been eliminated in consolidation.

Principles of Consolidation — The consolidated financial statements include the accounts of Northern Power Systems Corp. (formerly known as Wind Power Holdings, Inc.) and its wholly owned subsidiaries after elimination of all intercompany transactions and balances.

Use of Estimates — The preparation of the Company's consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Periodically, the Company evaluates its estimates, including those related to the accounts receivable, valuation allowance for inventories, useful lives of property and equipment and intangible assets, goodwill and long lived assets, accruals for product warranty, estimates of fair value for stock-based compensation, income taxes and contingencies, among others. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable at the time they are made, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Comprehensive Loss — Cumulative translation adjustments are excluded from net income (loss) and shown as a separate component of shareholders' equity.

Cash and Cash Equivalents — The Company considers all highly liquid investments that are readily convertible to cash with original maturity dates of three months or less as of the purchase date to be cash equivalents.

Accounts Receivable — Accounts receivable are stated at their estimated net realizable value. Accounts receivable are charged to the allowance for doubtful accounts when deemed uncollectible. The Company evaluates the collectability of accounts receivable based on the following factors:

- Age of past due receivables and specific customer circumstances;
- Probability of recoverability based on historical collection and write-off experience; and,
- Current economic trends

If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payment, additional allowances may be required.

Revenue Recognition — The Company generates revenue from three principal sources: product sales and services, technology licensing, and technology development. Revenues from product sales are recognized when delivery has occurred under completely executed sales agreements with selling prices fixed or determinable, and for which collectability is reasonably assured. Revenues from service, design activities, and repair time are recognized as work is performed and collectability is reasonably assured. For certain international turbine sales, the Company provides logistics services (including shipment and warehousing), and assistance with customer clearance if requested. These services are integral to meeting delivery and cannot be segregated from the turbine product. The Company recognizes revenue for the turbine product once it has cleared customs and been shipped from the logistics warehouse. During 2016 and 2015, service revenues were related primarily to commissioning activities as well as revenue generated from extended warranties and maintenance and service contracts.

Virtually all of the Company's turbine sales contracts include multiple elements that are delivered at different points of time. A deliverable in an arrangement qualifies as a separate unit of accounting if the delivered item has value to the customer on a stand-alone basis. The Company's contracts are composed of three or four units of accounting: the turbine product, commissioning services, and sometimes installation

and/or extended warranty services. Typically, the final 10%-30% of the turbine value for billing is due subsequent to the shipping/delivery of a turbine to the customer. Our current policy states that, to the extent that the value ascribed to the product value at shipment (delivery) is greater than the value billed to date the difference is recognized as unbilled revenue if no collectability questions exist.

For these arrangements, the revenue is allocated to each of the deliverables based upon their relative selling prices as determined by a selling-price hierarchy. The Company has determined that vendor-specific objective evidence (“VSOE”) and third-party evidence (“TPE”) are not available for its elements and therefore management’s best estimate of selling price (“BESP”) is currently used. VSOE is the price at which the Company independently sells each unit of accounting to its customers. TPE is the price of any competitor’s largely interchangeable products or services in stand-alone sales to similarly situated customers. BESP is the price at which the Company would sell the deliverable if it were sold regularly on a stand-alone basis, considering market conditions and entity-specific factors. The Company will re-evaluate the existence of VSOE and TPE in each reporting period and utilize the highest-level available pricing method in the hierarchy at any time.

Revenue recognition for product sales is deferred until all revenue recognition criteria have been met. The Company seeks to make the timing for which the criteria are met consistent across sales agreements; however, the timing may differ as a result of contract negotiations. As of December 31, 2016 and 2015, deferred revenue totaled \$4,153 and \$9,606, respectively. Costs deferred related to product sales as of December 31, 2016 and 2015, were \$351 and \$6,379, respectively. Amounts received from customers in advance of shipment of \$7,419 and \$3,596, as of December 31, 2016 and 2015, respectively, are recorded as customer deposits. Customers may also elect to purchase extended warranty agreements that are deferred and recognized over the third through the fifth year of a turbine’s life.

The Company follows Accounting Standards Codification (“ASC”) 605-25, *Revenue Recognition Multiple Element Arrangements*, for recognizing revenue on the value of prototype and pilot products when title is transferred. Payments received prior to title transfer are recorded as customer deposits or deferred revenue until recognition is achieved. The Company follows ASC 330 *Inventory* for classifying costs related to producing the products as inventory until the sale is recognized at which point they are expensed as cost of goods sold.

Revenue related to the licensing of intellectual property is recognized per ASC 605-25, which states that delivery for revenue recognition purposes does not occur until the license term begins. Therefore, the Company does not recognize revenue from the licensed intellectual property until the customer has the right to use the intellectual property per the terms of the contract, physical delivery of the intellectual property has occurred and all other revenue recognition criteria have been met. There may be instances in which the intellectual property has been delivered but other services such as training, installation support or supply chain certification are necessary for the customer to fully benefit from the intellectual property. In those cases, revenue recognition may be deferred until such services are delivered. For contracts to perform development services the Company records revenues using the percentage-of-completion method when applicable, if the percentage-of-completion method is not applicable revenue is recognized when all four revenue recognition criteria have been met.

Inventories — Inventories include material, direct labor and related manufacturing overhead, and are accounted for at the lower of cost or market value. Excess and obsolete inventory is estimated using assumptions regarding forecasted customer demand, market conditions, the age of the inventory items, and likely technological obsolescence. If any of the current estimates are significantly inaccurate, losses may result, which could be material.

Property, Plant, and Equipment — Property, plant, and equipment are accounted for at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. When assets are retired or otherwise disposed of, the related costs and accumulated depreciation are removed from their respective accounts and any resulting gain or loss is included in operations. Expenditures for repairs and maintenance not considered to substantially lengthen useful lives are charged to expense as incurred.

Estimated useful lives of the assets are as follows:

Asset Classification	Estimated Useful Life
Machinery and equipment	5 to 10 years
Patterns and tooling	5 to 7 years
Field service spare parts	3 to 10 years
Office furniture and equipment	3 to 7 years
IT equipment and software	3 to 5 years
Leasehold improvements	Shorter of the estimated useful life or remaining lease term

Recoverability of long lived assets is assessed when events have occurred that may give rise to impairment. The Company determined that an impairment indicator existed during the fourth quarter of 2016, which necessitated an impairment review of long-lived assets. The Company compared the estimated undiscounted net cash flows of the asset groups to the current carrying value of the assets groups and concluded that there was no impairment of the asset groups as the fair value (determined by using the future undiscounted cash flows) exceeded its carrying value as of December 31, 2016

Goodwill and Other Intangible Assets — Intangible assets consist of (1) goodwill, which is not subject to amortization; and (2) amortizing intangibles, consisting of core technology, trade name, and royalty license which are being amortized over the estimated life of each item. Goodwill and intangible assets are allocated to the Company's asset groups when testing for impairment.

Goodwill represents the excess of the fair value of the consideration exchanged in a business combination over the fair value of the net assets acquired, and is tested for impairment at least annually. Goodwill of \$361 and \$722 as reported on the December 31, 2016 and 2015 balance sheets, respectively, is a result of the purchase of the assets and the assumption of certain specified liabilities as part of the acquisition on August 15, 2008.

During the fourth quarter of 2016, the Company performed its annual impairment analysis. As a result of the Product, Sales and Services reporting segment having a negative carrying value, the Company performed a quantitative, step-one and step two, analysis of goodwill. Based on this analysis the Company concluded that the goodwill associated with the Product Sales and Services reporting unit was impaired, and as a result, recorded an impairment charge of \$0.4 million.

Warranty Costs — The Company's warranty contract with customers of the NPS 100 or 60 products is sometimes limited to repair or replacement of parts and typically expires two years from the date of shipment or commissioning. In such cases, the Company has typically provided non-warranty obligated services at no charge during the initial two-year period. The obligation to provide warranty services is deemed a contingency because it meets the probable and estimate criteria of ASC 460-10-25-2 and as such required accrual at the inception of the warranty period per ASC 460-10-25-5.

The Company's warranty contracts with customers of non-turbine products typically expire upon the earlier of 18 months after shipment or 12 months after commissioning by the customers and typically cover parts and labor.

The Company estimates the accrual on a per turbine basis based on historical warranty experience of the installed turbine base as a group consistent with ASC 460-10-25-6. The history is evaluated annually or when circumstances warrant an interim review and the per turbine accrual is adjusted as appropriate to reflect changes in actual warranty experience. Estimated warranty obligations are recorded in the earlier period of: (i) the period in which the related revenue is recognized or, (ii) the period in which the obligation is established. Warranty liabilities are based on estimated future repair costs incurred during the warranty period using historical labor, travel, shipping, and material costs, as well as estimated costs for performance warranty failures, when applicable, based upon historical performance experience. The accounting for warranties requires management to make assumptions and apply judgments when estimating product failure

rates and expected costs. Adjustments are made to warranty accruals based on claim data and experience. Such adjustments have typically resulted in reductions to the Company's estimated warranty obligation as the products have matured and improved in quality. Further, if actual results are not consistent with the assumptions and judgments used to estimate warranty obligations, because either failure rates or repair costs differ from management's assumptions, the resulting change in estimate could be material.

Customers may elect to purchase extended warranty coverage for repair or replacement of parts for a period covering years three through five of the product life. These extended warranties are considered services and are accounted for under the guidance of ASC 605-20-25. Revenues are deferred and recognized ratably over the service term consistent with ASC 605-20-25-3. Costs associated with these extended warranty contracts are expensed to cost of sales as incurred. Customers may also purchase a Performance Guaranty Program (PGP) which also provides maintenance and repair services over a ten-year period beginning at commissioning. This program is billed annually at a base amount with a premium for production in excess of a floor which depends on location and wind speeds. Revenues are recognized when billed and expenses as a cost of sale as incurred.

Research and Development — Research and development costs are expensed as incurred. Research and development expenses consist primarily of salaries, benefits and related overhead, as well as consulting costs related to design and development of new products.

Income Taxes — The Company uses the liability method of accounting for income taxes. Under this method, income taxes are provided for amounts currently payable and for deferred tax assets and liabilities, which are determined based on the differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. Deferred income taxes are measured using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is established for any deferred tax asset for which realization is not more likely than not. The net tax accounts are presented as long term.

The Company accounts for uncertain tax positions by determining a minimum probability threshold that a tax position must meet before a financial statement benefit is recognized. The minimum threshold is defined as a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. The Company does not believe material uncertain tax positions have arisen to date, and as a result, no reserves for these matters have been recorded and no interest or penalties have been recognized. Assessment of uncertain tax positions requires significant judgments relating to the amounts, timing, and likelihood of ultimate resolution. The Company's actual results could differ materially from these estimates.

Stock-Based Compensation — Stock-based compensation expense is recorded based on the fair value of the award at the grant date net of anticipated forfeiture rates, using the Black Scholes option pricing model. The Company considers many factors when estimating the stock-based compensation forfeiture rate including employee class, economic environment, historical data, and anticipated future employee turnover. The Company reviews its forfeiture rate when changes in business circumstances warrant a review, and performs a full analysis annually as of December 31. Other assumptions, such as expected term, expected volatility, risk-free interest rate, dividend rate, and the fair value of the Company's common shares impact the fair value estimate. The Company uses the simplified method for estimating expected term representing the midpoint between the vesting period and the contractual term. The Company estimates volatility based on the historical volatility of a peer group of publicly-traded companies. The risk-free interest rate is the implied yield currently available on U.S. treasury zero-coupon issues with a term equal to the expected vesting term.

Concentration of Credit Risk — The Company's customers operate primarily in the distributed energy market and include wind developers and end users that cover multiple industries and geographic locations. The Company's products and services are sold under contracts with varying terms including contracts

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denominated in foreign currencies. For the years ended December 31, 2016 and 2015, 69% and 39%, respectively, of the Company's revenues were denominated in foreign currency, primarily in euros. If the Company continues to increase the percentage of contracts denominated in foreign currencies, gains or losses due to fluctuations in currency exchange rates could become increasingly material.

Financial instruments which potentially subject the Company to concentrations of credit risk are cash and cash equivalents, time deposits when held, and accounts receivable. At times, cash balances in financial institutions may exceed federally insured deposit limits, however, management periodically evaluates the creditworthiness of those institutions, and the Company has not experienced any losses on such deposits.

During the year ended December 31, 2016, one customer accounted for 11% of revenue. The Company had no other customers representing more than 10% of revenue. One customer accounted for 18% and another for 12% of total revenue for year the ended December 31, 2015.

As of December 31, 2016 the Company had one customer representing 15% and two customers representing 10% of accounts receivable. As of December 31, 2015, the Company had one customer representing 24% and a second customer representing 17% of accounts receivable.

Shipping and Handling — Shipping and handling costs for wind turbine products are included in cost of product revenues.

Net Loss per Share — The Company determines basic loss per share by dividing net loss attributable to common shareholders by the weighted average common shares outstanding during the period.

Diluted loss per share is determined by dividing loss attributable to common shareholders by diluted weighted average shares outstanding during the period. Diluted weighted average shares reflect the dilutive effect, if any, of potential common shares. To the extent their effect is dilutive, employee equity awards and warrants, based on the treasury stock method, are included in the calculation of diluted earnings per share. For the years ended December 31, 2016 and 2015, all potential common shares were anti-dilutive due to the net loss and were excluded from the diluted net loss per share calculations. The calculations of basic and diluted net loss per share are as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Basic earnings per share calculation Numerator		
Net loss	\$ (8,949)	\$ (7,796)
Net loss attributable to common shareholders	<u>\$ (8,949)</u>	<u>\$ (7,796)</u>
Denominator		
Weighted average common shares outstanding — Basic and diluted	23,212,299	22,871,717
Net loss per share-Basic and diluted	<u>\$ (0.39)</u>	<u>\$ (0.34)</u>

The following potentially dilutive securities were excluded from the calculation of dilutive weighted average shares outstanding because they were considered anti-dilutive due to the Company's loss position:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Common share options	2,834,060	2,900,211
Total potentially dilutive securities	<u>2,834,060</u>	<u>2,900,211</u>

The Company had 367,500 placement agent options that expired unexercised on March 17, 2016. In addition, as described in Note 11, the Company has 2,834,060 options outstanding as of December 31, 2016 related to the 2014 NPS Corp. Plan. As of December 31, 2015 there were 367,500 placement agent options outstanding and 2,532,711 options outstanding related to the 2014 NPS Corp. Plan. Such options are considered to be potentially dilutive securities.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) (“ASU 2014-09”). The core principle of ASU 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps: identify the contract(s) with a customer; identify the performance obligations in the contract; determine the transaction price; allocate the transaction price to the performance obligations in the contract; and recognize revenue when (or as) the entity satisfies a performance obligation. ASU 2014-09 supersedes the revenue recognition requirements in Accounting Standards Codification Topic No. 605, Revenue Recognition, most industry-specific guidance throughout the industry topics of the accounting standards codification, and some cost guidance related to construction-type and production-type contracts. ASU 2014-09 is effective for public entities for annual periods and interim periods within those annual periods beginning after December 15, 2016. Early adoption is not permitted. Companies may use either a full retrospective or a modified retrospective approach to adopt ASU 2014-09.

In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers* (Topic 606) : *Deferral of the Effective Date* (“ASU 2015-14”). ASU 2015-14 defers the effective date of the new revenue recognition standard by one year. As such, it now takes effect for public entities in fiscal years beginning after December 15, 2017. Early adoption is permitted for any entity that chooses to adopt the new standard as of the original effective date (December 15, 2015). We have initiated an assessment of our revenue streams and are engaging outside consultants to perform a full assessment of the impact for implementing these standards. We have begun evaluating the impact of the new standard on our core revenues, and continue to evaluate its effect on our financial statement disclosures. We expect to have our preliminary evaluation, including the selection of an adoption method, completed by the end of 2017.

In May 2016, the FASB issued Accounting Standards Update No. 2016-12, *Revenue from Contracts with Customers* (Topic 606): *Narrow-Scope Improvements and Practical Expedients* which addresses various issues by making changes to the guidance originally included in ASU 2014-09, Revenue from Contracts with Customers (Topic 606). The guidance in ASC 606 (as revised) is effective in the quarter and year beginning January 1, 2018, for public entities with a calendar year-end. We are currently evaluating the potential impact of adopting this guidance on the consolidated financial statements.

In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers* (Topic 606). This update clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. The Update includes targeted improvements based on input the Board received from the Transition Resource Group for Revenue Recognition and other stakeholders. The Update seeks to proactively address areas in which diversity in practice potentially could arise, as well as to reduce the cost and complexity of applying certain aspects of the guidance both at implementation and on an ongoing basis. The amendments in this update are effective at the same time as ASU 2014-09. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in Update 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. We are currently evaluating the impact this ASU will have on our consolidated financial statements.

In August 2014, the FASB issued Accounting Standards Update No. 2014-15, *Presentation of Financial Statements — Going Concern* (Subtopic 205-40): *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern* (“ASU 2014-15”) which provides guidance on determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity’s ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity’s ability to continue as a going concern. The ASU applies to all entities and is effective for annual periods ending after December 15, 2016, and interim periods

thereafter, with early adoption permitted. The Company adopted this standard in the fourth quarter of 2016. In accordance with the guidance, the Company has expanded its disclosures to include the conditions that gave rise to the substantial doubt about the Company's ability to continue as a going concern as well as the actions taken to alleviate those concerns, as described in Note 1.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, *Inventory* (Topic 330). Topic 330, Inventory, currently requires an entity to measure inventory at the lower of cost or market. Market could be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. The amendments in this update require an entity to measure inventory within the scope of this update at the lower of cost and net realizable value. Subsequent measurement is unchanged for inventory measured using last-in, first-out (LIFO) or the retail inventory method. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have an impact on our financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments — Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The new standard amends certain aspects of accounting and disclosure requirements of financial instruments, including the requirement that equity investments with readily determinable fair values be measured at fair value with changes in fair value recognized in our results of operations. The new standard does not apply to investments accounted for under the equity method of accounting or those that result in consolidation of the investee. This new standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that fiscal year. The adoption of this standard is not expected to have an impact on our financial position or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842). The new standard requires that all lessees recognize the assets and liabilities that arise from leases on the balance sheet and disclose qualitative and quantitative information about its leasing arrangements. This new standard is effective for fiscal years beginning after December 15, 2019 and interim periods within fiscal years beginning after December 15, 2020. We are currently evaluating the potential impact of adopting this guidance on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-06, *Derivatives and Hedging* (Topic 815): *Contingent Put and Call Options in Debt Instruments*. The new standard simplifies the embedded derivative analysis for debt instruments containing contingent call or put options by removing the requirement to assess whether a contingent event is related to interest rates or credit risks. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU did not have an impact on our financial statements.

In March 2016, the FASB issued ASU No. 2016-07, *Investments — Equity Method and Joint Ventures* (Topic 323): *Simplifying the Transition to the Equity Method of Accounting*. The new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have an impact on our financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation — Stock Compensation* (Topic 718): *Improvements to Employee Share-Based Payment Accounting*. The new standard involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. This new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within that fiscal year. The application of this ASU will not have a material impact on our financial statements and we will not change our accounting policy in regards to forfeitures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows* (Topic 230). This update indicates that there is diversity in the practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows under Topic 230. This amendment provides guidance on eight specific cash flow issues with the objective of reducing the existing diversity in practice. Public business entities should apply the guidance in Update 2016-15 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. We are currently evaluating the impact this ASU will have on our consolidated financial statements.

3. FAIR VALUE MEASUREMENT

The Company measures fair value using the framework specified in U.S. GAAP. This framework emphasizes that fair value is a market-based measurement, not an equity-specific measurement, and establishes a fair value hierarchy that distinguishes between assumptions based on market data obtained from independent sources and those based on an entity's own assumptions. The hierarchy prioritizes the inputs for fair value measurement into three levels:

Level 1 — Measurements utilizing unadjusted quoted prices in active markets that the entity has the ability to access for identical assets or liabilities.

Level 2 — Measurements that include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and other observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3 — Measurements using unobservable inputs for assets or liabilities for which little or no market information exists, and are based on the best information available and might include the entity's own data.

In some valuations, the inputs used may fall into different levels of the hierarchy. In these cases, the financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Financial Instruments — The Company's financial instruments consist primarily of cash and cash equivalents, accounts receivable, unbilled revenue, accounts payable, the working capital revolving line of credit and debt. The carrying amounts of cash and cash equivalents, accounts receivable, unbilled revenue, accounts payable and the working capital revolving line of credit, as of December 31, 2016 and 2015, approximate fair value due to their short-term nature and are classified within Level 3 of the valuation hierarchy. The Company defines cash equivalents as highly liquid instruments with maturities of three months or less that are regarded as high quality, low risk investments. Cash equivalents consist of principally FDIC insured certificates of deposits.

Nonrecurring Fair Value Measurements — The Company holds certain assets and liabilities that are measured at fair value on a nonrecurring basis in periods subsequent to initial recognition.

During 2014, the Company entered into a technology development contract with a customer that will result in the Company receiving a royalty free license upon successful completion of the development. The Company determined the value of this license using a probability weighted analysis. The analysis applied a range of possibilities to a set of possible outcomes and attributed a value in the event of each outcome. The probabilities and weightings used in the analysis were based on management's views of the opportunities that will be available to the Company upon completion of the contract and receipt of the license, as well as a review of the outcomes that would result from the selected scenarios. The Company determined this was the most reliable approach to value the license. The license was accreting to full value over the development period of the contract and was subsequently to be amortized over its estimated useful life at the time. The license asset was sold on October 26, 2016, as part of the utility wind asset sale. The value assigned to the license at December 31, 2016 and December 31, 2015 is \$0 and \$792, respectively, represents a fair value measurement on a nonrecurring basis, and is included in assets held for sale, as of December 31, 2015, on the accompanying consolidated balance sheet.

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In 2016, the Company performed a quantitative, step-one and step two, analysis of goodwill. The two-step goodwill impairment test involves fair value measurements that are based on significant inputs not observable in the market and thus represent Level 3 measurements as defined by ASC 820. In the two-step assessment, management primarily uses a discounted cash flow analysis. Key assumptions in the discounted cash flow analysis include an appropriate discount rate, estimated revenue, terminal year multiples, and operating costs. In estimating cash flows, management incorporates current market information, as well as historical and other factors into the forecasted results. The value assigned to the goodwill for the Company's Product, Sales and Services segment at December 31, 2016 and December 31, 2015 is \$0 and \$361, respectively, represents a fair value measurement on a nonrecurring basis as it was fully impaired in year ended December 31, 2016.

In 2015, the Company entered into foreign currency forward contracts and no-cost collars, usually with one to three month durations, to mitigate the foreign currency risk related to certain balance sheet positions. We have not elected hedge accounting for these transactions.

There were no foreign currently forward contracts entered into during 2016 and there were no foreign currency forward contracts outstanding at December 31, 2016 and 2015. Net losses of \$21 thousand and net gains of \$13 thousand related to these contracts were recognized as a component of other expense, net for the year ended December 31, 2015.

4. INVENTORIES

Inventories, net of reserves, as of December 31, 2016 and 2015 consist of:

	December 31, 2016	December 31, 2015
Raw materials	\$ 2,897	\$ 3,298
Work in process	1,304	1,170
Finished goods	3,469	5,081
Allowance for obsolescence	(511)	(316)
Total inventory — net	<u>\$ 7,159</u>	<u>\$ 9,233</u>

For the year ended December 31, 2016 and 2015, the Company recorded an inventory provision of approximately \$259 and \$202, respectively.

5. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment, net of depreciation, at December 31, 2016 and 2015 consist of:

	December 31, 2016	December 31, 2015
Lease improvements	\$ 59	\$ 48
Machinery and equipment	2,232	2,390
Patterns and tooling	1,042	1,615
Office furniture and equipment	424	424
Information technology equipment and software	677	848
	<u>4,434</u>	<u>5,325</u>
Less accumulated depreciation	<u>(2,949)</u>	<u>(3,279)</u>
Total property, plant and equipment, net of depreciation	<u>\$ 1,485</u>	<u>\$ 2,046</u>

Depreciation expense was \$531 and \$603 for the years ending December 31, 2016 and 2015, respectively.

In 2016, the Company disposed of equipment, patterns and tooling with a cost of \$1,176 and a net book value of \$315.

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In 2015, the Company disposed of equipment, patterns and tooling with a cost of \$1,128 and a net book value of \$252.

6. INTANGIBLE ASSETS AND GOODWILL

Intangible assets consist of:

	December 31, 2016			
	Average Remaining Amortization Period	Cost	Accumulated Amortization	Net Carrying Amount End of Year
Core technology	0.0 years	\$490	\$ (490)	\$ —
Trade name	0.7 years	89	(80)	9
		<u>\$579</u>	<u>\$ (570)</u>	<u>\$ 9</u>

	December 31, 2015			
	Average Remaining Amortization Period	Cost	Accumulated Amortization	Net Carrying Amount End of Year
Core technology	0.7 years	\$490	\$ (433)	\$ 57
Trade name	1.7 years	89	(66)	23
		<u>\$579</u>	<u>\$ (499)</u>	<u>\$ 80</u>

As part of an agreement with WEG Equipamentos Elétricos S.A. to develop a 3.3 MW wind turbine, the Company has recorded an intangible asset of \$0 and \$792 as of December 31, 2016 and 2015, respectively, representing the earned value of the royalty free license the Company will receive upon completion of the development project. The Company's estimate of the total value of this intangible asset was being capitalized over the period of the development project. Amortization of the intangible asset was to commence when the Company completed the project and had the ability to license/sell the 3.3 MW wind turbine. The license asset was sold on October 26, 2016, as part of the utility wind asset sale.

Amortization expense as of December 31, 2016 and 2015 totaled \$128, which included \$57 related to amortization on intangibles prior to utility wind asset sale, and \$187, respectively.

The expected aggregate future amortization expense is as follows.

Years	Amortization
2017	\$ 9
	<u>\$ 9</u>

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Goodwill consists of:

	December 31, 2016		
	Beginning Balance	Impairment Loss	Ending Balance
Product Sales and Service	\$ 361	\$ (361)	\$ —
Technology Licensing	361	—	361
Total	<u>\$ 722</u>	<u>\$ (361)</u>	<u>\$ 361</u>

	December 31, 2015		
	Beginning Balance	Impairment Loss	Ending Balance
Product Sales and Service	\$ 361	\$ —	\$ 361
Technology Licensing	361	—	361
Total	<u>\$ 722</u>	<u>\$ —</u>	<u>\$ 722</u>

During the fourth quarter of 2016, the Company performed its annual impairment analysis. As a result of the Product, Sales and Services reporting segment having a carrying value in excess of its estimated fair value, the Company performed a quantitative, step-one and step two, analysis of goodwill. The first step of the goodwill impairment analysis identifies potential impairment and determines a fair value for the reporting segment. The second step of the goodwill impairment test involved allocating the estimated fair value of the reporting unit among the assets and liabilities of the reporting unit in a hypothetical purchase price allocation. The results of the hypothetical purchase price allocation indicated there was no fair value was attributable to goodwill. As a result, we recognized a goodwill impairment charge of \$0.4 million. There was no impairment in 2015.

7. GAIN ON SALE OF ASSETS

On October 26, 2016, the Company entered into a definitive agreement for WEG Electric Corp. and WEG Equipamentos Eletricos S.A. (collectively, “WEG”) to acquire some of the Company’s utility wind assets. Under the agreement, the proven utility scale direct drive technology developed are solely owned by WEG and its affiliates. All assets and liabilities, including the related patent portfolio for utility wind greater than 1.5 MW were acquired by WEG. In addition, WEG assumed all liabilities related to a maintenance agreement the Company had entered into upon the sale of two prototype turbines to a customer. WEG will continue to compensate the Company under the existing arrangement paying royalties for sales in South America resulting in future payments of up to approximately \$10.0 million, of which \$3.0 million are fixed payments. Additionally, WEG will pay the Company up to \$17.5 million in royalty payments over the next decade for turbines shipped anywhere outside of South America.

The gain on the disposition is included in loss from continuing operations before income taxes in the statement of operations in accordance with ASC 360-10-45-5. Any future royalty payments will be considered additional proceeds from sale and will be recorded as gain on sale of assets in the consolidated statements of operations. The net book value of all items transferred or retired total \$2.1 million and the guaranteed consideration totaled \$3 million. This results in a gain on sale of assets totaling \$973 thousand in Q4 2016.

8. REVOLVING LINE OF CREDIT

Debt at December 31, 2016 and 2015 consists of:

	December 31, 2016	December 31, 2015
Working capital revolving line of credit	<u>\$ 1,600</u>	<u>\$ 2,892</u>

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In September 2016, the Company amended its foreign working capital revolving line of credit with Comerica to extend the maturity date of September 30, 2016 to December 31, 2017. The line of credit was reduced from \$6,000 to \$2,000, with the available borrowing base being limited to the amount of collateral available at the time the line is drawn. All other significant terms of the line of credit remained the same. The renegotiated loan agreement with Comerica contains a financial covenant which requires the Company to maintain unencumbered liquid assets having a value of at least \$1,000 at all times.

At December 31, 2016, there was \$1,600 outstanding on the revolving line of credit as well as \$0 outstanding in performance and warranty letters of credit and the Company had a net maximum supported borrowing base, in excess of loans outstanding, of \$0.4 million.

9. ACCRUED EXPENSES

Accrued expenses consist of:

	December 31, 2016	December 31, 2015
Accrued warranties	\$ 1,912	\$ 2,171
Accrued rebates, allowances and discounts	65	20
Other accrued expenses	963	1,814
Total accrued expenses	<u>\$ 2,940</u>	<u>\$ 4,005</u>

Changes in the Company's product warranty accrual during 2016 and 2015 consisted of the following:

	December 31, 2016	December 31, 2015
Beginning balance	\$ 2,171	\$ 1,637
Provisions, net of reversals	1,238	1,802
Settlements	(1,497)	(1,268)
Ending balance	<u>\$ 1,912</u>	<u>\$ 2,171</u>

10. CAPITAL STRUCTURE

Common Shares-No Par — The Company's authorized capital consists of an unlimited number of voting common shares and an unlimited number of class B restricted voting shares. As of December 31, 2016, there were 23,613,884 voting common shares issued and outstanding.

11. STOCK BASED COMPENSATION AND EMPLOYEE BENEFIT PLANS

The Company had four equity incentive plans. As a result of the RTO all of these plans were converted in substance to the Northern Power Systems Corp. 2014 Stock Option and Incentive Plan ("2014 NPS Corp Plan").

2014 Northern Power Systems Corp. Stock Option and Incentive Plan — In April 2014 and as a result of the reverse takeover transaction, the Company adopted the 2014 NPS Corp Plan, which reserved 4,000,000 shares of the Company's voting common shares for both future exercise of outstanding stock options and shares available for future outstanding grants. At such time the Company considered the modification of such awards in accordance with ASC 718 and concluded that such transaction did not result in additional compensation expense. The Company is accounting for grants under the 2014 NPS Corp Plan as equity awards.

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A summary of the stock option activity under the 2014 NPS Corp Plan for December 31, 2016 is as follows:

	Shares	Weighted-Average Exercise Price	Average Remaining Weighted-Average Contractual Term (in Years)	Aggregate Intrinsic Value
Outstanding — December 31, 2014	2,403,347	\$ 2.20	6.0 years	\$ 2,151
Granted	413,625	\$ 0.49		
Exercised	(1,596)	\$ 1.59		
Canceled	(282,665)	\$ 2.38		
Outstanding — December 31, 2015	2,532,711	\$ 1.90	5.2 years	\$ —
Granted	705,000	\$ 0.19		
Canceled	(403,651)	\$ 2.67		
Outstanding — December 31, 2016	2,834,060	\$ 1.37	3.6 years	\$ —
Exercisable — December 31, 2016	1,966,614	\$ 1.82	2.3 years	\$ —
Shares vested and expected to vest December 31, 2016	2,707,901	\$ 1.42	3.5 years	\$ —

The aggregate intrinsic value in the table above represents the difference between the fair value of common shares and the exercise price of outstanding, in-the-money, stock options.

The weighted-average grant-date fair value of options granted under the 2014 NPS Corp Plan during the year ended December 31, 2016 and 2015 was \$0.11 and \$0.29 per share, respectively. At December 31, 2016, unrecognized stock-based compensation expense related to non-vested stock options is \$182 which is expected to be recognized over the weighted-average remaining vesting period of 1.9 years.

The Company calculates the fair value of stock-based payment awards on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods. Option pricing model input assumptions such as expected term, expected volatility, risk-free interest rate, dividend rate, and the fair value of the Company's common shares impact the fair value estimate. Further, the forfeiture rate impacts the amount of aggregate compensation. These assumptions are subjective and generally require significant analysis and judgment to develop. The Company uses the simplified method for estimating expected term representing the midpoint between the vesting period and the contractual term. The Company estimates volatility based on the historical volatility of a peer group of publicly-traded companies. The risk-free interest rate is the implied yield currently available on U.S. treasury zero-coupon issues with a term equal to the expected vesting term. Estimated forfeitures are adjusted over the requisite service period based on the extent to which actual forfeitures differ from estimated forfeitures.

The Company estimated the grant-date fair values of stock options granted in 2016, using the Black-Scholes option pricing model and the following assumptions:

	2016	2015
Expected volatility	73.0% – 77.0%	76.0%
Risk-free interest rate	1.40% – 1.98%	1.09% – 1.59%
Expected life (years)	4.5	4.5
Dividend yield	0.0%	0.0%

As of December 31, 2016, 268,560 options were available for grant. The Company had 367,500 placement agent options that expired on March 17, 2016.

In November 2016, the Company granted 210,000 restricted common shares, with a fair value per share of \$0.15 to its non-employee directors under the 2014 NPS Corp Plan as part of each such director's

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compensation for service on the Company's Board of Directors. In addition, in November 2016, the non-employee directors also elected to receive 50% of their annual retainer compensation in restricted shares, rather than cash. As such, the Company granted 230,000 restricted common shares, with a fair value per share of \$0.19. Both restricted common share grants vested 100% on the grant date.

During the year ended December 31, 2015, the Company granted 407,935 restricted common shares to its non-employee directors under the 2014 NPS Corp Plan as part of each such director's compensation for service on the Company's Board of Directors. The fair value per share for each grant was \$0.44. Each non-employee director received a grant of 15,000 restricted common shares, of which (for all but one director), 75% of the shares vested on September 30, 2015 with the remaining 25% vesting on December 31, 2015. For the other non-employee director, 50% of the shares vested on September 30, 2015 with the remaining 50% vesting on December 31, 2015. Several non-employee directors also elected to receive their annual retainer compensation in restricted shares, rather than cash. For each such grant, 50% of the total stock granted vested on the grant date of August 25, 2015, with the remaining 50% vesting in two equal installments on September 30, 2015 and December 31, 2015.

The Company recognizes stock-based compensation expense net of estimated forfeitures on a straight-line basis over the requisite service period. The forfeiture rate was 10% for the years ended December 31, 2016 and 2015. Stock-based compensation expense, a non-cash expense, is included in each respective expense category as follows, for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Cost of revenue	\$ 10	\$ 31
Sales and marketing	65	68
Research and development	11	20
General and administrative	433	801
	<u>\$ 519</u>	<u>\$ 920</u>

12. 401(k) PLAN

The Company has a defined contribution plan covering substantially all of its employees, subject to certain eligibility requirements. Under the plan, participating employees may defer up to 15% of their pre-tax compensation, as defined. As of January 1, 2016, the Company contributes 25% of the amount contributed by a participating employee, up to a maximum of 6% of the participant's pre-tax compensation. Prior to January 1, 2016, the Company contributed 50% of the amount contributed by a participating employee, up to a maximum of 6% of the participant's pre-tax compensation. Company matching contributions for 2016 and 2015 were \$68 and \$207, respectively.

13. INCOME TAXES

Income (loss) before provision for income taxes consists of the following:

	December 31, 2016	December 31, 2015
United States	\$ (8,905)	\$ (6,494)
Foreign	129	269
Total	<u>\$ (8,776)</u>	<u>\$ (6,225)</u>

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The provision for income taxes for the years ended December 31, 2016 and 2015, consists of the following:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Current Provision		
Federal	\$ —	\$ —
State	6	4
Foreign	263	1,553
Total current provision	<u>269</u>	<u>1,557</u>
Deferred provision		
Federal	(84)	12
State	(12)	2
Total deferred provision	<u>(96)</u>	<u>14</u>
Total provision for income taxes	<u>\$ 173</u>	<u>\$ 1,571</u>

Components of deferred income tax assets and liabilities at December 31, 2016 and, 2015 are as follows:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Deferred income tax assets:		
Net operating losses	\$ 49,736	\$ 47,618
Research and development tax credits	1,462	1,462
Bad debts	—	133
Deferred revenue	2,458	3,647
Inventories	238	174
Intangible assets and property	2,043	2,302
Stock-based compensation	3,555	3,358
Accrued expenses and other	1,241	1,485
	<u>60,733</u>	<u>60,179</u>
Deferred income tax liabilities:		
Goodwill	52	175
Prepaid expenses	143	177
Deferred costs	133	2,421
Unremitted Earnings of Foreign Subsidiaries	27	—
	<u>355</u>	<u>2,773</u>
Net deferred income tax assets	<u>60,378</u>	<u>57,406</u>
Valuation allowance	(60,457)	(57,581)
Carrying value of net deferred liability	<u>\$ (79)</u>	<u>\$ (175)</u>

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A reconciliation of the U.S. statutory federal income tax rate and the Company's effective income tax rate for the years ended December 31, 2016 and 2015 is as follows:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Federal statutory rate	34.00%	34.00%
State taxes — net of federal benefit	0.12	(0.06)
Tax credits	—	2.40
Other permanent items	(2.35)	(1.45)
Unremitted Earnings of Foreign Subs	(2.08)	—
Foreign withholding tax	(1.88)	(15.93)
Valuation allowance	(29.78)	(44.19)
Effective income tax rate	<u>(1.97)%</u>	<u>(25.23)%</u>

As of December 31, 2016, the Company had \$133,398 of federal net operating loss carryforwards that begin to expire in 2028, approximately \$79,177 of state net operating loss carryforwards that expire from 2016 through 2028, and approximately \$1,462 of research and development tax credits that begin to expire in 2028. The net operating loss carryforwards include approximately \$71 for which a benefit will be recorded in additional paid-in capital when realized. In addition, the amount of the net operating loss and research and development tax credit carryforwards that may be utilized annually to offset future taxable income and tax liability may be limited as a result of certain ownership changes pursuant to Section 382 and 383 of the Internal Revenue Code.

The Company has completed a Section 382 study, through November 30, 2014, to assess if any ownership changes would have caused limitations to our net operating loss carryforwards. Based on that study, the Company has concluded an ownership change occurred on September 19, 2008 and therefore there is potential for \$2,600 of net operating loss to be limited. For the period September 20, 2008 through November 30, 2014, the Company has determined that it is more likely than not that there has not been an ownership change under Section 382. We have not completed an updated Section 382 study for periods after November 30, 2014, and as such are not able to assess whether and ownership change has occurred that could cause limitations to our net operating loss carryforwards.

The net increase in the valuation allowance was \$2,876 and \$3,015 at December 31, 2016 and 2015, respectively. In assessing the realizability of carryforwards and other deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. We adjust the valuation allowance in the period management determines it is more likely than not that deferred tax assets will or will not be realized. In determining the need for a valuation allowance, we have assessed the available means of recovering deferred tax assets, including the ability to carryback net operating losses, the existence of reversing temporary differences, the availability of tax planning strategies, and available sources of future taxable income. Based upon this analysis, it is not more likely than not that some portion or all of the deferred tax assets will be realized. The net deferred tax liability as of December 31, 2016 and 2015 includes deferred tax liabilities related to amortizable goodwill, which are anticipated to reverse in an indefinite future period and which are not currently available as a source of taxable income.

The Company recognizes in its consolidated financial statements only those tax positions that are “more-likely-than-not” of being sustained upon examination by taxing authorities, based on the technical merits of the position. The Company performed a comprehensive review of its material tax positions in accordance with recognition and measurement standards. Based on this review, the Company has concluded that there are no uncertain tax positions that would require recognition or disclosure within the consolidated financial statements, as of December 31, 2016 and 2015. In addition, there are no amounts required to be included in the financial statements for interest or penalties on uncertain tax positions.

The Company files federal and various state income tax returns. Due to federal and state net operating loss carryforwards, income tax returns from 2008 through 2015 remain open for examination, with limited exceptions. The Company's 2009 federal return has been audited and the audit was closed without any changes to the return positions. In addition, the statute of limitations remains open for the Company's Switzerland-based subsidiary for 2009 and subsequent periods.

14. SEGMENT REPORTING

The Company's segments are defined as components of the enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

The performance of the segments is evaluated based upon several factors, of which the primary financial measures are segment revenues, gross profits, and loss from operations. The disaggregated financial results of the segments reflect the allocation of certain functional expense categories consistent with the basis and manner in which management internally disaggregates financial information for the purpose of assisting in making internal operating decisions. In addition, certain expenses and other shared costs which management does not believe are specifically and directly attributable or allocable to any of the business segments have been excluded from the presented segment contribution margins. The accounting policies of the business segments are the same as those for the consolidated Company. The Company assigns revenues to individual countries based on the customer's shipment location.

The Company manages its business with the four following segments:

- Product Sales and Service — Included in this business segment are the Company's sales of distributed turbines along with related services, power converters, other products produced and sold to customers, as well as, in the future the Company's direct sales of utility-class turbines.
- Technology Licensing — Included in this business segment is the licensing of packages of the Company's developed technology.
- Technology Development — Included in this business segment is the Company's development of technology for customers.
- Shared Services — These costs and expenses are comprised mainly of the general and administrative departments including executive, finance and accounting, legal, human resources, and information technology support, as well as certain shared engineering, and in certain circumstances, sales and marketing activities.

Unallocated costs and expenses include depreciation and amortization, stock compensation, and certain other non-cash charges, such as restructuring and impairment charges.

Revenue for the four business segments are shown as follows:

	December 31, 2016	December 31, 2015
Product Sales and Services	\$ 34,248	\$ 44,156
Technology Licensing	441	4,748
Technology Development	1,212	5,111
Total	<u>\$ 35,901</u>	<u>\$ 54,015</u>

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Income (loss) from operations for the business segments and unallocated costs and expenses are as follows:

	December 31, 2016	December 31, 2015
Product Sales and Services	\$ (2,299)	\$ (2,291)
Technology Licensing	1,180	3,652
Technology Development	584	4,244
Shared Services	(5,894)	(8,580)
Unallocated costs and expenses	(2,539)	(2,905)
Loss from operations	<u>\$ (8,968)</u>	<u>\$ (5,880)</u>

Unallocated costs and expenses consist of:

	December 31, 2016	December 31, 2015
Depreciation and amortization	\$ (659)	\$ (790)
Stock-based compensation expense	(519)	(920)
Other	(1,361)	(1,195)
	<u>\$ (2,539)</u>	<u>\$ (2,905)</u>

Total business segment assets are as follow:

	December 31, 2016	December 31, 2015
Product Sales and Services	\$ 15,755	\$ 27,033
Technology Licensing	1,915	1,222
Technology Development	—	1,477
Shared Services	247	381
Unallocated assets	748	1,763
Total	<u>\$ 18,665</u>	<u>\$ 31,876</u>

Unallocated assets consist of the following:

	December 31, 2016	December 31, 2015
Cash	\$ 705	\$ 1,746
Prepaid other	33	—
Property, plant and equipment, net	10	17
Total	<u>\$ 748</u>	<u>\$ 1,763</u>

Geographic information about revenue, based on shipments and/or services to customers by region, is as follows:

	December 31, 2016	December 31, 2015
United States	\$ 5,237	\$ 6,635
United Kingdom	6,501	17,321
Italy	22,411	20,235
Brazil	1,629	9,755
Asia	3	64
Rest of the world	120	5
Total	<u>\$ 35,901</u>	<u>\$ 54,015</u>

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For the years ended December 31, 2016 and 2015, 85% and 88% of revenues, respectively, were recognized from sales to customers outside the United States.

Geographic information about property, plant, equipment as well as intangible assets and goodwill associated with particular regions is as follows:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
United States	1,260	\$ 2,758
Rest of the world	595	90
Consolidated Total	<u>\$ 1,855</u>	<u>\$ 2,848</u>

15. SUBSEQUENT EVENTS

The company evaluated subsequent events through the date of the filing and had no additional subsequent events to report.

16. COMMITMENTS AND CONTINGENCIES

The Company has sold two prototype turbines to a customer resulting in a potential cost to perform a separately priced maintenance agreement. The Company is accounting for this contract under ASC 460 Guarantees, which requires that the measurement of a guarantee liability be the fair value of the obligation at each reporting period. If the consideration of the fair value of an obligation results in the potential of a contingent loss, consideration of the probable and estimable criteria of ASC 450-20-25 is appropriate. Furthermore, for longer-term obligations, such as this, the Company considers the use of a discount factor in determining the estimated liability to be appropriate. The Company originally estimated the discounted value of such exposure at \$562, using a discount rate of 9% over approximately 10 years. The total liability related to this exposure was transferred to WEG as part of the sale agreement. The total liability related to this exposure, as of December 31, 2016 and 2015 is \$0 and \$406, respectively, of which \$0 and \$160, respectively, is recorded as a current liability.

The Defense Contract Auditing Agency (“DCAA”) completed field work on the 2004 audit and issued a final report to the National Renewable Energy Laboratory (“NREL”). NREL has not issued a final determination related to the findings as of December 31, 2016. The DCAA considers the years 2005 through 2007 and 2010 open for audit, however, there has been no audit activity related to these years and the Company has not received formal notification that such audits are on hold. Management believes that as of the date of these financial statements these audits have been delayed or placed on hold. Based upon the lack of a final determination from NREL on the 2004 audit and lack of activity on later audits, the Company does not have adequate information at the date of issuance of these financial statements to determine if the outcome of any of these remaining open audits will result in a cost to the Company. The Company, however, does not expect a material impact based on the results of previous audits.

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The Company has entered into several operating lease agreements, primarily for the lease of office facilities, and office equipment, expiring through 2019. Rental expense under these operating lease arrangements for the years ended December 31, 2016 and 2015 was \$410 and \$415, respectively. The Company has leased its headquarters and production facility back from the buyer for up to a five-year term. Effective as of the second anniversary of the lease commencement (June 19, 2014), the Company has an annual right to terminate the lease without penalty. We have exercised the right to cancel the lease as of December 31, 2016 and are in the process of renegotiating a revised lease at the facility for less square footage and lower overall price per square foot. Therefore, only six months (January 2017 through June 2017) of rental expense is included in the table below. Future minimum lease payments under noncancelable lease agreements (with initial or remaining lease terms in excess of one year) are as follows:

Years Ending December 31,	
2017	243
2018	69
2019	7
Total	<u>\$319</u>

17. SELECTED QUARTERLY FINANCIAL INFORMATION (Unaudited)

The following tables set forth selected quarterly financial information for the fiscal years ended December 31, 2016 and 2015. The operating results for any given quarter are not necessarily indicative of results for any future period.

	Three Months Ending							
	March 31		June 30		September 30		December 31	
	2016	2015	2016	2015	2016	2015	2016	2015
Revenue	\$ 5.2	\$ 9.2	\$ 8.7	\$ 13.0	\$ 12.1	\$ 13.4	\$ 9.9	\$ 18.4
Loss from operations	\$ (4.1)	\$ (3.5)	\$ (2.2)	\$ (2.2)	\$ (1.2)	\$ —	\$ (1.4)	\$ (0.2)
Net loss	\$ (4.2)	\$ (4.0)	\$ (2.5)	\$ (2.7)	\$ (1.4)	\$ (0.5)	\$ (0.8)	\$ (0.6)
Net loss per common share — Basic and diluted	\$(0.18)	\$(0.17)	\$(0.11)	\$(0.11)	\$(0.06)	\$(0.02)	\$(0.04)	\$(0.04)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures are designed to ensure that information required to be disclosed by us in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in reports filed under the Exchange Act is accumulated and communicated to management, including principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

As of December 31, 2016, we have carried out an evaluation under the supervision of, and with the participation of our management, including our Chief Operating Officer and Chief Accounting Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on our evaluation, our Chief Operating Officer and Chief Accounting Officer concluded that our disclosure controls and procedures were not effective in ensuring that (a) the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported appropriately and within the time periods specified in the SEC's rules and forms, and (b) such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control and procedures objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act as a process designed by, or under the supervision of, a company's principal executive and principal financial officers and effected by a company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls

may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control — Integrated Framework.

A material weakness is defined as a deficiency or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

As of December 31, 2016, we identified three material weaknesses in our internal control over financial reporting. Specifically, we had inadequate and ineffective controls for reviewing and analyzing revenue transactions related to certain international turbine sales that remained in logistics warehouses while certain logistics events were completed. We also had inadequate and effective controls for reviewing and analyzing complex or non-routine transactions. These material weaknesses existed at December 31, 2015 and remained unremediated. In connection with the closing of our second quarter of 2016, we identified a material weakness in our internal control over financial reporting. Specifically, our inventory reconciliation control was not properly designed as it did not include the reconciliation of all non-system generated entries recorded to the general ledger. The material weaknesses resulted in material misstatements of our consolidated financial statements or disclosures, which have been corrected in previous filings. Until remediated, the matters described above will continue to constitute material weaknesses in our internal control over financial reporting that could result in material misstatements in our financial statements not being prevented or detected.

As a result of the material weaknesses, our management concluded that, as of December 31, 2016, our internal controls over financial reporting was not effective.

Plan for Remediation of the Material Weakness in Internal Control Over Financial Reporting

Management is engaged in the planning for, and implementation of, remediation efforts to address the material weakness. These remediation efforts, outlined below, are intended both to address the identified material weakness and to enhance the Company's overall financial control.

- enhance the formality and rigor of the reconciliation procedures and the evaluation of certain accounts and transactions;
- enhance the design of existing monitoring controls;
- enhancement and formation of our month end close and financial reporting review process to ensure that complex or significant transactions are thoroughly analyzed with the accounting and finance management team;
- engage outside technical accounting consultants to provide assistance and guidance in determining accounting conclusions for non-routine, complex transactions;
- enhancement of our existing policies and procedures relating to the preparation and review of general ledger reconciliations, including establishment of a formal escalation method to notify when accounts that have gone un-reconciled or unadjusted variances; and we have and plan to continue to improve the quality and timing of our accounting close process and financial reporting to allow for increase time for review.

We will continue to implement these and other improvements until our material weaknesses are fully remediated.

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Changes in Internal Control over Financial Reporting

Other than the changes resulting from the remediation activities described above, there have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required under this item is incorporated herein by reference to our 2017 Proxy Statement, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2016.

Item 11. Executive Compensation

The information required under this item is incorporated herein by reference to our 2017 Proxy Statement, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2016.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required under this item is incorporated herein by reference to our 2017 Proxy Statement, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2016.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required under this item is incorporated herein by reference to our 2017 Proxy Statement, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2016.

Item 14. Principal Accounting Fees and Services

The information required under this item is incorporated herein by reference to our 2017 Proxy Statement, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2016.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following is filed as part of this Annual Report on Form 10-K:

1. *Financial Statements.*

	Page
Consolidated Balance Sheets as of December 31, 2016 and 2015	64
Consolidated Statements of Operations and Comprehensive Loss for the Years Ended December 31, 2016 and 2015	66
Consolidated Statements of Changes in Shareholders' Equity (Deficiency) for the Years Ended December 31, 2016 and 2015	67
Consolidated Statements of Cash Flows for the Years Ended December 31, 2016 and 2015	68
Notes to Consolidated Financial Statements	69

2. *Financial Statement Schedules.*

Schedule II — Valuation and Qualifying Accounts	95
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NORTHERN POWER SYSTEMS CORP.
SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

	<u>Balance Beginning of Year</u>	<u>Charged to Expense</u>	<u>Write- Offs</u>	<u>Recoveries and Other Adjustments</u>	<u>Balance End of Year</u>
Allowance for doubtful accounts receivable:					
Fiscal year ended December 31, 2016	\$ 350	\$ (28)	\$ (322)	\$ —	\$ —
Fiscal year ended December 31, 2015	\$ 187	\$ 31	\$ (36)	\$ 168	\$ 350
	<u>Balance Beginning of Year</u>	<u>Additions</u>	<u>Write- Offs</u>	<u>Recoveries</u>	<u>Balance End of Year</u>
Deferred tax asset valuation allowance:					
Fiscal year ended December 31, 2016	\$ 57,581	\$ 2,876	\$ —	\$ —	\$60,457
Fiscal year ended December 31, 2015	\$ 54,566	\$ 3,015	\$ —	\$ —	\$57,581

(b) Exhibits.

See the Exhibit Index immediately following the signature page of this Annual Report on Form 10-K. The exhibits listed in the Exhibit Index below are filed or incorporated by reference as part of this Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NORTHERN POWER SYSTEMS CORP.

Date: March 31, 2017

By: /s/ Ciel R. Caldwell
Ciel R. Caldwell
President and Chief Operating Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Ciel R. Caldwell and Eric Larson, and each of them, his or her true and lawful attorneys in fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys in fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Ciel R. Caldwell</u> Ciel R. Caldwell	President and Chief Operating Officer (Principal Executive Officer)	March 31, 2017
<u>/s/ Eric Larson</u> Eric Larson	Vice President and Chief Accounting Officer (Principal Financial Officer and Principal Accounting Officer)	March 31, 2017
<u>/s/ Kevin R. Kopczynski</u> Kevin R. Kopczynski	Director	March 31, 2017
<u>/s/ Alexander Ellis, III</u> Alexander Ellis, III	Director	March 31, 2017
<u>/s/ Richard Hokin</u> Richard Hokin	Director	March 31, 2017
<u>/s/ John Simon</u> John Simon	Director	March 31, 2017

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ William F. Leimkuhler</u> William F. Leimkuhler	Director	March 31, 2017
<u>/s/ Robert L. Lentz</u> Robert L. Lentz	Director	March 31, 2017
<u>/s/ Gregory Wolf</u> Gregory Wolf	Director	March 31, 2017
<u>/s/ Troy C. Patton</u> Troy C. Patton	Director	March 31, 2017

EXHIBIT INDEX

<u>Number</u>	<u>Description</u>
2.1	Merger Agreement by and between Wind Power Holdings, Inc., Mira III Acquisition Corp (now known as Northern Power Systems, Corp), Mira Subco, Inc. and Mira Subco, LLC dated as of March 3, 2014. (filed as Exhibit 2.1 to the Registrant’s Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
3.1	Articles of Association of the Registrant, as amended (filed as Exhibit 3.1 to the Registrant’s Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
4.1	Form of Common Share Certificate of Registrant (filed as Exhibit 4.1 to Amendment No. 3 to the Registrant’s Registration Statement on Form 10 (File No. 001-36317), filed by Wind Power Holdings, Inc., the predecessor to the Registrant, on May 12, 2014 and incorporated herein by reference)
4.2	Form of Class B Restricted Voting Share Certificate of the Registrant (filed as Exhibit 4.1A to Amendment No. 3 to the Registrant’s Registration Statement on Form 10 (File No. 001-36317) by Wind Power Holdings, Inc., the predecessor to the Registrant, on May 12, 2014 and incorporated herein by reference)
4.3	Fifth Amended and Restated Investors’ Rights Agreement by and between Wind Power Holdings, Inc. and certain of its shareholders dated as of April 14, 2014 (filed as Exhibit 10.1 to the Registrant’s Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
10.1#	Northern Power Systems Corp. 2014 Stock Option and Incentive Plan (filed as Exhibit 10.2 to the Registrant’s Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
10.2	Northern Power Systems Corp. 2014 Stock Option and Incentive Plan Form of Non-Qualified Stock Option Grant (filed as Exhibit 10.3 to the Registrant’s Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
10.3	Employment Agreement by and between the Registrant and Troy C. Patton (filed as Exhibit 10.5 to the Registrant’s Registration Statement on Form 10 (File No. 001-36317) by Wind Power Holdings, Inc., the predecessor to the Registrant, on February 12, 2014 and incorporated herein by reference)
10.4#	Employment Agreement by and between the Registrant and Ciel R. Caldwell (filed as Exhibit 10.4 to the Registrant’s Registration Statement on Form S-1 (File No. 333- 201372) on January 5, 2015 and incorporated herein by reference)
10.5#	Employment Agreement by and between the Registrant and Jonathan A. Lynch (filed as Exhibit 10.5 to the Registrant’s Registration Statement on Form S-1 (File No. 333- 201372) on January 5, 2015 and incorporated herein by reference)
10.6#	Employment Agreement dated as of May 5, 2014 by and between Northern Power Systems, Inc. and Lawrence D. Willey (filed as Exhibit 10.7 to the Registrant’s Quarterly Report on Form 10-Q (File No. 000-55184) on August 14, 2014 and incorporated herein by reference)
10.8	Amended and Restated Loan and Security Agreement by and between the Registrant and Comerica Bank, dated December 31, 2013, as amended June 30, 2014 (filed as Exhibit 10.8 to the Registrant’s Registration Statement on Form S-1 (File No. 333- 201372) on January 5, 2015 and incorporated herein by reference)

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<u>Number</u>	<u>Description</u>
10.9†	Technological Know-How Transfer Agreement for NPS 2.X by and between the Registrant and WEG Equipamentos Eléctricos S.A. dated March 20, 2013 (filed as Exhibit 10.8 to Amendment No. 3 to the Registrant's Registration Statement on Form 10 (File No. 001-36317) by Wind Power Holdings, Inc., the predecessor to the Registrant, on May 12, 2014 and incorporated herein by reference)
10.10†	Turbine Design and Development Agreement for 3.3 MW by and between Registrant and WEG Equipamentos Eléctricos S.A. dated February 28, 2014 (filed as Exhibit 10.12 to Amendment No. 3 to the Registrant's Registration Statement on Form 10 (File No. 001-36317) by Wind Power Holdings, Inc., the predecessor to the Registrant, on May 12, 2014 and incorporated herein by reference)
10.11	Lease Agreement dated as of June 19, 2014 by and between Northern Power Systems, Inc. and Malone 29 Pitman Road Properties, LLC (filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q (File No. 000-55184) on August 14, 2014 and incorporated herein by reference)
10.12	Purchase and Sale Agreement dated as of March 5, 2014 by and between Wind Power Holdings, Inc. and Malone Properties, Inc. (filed as Exhibit 10.16 to Amendment No. 3 to the Registrant's Registration Statement on Form 10 (File No. 001-36317) by Wind Power Holdings, Inc., the predecessor to the Registrant, on May 12, 2014 and incorporated herein by reference)
10.13	Escrow Agreement made and entered into as of April 16, 2014, by and among Northern Power Systems Corp., Equity Financial Trust Company, as escrow agent, and the shareholders named therein (filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K (File No. 000-55184) on April 23, 2014 and incorporated herein by reference)
10.14*	Amendment No. 2 to Amended and Restated Loan and Security Agreement by and between the Registrant and Comerica Bank, dated April 30, 2015
10.15*	Amendment No. 3 to Amended and Restated Loan and Security Agreement by and between the Registrant and Comerica Bank, dated September 30, 2016
10.16*	Amendment No. 2 to Master Revolving Note by and between the Registrant and Comerica Bank, dated September 30, 2016
10.17*	Borrower Agreement by and between the Registrant and the Export-Import Bank of the United States dated September 30, 2016
10.18#*	Employment Agreement dated as of October 5, 2016, by and between Northern Power Systems, Inc. and June M. Morris
10.19*††	Asset Purchase Agreement, dated October 26, 2016, by and among the Registrant and WEG Electric Corp. and WEG Equipamentos Eléctricos S.A
10.20*	First Amendment to the Technological Know-How Agreement for NPS2.X by and between WEG Equipamentos Electricos S.A. and Northern Power Systems, Inc. dated October 26, 2016
21.1*	Subsidiaries of the Registrant
23.1*	Consent of RSM US LLP, Independent Registered Accounting Firm
24.1*	Power of Attorney (included on signature page)
31.1*	Principal Executive Officer — Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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<u>Number</u>	<u>Description</u>
31.2*	Principal Financial Officer — Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of the Principal Executive Officer and the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Calculation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document
101.LAB*	XBRL Taxonomy Label Linkbase Document
101.PRE*	XBRL Taxonomy Presentation Linkbase Document

* Filed herewith.

** Furnished herewith.

Indicates management contract or compensatory plan, contract or agreement.

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment previously granted by the SEC.

†† Schedules (or similar attachments) have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish supplementally copies of any of the omitted schedules (or similar attachments) upon request by the SEC.

Attached as Exhibits 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2016 and December 31, 2015, and (ii) Consolidated Statements of Operations for the years ended December 31, 2016 and 2015, and (iii) Consolidated Statements of Changes in Shareholders' Equity (Deficiency) for the years ended December 31, 2016 and 2015, and (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2016 and 2015 and (v) Notes to Consolidated Financial Statements.

AMENDMENT NO. 2 TO AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This Amendment No. 2 to Amended and Restated Loan and Security Agreement (“Amendment”) is made on April 30, 2015 (“First Amendment Effective Date”) between **NORTHERN POWER SYSTEMS, INC.**, a Delaware corporation (“Borrower”) and **COMERICA BANK**, a Texas banking association (“Bank”).

Borrower and Bank entered into an Amended and Restated Loan and Security Agreement dated December 31, 2013 (“Loan and Security Agreement”) providing terms and conditions governing certain loans and other credit accommodations extended by Bank to Borrower (“Indebtedness”).

Borrower and Bank have agreed to amend the terms of the Loan and Security Agreement as provided in this Amendment.

Accordingly, Borrower and Bank agree as follows:

1. Capitalized Terms. In this Amendment, capitalized terms that are used without separate definition shall have the meanings given to them in the Loan and Security Agreement.

2. Amendments. The Loan and Security Agreement is amended as follows:

(a) The following terms, which are defined in Exhibit A of the Loan and Security Agreement, are given the following amended definitions:

“Ex-Im Facility Documents” means the Ex-Im Facility Letter Agreement, the Loan Authorization Notice, the Borrower Agreement and the Economic Impact Certification, each dated as of April 30, 2015 and the Master Revolving Note (in the principal amount of \$6,000,000) dated as of June 30, 2014, as the same may be amended and or amended and restated from time to time.

“Guarantor(s)” means NPSBC.

3. Representations. Borrower represents, covenants and agrees that:

(a) Notwithstanding anything to the contrary in the Loan and Security Agreement, the Revolving Line is hereby terminated and cancelled, there being no Advances currently outstanding or hereafter permitted under such Revolving Line or the Loan and Security Agreement.

(b) The representations, warranties and covenants set forth in the Loan and Security Agreement shall continue to be applicable to the Ex-Im Facility Documents until Payment-in-Full of the Ex-Im Facility Loans.

(c) Except as expressly modified in this Amendment, (i) the representations and warranties set forth in the Loan and Security Agreement and in each Loan Document remain true and correct in all respects, except to the extent that they expressly speak as of a specific prior date, and (ii) the covenants set forth in the Loan and Security Agreement continue to be satisfied in all respects, and are legal, valid and binding obligations with the same force and effect as if entirely restated in this Amendment.

(d) When executed, this Amendment will be a duly authorized, legal, valid, and binding obligation of Borrower enforceable in accordance with its terms, and will not conflict with or violate any of Borrower’s formation documents or any agreement, instrument, law, or order to which Borrower or any material portion of its assets is subject or bound.

(e) The bylaws of the Borrower delivered to Bank on or about December 1, 2011 remain in full force and effect, have not been amended, repealed or rescinded in any respect and may continue to be relied upon by Bank until written notice to the contrary is received by Bank, and Borrower continues to be in good standing under the laws of the States of Delaware and Vermont.

(f) There is no default continuing under the Loan and Security Agreement, or any related document, agreement, or instrument, and no event has occurred or condition exists that is or, with the giving of notice or lapse of time or both, would be such a default.

4. Conditions Precedent. The effectiveness of this Amendment is subject to Bank's receipt of or Borrower's satisfaction of all of the following:

(a) this Amendment, duly executed by Borrower and the documents identified on attached Schedule 5, and such other agreements and instruments reasonably requested by Bank pursuant thereto (including such documents as are necessary to create and perfect Bank's interest in the Collateral), each duly executed by Borrower and/or other party as applicable;

(b) payment of Bank's expenses (including reasonable attorneys' fees) incurred through the date of this Amendment (it being acknowledged that the Bank is not charging an amendment fee in connection with this Amendment); and

(c) such other documents and completion of such other matters as Bank may reasonably deem necessary or appropriate.

5. No Other Changes. Except as specifically provided in this Amendment, it does not vary the terms and provisions of any of the Loan Documents. This Amendment shall not impair the rights, remedies, and security given in and by the Loan Documents. The terms of this Amendment shall control any conflict between its terms and those of the Loan and Security Agreement.

6. Ratification. Except for the modifications under this Amendment, the parties ratify and confirm the Loan and Security Agreement and the Loan Documents and agree that they remain in full force and effect.

7. Further Modification; No Reliance. This Amendment may be altered or modified only by written instrument duly executed by Borrower and Bank. In executing this Amendment, Borrower is not relying on any promise or commitment of Bank that is not in writing signed by Bank. This Amendment shall not be more strictly construed against any one of the parties as compared to any other.

8. Successors and Assigns. This Amendment shall inure to the benefit of and be binding upon the parties and their respective successors and assigns.

9. Governing Law. The parties agree that the terms and provisions of this Amendment shall be governed by and construed in accordance with the internal laws of the State of California, without regard to principles of conflicts of law.

10. No Defenses. Borrower acknowledges, confirms, and warrants to Bank that as of the date hereof Borrower has absolutely no defenses, claims, rights of set-off, or counterclaims against Bank under, arising out of, or in connection with, this Amendment, the Loan and Security Agreement, the Loan Documents and/or the individual advances under the Indebtedness, or against any of the indebtedness evidenced or secured thereby.

11. Expenses. Borrower shall promptly pay all out-of-pocket fees, costs, charges, expenses, and disbursements of Bank incurred in connection with the preparation, execution, and delivery of this Amendment, and the other documents contemplated by this Amendment.

12. Counterparts. This Amendment may be executed in one or more counterparts, and by separate parties on separate counterparts, all of which shall constitute one and the same agreement. Facsimile copies of signatures or copies of signatures sent by electronic mail (as a “pdf” or “tif” attachment) shall be treated as manually signed originals for the purposes of this Amendment and the documents to be delivered pursuant to Section 5. Any party delivering an executed counterpart of this Amendment by facsimile or electronic mail also shall deliver a manually executed counterpart of this Amendment, but the failure to deliver a manually executed counterpart shall not affect the validity, enforceability, and binding effect of this Amendment.

[*end of amendment – signature page follows*]

This Amendment No. 2 to Amended and Restated Loan and Security Agreement is executed and delivered as of the First Amendment Effective Date.

COMERICA BANK

By: Song Hu
Name: Song Hu
Title: VP

NORTHERN POWER SYSTEMS, INC.

By: /s/ Ciel R. Caldwell
Name: Ciel R. Caldwell
Title: Chief Financial Officer

SCHEDULE 5

CLOSING CHECKLIST

[See Document No. 24,062,036]

AMENDMENT NO. 3 TO AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This Amendment No. 3 to Amended and Restated Loan and Security Agreement (“ *Amendment* ”) is made on September 30, 2016 (“ *Third Amendment Effective Date* ”) between **NORTHERN POWER SYSTEMS, INC .**, a Delaware corporation (“ *Borrower* ”) and **COMERICA BANK**, a Texas banking association (“ *Bank* ”).

Borrower and Bank entered into an Amended and Restated Loan and Security Agreement dated December 31, 2013 (“ *Loan and Security Agreement* ”) providing terms and conditions governing certain loans and other credit accommodations extended by Bank to Borrower (“ *Indebtedness* ”).

Borrower and Bank have agreed to amend the terms of the Loan and Security Agreement as provided in this Amendment.

Accordingly, Borrower and Bank agree as follows:

1. **Capitalized Terms**. In this Amendment, capitalized terms that are used without separate definition shall have the meanings given to them in the Loan and Security Agreement.

2. **Amendments**. The Loan and Security Agreement is amended as follows:

(a) Section 6.7 of the Loan and Security Agreement is hereby deleted in its entirety and replaced with the following:

“6.7 **Financial Covenants**. Borrower shall at all times maintain the following financial covenant:

(a) **Liquid Assets**. At all times, be and remain the owner of Unencumbered Liquid Assets having a value (as such value is determined by Bank) of not less than **One Million Dollars (\$1,000,000)**.

(b) The following terms, which are defined in Exhibit A of the Loan and Security Agreement, are given the following amended definitions:

“ *Ex-Im Facility Documents* ” means the Ex-Im Facility Letter Agreement, the Loan Authorization Notice, the Borrower Agreement and the Economic Impact Certification, each dated as of September 30, 2016 and the Master Revolving Note (in the amended principal amount of \$2,000,000) dated as of June 30, 2014, as the same may be amended and or amended and restated from time to time.

3. **Representations**. Borrower represents, covenants and agrees that:

(a) Notwithstanding anything to the contrary in the Loan and Security Agreement, the Revolving Line is hereby terminated and cancelled, there being no Advances currently outstanding or hereafter permitted under such Revolving Line or the Loan and Security Agreement.

(b) The representations, warranties and covenants set forth in the Loan and Security Agreement shall continue to be applicable to the Ex-Im Facility Documents until Payment-in-Full of the Ex-Im Facility Loans.

(c) Except as expressly modified in this Amendment, (i) the representations and warranties set forth in the Loan and Security Agreement and in each Loan Document remain true and correct in all respects, except to the extent that they expressly speak as of a specific prior date, and (ii) the covenants set forth in the Loan and Security Agreement continue to be satisfied in all respects, and are legal, valid and binding obligations with the same force and effect as if entirely restated in this Amendment.

(d) When executed, this Amendment will be a duly authorized, legal, valid, and binding obligation of Borrower enforceable in accordance with its terms, and will not conflict with or violate any of Borrower's formation documents or any agreement, instrument, law, or order to which Borrower or any material portion of its assets is subject or bound.

(e) The bylaws of the Borrower delivered to Bank on or about December 1, 2011 remain in full force and effect, have not been amended, repealed or rescinded in any respect and may continue to be relied upon by Bank until written notice to the contrary is received by Bank, and Borrower continues to be in good standing under the laws of the States of Delaware and Vermont.

(f) There is no default continuing under the Loan and Security Agreement, or any related document, agreement, or instrument, and no event has occurred or condition exists that is or, with the giving of notice or lapse of time or both, would be such a default.

4. Conditions Precedent. The effectiveness of this Amendment is subject to Bank's receipt of or Borrower's satisfaction of all of the following:

(a) this Amendment, duly executed by Borrower and the documents identified on attached Schedule 1, and such other agreements and instruments reasonably requested by Bank pursuant thereto (including such documents as are necessary to create and perfect Bank's interest in the Collateral), each duly executed by Borrower and/or other party as applicable;

(b) payment of Bank's expenses (including reasonable attorneys' fees) incurred through the date of this Amendment (it being acknowledged that the Bank is not charging an amendment fee in connection with this Amendment); and

(c) such other documents and completion of such other matters as Bank may reasonably deem necessary or appropriate.

5. No Other Changes. Except as specifically provided in this Amendment, it does not vary the terms and provisions of any of the Loan Documents. This Amendment shall not impair the rights, remedies, and security given in and by the Loan Documents. The terms of this Amendment shall control any conflict between its terms and those of the Loan and Security Agreement.

6. Ratification. Except for the modifications under this Amendment, the parties ratify and confirm the Loan and Security Agreement and the Loan Documents and agree that they remain in full force and effect.

7. Further Modification; No Reliance. This Amendment may be altered or modified only by written instrument duly executed by Borrower and Bank. In executing this Amendment, Borrower is not relying on any promise or commitment of Bank that is not in writing signed by Bank. This Amendment shall not be more strictly construed against any one of the parties as compared to any other.

8. Successors and Assigns. This Amendment shall inure to the benefit of and be binding upon the parties and their respective successors and assigns.

9. Governing Law. The parties agree that the terms and provisions of this Amendment shall be governed by and construed in accordance with the internal laws of the State of California, without regard to principles of conflicts of law.

10. No Defenses. Borrower acknowledges, confirms, and warrants to Bank that as of the date hereof Borrower has absolutely no defenses, claims, rights of set-off, or counterclaims against Bank under, arising out of, or in connection with, this Amendment, the Loan and Security Agreement, the Loan Documents and/or the individual advances under the Indebtedness, or against any of the indebtedness evidenced or secured thereby.

11. Expenses. Borrower shall promptly pay all out-of-pocket fees, costs, charges, expenses, and disbursements of Bank incurred in connection with the preparation, execution, and delivery of this Amendment, and the other documents contemplated by this Amendment.

12. Counterparts. This Amendment may be executed in one or more counterparts, and by separate parties on separate counterparts, all of which shall constitute one and the same agreement. Facsimile copies of signatures or copies of signatures sent by electronic mail (as a “pdf” or “tif” attachment) shall be treated as manually signed originals for the purposes of this Amendment and the documents to be delivered pursuant to Section 5. Any party delivering an executed counterpart of this Amendment by facsimile or electronic mail also shall deliver a manually executed counterpart of this Amendment, but the failure to deliver a manually executed counterpart shall not affect the validity, enforceability, and binding effect of this Amendment.

[end of amendment – signature page follows]

COMERICA BANK

By: /s/ Song Hu
Name: Song Hu
Title: VP

NORTHERN POWER SYSTEMS, INC.

By: /s/ Ciel R. Caldwell
Name: Ciel R. Caldwell
Title: President and Chief Operating Officer

AMENDMENT NO. 2 TO MASTER REVOLVING NOTE

This Amendment No. 2 to Master Revolving Note (“Amendment”) dated as of September 30, 2016, is made between **Northern Power Systems, Inc.**, a Delaware corporation (“Borrower”) and **Comerica Bank**, a Texas banking association (“Bank”) in order to amend the terms of the \$6,000,000.00 Master Revolving Note dated June 30, 2014, made by Borrower to Bank (the “Note”).

1. Amendment to Note. The Note is amended as follows:

(a) The principal amount of the Note is hereby reduced to \$2,000,000 and each reference in the Note to “\$6,000,000” or “Six Million Dollars” is amended and restated as “\$2,000,000” and “Two Million Dollars” respectively.

(b) The Maturity Date is extended from September 30, 2016 to December 31, 2017.

(c) The definition of “Daily Adjusting LIBOR Rate” is hereby modified and replaced in its entirety with the following:

“ ‘Daily Adjusting LIBOR Rate’ means, for any day, a per annum interest rate which is equal to the quotient of the following:

(a) for any day, the per annum rate of interest determined on the basis of the rate for deposits in United States Dollars for a period equal to one (1) month appearing on Page BBAM of the Bloomberg Financial Markets Information Service as of 11:00 a.m. (London, England time) (or as soon thereafter as practical) on such day, or if such day is not a Business Day, on the immediately preceding Business Day. In the event that such rate does not appear on Page BBAM of the Bloomberg Financial Markets Information Service (or otherwise on such Service) on any day, the “Daily Adjusting LIBOR Rate” for such day shall be determined by reference to such other publicly available service for displaying eurodollar rates as may be reasonably selected by Bank, or, in the absence of such other service, the “Daily Adjusting LIBOR Rate” for such day shall, instead, be determined based upon the average of the rates at which Bank is offered dollar deposits at or about 11:00 a.m. (Detroit, Michigan time) (or as soon thereafter as practical), on such day, or if such day is not a Business Day, on the immediately preceding Business Day, in the interbank eurodollar market in an amount comparable to the principal amount of the Indebtedness outstanding hereunder and for a period equal to one (1) month;

divided by

(b) 1.00 minus the maximum rate (expressed as a decimal) on such day at which Bank is required to maintain reserves on “Euro-currency Liabilities” as defined in and pursuant to Regulation D of the Board of Governors of the Federal Reserve System or, if such regulation or definition is modified, and as long as Bank is required to maintain reserves against a category of liabilities which includes eurodollar deposits or includes a category of assets which includes eurodollar loans, the rate at which such reserves are required to be maintained on such category;

provided, however, and notwithstanding anything to the contrary set forth in this Note, if at any time the Daily Adjusting LIBOR Rate determined as provided above would be less than zero percent (0%), then the Daily Adjusting LIBOR Rate shall be deemed to be zero percent (0%) per annum for all purposes of this Note. Each calculation by Bank of the Daily Adjusting LIBOR Rate shall be conclusive and binding for all purposes, absent manifest error.”

2. Defined Terms. Initially capitalized terms used and not defined in this Amendment have the meanings given to them in the Note.

3. Payment Application. Borrower acknowledges that one or more Guaranties have been entered into which guarantee a portion of the Indebtedness under the Note. Upon partial satisfaction of the Indebtedness, Borrower expressly waives any right to designate the portion of the Indebtedness that is satisfied by such payment.

4. Legal Effect. Except as specifically modified hereby, all of the terms and conditions of the Note remain in full force and effect, provided that in the event of any conflict between the terms of this Amendment and the terms of the Note, this Amendment shall control.

5. No Further Amendment. This Amendment is not an agreement to any further or other amendment of the Note. Borrower expressly acknowledges and agrees that except as expressly amended in this Amendment, the Note, as amended, remains in full force and effect and is ratified and confirmed. The execution of this Amendment shall not be deemed to be a waiver of any Default or Event of Default.

6. Waiver. Borrower waives, discharges, and forever releases Bank, Bank’s employees, officers, directors, attorneys, stockholders, and their successors and assigns, from and of any and all claims, causes of action, allegations or assertions that Borrower has or may have had at any time up through and including the date of this Amendment, against any or all of the foregoing, regardless of whether any such claims, causes of action, allegations or assertions are known to Borrower or whether any such claims, causes of action, allegations or assertions arose as result of Bank’s actions or omissions in connection with the Note, or any amendments, extensions or modifications thereto, or Bank’s administration of the debt governed by the Note or otherwise.

7. Costs. Borrower is responsible for all costs incurred by Bank, including without limit reasonable attorney fees, with regard to the preparation and execution of this Amendment.

8. Counterparts. This Amendment may be executed in one or more counterparts, and by separate parties on separate counterparts, all of which shall constitute one and the same agreement. Facsimile copies of signatures or copies of signatures sent by electronic mail (as a “pdf” or “tif” attachment) shall be treated as manually signed originals for the purposes of this Amendment and the documents to be delivered pursuant to Section 4. Any party delivering an executed counterpart of this Amendment by facsimile or electronic mail also shall deliver a manually executed counterpart of this Amendment, but the failure to deliver a manually executed counterpart shall not affect the validity, enforceability, and binding effect of this Amendment.

[Signature Page Follows]

This Amendment No. 2 to Master Revolving Note is executed and delivered as of the date set forth above.

Comerica Bank

By: /s/ Song Hu
Name: Song Hu
Title: VP

Northern Power Systems, Inc.

By: /s/ Ciel R. Caldwell
Name: Ciel R. Caldwell
Title: President and Chief Operating Officer

**E X P O R T - I M P O R T B A N K O F T H E U N I T E D S T A T E S
W O R K I N G C A P I T A L G U A R A N T E E P R O G R A M**

B O R R O W E R A G R E E M E N T

Ex-Im Bank 12/31/05

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EXPORT-IMPORT BANK OF THE UNITED STATES
WORKING CAPITAL GUARANTEE PROGRAM
BORROWER AGREEMENT

THIS BORROWER AGREEMENT (this "Agreement") is made and entered into by the entity identified as Borrower on the signature page hereof ("Borrower") in favor of the Export-Import Bank of the United States ("Ex-Im Bank") and the institution identified as Lender on the signature page hereof ("Lender").

RECITALS

Borrower has requested that Lender establish a Loan Facility in favor of Borrower for the purposes of providing Borrower with working capital to finance the manufacture, production or purchase and subsequent export sale of Items.

Lender and Borrower expect that Ex-Im Bank will provide a guarantee to Lender regarding this Loan Facility subject to the terms and conditions of the Master Guarantee Agreement, a Loan Authorization Agreement, and to the extent applicable, the Delegated Authority Letter Agreement or Fast Track Lender Agreement.

Lender and Ex-Im Bank have requested that Borrower execute this Agreement as a condition precedent to Lender establishing the Loan Facility and Ex-Im Bank providing the guarantee.

NOW, THEREFORE, Borrower hereby agrees as follows:

ARTICLE I
DEFINITIONS

1.01 Definition of Terms. As used in this Agreement, including the Recitals to this Agreement and the Loan Authorization Agreement, the following terms shall have the following meanings:

"Accounts Receivable" shall mean all of Borrower's now owned or hereafter acquired (a) "accounts" (as such term is defined in the UCC), other receivables, book debts and other forms of obligations, whether arising out of goods sold or services rendered or from any other transaction; (b) rights in, to and under all purchase orders or receipts for goods or services; (c) rights to any goods represented or purported to be represented by any of the foregoing (including unpaid sellers' rights of rescission, replevin, reclamation and stoppage in transit and rights to returned, reclaimed or repossessed goods); (d) moneys due or to become due to such Borrower under all purchase orders and contracts (which includes Export Orders) for the sale of goods or the performance of services or both by Borrower (whether or not yet earned by performance on the part of Borrower), including the proceeds of the foregoing; (e) any notes, drafts, letters of credit, insurance proceeds or other instruments, documents and writings evidencing or supporting the foregoing; and (f) all collateral security and guarantees of any kind given by any other Person with respect to any of the foregoing.

Ex-Im Bank 12/31/05

“Accounts Receivable Aging Report” shall mean a report detailing the Export-Related Accounts Receivable and Export-Related Overseas Accounts Receivable for a Loan Facility, and the applicable terms for the relevant time period; in the case of Indirect Exports, such report shall indicate the portion of such Accounts Receivables corresponding to Indirect Exports.

“Advance Rate” shall mean, with respect to a Loan Facility, the rate specified in Section 5.C. of the Loan Authorization Agreement for each category of Primary Collateral except for Export-Related General Intangibles and Other Collateral. Unless otherwise set forth in writing by Ex-Im Bank, in no event shall the Advance Rate exceed (i) ninety percent (90%) for Eligible Export-Related Accounts Receivable, (ii) seventy five percent (75%) for Eligible Export-Related Inventory, (iii) seventy percent (70%) for Eligible Export-Related Overseas Accounts Receivable or (iv) sixty percent (60%) for Eligible Export-Related Overseas Inventory and (v) twenty five percent (25%) for Retainage Accounts Receivable.

“Affiliated Foreign Person” shall have the meaning set forth in Section 2.15.

“Business Day” shall mean any day on which the Federal Reserve Bank of New York is open for business.

“Buyer” shall mean a Person that has entered into one or more Export Orders with Borrower or who is an obligor on Export-Related Accounts Receivable or Export-Related Overseas Accounts Receivable.

“Capital Good” shall mean a capital good (e.g., manufacturing equipment, licensing agreements) that will establish or expand foreign production capacity of an exportable good.

“Collateral” shall mean all real and personal property and interest in real and personal property in or upon which Lender has been, or shall be, granted a Lien as security for the payment of all the Loan Facility Obligations and all products and proceeds (cash and non-cash) thereof.

“Commercial Letters of Credit” shall mean those letters of credit subject to the UCP payable in Dollars and issued or caused to be issued by Lender on behalf of Borrower under a Loan Facility for the benefit of a supplier(s) of Borrower in connection with Borrower’s purchase of goods or services from the supplier in support of the export of the Items.

“Country Limitation Schedule” shall mean the schedule published from time to time by Ex-Im Bank setting forth on a country by country basis whether and under what conditions Ex-Im Bank will provide coverage for the financing of export transactions to countries listed therein.

“Credit Accommodation Amount” shall mean, the sum of (a) the aggregate outstanding amount of Disbursements and (b) the aggregate outstanding Letter of Credit Obligations, which sum may not exceed the Maximum Amount.

“Credit Accommodations” shall mean, collectively, Disbursements and Letter of Credit Obligations.

“Debarment Regulations” shall mean, collectively, (a) the Governmentwide Debarment and Suspension (Nonprocurement) regulations (Common Rule), 53 Fed. Reg. 19204 (May 26, 1988), (b) Subpart 9.4 (Debarment, Suspension, and Ineligibility) of the Federal Acquisition Regulations, 48 C.F.R. 9.400-9.409 and (c) the revised Governmentwide Debarment and Suspension (Nonprocurement) regulations (Common Rule), 60 Fed. Reg. 33037 (June 26, 1995).

“Delegated Authority Letter Agreement” shall mean the Delegated Authority Letter Agreement, if any, between Ex-Im Bank and Lender.

“Disbursement” shall mean, collectively, (a) an advance of a working capital loan from Lender to Borrower under the Loan Facility, and (b) an advance to fund a drawing under a Letter of Credit issued or caused to be issued by Lender for the account of Borrower under the Loan Facility.

“Dollars” or “\$” shall mean the lawful currency of the United States.

“Economic Impact Approval” shall mean a written approval issued by Ex-Im Bank stating the conditions under which a Capital Good may be included as an Item in a Loan Facility consistent with Ex-Im Bank’s economic impact procedures (or other mechanism for making this determination that Ex-Im Bank notifies Lender of in writing).

“Economic Impact Certification” shall have the meaning set forth in Section 2.14(b).

“Effective Date” shall mean the date on which (a) all of the Loan Documents have been executed by Lender, Borrower and, if applicable, Ex-Im Bank and (b) all of the conditions to the making of the initial Credit Accommodations under the Loan Documents or any amendments thereto have been satisfied.

“Eligible Export-Related Accounts Receivable” shall mean Export-Related Accounts Receivable which are acceptable to Lender and which are deemed to be eligible pursuant to the Loan Documents, but in no event shall Eligible Export-Related Accounts Receivable include any Account Receivable:

- (a) that does not arise from the sale of Items in the ordinary course of Borrower’s business;
- (b) that is not subject to a valid, perfected first priority Lien in favor of Lender;
- (c) as to which any covenant, representation or warranty contained in the Loan Documents with respect to such Account Receivable has been breached;
- (d) that is not owned by Borrower or is subject to any right, claim or interest of another Person other than the Lien in favor of Lender;
- (e) with respect to which an invoice has not been sent;
- (f) that arises from the sale of defense articles or defense services;

(g) that arises from the sale of Items to be used in the construction, alteration, operation or maintenance of nuclear power, enrichment, reprocessing, research or heavy water production facilities unless with Ex-Im Bank's prior written consent;

(h) that is due and payable from a Buyer located in a country with which Ex-Im Bank is prohibited from doing business as designated in the Country Limitation Schedule;

(i) that does not comply with the requirements of the Country Limitation Schedule;

(j) that is due and payable more than one hundred eighty (180) days from the date of the invoice;

(k) that is not paid within sixty (60) calendar days from its original due date, unless it is insured through Ex-Im Bank export credit insurance for comprehensive commercial and political risk, or through Ex-Im Bank approved private insurers for comparable coverage, in which case it is not paid within ninety (90) calendar days from its due date;

(l) of a Buyer for whom fifty percent (50%) or more of the Accounts Receivable of such Buyer do not satisfy the requirements of subclauses (j) and (k) above;

(m) that arises from a sale of goods to or performance of services for an employee of Borrower, a stockholder of Borrower, a subsidiary of Borrower, a Person with a controlling interest in Borrower or a Person which shares common controlling ownership with Borrower;

(n) that is backed by a letter of credit unless the Items covered by the subject letter of credit have been shipped;

(o) that Lender or Ex-Im Bank, in its reasonable judgment, deems uncollectible for any reason;

(p) that is due and payable in a currency other than Dollars, except as may be approved in writing by Ex-Im Bank;

(q) that is due and payable from a military Buyer, except as may be approved in writing by Ex-Im Bank;

(r) that does not comply with the terms of sale set forth in Section 7 of the Loan Authorization Agreement;

(s) that is due and payable from a Buyer who (i) applies for, suffers, or consents to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or a substantial part of its property or calls a meeting of its creditors, (ii) admits in writing its inability, or is generally unable, to pay its debts as they become due or ceases operations of its present business, (iii) makes a general assignment for the benefit of creditors, (iv) commences a voluntary case under any state or federal bankruptcy laws (as now or hereafter in effect), (v) is adjudicated as bankrupt or insolvent, (vi) files a petition seeking to take advantage of any other law providing for the relief of debtors, (vii) acquiesces to, or fails to have dismissed, any petition which is filed against it in any involuntary case under such bankruptcy laws, or (viii) takes any action for the purpose of effecting any of the foregoing;

(t) that arises from a bill-and-hold, guaranteed sale, sale-and-return, sale on approval, consignment or any other repurchase or return basis or is evidenced by chattel paper;

(u) for which the Items giving rise to such Accounts Receivable have not been shipped to the Buyer or when the Items are services, such services have not been performed or when the Export Order specifies a timing for invoicing the Items other than shipment or performance and the Items have not been invoiced in accordance with such terms of the Export Order, or the Accounts Receivable otherwise do not represent a final sale;

(v) that is subject to any offset, deduction, defense, dispute, or counterclaim or the Buyer is also a creditor or supplier of Borrower or the Account Receivable is contingent in any respect or for any reason;

(w) for which Borrower has made any agreement with the Buyer for any deduction therefrom, except for discounts or allowances made in the ordinary course of business for prompt payment, all of which discounts or allowances are reflected in the calculation of the face value of each respective invoice related thereto;

(x) for which any of the Items giving rise to such Account Receivable have been returned, rejected or repossessed;

(y) that is included as an eligible receivable under any other credit facility to which Borrower is a party;

(z) any of the Items giving rise to such Accounts Receivable are Capital Goods, unless the transaction is in accordance with Section 2.14;

(aa) that is due and payable from a Buyer that is, or is located in, the United States; provided however, that this subsection (aa) shall not preclude an Export-Related Accounts Receivable arising from the sale of Items to foreign contractors or subcontractors providing services to a United States Embassy or the United States Military located overseas from being deemed an Eligible Export-Related Accounts Receivable; or

(bb) that arises from the sale of Items that do not meet the U.S. Content requirements in accordance with Section 2.01(b)(ii).

“Eligible Export-Related Inventory” shall mean Export-Related Inventory which is acceptable to Lender and which is deemed to be eligible pursuant to the Loan Documents, but in no event shall Eligible Export-Related Inventory include any Inventory:

(a) that is not subject to a valid, perfected first priority Lien in favor of Lender;

(b) that is located at an address that has not been disclosed to Lender in writing;

(c) that is placed by Borrower on consignment or held by Borrower on consignment from another Person;

(d) that is in the possession of a processor or bailee, or located on premises leased or subleased to Borrower, or on premises subject to a mortgage in favor of a Person other than Lender, unless such processor or bailee or mortgagee or the lessor or sublessor of such premises, as the case may be, has executed and delivered all documentation which Lender shall require to evidence the subordination or other limitation or extinguishment of such Person's rights with respect to such Inventory and Lender's right to gain access thereto;

(e) that is produced in violation of the Fair Labor Standards Act or subject to the "hot goods" provisions contained in 29 U.S.C. §215 or any successor statute or section;

(f) as to which any covenant, representation or warranty with respect to such Inventory contained in the Loan Documents has been breached;

(g) that is not located in the United States unless expressly permitted by Lender, on terms acceptable to Lender;

(h) that is an Item or is to be incorporated into Items that do not meet U.S. Content requirements in accordance with Section 2.01 (b)(ii);

(i) that is demonstration Inventory;

(j) that consists of proprietary software (i.e. software designed solely for Borrower's internal use and not intended for resale);

(k) that is damaged, obsolete, returned, defective, recalled or unfit for further processing;

(l) that has been previously exported from the United States;

(m) that constitutes, or will be incorporated into Items that constitute, defense articles or defense services;

(n) that is an Item or will be incorporated into Items that will be used in the construction, alteration, operation or maintenance of nuclear power, enrichment, reprocessing, research or heavy water production facilities unless with Ex-Im Bank's prior written consent;

(o) that is an Item or is to be incorporated into Items destined for shipment to a country as to which Ex-Im Bank is prohibited from doing business as designated in the Country Limitation Schedule;

(p) that is an Item or is to be incorporated into Items destined for shipment to a Buyer located in a country in which Ex-Im Bank coverage is not available for commercial reasons as designated in the Country Limitation Schedule, unless and only to the extent that such Items are to be sold to such country on terms of a letter of credit confirmed by a bank acceptable to Ex-Im Bank;

(q) that constitutes, or is to be incorporated into, Items whose sale would result in an Accounts Receivable which would not be an Eligible Export-Related Accounts Receivable;

(r) that is included as eligible inventory under any other credit facility to which Borrower is a party; or

(s) that is, or is to be incorporated into, an Item that is a Capital Good, unless the transaction is in accordance with Section 2.14.

“Eligible Export-Related Overseas Accounts Receivable” shall mean Export-Related Overseas Accounts Receivable which are acceptable to Lender and which are deemed to be eligible pursuant to the Loan Documents but in no event shall include the Accounts Receivable (a) through (bb) excluded from the definition of Eligible Export-Related Accounts Receivable.

“Eligible Export-Related Overseas Inventory” shall mean Export-Related Overseas Inventory which is acceptable to Lender and which is deemed to be eligible pursuant to the Loan Documents, but in no event shall include the Inventory (a) through (r) excluded from the definition of Eligible Export-Related Inventory.

“Eligible Person” shall mean a sole proprietorship, partnership, limited liability partnership, corporation or limited liability company which (a) is domiciled, organized or formed, as the case may be, in the United States, whether or not such entity is owned by a foreign national or foreign entity; (b) is in good standing in the state of its formation or otherwise authorized to conduct business in the United States; (c) is not currently suspended or debarred from doing business with the United States government or any instrumentality, division, agency or department thereof; (d) exports or plans to export Items; (e) operates and has operated as a going concern for at least one (1) year; (f) has a positive tangible net worth determined in accordance with GAAP; and (g) has revenue generating operations relating to its core business activities for at least one year. An Affiliated Foreign Person that meets all of the requirements of the foregoing definition of Eligible Person other than subclause (a) thereof shall be deemed to be an Eligible Person.

“ERISA” shall mean the Employee Retirement Income Security Act of 1974 and the rules and regulations promulgated thereunder.

“Export Order” shall mean a documented purchase order or contract evidencing a Buyer’s agreement to purchase the Items from Borrower for export from the United States, which documentation shall include written information that is necessary to confirm such purchase order or contract, including identification of the Items, the name of the Buyer, the country of destination, contact information for the Buyer and the total amount of the purchase order or contract; in the case of Indirect Exports, such documentation shall further include a copy of the written purchase order or contract from a foreign purchaser or other documentation clearly evidencing a foreign purchaser’s agreement to purchase the Items.

“Export-Related Accounts Receivable” shall mean those Accounts Receivable arising from the sale of Items which are due and payable to Borrower in the United States.

“Export-Related Accounts Receivable Value” shall mean, at the date of determination thereof, the aggregate face amount of Eligible Export-Related Accounts Receivable less taxes, discounts, credits, allowances and Retainages, except to the extent otherwise permitted by Ex-Im Bank in writing.

“Export-Related Borrowing Base” shall mean, at the date of determination thereof, the sum of (a) (if Lender elects to include) the Export-Related Inventory Value or Export-Related Historical Inventory Value multiplied by the Advance Rate applicable to Eligible Export-Related Inventory set forth in Section 5.B.(1.) of the Loan Authorization Agreement, plus (b) the Export-Related Accounts Receivable Value multiplied by the Advance Rate applicable to Eligible Export-Related Accounts Receivable set forth in Section 5.B.(2.) of the Loan Authorization Agreement, plus (c) if permitted by Ex-Im Bank in writing, the Retainage Value multiplied by the Advance Rate applicable to Retainages set forth in Section 5.B.(3.) of the Loan Authorization Agreement, plus (d) the Other Assets set forth in Section 5.B.(4.) of the Loan Authorization Agreement multiplied by the Advance Rate agreed to in writing by Ex-Im Bank, plus (e) if permitted by Ex-Im Bank in writing, the Export-Related Overseas Accounts Receivable Value multiplied by the Advance Rate applicable to Eligible Export-Related Overseas Accounts Receivable set forth in Section 5.B.(5.) of the Loan Authorization Agreement, plus (f) if permitted by Ex-Im Bank in writing, the Export-Related Overseas Inventory Value multiplied by the Advance Rate applicable to Eligible Export-Related Overseas Inventory set forth in Section 5.B.(6.) of the Loan Authorization Agreement, less (g) the amounts required to be reserved pursuant to Sections 4.12 and 4.13 of this Agreement for each outstanding Letter of Credit, less (h) such reserves and in such amounts deemed necessary and proper by Lender from time to time.

“Export-Related Borrowing Base Certificate” shall mean a certificate in the form provided or approved by Lender, executed by Borrower and delivered to Lender pursuant to the Loan Documents detailing the Export-Related Borrowing Base supporting the Credit Accommodations which reflects, to the extent included in the Export-Related Borrowing Base, Export-Related Accounts Receivable, Eligible Export-Related Accounts Receivable, Export-Related Inventory, Eligible Export-Related Inventory, Export-Related Overseas Accounts Receivable, Eligible Export-Related Accounts Receivable, Export-Related Overseas Inventory and Eligible Export- Related Overseas Inventory balances that have been reconciled with Borrower’s general ledger, Accounts Receivable Aging Report and Inventory schedule.

“Export-Related General Intangibles” shall mean the Pro Rata Percentage of General Intangibles determined as of the earlier of: (i) the date such General Intangibles are liquidated and (ii) the date Borrower fails to pay when due any outstanding amount of principal or accrued interest payable under the Loan Documents that becomes the basis for a Payment Default on which a Claim is filed.

“Export-Related Historical Inventory Value” shall mean with respect to a Borrower, the relevant Export-Related Sales Ratio multiplied by the lowest of (i) the cost of such Borrower’s Inventory as determined in accordance with GAAP, or (ii) the market value of such Borrower’s Inventory as determined in accordance with GAAP or (iii) the appraised or orderly liquidation value of such Borrower’s Inventory, if Lender has loans and financial accommodations to such Borrower for which it conducts (or contracts for the performance of) such an appraised or orderly liquidation value.

“Export-Related Inventory” shall mean the Inventory of Borrower located in the United States that has been purchased, manufactured or otherwise acquired by Borrower for sale or resale as Items, or to be incorporated into Items to be sold or resold pursuant to Export Orders.

“Export-Related Inventory Value” shall mean, at the date of determination thereof, the lowest of (i) the cost of Eligible Exported-Related Inventory as determined in accordance with GAAP, or (ii) the market value of Eligible Export-Related Inventory as determined in accordance with GAAP or (iii) the lower of the appraised market value or orderly liquidation value of the Eligible Export-Related Inventory, if Lender has other loans and financial accommodations to a Borrower for which it conducts (or contracts for the performance of) such an appraised or orderly liquidation value.

“Export-Related Overseas Accounts Receivable” shall mean those Accounts Receivable arising from the sale of Items which are due and payable outside of the United States either to a Borrower or an Affiliated Foreign Person.

“Export-Related Overseas Accounts Receivable Value” shall mean, with respect to a Loan Facility, at the date of determination thereof, the aggregate face amount of Eligible Export-Related Overseas Accounts Receivable less taxes, discounts, credits, allowances and Retainages, except to the extent otherwise permitted by Ex-Im Bank in writing.

“Export-Related Overseas Inventory” shall mean the Inventory of Borrower located outside of the United States that has been purchased, manufactured or otherwise acquired by such Borrower for sale or resale as Items, or to be incorporated into Items to be sold or resold pursuant to Export Orders.

“Export-Related Overseas Inventory Value” shall mean, at the date of determination thereof, the lowest of (i) the cost of Eligible Export-Related Overseas Inventory as determined in accordance with GAAP, (ii) the market value of Eligible Export-Related Overseas Inventory as determined in accordance with GAAP or (iii) the appraised or orderly liquidation value of the Eligible Export-Related Overseas Inventory, if Lender has other loans and financial accommodations to Borrower or an Affiliated Foreign Person for which it conducts (or contracts for the performance of) such a appraised or orderly liquidation.

“Export-Related Sales Ratio” shall mean with respect to a Borrower, the percentage of such Borrower’s total sales revenue derived from the sale of Eligible Export-Related Inventory over a rolling twelve-month period ending no more than ninety (90) days prior to the date of the relevant Export-Related Borrowing Base Certificate.

“Extension” shall mean, with respect to a Loan Facility, an amendment to the Loan Authorization Agreement extending the Final Disbursement Date on the same terms and conditions as the Loan Facility for an aggregate period not to exceed one hundred and twenty (120) days beyond the original Final Disbursement Date, either as agreed to in writing by Ex-Im Bank or, in the case of Delegated Authority, as notified by Lender to Ex-Im Bank pursuant to its authority under the Delegated Authority Letter Agreement.

“Fast Track Lender Agreement” shall mean the Fast Track Lender Agreement, if any, between Ex-Im Bank and Lender.

“Final Disbursement Date” shall mean the last date on which Lender may make a Disbursement set forth in Section 10 of the Loan Authorization Agreement (including as amended by an Extension) or, if such date is not a Business Day, the next succeeding Business Day; provided, however, to the extent that Lender has not received cash collateral in the amount of the Letter of Credit Obligations or an equivalent full indemnity from Borrower or Guarantor, as applicable, with respect to Letter of Credit Obligations outstanding on the Final Disbursement Date, the Final Disbursement Date with respect to an advance to fund a drawing under such Letter of Credit shall be no later than thirty (30) days after any such drawing which may be no later than the expiry date of the Letter of Credit related thereto.

“GAAP” shall mean the generally accepted accounting principles issued in the United States.

“General Intangibles” shall mean all intellectual property and other “general intangibles” (as such term is defined in the UCC).

“Guarantor” shall mean any Person which is identified in Section 3 of the Loan Authorization Agreement who shall guarantee (jointly and severally if more than one) the payment and performance of all or a portion of the Loan Facility Obligations.

“Guarantee Agreement” shall mean a valid and enforceable agreement of guarantee executed by each Guarantor in favor of Lender.

“Indirect Exports” shall mean finished goods or services that are sold by a Borrower to a Buyer located in the United States, are intended for export from the United States, and are identified in Section 4.A.(2.) of the Loan Authorization Agreement.

“Inventory” shall mean all “inventory” (as such term is defined in the UCC), now or hereafter owned or acquired by Borrower, wherever located, including all inventory, merchandise, goods and other personal property which are held by or on behalf of Borrower for sale or lease or are furnished or are to be furnished under a contract of service or which constitute raw materials, work in process or materials used or consumed or to be used or consumed in Borrower’s business or in the processing, production, packaging, promotion, delivery or shipping of the same, including other supplies.

“ISP” shall mean the International Standby Practices-ISP98, International Chamber of Commerce Publication No. 590 and any amendments and revisions thereof.

“Issuing Bank” shall mean the bank that issues a Letter of Credit, which bank is Lender itself or a bank that Lender has caused to issue a Letter of Credit by way of a guarantee or reimbursement obligation.

“Items” shall mean the finished goods or services which are intended for export from the United States, either directly or as an Indirect Export, meet the U.S. Content requirements in accordance with Section 2.01(b)(ii) of this Agreement and are specified in Section 4.A. of the Loan Authorization Agreement.

“Letter of Credit” shall mean a Commercial Letter of Credit or a Standby Letter of Credit.

“Letter of Credit Obligations” shall mean all undrawn amounts of outstanding obligations incurred by Lender, whether direct or indirect, contingent or otherwise, due or not due, in connection with the issuance or guarantee by Lender or Issuing Bank of Letters of Credit.

“Lien” shall mean any mortgage, security deed or deed of trust, pledge, hypothecation, assignment, deposit arrangement, lien, charge, claim, security interest, security title, easement or encumbrance, or preference, priority or other security agreement or preferential arrangement of any kind or nature whatsoever (including any lease or title retention agreement, any financing lease having substantially the same economic effect as any of the foregoing, and the filing of, or agreement to give, any financing statement perfecting a security interest under the UCC or comparable law of any jurisdiction) by which property is encumbered or otherwise charged.

“Loan Agreement” shall mean a valid and enforceable agreement between Lender and a Borrower setting forth, with respect to each Loan Facility, the terms and conditions of such Loan Facility.

“Loan Authorization Agreement” shall mean, as applicable, the duly executed Loan Authorization Agreement, Fast Track Loan Authorization Agreement, or the Loan Authorization Notice, setting forth certain terms and conditions of each Loan Facility, a copy of which is attached hereto as Annex A.

“Loan Authorization Notice” shall mean the Loan Authorization Notice executed by Lender and delivered to Ex-Im Bank in accordance with the Delegated Authority Letter Agreement setting forth the terms and conditions of each Loan Facility.

“Loan Documents” shall mean the Loan Authorization Agreement, the Loan Agreement, this Agreement, each promissory note (if applicable), each Guarantee Agreement, and all other instruments, agreements and documents now or hereafter executed by the applicable Borrower, any Guarantor, Lender or Ex-Im Bank evidencing, securing, guaranteeing or otherwise relating to the Loan Facility or any Credit Accommodations made thereunder.

“Loan Facility” shall mean the Revolving Loan Facility, the Transaction Specific Loan Facility or the Transaction Specific Revolving Loan Facility established by Lender in favor of Borrower under the Loan Documents.

“Loan Facility Obligations” shall mean all loans, advances, debts, expenses, fees, liabilities, and obligations, including any accrued interest thereon, for the performance of covenants, tasks or duties or for payment of monetary amounts (whether or not such performance is then required or contingent, or amounts are liquidated or determinable) owing by Borrower to Lender, of any kind or nature, present or future, arising in connection with the Loan Facility.

“Loan Facility Term” shall mean, with respect to a Loan Facility, the number of months or portion thereof from the Effective Date to the Final Disbursement Date as set forth in the Loan Authorization Agreement as amended.

“Master Guarantee Agreement” shall mean the Master Guarantee Agreement between Ex-Im Bank and Lender, as amended, modified, supplemented and restated from time to time.

“Material Adverse Effect” shall mean a material adverse effect on (a) the business, assets, operations, prospects or financial or other condition of Borrower or any Guarantor, (b) any Borrower’s ability to pay or perform the Loan Facility Obligations in accordance with the terms thereof, (c) the Collateral or Lender’s Liens on the Collateral or the priority of such Lien, or (d) Lender’s rights and remedies under the Loan Documents.

“Maximum Amount” shall mean the maximum Credit Accommodation Amount that may be outstanding at any time under each Loan Facility, as specified in Section 5.A. of the Loan Authorization Agreement.

“Other Assets” shall mean, with respect to a Loan Facility, such other assets of a Borrower to be included in Primary Collateral, which may include cash and marketable securities, or such other assets as Ex-Im Bank agrees to in writing, and disclosed as Primary Collateral in Section 6.A. of the Loan Authorization Agreement. The applicable Advance Rate (to be multiplied by the Other Asset Value) shall be as agreed to by Ex-Im Bank in writing case by case by case and set forth in Section 5.B.(4) of the Loan Authorization Agreement.

“Other Asset Value” shall mean, with respect to a Loan Facility, at the date of determination thereof, the value of the Other Assets as determined in accordance with GAAP.

“Other Collateral” shall mean any additional collateral that Lender customarily would require as security for loan facilities on its own account and risk where the permitted borrowing level is based principally on a borrowing base derived from a borrower’s inventory and accounts receivable, but where such additional collateral does not enter into the borrowing base calculation.

“Permitted Liens” shall mean (a) Liens for taxes, assessments or other governmental charges or levies not delinquent, or, being contested in good faith and by appropriate proceedings and with respect to which proper reserves have been taken by Borrower; provided that, the Lien shall have no effect on the priority of the Liens in favor of Lender or the value of the assets in which Lender has such a Lien and a stay of enforcement of any such Lien shall be in effect; (b) deposits or pledges securing obligations under worker’s compensation, unemployment insurance, social security or public liability laws or similar legislation; (c) deposits or pledges securing bids, tenders, contracts (other than contracts for the payment of money), leases, statutory obligations, surety and appeal bonds and other obligations of like nature arising in the ordinary course of Borrower’s business; (d) judgment Liens that have been stayed or bonded; (e) mechanics’, workers’, materialmen’s or other like Liens arising in the ordinary course of Borrower’s business with respect to obligations which are not due; (f) Liens placed upon fixed assets hereafter acquired to secure a portion of the purchase price thereof, provided, that, any such Lien shall not encumber any other property of Borrower; (g) security interests being terminated concurrently with the execution of the Loan Documents; and (h) Liens disclosed in Section 6.D. of the Loan Authorization Agreement, provided that, except as otherwise permitted by Ex-Im Bank in writing, such Liens in Section 6.D. shall be subordinate to the Liens in favor of Lender on Primary Collateral.

Authorization Agreement, provided that, except as otherwise permitted by Ex-Im Bank in writing, such Liens in Section 6.D. shall be subordinate to the Liens in favor of Lender on Primary Collateral.

“Person” shall mean any individual, sole proprietorship, partnership, limited liability partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, public benefit corporation, entity or government (whether national, federal, provincial, state, county, city, municipal or otherwise, including any instrumentality, division, agency, body or department thereof), and shall include such Person’s successors and assigns.

“Pro Rata Percentage” shall mean, with respect to a Loan Facility, as of the date of determination thereof, the principal balance of the Credit Accommodations outstanding as a percentage of the combined principal balance of all loans from Lender to such Borrower including the then outstanding principal balance of the Credit Accommodations plus unfunded amounts under outstanding Letters of Credit.

“Principals” shall mean any officer, director, owner, partner, key employee, or other Person with primary management or supervisory responsibilities with respect to Borrower or any other Person (whether or not an employee) who has critical influence on or substantive control over the transactions covered by this Agreement.

“Retainage” shall mean that portion of the purchase price of an Export Order that a Buyer is not obligated to pay until the end of a specified period of time following the satisfactory performance under such Export Order.

“Retainage Accounts Receivable” shall mean those portions of Eligible Export-Related Accounts Receivable or Eligible Export-Related Overseas Accounts Receivable arising out of a Retainage.

“Retainage Value” shall mean, at the date of determination thereof, the aggregate face amount of Retainage Accounts Receivable as permitted by Ex-Im Bank in writing, less taxes, discounts, credits and allowances, except to the extent otherwise permitted by Ex-Im Bank in writing.

“Revolving Loan Facility” shall mean the credit facility or portion thereof established by Lender in favor of Borrower for the purpose of providing working capital in the form of loans and/or Letters of Credit to finance the manufacture, production or purchase and subsequent export sale of Items pursuant to Loan Documents under which Credit Accommodations may be made and repaid on a continuous basis based solely on credit availability on the Export-Related Borrowing Base during the term of such credit facility.

“Special Conditions” shall mean those conditions, if any, set forth in Section 13 of the Loan Authorization Agreement.

“Specific Export Orders” shall mean those Export Orders specified in Section 5.D. of the Loan Authorization Agreement as applicable for a Transaction Specific Revolving Loan Facility or a Transaction Specific Loan Facility.

“Standby Letters of Credit” shall mean those letters of credit subject to the ISP or UCP issued or caused to be issued by Lender for Borrower’s account that can be drawn upon by a Buyer only if Borrower fails to perform all of its obligations with respect to an Export Order.

“Transaction Specific Loan Facility” shall mean a credit facility or a portion thereof established by Lender in favor of Borrower for the purpose of providing working capital in the form of loans and/or Letters of Credit to finance the manufacture, production or purchase and subsequent export sale of Items pursuant to Loan Documents under which Credit Accommodations are made based solely on credit availability on the Export-Related Borrowing Base relating to Specific Export Orders and once such Credit Accommodations are repaid they may not be reborrowed.

“Transaction Specific Revolving Loan Facility” shall mean a Revolving Credit Facility established to provide financing of Specific Export Orders.

“UCC” shall mean the Uniform Commercial Code, as the same may be in effect from time to time in the relevant United States jurisdiction.

“UCP” shall mean the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500 and any amendments and revisions thereof.

“U.S.” or “United States” shall mean the United States of America including any division or agency thereof (including United States embassies or United States military bases located overseas), and any United States Territory (including without limitation, Puerto Rico, Guam or the United States Virgin Islands).

“U.S. Content” shall mean, with respect to any Item, all the costs, including labor, materials, services and overhead, but not markup or profit margin, which are of U.S. origin or manufacture, and which are incorporated into an Item in the United States.

“Warranty” shall mean Borrower’s guarantee to Buyer that the Items will function as intended during the warranty period set forth in the applicable Export Order.

“Warranty Letter of Credit” shall mean a Standby Letter of Credit which is issued or caused to be issued by Lender to support the obligations of Borrower with respect to a Warranty or a Standby Letter of Credit which by its terms becomes a Warranty Letter of Credit.

1.02 Rules of Construction. For purposes of this Agreement, the following additional rules of construction shall apply, unless specifically indicated to the contrary: (a) wherever from the context it appears appropriate, each term stated in either the singular or plural shall include the singular and the plural, and pronouns stated in the masculine, feminine or neuter gender shall include the masculine, the feminine and the neuter; (b) the term “or” is not exclusive; (c) the term “including” (or any form thereof) shall not be limiting or exclusive; (d) all references to statutes and related regulations shall include any amendments of same and any successor statutes and regulations; (e) the words “this Agreement”, “herein”, “hereof”, “hereunder” or other words of similar import refer to this Agreement as a whole including the schedules, exhibits, and annexes

hereto as the same may be amended, modified or supplemented; (f) all references in this Agreement to sections, schedules, exhibits, and annexes shall refer to the corresponding sections, schedules, exhibits, and annexes of or to this Agreement; and (g) all references to any instruments or agreements, including references to any of the Loan Documents, the Delegated Authority Letter Agreement, or the Fast Track Lender Agreement shall include any and all modifications, amendments and supplements thereto and any and all extensions or renewals thereof to the extent permitted under this Agreement.

1.03 Incorporation of Recitals. The Recitals to this Agreement are incorporated into and shall constitute a part of this Agreement.

ARTICLE II OBLIGATIONS OF BORROWER

Until payment in full of all Loan Facility Obligations and termination of the Loan Documents, Borrower agrees as follows:

2.01 Use of Credit Accommodations. (a) Borrower shall use Credit Accommodations only for the purpose of enabling Borrower to finance the cost of manufacturing, producing, purchasing or selling the Items. Borrower may not use any of the Credit Accommodations for the purpose of: (i) servicing or repaying any of Borrower's pre-existing or future indebtedness unrelated to the Loan Facility unless approved by Ex-Im Bank in writing; (ii) acquiring fixed assets or capital assets for use in Borrower's business; (iii) acquiring, equipping or renting commercial space outside of the United States; (iv) paying the salaries of non U.S. citizens or non-U.S. permanent residents who are located in offices outside of the United States; or (v) in connection with a Retainage or Warranty unless approved by Ex-Im Bank in writing.

(b) In addition, no Credit Accommodation may be used to finance the manufacture, purchase or sale of any of the following:

(i) Items to be sold to a Buyer located in a country as to which Ex-Im Bank is prohibited from doing business as designated in the Country Limitation Schedule;

(ii) that part of the cost of the Items which is not U.S. Content unless such part is not greater than fifty percent (50%) of the cost of the Items and is incorporated into the Items in the United States;

(iii) defense articles or defense services;

(iv) Capital Goods unless in accordance with Section 2.14 of this Agreement; or

(v) without Ex-Im Bank's prior written consent, any Items to be used in the construction, alteration, operation or maintenance of nuclear power, enrichment, reprocessing, research or heavy water production facilities.

2.02 Security Interests. Borrower agrees to cooperate with Lender in any steps Lender shall take to file and maintain valid, enforceable and perfected security interests in the Collateral.

2.03 Loan Documents and Loan Authorization Agreement. (a) This Agreement and each of the other Loan Documents applicable to Borrower have been duly executed and delivered on behalf of Borrower, and are and will continue to be legal and valid obligations of Borrower, enforceable against it in accordance with its terms.

(b) Borrower shall comply with all of the terms and conditions of this Agreement, the Loan Authorization Agreement and each of the other Loan Documents to which it is a party.

(c) Borrower hereby represents and warrants to Lender that Borrower is an Eligible Person.

2.04 Export-Related Borrowing Base Certificates and Export Orders. (a) In order to receive Credit Accommodations under the Loan Facility, Borrower shall have delivered to Lender an Export-Related Borrowing Base Certificate as frequently as required by Lender but at least within the past month, together with a copy of the Export Order(s) or, for Revolving Loan Facilities, if permitted by Lender, a written summary of the Export Orders (when Eligible Export-Related Inventory and Eligible Overseas Export-Related Inventory are entering the Export-Related Borrowing Base) against which Borrower is requesting Credit Accommodations. In addition, so long as there are any Credit Accommodations outstanding under the Loan Facility, Borrower shall deliver to Lender an Export-Related Borrowing Base Certificate at least once each month. Lender shall determine if daily electronic reporting reconciled monthly may substitute for monthly Export-Related Borrowing Base Certificates. If the Lender requires an Export-Related Borrowing Base Certificate more frequently, Borrower shall deliver such Export-Related Borrowing Base Certificate as required by Lender.

(b) If Lender permits summaries of Export Orders, Borrower shall also deliver promptly to Lender copies of any Export Orders requested by Lender.

2.05 Schedules, Reports and Other Statements. With the delivery of each Export-Related Borrowing Base Certificate required in Section 2.04 above, Borrower shall submit to Lender in writing (a) an Inventory schedule for the preceding month, as applicable, and (b) an Accounts Receivable Aging Report for the preceding month. Borrower shall also furnish to Lender promptly upon request such information, reports, contracts, invoices and other data concerning the Collateral as Lender may from time to time specify.

2.06 Exclusions from the Export-Related Borrowing Base. In determining the Export-Related Borrowing Base, Borrower shall exclude therefrom Inventory which are not Eligible Export-Related Inventory or Eligible Export-Related Overseas Inventory and Accounts Receivable which are not Eligible Export-Related Accounts Receivable or Eligible Export-Related Overseas Accounts Receivable. Borrower shall promptly, but in any event within five (5) Business Days, notify Lender (a) if any then existing Export-Related Inventory or Export-Related Overseas Inventory no longer constitutes Eligible Export-Related Inventory or Eligible Export-Related Overseas Inventory, as applicable or (b) of any event or circumstance which to Borrower's knowledge would cause Lender to consider any then existing Export-Related Accounts Receivable or Export-Related Overseas Accounts Receivable as no longer constituting an Eligible Export-Related Accounts Receivable or Eligible Export-Related Overseas Accounts Receivable, as applicable.

2.07 Borrowings and Reborrowings. (a) If the Loan Facility is a Revolving Loan Facility or Transaction Specific Revolving Loan Facility, provided that Borrower is not in default under any of the Loan Documents, Borrower may borrow, repay and reborrow amounts under such Loan Facility up to the credit available on the current Export-Related Borrowing Base Certificate subject to the terms of this Agreement and each of the other Loan Documents until the close of business on the Final Disbursement Date.

(b) If the Loan Facility is a Transaction Specific Loan Facility, provided that Borrower is not in default under any of the Loan Documents, Borrower may borrow (but not reborrow) amounts under the Loan Facility up to the credit available on the current Export-Related Borrowing Base Certificate subject to the terms of this Agreement and each of the other Loan Documents until the close of business on the Final Disbursement Date.

2.08 Repayment Terms. (a) The Borrower on a Revolving Loan Facility shall pay in full the outstanding Loan Facility Obligations no later than the first Business Day after the Final Disbursement Date unless such Loan Facility is renewed or extended by Lender consistent with procedures required by Ex-Im Bank.

(b) The Borrower on a Transaction Specific Loan Facility and a Transaction Specific Revolving Loan Facility shall, within two (2) Business Days of the receipt thereof, pay to Lender (for application against the outstanding Loan Facility Obligations) all checks, drafts, cash and other remittances it may receive in payment or on account of the Export-Related Accounts Receivable, Export-Related Overseas Accounts Receivable or any other Collateral, in precisely the form received (except for the endorsement of Borrower where necessary). Pending such deposit, Borrower shall hold such amounts in trust for Lender separate and apart and shall not commingle any such items of payment with any of its other funds or property. Unless a Transaction Specific Loan Facility or Transaction Specific Revolving Loan Facility is renewed or extended by Lender consistent with procedures required by Ex-Im Bank, Borrower shall pay in full all outstanding Loan Facility Obligations no later than the first Business Day after the Final Disbursement Date, except for Eligible Export-Related Accounts Receivables and Eligible Export-Related Overseas Accounts Receivable outstanding as of the Final Disbursement Date and due and payable after such date, for which the principal and accrued and unpaid interest thereon shall be due and payable no later than the first Business Day after the date such Accounts Receivable are due and payable.

2.09 Financial Statements. Borrower shall deliver to Lender the financial statements required to be delivered by Borrower in accordance with Section 11 of the Loan Authorization Agreement.

2.10 Additional Security or Payment. (a) Borrower shall at all times ensure that the Export-Related Borrowing Base equals or exceeds the aggregate outstanding amount of Disbursements. If informed by Lender or if Borrower otherwise has actual knowledge that the Export-Related Borrowing Base is at any time less than the aggregate outstanding amount of Disbursements, Borrower shall, within five (5) Business Days, either (i) furnish additional Collateral to Lender, in form and amount satisfactory to Lender and Ex-Im Bank or (ii) pay to Lender an amount equal to the difference between the aggregate outstanding amount of Disbursements and the Export-Related Borrowing Base.

(b) For purposes of this Agreement, in determining the Export-Related Borrowing Base there shall be deducted from the Export-Related Borrowing Base an amount equal to (i) twenty-five percent (25%) of the undrawn amount of outstanding Commercial Letters of Credit and Standby Letters of Credit and (ii) one hundred percent (100%) of the undrawn amount of outstanding Warranty Letters of Credit less the amount of cash collateral held by Lender to secure Warranty Letters of Credit.

(c) Unless otherwise approved in writing by Ex-Im Bank, for Revolving Loan Facilities (other than Transaction Specific Revolving Loan Facilities), Borrower shall at all times ensure that the sum of the outstanding amount of Disbursements and the undrawn amount of outstanding Commercial Letters of Credit that is supported by Eligible Export-Related Inventory or Eligible Export-Related Overseas Inventory (discounted by the relevant Advance Rate percentages) in the Export-Related Borrowing Base does not exceed sixty percent (60%) of the sum of the total outstanding amount of Disbursements and the undrawn amount of all outstanding Commercial Letters of Credit. If informed by Lender or if Borrower otherwise has actual knowledge that the sum of the outstanding amount of Disbursements and the undrawn amount of outstanding Commercial Letters of Credit that is supported by such Inventory exceeds sixty percent (60%) of the sum of the total outstanding Disbursements and the undrawn amount of all outstanding Commercial Letters of Credit, Borrower shall, within five (5) Business Days, either (i) furnish additional non-Inventory Collateral to Lender, in form and amount satisfactory to Lender and Ex-Im Bank, or (ii) pay down the applicable portion of the outstanding Disbursements or (iii) reduce the undrawn amount of outstanding Commercial Letters of Credit such that the above described ratio is not exceeded.

(d) If informed by Lender or if Borrower otherwise has actual knowledge that the conditions of Section 2.16(g) are at any time not being met, Borrower shall, within five (5) Business Days, either (i) furnish additional Collateral to Lender that is not Eligible Export-Related Overseas Accounts Receivable or Eligible Export-Related Overseas Inventory, in form and amount satisfactory to Lender and Ex-Im Bank, or (ii) remove from the Export-Related Borrowing Base the portion of Eligible Export-Related Overseas Accounts Receivable or Eligible Export-Related Overseas Inventory that supports greater than fifty percent (50%) of the Export-Related Borrowing Base.

2.11 Continued Security Interest. Borrower shall not change (a) its name or identity in any manner, (b) the location of its principal place of business or its jurisdiction of organization or formation, (c) the location of any of the Collateral or (d) the location of any of the books or records related to the Collateral, in each instance without giving thirty (30) days prior written notice thereof to Lender and taking all actions deemed necessary or appropriate by Lender to continuously protect and perfect Lender's Liens upon the Collateral.

2.12 Inspection of Collateral and Facilities. (a) Borrower shall permit the representatives of Lender and Ex-Im Bank to make at any time during normal business hours inspections of the Collateral and of Borrower's facilities, activities, and books and records, and shall cause its officers and employees to give full cooperation and assistance in connection therewith.

(b) Borrower agrees to facilitate Lender's conduct of field examinations at Borrower's facilities in accordance with the time schedule and content for such examinations that Lender requests. Such field examinations shall address at a minimum: (x) the value of the Collateral against which Credit Accommodations may be provided, (y) the amount, if any, that the aggregate outstanding amount of Disbursements exceeds the Export-Related Borrowing Base and (z) whether such Borrower is in material compliance with the terms of each of the Loan Documents. Such field examinations shall include an inspection and evaluation of the Export-Related Inventory and Export-Related Overseas Inventory, a book audit of Export-Related Accounts Receivable and Export-Related Overseas Accounts Receivable, a review of the Accounts Receivable Aging Reports and a review of Borrower's compliance with any Special Conditions. Lenders who opt to use the Export-Related Historical Inventory Value in the Export-Related Borrowing Base calculation shall reconcile those numbers against the calculation for the relevant time periods using the Export-Related Inventory Value. Whenever Export-Related Accounts Receivable or Export-Related Inventory derived from Indirect Exports are in the Export-Related Borrowing Base, Lender shall verify compliance with Section 2.15 herein, including taking a random sampling of ultimate foreign purchasers.

2.13 General Intangibles. Borrower represents and warrants that it owns, or is licensed to use, all General Intangibles necessary to conduct its business as currently conducted except where the failure of Borrower to own or license such General Intangibles could not reasonably be expected to have a Material Adverse Effect.

2.14 Economic Impact Approval. (a) For Loan Facilities up to and including \$10 million, Borrower acknowledges that Capital Goods may not be included as Items, and Export-Related Inventory, Export-Related Overseas Inventory, Export-Related Accounts Receivable and Export-Related Overseas Accounts Receivable in connection with the sale of such Capital Goods may not be included in the Export-Related Borrowing Base, if such Capital Goods would enable a foreign buyer to establish or expand production of a product where, as of the date of the Economic Impact Certification covering such Item: (i) the Buyer is subject to a Final Anti-Dumping (AD) or Countervailing Duty (CVD) order, or a Suspension Agreement arising from a AD or CVD investigation, and such product is substantially the same as the product that is the subject of the AD/CVD order or suspension agreement; or (ii) the Buyer is the subject of a Section 201 injury determination by the International Trade Commission ("ITC") and such product is substantially the same as a product that is the subject of the ITC injury determination. Borrower may consult with Ex-Im Bank regarding the appropriate application of this Section 2.14(a) and may, at its option, request that Ex-Im Bank issue an Economic Impact Approval covering any Items listed in Section 4.A. of the Loan Authorization Agreement. For Loan Facilities over \$10 million involving Items that are Capital Goods, Borrower shall obtain from Ex-Im Bank, and abide by, an Economic Impact Approval covering all Items listed in Section 4(A) of the Loan Authorization Agreement.

(b) Borrower shall provide Lender with a certification in the form of Annex B (an "Economic Impact Certification") covering the Items stated in Section 4(A) of the Loan Authorization Agreement prior to Lender including such Items in the Loan Authorization Agreement. Prior to Lender amending the Loan Authorization Agreement to include additional Items, Borrower shall provide Lender with an additional Economic Impact Certification covering such additional Items.

2.15 Indirect Exports. Indirect Exports may be included as Items in a Loan Facility provided that funds available under such Loan Facility's Export-Related Borrowing Base supported by Accounts Receivable and Inventory derived from Indirect Exports at no time exceed ten percent (10%) of the Maximum Amount of such Loan Facility, and provided, further that (a) the ultimate foreign buyer for the Items must be located in a country in which Ex-Im Bank is not legally prohibited from doing business in accordance with the Country Limitation Schedule, and (b) the Borrower must make available to Lender verifiable evidence of intent to export the Indirect Exports from the United States, which evidence may be contained in the Export Orders and Accounts Receivable Aging Reports and supporting documents. Lender must obtain written consent from Ex-Im Bank prior to including funds derived from Indirect Exports in an Export-Related Borrowing Base above the ten percent (10%) threshold.

2.16 Overseas Inventory and Accounts Receivable. Upon the prior written consent of Ex-Im Bank, Export-Related Overseas Accounts Receivable and Export-Related Overseas Inventory of a Borrower or of an Affiliated Foreign Person (as defined below) may be included in the Export-Related Borrowing Base provided that conditions required by Ex-Im Bank, including the following, are met:

(a) the Affiliated Foreign Person, if any, has been approved by Ex-Im Bank;

(b) the Affiliated Foreign Person, if any, is a Borrower under the relevant Loan Facility;

(c) notwithstanding the Maximum Amount of the Loan Facility, all payments due and payable on such Export-Related Overseas Accounts Receivable are collected through a cash collateral account under Lender's control;

(d) as of the Effective Date, or such later date when the Export-Related Overseas Accounts Receivable and/or Export-Related Overseas Inventory are added to the Loan Facility, Lender has obtained a valid and enforceable first priority Lien in the Export-Related Overseas Accounts Receivable and Export-Related Overseas Inventory, as applicable;

(e) as of the Effective Date, or such later date when the Export-Related Overseas Accounts Receivable and/or Export-Related Overseas Inventory are added to the Loan Facility, Lender has obtained a legal opinion confirming the security interest in the Export-Related Overseas Accounts Receivable and Export-Related Overseas Inventory;

(f) the Export-Related Overseas Accounts Receivable are due and payable in United States Dollars or other currency acceptable to Ex-Im Bank; and

(g) at no time may the portion of the Export-Related Borrowing Base derived from Eligible Export-Related Overseas Accounts Receivable and Eligible Export-Related Overseas Inventory exceed fifty percent (50%) of the Export-Related Borrowing Base.

For purposes hereof, an "Affiliated Foreign Person" shall mean a subsidiary or affiliate of a Borrower on the same Loan Facility, which has duly executed as a Borrower all of the applicable Loan Documents and any other documents required by Ex-Im Bank, meets all of the requirements of the definition of Eligible Person other than subclause (a) thereof and is in good standing in the country of its formation or otherwise authorized to conduct business in such country.

2.17 Country Limitation Schedule. Unless otherwise informed in writing by Lender or Ex-Im Bank, Borrower shall be entitled to rely on the last copy of the Country Limitation Schedule distributed from Lender to Borrower.

2.18 Notice of Certain Events. Borrower shall promptly, but in any event within five (5) Business Days, notify Lender in writing of the occurrence of any of the following:

(a) Borrower or any Guarantor (i) applies for, consents to or suffers the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or similar fiduciary of itself or of all or a substantial part of its property or calls a meeting of its creditors, (ii) admits in writing its inability, or is generally unable, to pay its debts as they become due or ceases operations of its present business, (iii) makes a general assignment for the benefit of creditors, (iv) commences a voluntary case under any state or federal bankruptcy laws (as now or hereafter in effect), (v) is adjudicated as bankrupt or insolvent, (vi) files a petition seeking to take advantage of any other law providing for the relief of debtors, (vii) acquiesces to, or fails to have dismissed within thirty (30) days, any petition filed against it in any involuntary case under such bankruptcy laws, or (viii) takes any action for the purpose of effecting any of the foregoing;

(b) any Lien in any of the Collateral, granted or intended by the Loan Documents to be granted to Lender, ceases to be a valid, enforceable, perfected, first priority Lien (or a lesser priority if expressly permitted pursuant to Section 6 of the Loan Authorization Agreement) subject only to Permitted Liens;

(c) the issuance of any levy, assessment, attachment, seizure or Lien, other than a Permitted Lien, against any of the Collateral which is not stayed or lifted within thirty (30) calendar days;

(d) any proceeding is commenced by or against Borrower or any Guarantor for the liquidation of its assets or dissolution;

(e) any litigation is filed against Borrower or any Guarantor which has had or could reasonably be expected to have a Material Adverse Effect and such litigation is not withdrawn or dismissed within thirty (30) calendar days of the filing thereof;

(f) any default or event of default under the Loan Documents;

(g) any failure to comply with any terms of the Loan Authorization Agreement;

(h) any material provision of this Agreement or any other Loan Document for any reason ceases to be valid, binding and enforceable in accordance with its terms;

(i) any event which has had or could reasonably be expected to have a Material Adverse Effect; or

(j) the aggregate outstanding amount of Disbursements exceeds the applicable Export-Related Borrowing Base.

2.19 Insurance. Borrower will at all times carry property, liability and other insurance, with insurers acceptable to Lender, in such form and amounts, and with such deductibles and other provisions, as Lender shall require, and Borrower will provide evidence of such insurance to Lender on the proper Acord Form, so that Lender is satisfied that such insurance is, at all times, in full force and effect. Each property insurance policy shall name Lender as loss payee or mortgagee and shall contain a lender's loss payable endorsement in form acceptable to Lender and each liability insurance policy shall name Lender as an additional insured. All policies of insurance shall provide that they may not be cancelled or changed without at least thirty (30) days' prior written notice to Lender and shall otherwise be in form and substance satisfactory to Lender. Borrower will promptly deliver to Lender copies of all reports made to insurance companies.

2.20 Taxes. Borrower has timely filed all tax returns and reports required by applicable law, has timely paid all applicable taxes, assessments, deposits and contributions owing by Borrower and will timely pay all such items in the future as they became due and payable. Borrower may, however, defer payment of any contested taxes; provided, that Borrower (a) in good faith contests Borrower's obligation to pay such taxes by appropriate proceedings promptly and diligently instituted and conducted; (b) notifies Lender in writing of the commencement of, and any material development in, the proceedings; (c) posts bonds or takes any other steps required to keep the contested taxes from becoming a Lien upon any of the Collateral; and (d) maintains adequate reserves therefore in conformity with GAAP.

2.21 Compliance with Laws. Borrower represents and warrants that it has complied in all material respects with all provisions of all applicable laws and regulations, including those relating to Borrower's ownership of real or personal property, the conduct and licensing of Borrower's business, the payment and withholding of taxes, ERISA and other employee matters, safety and environmental matters.

2.22 Negative Covenants. Without the prior written consent of Ex-Im Bank and Lender, Borrower shall not: (a) merge, consolidate or otherwise combine with any other Person; (b) acquire all or substantially all of the assets or capital stock of any other Person; (c) sell, lease, transfer, convey, assign or otherwise dispose of any of its assets, except for the sale of Inventory in the ordinary course of business and the disposition of obsolete equipment in the ordinary course of business; (d) create any Lien on the Collateral except for Permitted Liens; (e) make any material changes in its organizational structure or identity; or (f) enter into any agreement to do any of the foregoing.

2.23 Cross Default. Borrower shall be deemed in default under the Loan Facility if Borrower fails to pay when due any amount payable to Lender under any loan or other credit accommodations to Borrower whether or not guaranteed by Ex-Im Bank.

2.24 Munitions List. If any of the Items are articles, services, or related technical data that are listed on the United States Munitions List (part 121 of title 22 of the Code of Federal Regulations), Borrower shall send a written notice promptly, but in any event within five (5) Business Days, of Borrower learning thereof to Lender describing the Items(s) and the corresponding invoice amount.

2.25 Suspension and Debarment, etc. On the date of this Agreement neither Borrower nor its Principals are (a) debarred, suspended, proposed for debarment with a final determination still pending, declared ineligible or voluntarily excluded (as such terms are defined under any of the Debarment Regulations referred to below) from participating in procurement or nonprocurement transactions with any United States federal government department or agency pursuant to any of the Debarment Regulations or (b) indicted, convicted or had a civil judgment rendered against Borrower or any of its Principals for any of the offenses listed in any of the Debarment Regulations. Unless authorized by Ex-Im Bank, Borrower will not knowingly enter into any transactions in connection with the Items with any person who is debarred, suspended, declared ineligible or voluntarily excluded from participation in procurement or nonprocurement transactions with any United States federal government department or agency pursuant to any of the Debarment Regulations. Borrower will provide immediate written notice to Lender if at any time it learns that the certification set forth in this Section 2.24 was erroneous when made or has become erroneous by reason of changed circumstances.

ARTICLE III RIGHTS AND REMEDIES

3.01 Indemnification. Upon Ex-Im Bank's payment of a Claim to Lender in connection with the Loan Facility pursuant to the Master Guarantee Agreement, Ex-Im Bank may assume all rights and remedies of Lender under the Loan Documents and may enforce any such rights or remedies against Borrower, the Collateral and any Guarantors. Borrower shall hold Ex-Im Bank and Lender harmless from and indemnify them against any and all liabilities, damages, claims, costs and losses incurred or suffered by either of them resulting from (a) any materially incorrect certification or statement knowingly made by Borrower or its agent to Ex-Im Bank or Lender in connection with the Loan Facility, this Agreement, the Loan Authorization Agreement or any other Loan Documents or (b) any material breach by Borrower of the terms and conditions of this Agreement, the Loan Authorization Agreement or any of the other Loan Documents. Borrower also acknowledges that any statement, certification or representation made by Borrower in connection with the Loan Facility is subject to the penalties provided in Article 18 U.S.C. Section 1001.

3.02 Liens. Borrower agrees that any and all Liens granted by it to Lender are also hereby granted to Ex-Im Bank to secure Borrower's obligation, however arising, to reimburse Ex-Im Bank for any payments made by Ex-Im Bank pursuant to the Master Guarantee Agreement. Lender is authorized to apply the proceeds of, and recoveries from, any property subject to such Liens to the satisfaction of Loan Facility Obligations in accordance with the terms of any agreement between Lender and Ex-Im Bank.

**ARTICLE IV
MISCELLANEOUS**

4.01 Governing Law. This Agreement and the obligations arising under this Agreement shall be governed by, and construed in accordance with, the law of the state governing the Loan Agreement.

4.02 Notification. All notices required by this Agreement shall be given in the manner and to the parties provided for in the Loan Agreement.

4.03 Partial Invalidity. If at any time any of the provisions of this Agreement becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, neither the legality, the validity nor the enforceability of the remaining provisions hereof shall in any way be affected or impaired.

4.04 Waiver of Jury Trial. BORROWER HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ANY AND ALL RIGHTS IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY ACTION, SUIT, PROCEEDING OR OTHER LITIGATION BROUGHT TO RESOLVE ANY DISPUTE ARISING UNDER, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, THE LOAN AUTHORIZATION AGREEMENT, ANY LOAN DOCUMENT, OR ANY OTHER AGREEMENT, DOCUMENT OR INSTRUMENT EXECUTED OR DELIVERED IN CONNECTION HERewith OR THEREWITH OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN), OR ACTIONS OR OMISSIONS OF LENDER, EX-IM BANK, OR ANY OTHER PERSON, RELATING TO THIS AGREEMENT, THE LOAN AUTHORIZATION AGREEMENT OR ANY OTHER LOAN DOCUMENT.

4.05 Consequential Damages. Neither Ex-Im Bank, Lender nor any agent or attorney for any of them shall be liable to Borrower for consequential damages arising from any breach of contract, tort or other wrong relating to the establishment, administration or collection of the Loan Facility Obligations.

IN WITNESS WHEREOF, Borrower has caused this Agreement to be duly executed as of the 30th day of September, 2016.

NORTHERN POWER SYSTEMS, INC.

Borrower

By: /s/ Ciel R. Caldwell
(Signature)
Name: Ciel R. Caldwell
(Print or Type)
Title: President and Chief Operating Officer
(Print or Type)

ACKNOWLEDGED:

COMERICA BANK

Lender

By: /s/ Song Hu
(Signature)
Name: Song Hu
(Print or Type)
Title: VP
(Print or Type)

ANNEXES:

Annex A - Loan Authorization Agreement, Fast Track Loan Authorization Agreement or Loan Authorization Notice, as applicable

Annex B - Economic Impact Certification

CONSENT OF GUARANTORS

Each of the undersigned, as a Guarantor of the obligations of Borrower to the Lender executing the foregoing Agreement, hereby agrees that the foregoing Agreement, each of their respective Guarantee Agreements and each other Loan Documents may be assigned to the Export-Import Bank of the United States.

NORTHERN POWER SYSTEMS CORP.

By: /s/ Ciel R. Caldwell

Name: Ciel R. Caldwell

Title: President and Chief Operating Officer

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this “Agreement”), dated October 5, 2016, effective as of two weeks from signing the Agreement (the “Effective Date”), by and between Northern Power Systems, Inc., a Delaware corporation (the “Company”) and June M. Morris (“Employee”), sets forth the terms and conditions of Employee’s employment with the Company.

WHEREAS, the Company wishes to employ Employee in the capacities and on the terms and conditions set out below, and Employee has agreed to enter into such employment, in the capacities and on the terms and conditions set forth below.

NOW, THEREFORE , the Company and Employee, in consideration of the respective covenants set out below, hereby agree as follows:

1. Employment . Pursuant to the terms and conditions herein, the Company shall employ Employee from the Effective Date until terminated as provided herein.

2. Title, Duties and Responsibilities . Employee will serve as the Vice President, General Counsel and as subsequently approved by our Board of Directors, Secretary of the Company and will report to the Company’s President and Chief Operating Officer (the “COO”), and perform such duties, services, and tasks as requested by the President and COO that are commensurate with her position. During Employee’s employment with the Company, Employee shall devote her full business time, attention and ability to the performance of her duties hereunder and shall not be employed in any other capacity, or render services to any other party, without the prior written consent of the Company, other than serving as Director on an outside board, subject to providing notification to the Company and provided there is no conflict of interest with the Company.

3. Compensation .

a. *Base Salary*. The Company shall pay Employee a salary of two hundred fifteen thousand dollars (\$215,000) annually (“Base Salary”), subject to any increases approved by the Company’s Board of Directors (the “Board”), payable in accordance with the Company’s normal payroll practices and subject to applicable taxes and withholding.

b. *Stock Options*. Upon approval by the Compensation Committee of the Board of Directors, the Company will grant Employee 30,000 to 60,000 options to purchase common shares of Northern Power Systems Corp. (“NPS Corp”). Such options shall be issued pursuant to, and subject to the terms and conditions of, the Northern Power Systems Corp. 2014 Stock Option and Incentive Plan, or such other plan as is in effect at the time the stock options are granted (the “Stock Option Plan”) and shall have an exercise price set at the Fair Market Value per share (as defined in the Stock Option Plan) as of the grant date. The options granted to Employee shall be exercisable for a period of seven (7) years from the date of grant, and shall vest over three years as

follows: cliff vesting of the first one-third of options granted on the first anniversary of the Effective Date, with equal quarterly vesting in arrears thereafter for the balance of the award. Vesting of all such options shall be fully accelerated in the event of a termination of Employee's employment without cause or by Employee for "Good Reason", in each case within six months of a Change in Control, as defined in Employee's stock option agreement. For purposes hereof, "Good Reason" shall mean: (i) any material diminution in Employee's functions, duties or responsibilities from and after the Change in Control; (ii) any reduction in the cash compensation payable to Employee from and after the Change in Control, other than as a part of a salary reduction program affecting all other members of senior management; or (iii) a change of more than 50 miles in Employee's permanent workplace without Employee's consent from and after the Change in Control. In addition, it is anticipated that, based on performance and at the discretion of the compensation committee of the Board (the "Compensation Committee") and the Board, additional option grants or other equity awards may be made from time to time. Vesting of any such additional option grants or other equity awards likewise shall be fully accelerated in the event of termination without cause or by Employee for Good Reason, in each case within six months of a Change in Control.

c. *Bonus*. At the discretion of the Compensation Committee and the Board, an annual cash bonus, targeted at 35% of Base Salary. The awarding and amount of any bonus is discretionary, based on the Board's evaluation of individual performance as well as overall Company performance for the given year. All bonuses are subject to approval by the Board. Employee also shall be eligible to participate in any and all other plans and packages that are made available to the Company's executives, on a basis consistent with Employee's position and then-current Base Salary and in accordance with the policies and practices of the Company and the Board.

4. Benefits.

a. *Health and Benefit Plans*. Employee shall be eligible to participate in such medical, dental, disability, life insurance, 401 (k) Savings Plan and other benefit plans as may be maintained by the Company from time to time, on the terms and conditions set forth in such plans.

b. *Vacation*. Employee shall be entitled to 20 days paid vacation per full calendar year, which shall accrue in accordance with the Company's vacation policy as in effect from time to time. Subject to the provisions of the Company's policy as in effect from time to time, up to 20 days of unused vacation time may be carried over to subsequent years. Accrued unused vacation time will be paid out upon termination of employment for any reason per the vacation policy.

c. *Sick Leave*. Employee shall be entitled to five (5) days of paid sick leave per calendar year pursuant to Company policy.

d. *Reimbursement for Business Expenses*. Upon presentation of appropriate documentation, Employee shall be reimbursed, in accordance with the Company's expense reimbursement policy, for all reasonable business expenses incurred in connection with Employee's performance of services for the Company. All expense reports shall be submitted no later than the end of the calendar year next following the calendar year in which such reimbursable expenses are incurred.

5. Representations and Warranties. Employee represents, warrants and covenants to the Company that Employee is free to enter into this Agreement and provide the services contemplated hereunder, and that the engagement hereunder does not conflict with or violate, and will not be restricted by, any pre-existing business relationship or agreement to which Employee is a party or otherwise is bound.

6. Termination.

a. *Generally*. Employee's employment with the Company may terminate for any of the following reasons, with or without any prior notice (and such notice shall not be required) unless otherwise indicated:

i. The Company may terminate Employee for any act or omission that constitutes "Cause," provided that any termination for Cause within the meaning of subsection (i) below shall occur only after the Company has provided written notice to Employee describing the reasons for the proposed termination and giving Employee an opportunity to cure such breach within a reasonable period not to exceed 10 days after such notice. For purposes hereof, "Cause" shall mean: (i) Employee's willful failure substantially to perform her duties and responsibilities to the Company or deliberate violation of a material Company policy; (ii) Employee's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in material injury to the Company; (iii) unauthorized use or disclosure by Employee of any proprietary information or trade secrets of the Company or any other party to whom Employee owes an obligation of nondisclosure as a result of her relationship with the Company; or (iv) Employee's willful and material breach of her obligations under the Assignment of Inventions, Non-Disclosure and Noncompetition Agreement between Employee and the Company dated October 4, 2016 (the "Assignment Agreement").

ii. The Company may terminate Employee without Cause or because of Employee's death or "Disability". For purposes hereof, "Disability" shall mean Employee's failure or inability to substantially perform her duties hereunder because of illness or injury, with or without reasonable accommodation, for either four (4) consecutive months or an aggregate of six (6) months in any rolling twelve (12) month period, as determined in the reasonable judgment of an independent qualified physician selected by the Company to whom Employee or her personal representative (as the case may be) has no reasonable objection.

iii. Employee may resign from the Company, provided that in the case of such resignation, Employee shall have provided the Company with at least 30 days' prior written notice and upon receipt of such notice, the Company may elect, in its discretion, to terminate the employment of Employee at any time following such notice. In the event the Company elects to terminate Employee following notice, Employee's Base Salary and benefits (subject to customary employee participation) shall continue to be paid during the notice period.

b. *Payments Upon Termination by the Company for Cause.* Upon the termination of Employee's employment by the Company for Cause, Employee shall be paid any unpaid Base Salary and vacation accrual due and owed for periods prior to the termination and any outstanding expense reimbursements (collectively, the "Accrued Obligations").

c. *Payments Upon Termination by the Company for Death or Disability, or Resignation by Employee.* Upon the termination of Employee's employment by the Company because of Employee's death or Disability, or resignation by Employee, Employee (or, in the event of Employee's death, Employee's estate) shall be paid the Accrued Obligations and any bonus which had been awarded to Employee but not yet paid on the date of termination.

d. *Payments Upon a Termination by the Company without Cause.* Upon the termination of Employee's employment by the Company without Cause, Employee shall be paid the Accrued Obligations, any bonus which had been awarded to Employee but not yet paid on the date of termination, and a pro-rated bonus for the year in which the termination occurs for performance through the date of termination, as determined in good faith by the Compensation Committee and the Board pursuant to Section 3(c) above. Provided the Employee is employed with the Company for at least three (3) months, the Company shall also provide the Employee the following severance for three (3) months from the termination date or, if sooner, up to the commencement of subsequent employment (the "Severance Period"):

i. the applicable portion of the Base Salary in effect at the time, payable in equal bi-weekly installments over the Severance Period beginning on the first payroll date following the expiration of the Revocation Period referenced below, and including any missed installments between the date of termination of employment and the first such payment date; and

ii. all health and dental benefits, through the cost of COBRA continuation coverage for Employee and her eligible dependents during the Severance Period (subject to Employee's payment of premiums at the active employee rate), payable beginning on the first payroll date following the expiration of the Revocation Period referenced below, and including any missed installments between the date of termination of employment and the first such payment date; provided that in the event that Employee obtains other employment that offers group health benefits, such payments by the Company under this Section 6.d.ii shall immediately cease (with the Base Compensation referenced in Section 6.d.i above, the "Severance Compensation").

7. Severance Compensation Terms. Severance Compensation shall be payable on the dates on which such amounts would have been paid had Employee continued her employment hereunder, provided that Severance Compensation shall only be paid if Employee executes a general release (in a customary and reasonable form) of any and all claims against the Company, Northern Power Systems Corp., and their affiliates, subsidiaries, officers, employees, and assigns, and continues to comply with the terms and conditions set forth in the Assignment Agreement. Employee will be provided a period of at least twenty-one (21) days to consider whether to execute the general release, and will be provided a seven (7) day post-execution period in which her agreement to it may be revoked (“Revocation Period”).

8. Entire Agreement/Amendments. This Agreement embodies the entire understanding with respect to the subject matter hereof and supersedes all prior understandings and communications with respect to the matters herein except for the Assignment Agreement. This Agreement may not be modified except in writing signed by Employee and a duly authorized officer of the Company.

9. Governing Law. The validity, interpretation, construction, performance, and enforcement of this Agreement shall be governed by the laws of the state of Vermont. Any action commenced by employee against the Company shall be brought in the state or federal courts in the state of Vermont, but not in any other jurisdiction.

10. Section 409A. This Agreement is intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the “Code”) and the regulations thereunder. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be interpreted in a manner so that no payment due to Employee shall be subject to an “additional tax” within the meaning of Section 409A(a)(1)(B) of the Code. To the extent that any provision in the Agreement is ambiguous as to its compliance with Section 409A of the Code, or to the extent any provision in the Agreement must be modified to comply with Section 409A of the Code, such provision shall be read, or shall be modified (with the mutual consent of the parties), as the case may be, in such a manner so that no payment due to Employee shall be subject to an “additional tax” within the meaning of Section 409A(a)(1)(B) of the Code.

For purposes of Section 409A of the Code, each payment made under this Agreement shall be treated as a separate payment. In no event may Employee, directly or indirectly, designate the calendar year of any payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of

Section 409A of the Code, including, where applicable, the requirement that (i) any reimbursement be for expenses incurred during Employee's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit.

Notwithstanding anything to the contrary herein, if a payment or benefit under this Agreement is due to a "separation from service" for purposes of the rules under Treas. Reg. § 1.409A-3(i)(2) (payments to specified employees upon a separation from service) and Employee is determined to be a "specified employee" (as determined under Treas. Reg. § 1.409A-1(i)), such payment or benefit shall, to the extent necessary to comply with the requirements of Section 409A of the Code, be made or provided on the later of the date specified by the foregoing provisions of this Agreement or the date that is six months after the date of Employee's separation from service (or, if earlier, the date of Employee's death). Any installment payments that are delayed pursuant to this Section 10 shall be accumulated and paid in a lump sum on the first day of the seventh month following Employee's separation from service, and the remaining installment payments shall begin on such date in accordance with the schedule provided in this Agreement.

This Section 10 shall survive the termination of this Agreement.

11. General Provisions.

a. *Notices* . All notices and other communications hereunder shall be in writing or by written telecommunication, and shall be deemed to have been duly given if delivered personally or if sent by overnight courier or by certified mail, return receipt requested, postage prepaid or sent by written telecommunication or telecopy, to the relevant address set forth below, or to such other address as the recipient of such notice or communication shall have specified in writing to the other party hereto, in accordance with this Section 11(a).

If to the Company: 29 Pitman Road, Barre, VT 05641
Facsimile: (802) 461-2998

If to Employee, at her last residence shown on the records of the Company or to such address as the Employee may designate in writing.

Any such notice shall be effective (i) if delivered personally, when received, (ii) if sent by overnight courier, when receipted for, (iii) if mailed, five (5) days after being mailed, and (iv) on confirmed receipt if sent by written telecommunication or telecopy, provided a copy of such communication is sent by regular mail, as described above.

b. *Severability*. If any provision of this Agreement is deemed by a court of competent jurisdiction or otherwise or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired.

c. *Waivers*. No delay or omission by either party hereto in exercising any right, power or privilege hereunder shall impair such right, power or privilege, nor shall any single or partial exercise of any such right, power or privilege preclude any further exercise thereof or the exercise of any other right, power or privilege.

d. *Counterparts*. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. In making proof of this Agreement, it shall not be necessary to produce or account for more than one such counterpart.

e. *Assigns*. This Agreement shall be binding upon and inure to the benefit of the Company's successors and Employee's personal or legal representatives, executors, administrators, heirs, distributees, devisees and legatees. This Agreement shall not be assignable by Employee, it being understood and agreed that this is a contract for Employee's personal services.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

Northern Power Systems, Inc.:

By: /s/ Ciel Caldwell
Ciel Caldwell
President and Chief Operating Officer

Employee:

/s/ June M. Morris
June M. Morris

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this “Agreement”) is entered into as of October 26, 2016 (“Effective Date”), by and between: (i) WEG Electric Corp., a corporation incorporated and existing under the laws of the State of Georgia, U.S.A., with its principal office at 6655 Sugarloaf Parkway, Duluth, GA 30097, U.S.A. (“WEC”); (ii) WEG Equipamentos Eletricos S.A., a company incorporated and existing under the laws of Brazil, with its principal office at Av. Prefeito Waldemar Grubba, 3000. Jaragua do Sul, SC, 89256-900. Brazil (“WEG”), and (iii) Northern Power Systems, Inc., a company incorporated and existing under the laws of the State of Delaware, U.S.A., with its principal office at 29 Pitman Road, Barre, Vermont 05641, U.S.A. (“NPS”), WEC and WEG are referred herein collectively as the “WEG Group”, and WEG, WEC and NPS are referred to herein collectively as the “Parties” and individually as a “Party.”

WHEREAS, NPS is a wind turbine manufacturer and has developed, among other things, utility scale wind turbines, related technology and intellectual property used in connection with the manufacture, use and sale of wind turbines with a rated capacity of greater than 1.5MW (“Utility-Scale Wind Turbines”);

WHEREAS, WEG is a manufacturer, among other things, of motors, drives, transformers, generators (including generators for wind turbines) and wind turbines;

WHEREAS, WEC is the branch of WEG in the United States that explores and exploits the business of motors, drives, transformers, generators and wind turbines;

WHEREAS, WEG and NPS (as successor-by-merger to Northern Power Systems Utility Scale, Inc.) entered into that certain Technological Know-How Transfer Agreement for NPS 2.X, dated March 20, 2013 (the “2.X Agreement”), pursuant to which, among other things, NPS provided certain services to WEG and granted WEG a royalty-bearing license to certain intellectual property of NPS useful in connection with 2.1, 2.2 and 2.3 MW wind turbines;

WHEREAS, WEG and NPS subsequently entered into that certain Turbine Design and Development Agreement for 3.3 MW, dated February 28, 2014 (the “3.X Agreement”), pursuant to which, among other things, NPS agreed to undertake the design and development of a 3.3 MW turbine and WEG agreed to manufacture and market such 3.3 MW turbines; and

WHEREAS, NPS now wishes to sell, transfer and assign to WEC, and WEC desires to purchase, accept and assume from NPS, certain assets used in connection with the Utility-Scale Wind Turbines, subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which each Party acknowledges, the Parties, intending to be legally bound, hereby agree as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATIONS

Section 1.1 Definitions. As used in this Agreement, the following terms shall have the meanings set forth or as referenced below:

“2.X Agreement” has the meaning described in the recitals to this Agreement.

“2.X Agreement Addendum” has the meaning described in Section 5.5.

“2.X Platform” means the 2.1 MW turbine currently in production by WEG and any variation thereof with a rated power from 1.8MW to 2.8MW, including, without limitation, the associated tower, blade and accessory packages.

“2.X Territory Royalty” has the meaning described in Schedule 5.

“2.X Royalty Payments” means those payments described in Section 5.3.

“2.X Royalty Payment Term” means the term that begins at the Trigger Point and ends on the earlier of: (i) the date that WEG Group pays NPS Ten Million One Hundred Thousand Dollars (\$10,100,000), comprising the Purchase Price and 2.X Royalty Payments; and (ii) September 20, 2020.

“2.X Territories” means South America.

“2.X Turbine” means any Utility-Scale Wind Turbine based on the 2.X Platform.

“3.X Agreement” has the meaning described in the recitals to this Agreement.

“Abandoned Utility Wind IP” has the meaning described in Section 16.2.

“Affiliate” with respect to either Party or entity means any person or company which, directly or indirectly, (a) Controls such Party or entity, (b) is Controlled by such Party or entity, or (c) is Controlled by the same person, who, directly or indirectly. Controls such Party or entity; “Controlling”, “Controlled by” or “Control” with respect to any person or company, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such person or company whether through the ownership of voting securities, by agreement or otherwise or the power to elect more than one-half of the directors, partners or other individuals exercising similar authority with respect to such person or company.

“Agreement” has the meaning describe in the preamble to this Agreement.

“Ancillary Agreements” means those agreements set forth in Article X (Ancillary Agreements).

“Assumed Contracts” had the meaning described in Section 2.1(d).

“Assumed Liabilities” has the meaning described in Section 3.1.

“Bankruptcy Code” has the meaning described in Section 6.4.

“Biannual Meeting” has the meaning described in Section 9.2.

“Business Days” means any day other than a Saturday or a Sunday that the banks are open for business in Brazil and the U.S.A.

“Claim” means a claim under Section 12.1 or 12.2.

“Code” has the meaning described in Section 5.6.

“Commercialization Efforts” has the meaning described in Section 8.1.

“Commercialization Notice” has the meaning described in Section 8.4(a).

“Commercialization Target” has the meaning described in Section 8.2.

“Confidential Information” has the meaning described in Section 15.1.

“Controls Patents” means those patents set forth on Schedule 1.1(a) attached hereto.

“Disclosing Party” has the meaning described in Section 15.1.

“Dispute” has the meaning described in Section 18.2(a).

“Effective Date” has the meaning described in the preamble to this Agreement.

“Effective Date Payment” has the meaning described in Section 5.2(a).

“Event of Default” has the meaning described in Section 14.1.

“Event of Default Notice” has the meaning described in Section 14.2.

“Excluded Assets” has the meaning described in Section 2.2.

“Excluded Liabilities” has the meaning described in Section 3.2.

“Existing Licensees” means all NPS customers and licensees listed in Schedule 1.1(b).

“Existing Licenses” means all Intellectual Property license agreements between NPS and Existing Licensees in effect as of the Effective Date.

“FCPA” has the meaning described in Section 19.2.

“Feedback” has the meaning described in Section 15.5.

“Forecast” has the meaning described in Section 9.3.

“Good Industry Practice” means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably considered state-of-the-art by a reasonably skilled, prudent and experienced person engaged in the same type of undertaking as envisaged under this Agreement.

“ICC” has the meaning described in Section 18.2(b).

“Indemnitee” means a NPS Indemnitee or a WEG Indemnitee, as the case may be.

“Indemnifying Party” has the meaning described in Section 12.3(a).

“INPI” means the *Instituto Nacional da Propriedade Industrial*, with main address at Rua Sao Bento, n. 1, CEP 20090-010. Centro, Rio de Janeiro/RJ, Brazil.

“Intellectual Property” means all industrial and intellectual property rights of every kind and nature however denominated, throughout the world, whether now existing or which come into existence in the future including: (i) patents, copyrights, designs, proprietary and confidential information, trade secrets, know-how, database rights, moral rights, and all other intellectual property rights in software; (ii) trademarks, trade names, service marks and all other source identifiers or indicia of origin; and (iii) any and all registrations, applications, common-law rights, and statutory rights with respect to any of the foregoing.

“ITAR” has the meaning described in Section 19.2.

“Joint Venture Commercialization Agreement” has the meaning described in Section 8.3.

“Knowledge of NPS” means the actual knowledge of Jonathan A. Lynch, Kelly Mack and Troy Patton after due inquiry of their direct reports.

“Law” means all laws, statutes, rules, regulations, orders, ordinances, protocols, codes, guidelines, policies, notices, directions, judgments, decrees or other requirements or official directive of any governmental authority or person acting under the authority of any governmental authority and/or of any statutory authority having jurisdiction over NPS, the WEG Group, or the Utility Wind Assets or the rights granted to the Parties hereunder.

“Level One 2.X Turbine” has the meaning described in Schedule 5.

“Level Two 2.X Turbine” has the meaning described in Schedule 5.

“Level One Rest of World Royalty” has the meaning described in Schedule 5.

“Level Two Rest of World Royalty” has the meaning described in Schedule 5.

“Liabilities” mean any and all debts, liabilities, claims, demands, expenses, commitments and obligations of any kind, whether fixed, contingent or absolute, matured or unmatured, liquidated or unliquidated, accrued or not accrued, asserted or not asserted, known or unknown, determined, determinable or otherwise, whenever or however arising (including, whether arising out of any contract or tort based on negligence or strict liability).

“Licensed Processes” means all processes for making or using products except Utility-Scale Wind Turbines. In the event a process has application in making or using a Utility-Scale Wind Turbine but also has application with respect to other products, such process shall be considered a Licensed Process (in which case, the license granted by WEC pursuant to Section 6.1 with respect such process shall be non-exclusive).

“Licensed Products” means all products except the Utility-Scale Wind Turbines.

“Master Services Agreement” has the meaning described in Section 9.5.

“Monthly Payments” has the meaning described in Section 5.2(b).

“NPE” means a third-party, other than an Affiliate of NPS, that acquires patent rights solely for purposes of enforcing patent rights, and not for making, having made, using, selling or importing any products or processes or licensing others to do any of the foregoing.

“NPS” has the meaning described in the preamble to this Agreement.

“NPS 100 Agreement” has the meaning described in Section 17.2(c).

“NPS 100 Turbine” has the meaning described in Section 17.2(c).

“NPS Commercialization Territory” has the meaning described in Section 8.4(a).

“NPS Indemnitees” has the meaning described in Section 12.2.

“Other IP” means all Intellectual Property of NPS, other than Utility Wind Patents, covering the Supporting Materials identified in Section 2.1(c).

“Parties” and “Party” have the meanings described in the preamble to this Agreement.

“Patent Assignment” has the meaning described in Section 4.2.

“Purchase Price” has the meaning described in Section 5.2.

“Program Manager” has the meaning described in Section 9.1.

“Quarterly Report” has the meaning described in Section 7.1.

“Receiving Party” has the meaning described in Section 15.1.

“Request” has the meaning described in Section 18.2(a).

“Request to Negotiate” has the meaning described in Section 8.3.

“Required Disclosure” has the meaning described in Section 19.1.

“Rest of World” means all territories worldwide other than the 2.X Territories.

“Rest of World Royalty Payments” means those payments described in Section 5.4.

“Rest of World Royalty Payment Term” means the term that begins at the Trigger Point and ends on the earlier of: (i) the date that WEG pays NPS a total, aggregate amount of Rest of World Royalty Payments (plus payments for 2.X Turbines shipped into the Rest of the World prior to the Trigger Point, if any) equal to Seventeen Million Five Hundred Thousand Dollars (\$17,500,000) and (ii) the date that is the seventh (7th) anniversary of the date the first Rest of World Royalty Payment is received by NPS.

“Royalty Payments” has the meaning described in Section 7.1.

“Royalty Payment Term” means the period beginning at the Trigger Point and expiring on the later of: (i) the expiration of the 2.X Royalty Payment Term; and (ii) the expiration of the Rest of World Royalty Payment Term.

“Schedule 17.1(a) Employees” has the meaning described in Section 17.1(b).

“Sublease Agreement” has the meaning described in Section 9.4.

“Supporting Materials” has the meaning described in Section 2.1(c).

“Transferred Employees” has the meaning described in Section 17.1(b).

“Trigger Point” means the point at which, on or after the Effective Date, that NPS has been paid for the number of 2.X Turbines described in Schedule 5 (excluding units shipped due to warranty or replacement causes and returned units).

“Utility-Scale Wind Turbines” has the meaning described in the recitals to this Agreement.

“Utility Wind Assets” has the meaning described in Section 2.1.

“Utility Wind IP” means the Utility Wind Patents and the Other IP.

“Utility Wind Patents” means those patents and patent applications set forth on Schedule 1.1(c) attached hereto.

“WEC Transfer of Assets” has the meaning described in Section 2.3(a).

“WEG” has the meaning described in the preamble to this Agreement.

“WEG Benefit Plans” has the meaning described in Section 17.1(c).

“WEG Group” has the meaning described in the preamble to this Agreement.

“ WEG Indemnitees ” has the meaning described in Section 12.1.

“ WEG Parties ” or “ WEG Party ” have the meanings described in Section 2.3(b).

Section 1.2 Interpretation . In the interpretation of this Agreement, the following rules shall apply:

(a) The singular includes the plural and vice versa. A reference to any gender includes all genders.

(b) A reference to any document, agreement, deed or other instrument (including, without limitation, references to this Agreement) includes the same as amended, supplemented, restated, novated or replaced, from time to time, and shall include all appendices, annexes or other documents incorporated by reference therein.

(c) A reference to any Law, includes any amendment, modification, reenactment or change in interpretation or applicability of such law.

(d) The words ‘include’ and ‘including’ are to be construed without limitation. The terms ‘herein’, ‘hereof’ ‘hereto’, ‘hereunder’ and words of similar purport refer to this Agreement as a whole.

(e) Any rule of interpretation which would require that an agreement be interpreted against the person or Party drafting it shall have no application in the case of this Agreement.

(f) The terms “U.S. dollars” and “\$” shall mean lawful currency of the United States of America.

(g) The headings contained in this Agreement are for convenience of reference only and shall not be considered in interpreting or construing this Agreement.

ARTICLE II

PURCHASE AND SALE OF UTILITY WIND ASSETS

Section 2.1 Utility Wind Assets . Subject to the terms and conditions set forth in this Agreement, NPS hereby sells, conveys, transfers, assigns and delivers to WEC, and WEC hereby acquires and take assignment of all of NPS’s right, title and interest in and to the following assets (collectively, the “Utility Wind Assets ”):

(a) Intellectual Property . All Utility Wind IP including, without limitation, the Utility Wind Patents;

(b) Equipment . The hardware, tooling, and other equipment relating to the Utility Scale Wind Turbines set forth on Schedule 2.1(b) , and the general use equipment that WEC shall purchase from NPS as described in Schedule 2.1(b) and Section 5.6;

(c) Supporting Materials. All drawings, designs, specifications, software used exclusively by NPS in connection with NPS 's 2.X and 3.X wind turbine platforms as of the Effective Date set forth in Schedule 2.1(c) (the "Supporting Materials");

(d) Assumed Contracts. All third-party contract rights and continuing obligations relating to Utility Wind Assets as of the Effective Date set forth on Schedule 2.1(d) (the "Assumed Contracts' ");

and

(e) Goodwill. All goodwill in or arising from the Utility Wind Assets.

Section 2.2 Excluded Assets. The Utility Wind Assets are the sole assets to be conveyed to WEC hereunder, and all other tangible and intangible assets of NPS are excluded from this sale (the "Excluded Assets").

Section 2.3 Assignment of Utility Wind Assets.

(a) Except for granting limited licenses to third parties pursuant to Section 2.3(b) below, during the Royalty Payment Term and except as otherwise permitted under Section 19.10 of this Agreement, WEC shall not sell, convey, transfer or assign to any third party (other than an Affiliate) any right, title or interest in or to the Utility Wind Assets including, without limitation, the Utility Wind IP. After the Royalty Payment Term has ended, WEC shall have full rights to sell, convey, assign, deliver, delegate, license, sub-license or otherwise grant or provide any third party any right, title or interest in or to the Utility Wind Assets including, without limitation, the Utility Wind IP (collectively, a "WEC Transfer of Assets").

(b) Notwithstanding Section 2.3(a), during the Royalty Payment Term, WEC may grant non-exclusive licenses to the Utility Wind IP to any (i) customer or (ii) other party (without the right to sublicense, assign or further transfer such license rights) in WEG Group's supply and/or manufacturing chain for Utility-Scale Wind Turbines for the sole and exclusive purpose of assisting WEG Group with supplying and/or manufacturing Utility-Scale Wind Turbines; provided, however, that (x) such licensees shall be bound by the terms and conditions of this Agreement (including the confidentiality and diligence provisions), (y) WEG Group shall remain liable for all of the terms and conditions of this Agreement and for any breach by the licensee of these terms, and (z) all such licenses shall be in writing. WEG Group and any such licensee shall be referred to individually herein as a "WEG Party" and collectively as the "WEG Parties".

ARTICLE III

ASSUMED LIABILITIES; EXCLUDED LIABILITIES

Section 3.1 Liabilities to be Assumed at Closing. Subject to all other terms and conditions of this Agreement, WEC shall assume, and from and after the Effective Date, WEC shall perform, discharge and pay as and when due the following liabilities (the "Assumed Liabilities") and no other Liabilities:

(a) Assumed Contracts. All of NPS's Liabilities under each of the Assumed Contracts arising on or after the Effective Date, but only to the extent such Liabilities do not relate to or arise out of any failure to perform where such duty existed, improper performance, warranty claim of which NPS had been notified, or other breach, default or violation by NPS prior to the Effective Date;

(b) Operating Liabilities. All Liabilities with respect to the operation or ownership by WEC of the Utility Wind Assets arising on or after the Effective Date that are not Excluded Liabilities; and

(c) Other Assumed Liabilities. All other Liabilities of NPS that are specifically enumerated as Assumed Liabilities on Schedule 3.1(d) attached hereto.

Section 3.2 Excluded Liabilities. Notwithstanding anything in this Agreement to the contrary, WEC and/or WEG shall not assume and shall be deemed to have not assumed, any Liabilities of, incurred by or on behalf of, NPS other than the Assumed Liabilities (all such other Liabilities being the "Excluded Liabilities"). The Excluded Liabilities shall remain the sole responsibility of and shall be retained, paid, performed and discharged solely by NPS as and when due. The Excluded Liabilities include, without limitation, the following:

(a) Assumed Contracts. All of NPS's Liabilities under each of the Assumed Contracts arising prior to the Effective Date, including to the extent such Liabilities relate to any failure to perform where such duty existed, improper performance, warranty claim of which NPS had been notified or other breach, default or violation by NPS prior to the Effective Date;

(b) Excluded Assets. All Liabilities of NPS relating to the Excluded Assets;

(c) Employment Matters. All Liabilities relating to the employment of any employee of NPS prior to the Effective Date;

(d) Operating Liabilities. All Liabilities with respect to the operation or ownership of the Utility Wind Assets arising prior to the Effective Date that are not Assumed Liabilities; and

(e) Other Excluded Liabilities. All other Liabilities of NPS that are specifically enumerated as Excluded Liabilities on Schedule 3.2(e) attached hereto.

ARTICLE IV

ASSIGNMENT

Section 4.1 IP Assignment. Subject to the licenses granted by WEC to NPS under this Agreement, NPS hereby sells, transfers and assigns to WEC: (a) all right, title and interest in and to the Utility Wind IP that NPS has as of the Effective Date; and (b) any and all rights and privileges arising under applicable law with respect to NPS's use of the Utility Wind IP; and (c) all income, fees, royalties, damages, claims and payments now or hereafter due and payable thereunder and with respect thereto including the right to sue for injunctive relief and collect damages for infringement of any of the Utility Wind IP, including, but not limited to, any damages for past or present infringement.

Section 4.2 Delivery of Executed Assignments. To evidence the assignment of the Utility Wind Patents, NPS will execute and deliver to WEC on the Effective Date a confirmatory patent assignment document for the Utility Wind Patents in substantially the form as that set forth in Exhibit A hereto (the "Patent Assignment"). If there is any inconsistency between such Patent Assignment and the terms and conditions of this Agreement, the terms and conditions of this Agreement will prevail.

Section 4.3 Responsibility for Actions and Costs. Except as expressly set forth in this Agreement, WEC shall be solely responsible for all actions and all costs whatsoever, including but not limited to taxes, attorneys' fees and patent office fees, associated with (i) the perfection of WEC's right, title, and interest in and to each of the Utility Wind Assets and recordation thereof, (ii) any actions before any intellectual property office pending or initiated after the Effective Date pertaining to the Utility Wind IP, including but not limited to any inter-partes reviews, post-grant reviews, reissues and reexaminations of the Utility Wind Patents, and (iii) any assertion, litigation, or other action taken with respect to enforcing or defending the Utility Wind IP.

ARTICLE V

CONSIDERATION

Section 5.1 Consideration. In consideration for the sale and transfer of the Utility Wind Assets to WEC hereunder, (i) WEC shall grant NPS the licenses set forth in this Agreement including, without limitation, Article VI below, (ii) WEC shall pay NPS the Purchase Price described in Section 5.2 below, (iii) upon full payment of the Purchase Price, after the Trigger Point, the WEG Group shall commence payment of the 2.X Royalty Payments as described in Section 5.3 below; and (iv) the WEG Group shall pay NPS the Rest of World Royalty Payments described in Section 5.4 below, each of which shall be due and payable to NPS in accordance with the terms and conditions of this Agreement.

Section 5.2 Purchase Price. WEC shall pay NPS Five Million, Three Hundred Thousand Dollars (\$5,300,000) as a purchase price for the Utility Wind Assets (the "Purchase Price"), which shall be due and payable to NPS as a combination of the following:

(a) One Million Dollars (\$1,000,000) shall be due and payable to NPS on the Effective Date (the "Effective Date Payment").

(b) Commencing in January 2017, WEC shall make quarterly payments to NPS per 2.X Turbine shipped in the previous quarter as set forth in Schedule 5 until amounts paid to NPS under clauses (a), (b) and (c) of this Section 5.2 equal in the aggregate the Purchase Price; provided, however, that once NPS has been paid \$4,525,000 under this Section 5.2, WEC shall not be required to make quarterly payments until the amounts payable after the Effective Date for 2.X Turbines actually shipped would exceed \$4,525,000.

(c) Notwithstanding amounts otherwise payable under clause (b) of this Section 5.2, WEC shall be required to pay to NPS monthly amounts of at least \$250,000 under this Section 5.2, commencing in November 2016 and continuing each month thereafter until amounts paid under clauses (a), (b) and (c) of this Section 5.2 equal or exceed in the aggregate Three Million Dollars (\$3,000,000) (the “Monthly Payments”).

The amounts payable under this Section 5.2 are shown in Schedule 5.2 for the scenario anticipated by the Parties. Adjustments to the values on such schedule shall be made depending on the actual quarterly payments required to be made by WEC to NPS under clause (b) of this Section 5.2.

Section 5.3 2.X Royalty Payments. Upon the commencement of and for the duration of the 2.X Royalty Payment Term, the following royalty payments shall be due and payable to NPS for shipments in the 2.X Territories:

(a) The WEG Group shall pay, or caused to be paid to, NPS a 2.X Territory Royalty per 2.X Turbine shipped after the Trigger Point by a WEG Party into the 2.X Territories (excluding units shipped due to warranty or replacement causes and returned units).

(b) For purposes of calculating 2.X Royalty Payments, a 2.X Turbine shall be considered to have been shipped upon Ex Works shipment of the nacelle from the facilities of a WEG Party. Also included in the 2.X Royalty Payments shall be a 2.X Territory Royalty per any unshipped 2.X Turbine for which the original date of shipment included in the WEG Group sales agreement, purchase order, or other sales document for the relevant 2.X Turbine was prior to the expiration of the 2.X Royalty Payment Term.

Section 5.4 Rest of World Royalty Payments. For the duration of the Rest of World Royalty Payment Term, the following royalty payments shall be due and payable to NPS for shipments in the Rest of World:

(a) The WEG Group shall pay, or cause to be paid to, NPS a Level One Rest of World Royalty per 2.X Turbine on the Level One 2.X Turbines shipped by a WEG Party after the Trigger Point into the Rest of World (excluding units shipped due to warranty or replacement causes and returned units).

(b) The WEG Group shall pay, or cause to be paid to, NPS a Level Two Rest of World Royalty per 2.X Turbine on the Level Two 2.X Turbines shipped by a WEG Party into the Rest of World (excluding units shipped due to warranty or replacement causes and returned units).

(c) For purposes of calculating Rest of World Royalty Payments, a 2.X Turbine shall be considered to have been shipped upon Ex Works shipment of the nacelle from the facilities of a WEG Party.

Section 5.5 Addendum to 2.X Agreement. Solely for the purpose of memorializing the Royalty Payments due hereunder, the Parties will sign an addendum to the 2.X Agreement in the form of **Exhibit B** (the “2.X Agreement Addendum”) pursuant to which WEG will make the Royalty Payments to NPS and NPS will be otherwise released from responsibilities under the 2.X Agreement. WEC will join such agreement and will be co-responsible for the payment of the 2.X Royalty Payments owed by WEG under the 2.X Agreement Addendum.

Section 5.6 Purchase of Additional Assets. WEC shall purchase the Additional Equipment listed on Schedule 2.1(b) for payment of Thirty-Three Thousand Eight Hundred Dollars (\$33,800), due and payable on the Effective Date.

Section 5.7 Purchase Price Allocation. NPS and the WEG Group shall allocate the Purchase Price among the Utility Wind Assets in accordance with the provision of Section 1060 of the Internal Revenue Code of 1986, as amended (the “Code”), and the Treasury regulations thereunder. Any adjustment to the Purchase Price pursuant to the terms of this Agreement shall be allocated in accordance with Section 1060 of the Code and the Treasury regulations thereunder.

ARTICLE VI

LICENSE

Section 6.1 License Grant for Licensed Products. WEC hereby grants NPS, and NPS hereby accepts, a perpetual, exclusive, transferable, worldwide, fully paid-up, royalty free, right and license under the Utility Wind IP to make, have made, use, offer for sale, sell and import Licensed Products, to practice Licensed Processes for any purpose, and to use, execute, copy, display, and prepare derivative works of, Licensed Products, including the right to sublicense any of the foregoing through multiple tiers.

Section 6.2 License Grant for Existing Licensees. WEC hereby grants NPS, and NPS hereby accepts, a perpetual, non-exclusive, transferable, worldwide, fully paid-up, royalty free, right and license under the Utility Wind IP for the limited purpose of sublicensing Existing Licensees to practice those license rights licensed by NPS in Existing Licenses, but only to the extent such license rights exist on the Effective Date, and continuing only for so long as such license rights continue pursuant to the Existing Licenses without voluntary extension by NPS.

Section 6.3 No Other Rights. Each Party acknowledges that the rights and licenses granted under this Article VI (License) and elsewhere in this Agreement are limited to the scope expressly granted. Accordingly, except for the rights expressly granted under this Agreement, no right, title, or interest of any nature whatsoever is granted whether by implication, estoppel, reliance, or otherwise, by either Party to the other Party. All rights with respect to Intellectual Property and other subject matter that are not specifically granted herein are reserved to the Party owning or otherwise controlling the same. For the avoidance of doubt, except as expressly stated herein, neither Party shall be limited in the exploitation and commercialization of their own Intellectual Property or products by the terms and conditions of this Agreement.

Section 6.4 Section 365(n) Election. All rights and licenses granted to NPS under or pursuant to this Agreement are, and shall otherwise be deemed to be, for the purposes of Section 365(n) of the United States Bankruptcy Code (the “Bankruptcy Code”) and any similar Laws in other jurisdictions, rights to “intellectual property” as defined in the Code. NPS shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding under the Bankruptcy Code by or against the WEG Group, NPS shall be entitled to retain all of its rights under this Agreement with respect to intellectual property.

ARTICLE VII

PAYMENT TERMS

Section 7.1 Payment Terms; Reports. Other than the Monthly Payments, which shall be due and payable to NPS on the 20th day of the month in accordance with Section 5.2, all payments to NPS shall be made by WEG on a quarterly basis and shall include all 2.X Royalty Payments and Rest of World Royalty Payments (collectively, the “Royalty Payments”) for the applicable quarter. Such payments shall be due and payable within twenty (20) days of the end of each calendar quarter and shall be accompanied by a quarterly report listing: (i) the total number of 2.X Turbines sold by a WEG Party during the applicable quarter; (ii) the territory into which each 2.X Turbine was shipped; and (iii) the Royalty Payment due for each such 2.X Turbine (collectively, the “Quarterly Report”). For purposes of tracking the Trigger Point. WEG shall also provide NPS Quarterly Reports of shipments after the Effective Date and prior to the Trigger Point.

Section 7.2 Payment Method; Currency. All payments under this Agreement shall be made by wire transfer in immediately available funds to an account or accounts designated by NPS. Any payments or portions thereof due under this Agreement that are not paid by the date such payments are due under this Agreement shall bear interest at a rate equal to the lesser of (i) ten percent (10%) per annum or (ii) the maximum rate permitted by applicable Law. All amounts specified in this Agreement are in U.S. dollars, and all payments by the WEG Group to NPS under this Agreement shall be made directly by WEG (in the United States) or by WEG (in Brazil) to NPS (in the United States) unless otherwise agreed to in writing by the Parties.

Section 7.3 Taxes; Withholding. The Parties agree that each Party shall be liable for its own taxes, charges, VAT, withholding payment, custom duties, etc. due and payable in connection with the execution or closing of the Agreement. Any withholding taxes or like charges which the WEG Group shall be required to withhold on remittance of any payment to NPS under the prevailing tax laws shall not be deducted from the amounts to be paid to NPS to the extent the WEG Group is responsible for such levies under the preceding sentence, and the WEG Group shall be responsible for the payment of such taxes or charges or obtaining an exemption from such taxes or charges, as appropriate. The WEG Group shall promptly provide NPS with the evidence of its payment of or exemption from all taxes or charges. NPS shall not be liable for any unpaid taxes, charges, VAT, withholding payments, custom duties or other public levies of the WEG Group.

Section 7.4 Records; Audit. The WEG Group shall keep complete, true and accurate books and records for the purpose of confirming the accuracy of the Royalty Payments and the Quarterly Reports. Such books and records shall be kept for at least two (2) years following the end of the calendar quarter to which they pertain. NPS shall have the right, upon ten (10) Business Days prior written notice, during the WEG Group’s normal business hours, using internal NPS personnel or a third-party firm, to examine the WEG Group’s facilities, books and records for the sole purpose of verifying that the WEG Group is operating in compliance with the terms of this Agreement, including but not limited to, confirming that the WEG Group is accurately reporting the number of 2.X Turbines produced and shipped. Such inspection may include but shall not be limited to inspecting Utility-Scale Wind Turbines in production at the WEG Group’s factories or installed at customer sites, and examining purchase orders, shipping documents, contracts, sublicenses or other agreements entered into by the WEG Group for the marketing, sale or manufacture of Utility-Scale Wind Turbines or any components thereof or otherwise in connection with this Agreement. In conducting such audit. NPS will use all reasonable efforts to minimize

any interference with the normal operations of the WEG Group. All information provided to NPS in the course of conducting such audit shall be deemed to be Confidential Information of the WEG Group. If any inaccuracies are discovered during such audit implying any unpaid Royalty Payments to NPS, the WEG Group shall reimburse NPS for fifty percent (50%) of the auditing costs and expenses. Additionally, if NPS determines that there is a discrepancy between the number of 2.X Turbines actually shipped and the number of 2.X Turbines reported to NPS, the WEG Group shall pay any unpaid Royalty Payments owing thereon within five (5) Business Days of such discovery plus interest, as determined in accordance with Section 7.2 above, from the date such Royalty Payment was originally due.

ARTICLE VIII

COMMERCIALIZATION

Section 8.1 Commercialization.

(a) The Parties acknowledge and agree that the value NPS shall derive from this Agreement is dependent upon the WEG Group's good faith and commercially reasonable efforts to commercialize the 2.X Turbines, both in the 2.X Territories and the Rest of World, During the Royalty Payment Term, the WEG Group shall, acting in good faith, use commercially reasonable efforts to: (i) pursue the commercialization of the 2.X Turbines in the 2.X Territories and the Rest of World; (ii) develop a product and technology roadmap to maintain, support and commercialize the 2.X Turbines; and (iii) go to market with a commercial strategy for the 2.X Turbines designed to drive business growth (collectively, "Commercialization Efforts"). Such Commercialization Efforts shall include, without limitation, the WEG Group evaluating and pursuing target markets, identified at its sole discretion, taking into account the competitive landscape, pricing, necessary in-country resources and financing solutions and methods to best satisfy the needs of customers while maintaining the profitability goals from time to time established by the WEG Group for its commercialization of the 2.X Turbines.

(b) The WEG Group shall bear all costs and expenses incurred in connection with the Commercialization Efforts.

(c) NPS acknowledges and agrees that: (i) the WEG Group is not guarantying that it will be successful in its Commercialization Efforts, and (ii) the WEG Group is not representing or warranting that it will be able to achieve sales of the 2.X Turbines at levels that will permit NPS to fully receive the maximum Royally Payments contemplated hereby.

Section 8.2 Milestones. In connection with Section 8.1, the WEG Group shall use commercially reasonable efforts to secure, on or prior to the third (3rd) anniversary of the Effective Date, an aggregate of one hundred and fifty (150) orders for 2.X Turbines in the Rest of World (the "Commercialization Target").

Section 8.3 Joint Venture Negotiation. If the WEG Group (i) fails to reach the Commercialization Target prior to the third (3rd) anniversary of the Effective Date for any reason or (ii) by the eighteenth (18th) month following the Effective Date has not taken material steps to pursue commercialization in a given country, then following written notice delivered by either Party (a "Request to Negotiate"), the Parties shall use commercially reasonable efforts to negotiate

a mutually acceptable agreement pursuant to which a license to the Utility Wind IP will be placed in an entity jointly owned by NPS and the WEG Group and under which license either NPS alone or NPS and the WEG Group jointly may continue to pursue the commercialization of Utility-Scale Wind Turbines, and if pursued jointly dividing equally all the expenses and all the investment required for such commercialization (the “Joint Venture Commercialization Agreement”), provided that in the event such Joint Venture Commercialization Agreement is as a result of the WEG Group’s inactivity in a given country or countries pursuant to clause (ii) above, then the Joint Venture Commercialization Agreement will be limited to that country or countries; and provided further that such Joint Venture Commercialization Agreement shall in no event extend to any country where the WEG Group has had sales of at least ten (10) Utility-Scale Wind Turbines in the twelve-month period prior to the third (3rd) anniversary of the Effective Date.

Section 8.4 NPS Commercialization.

(a) If the Parties, after negotiating in good faith, fail to enter into a mutually acceptable Joint Venture Commercialization Agreement in accordance with Section 8.3 within sixty (60) days following the Request to Negotiate, then NPS may, in its sole discretion, provide the WEG Group with written notice of its intent to pursue Commercialization Efforts in the country or countries that would have been covered by a Joint Venture Commercialization Agreement separately from the WEG Group (a “Commercialization Notice”). Any country or countries identified in a Commercialization Notice provided pursuant to this Section 8.4(a) shall be referred to as an “NPS Commercialization Territory”.

(b) WEC hereby grants NPS, and NPS hereby accepts, a non-exclusive perpetual, transferable, fully paid-up, royalty free, right and license, effective immediately upon the WEG Group’s receipt of a Commercialization Notice from NPS, in the applicable NPS Commercialization Territory, under the Utility Wind IP as it exists as of the date of the license grant (to include rights to obtain copies of all Supporting Materials as of such date), to make, have made, use, offer for sale, sell and import any products other than Licensed Products, to practice any process for any purpose, and to use, execute, copy, display, and prepare derivative works of, any such products, including the right to sublicense any of the foregoing through multiple tiers. The license granted pursuant to this Section 8.4(b) shall be non-exclusive as to processes and products (other than Licensed Processes and Licensed Products for which NPS retains an exclusive worldwide license under Section 6.1) in the NPS Commercialization Territory. In the event this Section 8.4(b) license is invoked, the WEG Group shall retain the non-exclusive right under the Utility Wind IP to continue to commercialize the 2.X Turbine in any NPS Commercialization Territory.

(c) NPS acknowledges and agrees that if it decides to exploit such license in any NPS Commercialization Territory, NPS is doing so at its own risk and costs, on an “AS IS, WHERE IS” BASIS AND WITHOUT ANY REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

Section 8.5 Recourse for Failure to Commercialize. NPS acknowledges and agrees that its exclusive recourse for the WEG Group's failure to use commercially reasonable efforts to pursue the commercialization of the 2.X Turbines in the 2.X Territories and in the Rest of World is the exercise by NPS of its rights as described in Section 8.3 and 8.4 above. The foregoing is not intended to relieve the WEG Group of any liability or obligation that it may otherwise have under this Agreement nor limit the rights of NPS to pursue rights or remedies for any breach of contract other than, in each case, those relating to the WEG Group's Commercialization Efforts.

ARTICLE IX

ONGOING COLLABORATION BETWEEN THE WEG GROUP AND NPS

Section 9.1 Program Managers. During the Royalty Payment Term, NPS and the WEG Group shall each appoint a program manager who shall be responsible for coordination of the Party's activities under this Agreement and who will act as a primary contact for communication between the Parties relative to this Agreement (each a "Program Manager"). The Program Managers shall make themselves available to participate in discussions and meetings, as needed, including the Biannual Meetings (defined below). Each Party shall provide the other Party the name, title and contact information of their Program Manager upon execution of this Agreement and may, upon written notice to the other Party, change the designated Program Manager at any time.

Section 9.2 Biannual Meetings. During the Royalty Payment Term, NPS and the WEG Group shall meet by telephone or in person at least twice per year (each a "Biannual Meeting"). The first Biannual Meeting shall take place within one hundred and twenty (120) days of the Effective Date. During the Biannual Meetings, the Parties shall:

(a) Discuss the Quarterly Reports (described in Section 7.1 above) provided by WEG for the prior two (2) calendar quarters.

(b) Discuss the Forecast (defined in Section 9.3 below).

(c) Discuss the WEG Group's commercialization plans and efforts to commercialize the 2.X Turbines pursuant to Article VIII (Commercialization).

Section 9.3 Forecasts and Commercialization Plans. At least ten (10) Business Days prior to each Biannual Meeting, the WEG Group shall provide NPS with a non-binding, written forecast of the anticipated sales of 2.X Turbines by WEG Parties and anticipated Royalty Payments for the upcoming six (6) month period (each, a "Forecast"). Prior to the first Biannual Meeting, the WEG Group shall provide NPS with an overview of the territories and/or countries for which it plans to pursue commercialization of the 2.X Turbine and identify those territories and/or countries, if any, in which it does not plan to pursue sales of the 2.X Turbine. Prior to the second Biannual Meeting, the WEG Group shall provide NPS with a list of those counties, among the top 20 markets for Utility-Scale Wind Turbines, in which WEG intends to pursue sales of 2.X Turbines.

Section 9.4 Sublease Agreement. WEG shall sublease office space from NPS in each of current NPS's North American facilities in accordance with the terms and conditions set forth in that certain Sublease Agreement attached hereto as **Exhibit C** (the "Sublease Agreement"), to be executed by the Parties on the Effective Date.

Section 9.5 Master Services Agreement. Each Party will perform specialized services for the other Party in accordance with the terms and conditions set forth in that certain Master Services Agreement attached hereto as **Exhibit D** (the “Master Services Agreement”), to be executed by the Parties on the Effective Date. Such Master Services Agreement shall provide the overall framework and standard terms and conditions for one or more statements of work that will include:

- (a) Provision by NPS of business services, including but not limited to, networking, information technology (IT) services, SCADA monitoring, and maintenance of software licensing for the duration of the Sublease Agreement; and
- (b) Specialized engineering services to be provided by each Party to the other Party, as shall be determined and negotiated from time to time and set forth in one or more mutually agreeable statements of work executed by authorized representatives of both Parties.

ARTICLE X

ANCILLARY AGREEMENTS

Section 10.1 Deliveries by the WEG Group. On the Effective Date, the WEG Group shall deliver, or cause to be delivered to NPS (unless previously delivered) the following:

- (a) Payment by WEC of the Effective Date Payment
- (b) Payment by WEC of the Transferred Employee Reimbursement
- (c) Bill of Sale
- (d) Assignment of Patent Rights
- (e) Sublease Agreement
- (f) Master Services Agreement
- (g) Good Standing Certificate
- (h) 2.X Agreement Addendum

Section 10.2 Deliveries by NPS. On the Effective Date, NPS shall deliver, or cause to be delivered to the WEG Group (unless previously delivered) the following:

- (a) Bill of Sale
- (b) Assignment of Patent Rights
- (c) Sublease Agreement
- (d) Master Services Agreement
- (e) Good Standing Certificate
- (f) 2.X Agreement Addendum

ARTICLE XI

WARRANTIES

Section 11.1 NPS Warranties. NPS represents and warrants to the WEG Group as follows:

- (a) It is duly organized and validly existing under the laws of the State of Delaware, U.S., and has been in continuous existence since incorporation.
- (b) It has full power and authority to execute, deliver and perform its obligations under this Agreement and any Ancillary Agreement to which it is a party and to carry out the transactions contemplated hereby.
- (c) It has taken all necessary corporate and other action under Law and its organizational documents to authorize the execution, delivery and performance of this Agreement and any Ancillary Agreement to which it is a party.
- (d) The obligations of NPS under this Agreement and any Ancillary Agreement to which it is a party are legally valid, binding and enforceable obligations against NPS in accordance with the terms hereof.
- (e) The execution, delivery and performance of this Agreement and any Ancillary Agreement to which it is a party will not conflict with, result in the breach of, constitute a default under or accelerate performance required by any of the terms of its organizational documents or any Law or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected.
- (f) NPS is not in violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any governmental authority which may result in any material impairment of its ability to perform its obligations and duties under this Agreement and has operated its business in accordance with all applicable Laws.
- (g) Schedule 1.1(a) contains a complete and accurate list of all Controls Patents. Schedule 1.1(c) contains a complete and accurate list of all Utility Wind Patents. Other than as disclosed in this Agreement, no third party has any license rights in or to the Utility Wind Assets. Schedule 1.1(b) contains a complete and accurate list of all Existing Licensees and NPS has delivered to WEG a true, correct and complete copy of any Existing Licenses. To the Knowledge of NPS, no third party has any license rights in or to the Utility Wind Assets, except under the Existing Licenses. NPS is the owner of the Utility Wind Assets and, to the Knowledge of NPS, no third party has filed any claim with any governmental authority contesting NPS's ownership of the Utility Wind Assets and there are no pending or, to the Knowledge of NPS, threatened assertions, litigations or other actions related to the Utility Wind Assets.

(h) NPS has disclosed to the WEG Group the service history for the two Utility-Scale Wind Turbines serviced under the Heritage Stoney Corners Wind Farm 1, LLC, Service and Maintenance Agreement, dated April 15, 2014, as amended, and has provide any material information it has relating to the performance and servicing of such turbines as of the Effective Date.

(i) To the Knowledge of NPS, no person has asserted any claim with any governmental authority contesting the validity of the Utility Wind Patents such as (but not limited to) ex parte re-examination proceedings, inter parte review proceedings, post-grant review proceedings, derivation proceedings, actions for declaratory judgment, interference proceedings or other attacks upon the validity, title or enforceability of any Utility Wind IP.

(j) All Utility Wind Patents were developed with NPS's own knowledge and research, and, to the Knowledge of NPS, there was no violation of professional secrecy, counterfeiting or deriving of intellectual property owned or developed by third parties.

(k) To the Knowledge of NPS as of the Effective Date, there is no design or conception problem and/or hidden defect in the 2.X Turbines, of which WEG or any of its personnel have not been made aware, that may cause any losses or create any liabilities to WEG or its customers and/or other third parties, including costs related to technical assistance and/or corrections.

(l) NPS has delivered to WEG true, correct and complete copies of all Assumed Contracts, each Assumed Contract is legal, valid, binding and enforceable and in full force and effect against NPS and each other person party thereto. Neither NPS, nor to the Knowledge of NPS, any other person party thereto is in breach or default in any material respect and no event has occurred which with or without notice or lapse of time (or both) would constitute a material breach or default or permit termination, modification or acceleration thereunder. Each Assumed Contract may be assigned to WEG by NPS without consent or consent has been validly obtained.

(m) Schedule 17.1(a) contains a true, correct and complete list of all employees of NPS for which WEC has agreed to make offers of employment. None of the employees are subject to any collective bargaining, union or labor contract and all of the employees are at-will employees. NPS has provided WEC with true, correct and complete copies of any non-competition, confidentiality or employment agreement covering any such employee. NPS has complied with all applicable Laws with respect to its employees, including under NPS's employee benefit plans, and there are no pending or, to the Knowledge of NPS, threatened claims against NPS or its employees or Affiliates by any of the employees listed on Schedule 17.1(a).

(n) Immediately after giving effect to the transactions contemplated hereby, NPS will be solvent and will: (i) be able to pay its debts as they become due; (ii) own property that has a fair saleable value greater than the amounts required to pay its debts (including a reasonable estimate of the amount of all contingent liabilities); and (iii) have adequate capital to carry on its businesses. No transfer of property is being made and no obligation is being incurred in connection with the transactions contemplated hereby with the intent by NPS to hinder, delay or defraud either present or future creditors of NPS.

(o) Notwithstanding anything to the contrary herein, NPS acknowledges and agrees that the WEG Group has not represented or warranted to NPS that it will be successful in its Commercialization Efforts, or that it will be able to achieve sales of the 2.X Turbines at levels that will permit NPS to receive the maximum Royalty Payments contemplated hereby. NPS acknowledges and agrees that: (i) in making its decision to enter into this Agreement and to consummate the transactions contemplated hereby, it understands the risks associated with the WEG Group's Commercialization Efforts and that it will not have any control over or right to interfere with the WEG Group's determination of how to pursue such Commercialization Efforts, and that it is within the WEG Group's sole discretion to determine what efforts are commercially reasonable pertaining to its Commercialization Efforts in any country and (ii) neither the WEG Group nor any other person has made any representation or warranty as to the WEG Group or the ownership or operation of the Utility Wind Assets after the Effective Date of this Agreement, except as expressly set forth in this Agreement.

Section 11.2 WEG Group Warranties. Each of WEG and WEC individually represents and warrants to NPS as follows:

(a) WEG is duly organized and validly existing under the laws of Brazil and WEC is duly organized and validly existing under the laws of Georgia, U.S.A., and each has been in continuous existence since its incorporation.

(b) It has full power and authority to execute, deliver and perform its obligations under this Agreement and any Ancillary Agreement to which it is a party and to carry out the transactions contemplated hereby.

(c) It has taken all necessary corporate and other action under Law and its organizational documents to authorize the execution, delivery and performance of this Agreement and any Ancillary Agreement to which it is a party.

(d) The obligations of the WEG Group under this Agreement and any Ancillary Agreement to which it is a party are legally valid, binding and enforceable obligations against the WEG Group in accordance with the terms hereof.

(e) The execution, delivery and performance of this Agreement and any Ancillary Agreement to which it is a party will not conflict with, result in the breach of, constitute a default under or accelerate performance required by any of the terms of its organizational documents or any Law or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected.

(f) Neither WEC nor WEG are in violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any governmental authority which may result in any material impairment of its ability to perform its obligations and duties under this Agreement.

(g) Notwithstanding anything to the contrary herein, the WEG Group is aware that through the conduct of NPS's business, there are third parties that have or may have license rights under the Utility Wind Assets pursuant to those agreements set forth on Schedule 1.1(c).

(h) The WEG Group shall be solely responsible for the compliance with any applicable laws and regulations and any agreements relating thereto of all Utility-Scale Wind Turbines and services relating thereto sold or provided by WEG on or after the Effective Date, provided, however, that nothing herein is intended to be a limitation on the representations and warranties made by NPS hereunder.

(i) The WEG Group has sufficient cash on hand or other sources of immediately available funds to enable it to make payment of the Purchase Price, the Royalty Payments, the fees and expenses associated with this Agreement and the transactions contemplated hereby, and to fully pay and perform all of its obligations following the Effective Date.

(j) Immediately after giving effect to the transactions contemplated hereby, both WEC and WEG will be solvent and will: (i) be able to pay its debts as they become due; (ii) own property that has a fair saleable value greater than the amounts required to pay its debts (including a reasonable estimate of the amount of all contingent liabilities); and (iii) have adequate capital to carry on its businesses. No transfer of property is being made and no obligation is being incurred in connection with the transactions contemplated hereby with the intent by WEG or WEC to hinder, delay or defraud either present or future creditors of WEG, WEC or NPS.

(k) The WEG Group has been provided the opportunity to conduct their own independent investigation, review and analysis of the Utility Wind Assets including access to the personnel, properties, assets, premises, books and records, and the other documents and data of NPS for such purpose. WEG and WEC acknowledge and agree that: (i) in making their decision to enter into this Agreement and to consummate the transactions contemplated hereby, they have relied solely upon their own investigation and the express representations and warranties of NPS set forth in this Agreement; and (ii) neither NPS nor any other person has made any representation or warranty as to NPS, the Utility Wind Assets or this Agreement, except as expressly set forth in this Agreement.

Section 11.3 No Implied Warranties. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN SECTION 11.1, THE UTILITY WIND ASSETS ARE PROVIDED “AS IS, WHERE IS” WITHOUT ANY WARRANTY OF ANY KIND. NPS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. NPS DOES NOT WARRANT THE RESULTS OF USE OF THE UTILITY WIND ASSETS OR THAT THE UTILITY WIND ASSETS SHALL BE FREE FROM ERROR. WEG AND WEC DO NOT WARRANT THE RESULTS OF THE WEG GROUP’S COMMERCIALIZATION EFFORTS.

ARTICLE XII

INDEMNIFICATION

Section 12.1 Indemnification by NPS. NPS shall indemnify, defend and hold harmless the WEG Group, its Affiliates and their respective directors, officers, employees, and agents, and their respective successors, heirs and assigns (the “WEG Indemnitees”), from and against any liability, damage, loss or expense (including reasonable attorneys’ fees and expenses of litigation)

actually incurred by or imposed upon such WEG Indemnitees, or any of them, in connection with any claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters (collectively, “Losses”), to the extent arising out of or relating to: (i) any breach by NPS of its representations or warranties set forth in this Agreement, (ii) any breach by NPS, its Affiliates, its directors, officers, employees and agents of any of the covenants and agreements required to be performed by NPS under this Agreement or any Ancillary Agreement, (iii) the Excluded Liabilities or (iv) arising out of NPS’s exercise of its rights under Section 8.4 (each, a “Claim”).

Section 12.2 Indemnification by WEG. The WEG Group shall indemnify, defend and hold harmless NPS, its Affiliates and their respective directors, officers, employees, and agents, and their respective successors, heirs and assigns (the “NPS Indemnitees”), from and against any liability, damage, loss or expense (including reasonable attorneys’ fees and expenses of litigation) actually incurred by or imposed upon such NPS Indemnitees, or any of them, in connection with any claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters, to the extent arising out of or relating to: (i) the exploitation, commercialization, development or other use of the Utility Wind Assets on or after the Effective Date except with respect to the Licensed Products and the Licensed Processes, or pursuant to Section 8.4(b); (ii) any wind turbine owned, operated or maintained by the WEG Group or any Affiliate of the WEG Group; (iii) any breach by the WEG Group of its representations or warranties set forth in this Agreement; (iv) the negligence or willful misconduct of the WEG Group or any Affiliate of the WEG Group; (v) any breach by the WEG Group, its Affiliates, its directors, officers, employees and agents of any of the covenants and agreements required to be performed by the WEG Group under this Agreement or any Ancillary Agreement, or (vi) the Assumed Liabilities (each, together with the Claims described in Section 12.1, a “Claim”).

Section 12.3 Indemnification Procedure.

(a) Notice. In the event any Indemnitee is seeking indemnification under this Article XII, from a Party (the “Indemnifying Party”), the other Party shall notify the Indemnifying Part of such Claim with respect to such Indemnitee as soon as reasonably practicable after the Indemnitee receives notices of the Claim. However, an Indemnitee’s delay in providing or failure to provide such notice will not relieve a Party of its indemnification obligations, except (and solely to the extent) it can demonstrate actual prejudice due to the delay or lack of notice.

(b) Defense. Upon receipt of notice under Section 12.3(a), the Indemnifying Party will have the right to either compromise or defend, at its own expense and by counsel (reasonably satisfactory to the Indemnitee), such Claim. The Indemnifying Party shall promptly (and in any event not more than twenty (20) days after receipt of the Indemnitee’s original notice) notify the Indemnitee in writing of its intention either to compromise or defend such Claim. Notwithstanding the foregoing, the Indemnitee shall also have the right to employ separate counsel at the Indemnitee’s expense.

(c) Cooperation. The Indemnitee will reasonably cooperate with the Indemnifying Party and its legal representatives in the investigation and defense of any Claim. The Indemnifying Party will keep the Indemnitee informed on a reasonable and timely basis as to the status of such Claim (to the extent the Indemnitee is not participating in the defense of such Claim).

(d) Settlement. If the Indemnifying Party assumes the defense of a Claim, no compromise or settlement of such Claim may be effected by the Indemnifying Party without the Indemnitee's written consent, unless: (i) there is no finding or admission of any violation of law or any violation of the rights of any person and no effect on any other claims that may be made against the Indemnitee; (ii) the sole relief provided is monetary damages that are paid in full by the Indemnifying Party; and (iii) the Indemnitee's rights are not adversely affected. If the Indemnifying Party does not defend a Claim, the Indemnitee shall not settle any Claim if such settlement is without the consent of the Indemnifying Party, which consent shall not be withheld or delayed unreasonably.

(e) Right of Offset. Either Party may offset any amounts due under this Agreement or any Ancillary Agreement to the other Party (including Royalty Payments) against any amounts determined to be due it under this Article XII pursuant to the procedures described in this Section 12.3, or, in the event the amount due under this Article XII has not finally determined, may escrow an amount reasonably necessary to satisfy any such Claim.

ARTICLE XIII

LIMITATION OF LIABILITY

Section 13.1 Consequential Damages. EXCEPT WITH RESPECT TO BREACHES OF CONFIDENTIALITY OBLIGATIONS, WILLFUL VIOLATIONS OF THIS AGREEMENT AND INDEMNIFICATION OBLIGATIONS, IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES BE LIABLE TO THE OTHER PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF ACTUAL OR ANTICIPATED PROFITS, REVENUES OR PRODUCTS; LOSS BY REASON OF SHUTDOWN OR NON-OPERATION; INCREASED EXPENSE OF OPERATION, BORROWING OR FINANCING; OR INCREASED COST OF CAPITAL, IN EACH CASE REGARDLESS OF WHETHER SUCH LIABILITY ARISES OUT OF BREACH OF CONTRACT, GUARANTEE OR WARRANTY. TORT, PRODUCT LIABILITY, INDEMNITY, CONTRIBUTION, STRICT LIABILITY OR ANY OTHER LEGAL THEORY, EVEN IF THAT PARTY HAS BEEN PLACED ON NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

ARTICLE XIV

EVENT OF DEFAULT

Section 14.1 Event of Default. Each of the following shall constitute an “Event of Default” under this Agreement:

- (a) The WEG Group fails to timely pay when due any amount due to NPS under this Agreement and such failure continues for fifteen (15) Business Days from WEG's receipt of written notice of such failure from NPS;
- (b) The WEG Group fails to comply with Section 2.3 (Assignment of Utility Wind Assets) or Section 19.10 (Assignment);

(c) The WEG Group makes an assignment for the benefit of creditors, or a receiver, trustee in bankruptcy or similar officer is appointed to take charge of any or all of the WEG Group's property or seeks protection under any bankruptcy, receivership, trust deed, creditors arrangement, composition or comparable proceeding; or such a proceeding is instituted against the WEG Group and is not dismissed within thirty (30) days;

(d) The WEG Group becomes insolvent, dissolves or liquidates, ceases to do business, or otherwise terminates its Utility-Scale Wind Turbine business operations;

(e) The WEG Group materially breaches any term or provision of this Agreement or any of the Ancillary Agreements and fails to cure such breach within thirty (30) days after receiving written notice of such breach from NPS.

Section 14.2 Effect of Event of Default. If any Event of Default described in Section 14.1 occurs, NPS may provide the WEG Group with written notice of such Event of Default (an "Event of Default Notice")

Section 14.3 Event of Default License. In the case WEC receives an Event of Default Notice from NPS pursuant to Section 14.1(b), 14.1(c), or 14.1(d). WEC hereby grants NPS, and NPS hereby accepts, a perpetual, transferable, worldwide (except for Brazil), fully paid-up, royalty free, right and license, effective immediately upon the WEG Group's receipt of an Event of Default Notice, under the Utility Wind IP to make, have made, use, offer for sale, sell and import any products. to practice any process for any purpose, and to use. execute, copy, display, and prepare derivative works of, any products, including the right to sublicense any of the foregoing through multiple tiers. The license granted pursuant to this Section 14.3 shall be exclusive as to Licensed Processes and Licensed Products, consistent with Section 6.1, and shall be non-exclusive as to processes and products other than Licensed Processes and Licensed Products.

Section 14.4 Existing Obligations: Non-Exclusive Remedy. The occurrence of an Event of Default and the exercise of the remedies set forth in this Article XIV (Event of Default) shall not release the WEG Group from any liability or obligation arising under this Agreement, nor prevent NPS from pursuing all rights and remedies it may have under this Agreement, or at law or in equity. No remedy, right or power of NPS is intended to be exclusive of any other remedy, right or power, and each and every remedy, right and power shall be cumulative and in addition to every other remedy, right and power given hereunder and under any Ancillary Agreement or now or hereafter existing at law or in equity or by statute or otherwise.

ARTICLE XV

CONFIDENTIAL INFORMATION

Section 15.1 Confidential Information. The term "Confidential Information" shall mean all non-public, confidential or proprietary information disclosed by a Party (a "Disclosing Party") to the other Party (a "Receiving Party") including without limitation all financial, business, customer, scientific, technical, economic, or engineering information including, without limitation, patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically.

photographically, or in writing, and all copies thereof. The terms and conditions of this Agreement shall be deemed the Confidential Information of both Parties. Notwithstanding the foregoing, the term "Confidential Information" shall not include information which: (i) was known to the Receiving Party prior to the effective date of disclosure by the Disclosing Party; provided, however, that any information which is included in the Utility Wind Assets and has been treated by NPS as confidential information shall for all purposes continue to be Confidential Information under this Agreement; (ii) either before or after the date of the disclosure to the Receiving Party, is disclosed to the Receiving Party by a third party without an obligation of confidentiality; (iii) either before or after the date of the disclosure to the Receiving Party becomes generally known to the public through no fault or omission on the part of the Receiving Party; or (iv) is independently developed by the Receiving Party without reference to or reliance upon any of the Disclosing Party's Confidential Information, provided, however, that any information which is included in the Utility Wind Assets and has been treated by NPS as confidential information shall continue to be Confidential Information under this Agreement even if it was independently developed by NPS.

Section 15.2 Treatment of Confidential Information. The Receiving Party shall treat the Confidential Information of the Disclosing Party as confidential and shall use at least the same degree of care as the Receiving Party uses to protect its own confidential information of similar importance, and in no event less than a reasonable degree of care. The Receiving Party shall use the Confidential Information of the Disclosing Party solely for the purposes authorized by this Agreement and for no other purpose. The Receiving Party shall promptly notify the Disclosing Party in writing of any unauthorized use or disclosure of any Confidential Information of the Disclosing Party of which the Receiving Party becomes aware.

Section 15.3 Disclosure to Employees and Other Parties. The Receiving Party shall not disclose any Confidential Information of the Disclosing Party except to those of the Receiving Party's Affiliates, employees, directors, agents, and authorized representatives who have a need to know such Confidential Information to assist the Receiving Party in fulfilling its obligations under this Agreement (or as reasonably necessary to exercise its rights under this Agreement) and who are bound by obligations of confidentiality, non-disclosure and restricted use that are at least as restrictive as those set forth in this Agreement. Each Party shall remain responsible for any failure by any of its Affiliates, employees, directors, agents, and authorized representatives to treat such Confidential Information as required under this Article XV (Confidential Information). Except as otherwise expressly permitted herein, neither Party shall disclose Confidential Information to any third party unless required to be disclosed by the Receiving Party to comply with applicable law, an applicable governmental rule or regulation, or any other bona fide legal process; provided that, the Receiving Party provides prior written notice of such disclosure to the Disclosing Party (to the extent feasible) and only discloses Confidential Information of the Disclosing Party to the extent necessary for such legal compliance.

Section 15.4 Injunctive Relief. Each of the Parties acknowledges that any use or disclosure of Confidential Information in violation of this Agreement may cause irreparable injury to the Disclosing Party for which other remedies at law would be inadequate, and each of the Parties agrees that a Disclosing Party shall have the right to seek injunctive or other equitable relief as may be necessary or appropriate to prevent any use or disclosure of Confidential Information in violation of this Agreement and may also exercise any other rights and remedies the Disclosing Party may have at law or in equity.

Two handwritten signatures in black ink are located at the bottom right of the page. The first signature is a stylized, cursive 'A' with a horizontal line extending to the right. The second signature is a more complex cursive signature, possibly starting with 'S' or 'D', followed by several loops and ending with a horizontal line.

Section 15.5 Feedback. The Receiving Party may from time to time provide suggestions, comments or other feedback (“Feedback”) to the Disclosing Party regarding the Disclosing Party’s products or services. Both Parties agree that all Feedback is and shall be given entirely voluntarily. Feedback, even if designated as confidential by the Party offering Feedback, shall not, absent a separate written agreement, create any confidentiality obligation for the receiver of the Feedback. Furthermore, except as otherwise provided in a separate subsequent written agreement between the Parties, the receiver of the Feedback shall be free to use, disclose, reproduce, license or otherwise distribute and exploit the Feedback provided to it, royalty-free, entirely without obligation or restriction of any kind.

ARTICLE XVI

INTELLECTUAL PROPERTY

Section 16.1 First Right to Maintain Utility Wind IP. As between NPS and the WEG Group, the WEG Group shall have the first right, but not the obligation, to maintain, defend and prosecute the Utility Wind IP, including through any ex parte reexamination proceedings, inter partes review proceeding, post grant review proceeding, derivation proceeding, action for declaratory judgment, interference proceeding or other attack upon the validity, title or enforceability of any Utility Wind IP. Upon written request by the WEG Group, NPS shall provide to the WEG Group, at the WEG Group’s sole cost and expense, such assistance as may be reasonably necessary to enable the WEG Group to prosecute, maintain and defend the Utility Wind IP. The WEG Group shall keep NPS advised by forwarding to NPS copies of all official correspondence (including, but not limited to, applications, office actions, responses, etc.) relating to the prosecution, maintenance and defense of Utility Wind IP, and shall provide NPS with an opportunity to comment on any proposed responses, voluntary amendments, submissions, or other actions of any kind to be made with respect to Utility Wind IP.

Section 16.2 Second Right to Maintain. If the WEG Group desires to abandon or otherwise cease to prosecute, maintain or defend any Utility Wind IP, including any Utility Wind Patents, (“Abandoned Utility Wind IP”), then the WEG Group shall provide NPS with written notice of its intention sufficiently in advance of any deadline for filing or payment of fees to permit NPS to carry out such activity, which notice shall, in any case, be provided to NPS at least sixty (60) days prior to the applicable deadline for filing or payment of fees. NPS may elect, by written notice to the WEG Group, to continue the maintenance, defense or prosecution of such Abandoned Utility Wind IP, at NPS’s sole cost and expense, and NPS shall be entitled to undertake such maintenance, defense or prosecution of the Abandoned Utility Wind IP. If NPS assumes the maintenance, defense, and/or prosecution of any Abandoned Utility Wind IP, the WEG Group shall immediately assign the Abandoned Utility Wind IP to NPS. In addition, the WEG Group shall reasonably cooperate with NPS in the maintenance, defense and prosecution of any such Abandoned Utility Wind IP and shall provide NPS with such assistance as may be reasonably necessary to enable NPS to prosecute, maintain and defend the Abandoned Utility Wind IP, in each case, at NPS’s sole cost and expense.

ARTICLE XVII

COVENANTS

Section 17.1 Employment Matters.

(a) Termination by NPS. Effective as of the Effective Date, NPS shall terminate the employment of each of the employees listed on Schedule 17.1(a) and pay all amounts due such employees as of the Effective Date, including salaries, benefits and severance, if any, owed to such employees at the time of termination.

(b) Offers of Employment. WEC shall offer employment to all of the employees of NPS set forth on Schedule 17.1(a) (the "Schedule 17.1(a) Employees") for employment to be effective on the Effective Date (the employees of NPS who accept such employment and commence employment on the Effective Date, the "Transferred Employees"). WEC shall reimburse NPS, on the Effective Date, for the payroll costs and expenses incurred by NPS with respect to the Schedule 17.1(a) Employees during the period beginning on August 16, 2016 and ending on the Effective Date. NPS hereby consents to the hiring of such employees by WEC and waives, with respect to the employment by WEC of such employees, any claims or rights NPS may have against WEC or any such employee under any non-competition, confidentiality or employment agreement. WEC shall be liable and hold the NPS harmless for any claims relating to the employment of any Transferred Employee arising after the Effective Date.

(c) WEC Benefit Plans. With respect to any employee benefit plan maintained by WEC (collectively, the "WEC Benefit Plans") for the benefit of any Transferred Employee effective as of the Effective Date, WEC shall use commercially reasonable efforts to recognize all service of the Transferred Employee with NPS, as if such service were with the WEC, for vesting, eligibility and accrual purposes; provided, however, such service shall not be recognized to the extent that (i) such recognition would result in the duplication of benefits or (ii) such service was not recognized under the corresponding NPS employee benefit plan.

Section 17.2 2.X Agreement and 3.X Agreement.

(a) 3.X Agreement Termination. Effective as of the Effective Date, the 3.X Agreement shall be deemed to be terminated in its entirety, and WEG hereby releases NPS of all of its obligations thereunder. All materials, drawings, diagrams, intellectual property and know-how created or prepared under the 3.X Agreement shall be transferred to WEC on the Effective Date as part of the Utility Wind IP and/or the Utility Wind Assets.

(b) 2.X Agreement Addendum. Exclusively to allow WEG to make the 2.X Royalty Payments from Brazil, the Parties shall sign the 2.X Agreement Addendum.

(c) Rights to NPS 100 Turbines. WEG shall have the right to enter into an agreement with NPS under which WEG shall be granted the right to manufacture and sell the NPS 100 kW wind turbine (the "NPS 100 Turbine") in the 2.X Territory, which agreement shall be consistent with this Section 17.2(c). WEG shall provide NPS notice of its intent to exercise this right by December 31, 2016, and the Parties shall use commercially reasonable efforts to negotiate and execute, within sixty (60) days of such notice, a mutually acceptable Technological Know



How Transfer Agreement for NPS 100 (a “ NPS 100 Agreement ”) which shall define, among other things, the amount and duration of royalty payments to be made by WEG to NPS for each NPS 100 Turbine sold in the 2.X Territory. In the event WEG fails to provide notice of its intent to exercise this right, or the Parties are unable to negotiate the NPS 100 Agreement within 60 days after such notice is given, WEG shall forfeit its rights to the NPS 100 Turbine under this Section 17.3(c) and the 2.X Agreement.

Section 17.3 Acquisition by an NPE. If NPS is acquired by or otherwise transfers to an NPE all or any of the Controls Patents listed on Schedule 1.1(a), WEG shall have the option to obtain a non-exclusive license from NPS relating to the Controls Patents, provided that, such license shall be: (i) limited to Controls Patents only; (ii) limited to renewable energy applications in the areas of wind, solar, hydroelectric, biomass and geothermal; (iii) limited to Latin America and Sub-Saharan Africa; and (iv) effective only after authorized representatives of both Parties have executed a mutually acceptable license agreement reflecting the terms and conditions set forth in this Section 17.3 and WEG has paid NPS Five Hundred Thousand Dollars (\$500,000) for such license rights.

Section 17.4 Insurance. The WEG Group shall maintain, during the Royalty Payment Term and for a period of five (5) years thereafter, comprehensive or commercial general liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence and Six Million Dollars (\$6,000,000) in the aggregate, consistent with Good Industry Practices covering product liability, bodily injury, broad-form property insurance and including blanket contractual coverage. Upon request, the WEG Group shall provide to NPS evidence of the required insurance.

Section 17.5 Further Assurances. At any time and from time to time after the Effective Date, at the request of the other Party and without further consideration, a Party shall, at the requesting Party’s expense, execute and deliver such other documents and take such actions as the other Party may reasonably request to give full effect to the provisions of this Agreement including, without limitation, to more effectively transfer, convey and assign to WEC, to confirm WEC’s rights to, title in and ownership of, the Utility Wind Assets and to place WEC in actual possession and operating control thereof. The Parties acknowledge and agree that, except for the Ancillary Agreements, which have been prepared by both Parties in connection with the execution of this Agreement, the WEG Group shall be responsible for preparing and for all costs and expenses (including all attorneys’ fees) associated with preparing any and all instruments of sale, transfer, conveyance and assignment necessary to more effectively transfer, convey and assign to WEC, and to confirm WEC’s rights to, title in and ownership of, the Utility Wind Assets. The WEG Group shall also be responsible for all costs and expenses (including all attorneys’ fees) associated with the filing or registration of any of the foregoing.

ARTICLE XVIII

GOVERNING LAW; DISPUTE RESOLUTION

Section 18.1 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, U.S.A. without giving effect to the principles of conflicts of law (whether of the State of New York or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of New York. The United Nations Convention on the International Sale of Goods shall not apply to this Agreement.



Section 18.2 Dispute Resolution.

(a) Amicable Settlement. Other than for equitable remedies, such as injunction, which may be pursued under Section 18.2(c) prior to the initiation of any legal action or proceeding to resolve disputes between the Parties, in the event a dispute arises between the WEG Group and NPS regarding, arising out of, relating to or in connection with this Agreement, its application, interpretation, breach, termination, validity or invalidity thereof, or other related matter, or any other matter involving the Parties or any Affiliate thereof (each of the foregoing, a “Dispute”), upon the written request of either the WEG Group or NPS (a “Request”), the Parties shall use commercially reasonable efforts in good faith to settle the Dispute amicably. If the Dispute is not resolved within sixty (60) days after written notice of the Dispute by one Party to the other Party, then the provisions of Section 18.2(b) shall apply.

(b) Arbitration. All Disputes that remain unresolved pursuant to Section 18.2(a) shall be submitted to the International Court of Arbitration of the International Chamber of Commerce (the “ICC”) and shall be finally settled under the Rules of Arbitration of the ICC by a panel of three arbitrators. Each Party shall appoint one arbitrator, and the two arbitrators so appointed shall jointly appoint a third arbitrator. In the event of the failure by any Party to appoint an arbitrator within thirty (30) days from the date of the receipt of the notice from the other Party and/or failure by the two arbitrators appointed by the Parties to appoint the third arbitrator within a period of thirty (30) days, such arbitrator(s) shall be appointed by the ICC. The place of arbitration shall be New York, New York, U.S.A. and the language of such arbitration shall be English. Both Parties shall bear equally the cost of the arbitration, unless otherwise determined by the arbitrators. All decisions of the arbitrators shall be final and binding on both Parties and enforceable in any court of competent jurisdiction. Notwithstanding this, application may be made to any court for a judicial acceptance of the award or order of enforcement. In the event of judicial acceptance or an order of enforcement, each Party expressly waives all rights to object thereto.

(c) Provisional Relief. In connection with any Dispute, each Party may seek and shall be entitled to receive provisional equitable relief from any court of competent jurisdiction, including without limitation provisional injunctive relief, provided that the final resolution of the Dispute shall be through the arbitral tribunal appointed in accordance with Section 18.2(b). Each of the WEG Group and NPS hereby submit to the exclusive jurisdiction of the courts located in New York, New York, U.S.A. with respect to any such claim for provisional relief, provided that NPS may elect to bring such claim for provisional relief in any court which would have jurisdiction to hear such claim. Each Party waives any objection such Party might have to the laying of venue in such courts, including but not limited to objections based on lack of personal jurisdiction, improper venue or inconvenience of the forum.

(d) Fees and Costs. In any action or proceeding to enforce rights under this Agreement, the substantially prevailing Party shall be entitled to recover reasonable costs and attorneys’ fees from the other Party.

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ARTICLE XIX

GENERAL PROVISIONS

Section 19.1 Press Releases and Communications. Neither Party shall issue a press release or make any public announcement relating to this Agreement or the transactions contemplated herein without the prior written approval of the other Party; provided however that approval shall not be withheld by the WEG Group in the event that such press release or public announcement is required under either Canadian or U.S. securities regulations (a “Required Disclosure”). In the event of a Required Disclosure, NPS shall provide WEG the opportunity to collaborate in the drafting of the disclosure prior to its filing.

Section 19.2 Compliance with Laws. The Parties shall, at all times, obtain and maintain all applicable permits, registrations and filings which are required by applicable Law to discharge its obligations hereunder, and shall comply with all Laws applicable to its obligations under this Agreement, including, without limitation, the International Traffic in Arms Regulations (“ITAR,” 22 C.F.R. §§ 120 -130), the U.S. Foreign Corrupt Practices Act of 1977, as amended, 15 U.S.C. §§ 78dd-1, et seq. (the “FCPA”), and any similar Laws in Brazil, including without limitation such registration of this Agreement or any other agreement in connection herewith at the relevant commerce authority in Brazil, and provide, upon the other Party’s request, the evidence of such approvals to the reasonable satisfaction of the other Party. Neither Party shall export, re-export or transfer, directly or indirectly, any software, technical knowledge or know-how to any country for which an export license or other governmental approval is required at the time of export, re-export or transfer without first obtaining such license or approval from the appropriate government agency or other governmental entity. Each Party shall provide the other Party with information and assistance as may be reasonably requested by such Party in connection with obtaining any such license or approval.

Section 19.3 Expenses. Except as otherwise expressly provided herein, each Party shall pay all of its own fees, costs and expenses incurred in connection with the negotiation, preparation and execution of this Agreement, the performance of its obligations hereunder and the consummation of the transactions contemplated hereby including, without limitation, any fees payable to its advisors and attorneys.

Section 19.4 Notices. All notices, requests, demands or other communication required or permitted to be given under this Agreement and the provisions contained herein shall be written in English and shall be deemed to be duly sent by registered mail, postage prepaid or transmitted by facsimile transmission or internationally recognized courier to the other Party at the address indicated below:

In the case of the WEG Group, to:

WEG Equipamentos Eletricos S.A.
Av. Prefeito Waldemar Grubba, 3000
Jaragua do Sul, SC, 89256-900
Brazil
Attention: Joao Paulo Gualberto da Silva
E-mail: jsilva@weg.net
Facsimile: +55 47 3276-4593

WEG Electric Corp.
6655 Sugarloaf Parkway
Duluth, GA 30097
U.S.A.
Attention: Luiz Fernando Leonardo Ribeiro
E-mail: lribeiro@weg.net
Facsimile: +1 678-475-2636

with a copy to:

WEG S.A.
Av. Prefeito Waldemar Grubba, 3300
Jaragua do Sul, SC, 89256-900
Brazil
Attention: Paulo Ubiratan Mehret da Silva
E-mail: pauloms@weg.net
Facsimile: +55 47 3276-7803

In the case of NPS, to:

Northern Power Systems, Inc.
29 Pitman Road Barre,
Vermont 05641
U.S.A.
Attention: Ciel R. Caldwell, President and Chief Operating Officer
E-mail: ccaldwell@northernpower.com
Facsimile: +1 802-461-2997

with a copy to:

Northern Power Systems, Inc.
29 Pitman Road
Barre, Vermont 05641
U.S.A.
Attention: Legal Department
Facsimile: +1 802-461-2997

or at such other address as the Party to whom such notices, requests, demands or other communication is to be given shall have last notified the Party giving the same in the manner provided in this Section, but no such change of address shall be deemed to have been given until it is actually received by the Party sought to be charged with the knowledge of its contents. Any notice, request, demand or other communication delivered to the Party to whom it is addressed as provided in this Section 19.4 shall be deemed (unless there is evidence that it has been received earlier) to have been given and received, if:

- (i) sent by registered mail or courier, upon confirmation of delivery; or
- (ii) sent by facsimile or e-mail, when confirmation of its transmission has been recorded by the sender's facsimile machine or e-mail account.

Section 19.5 Non-Competition. During the Royalty Payment Term, NPS and its Affiliates shall not, directly or indirectly, manufacture, market, sell, import, export, develop, or design any Utility-Scale Wind Turbine except to the extent permitted by a Commercialization Notice in the applicable NPS Commercialization Territory or Joint Venture Commercialization Agreement, or provide any consulting, advisory or other type of services to third parties in connection with Utility-Scale Wind Turbines.

Section 19.6 Non-Solicitation. Each Party agrees that, during the Royalty Payment Term and for a period of one (1) year following its expiration, it will not entice, solicit, hire or encourage any employee of the other Party to leave the other Party's employ (other than the employees identified in Schedule 17.1(a)), except that it may hire an employee of the other Party who, without individual solicitation, responds to advertisements or solicitations aimed at the general public.

Section 19.7 Time of Essence. The Parties agree that time is of the essence for all deliverables under this Agreement, including but not limited to NPS's obligations to deliver the Utility Wind Assets, and the WEG Group's commercialization obligations pursuant to Section 8.1.

Section 19.8 Relationship of the Parties. Nothing in this Agreement shall be in any manner interpreted to constitute an agency or partnership for and on behalf of any other Party and the relationship between the Parties is as a principal to principal and on an arm's length basis. Except as otherwise expressly agreed to, nothing contained herein shall confer, on any Party, the authority to incur any obligation or liability on behalf of the other Party or bind the other.

Section 19.9 Severability. Any term or provision of this Agreement that is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If the final judgment of a court of competent jurisdiction or other authority declares that any term or provision hereof is invalid, void or unenforceable, then the Parties agree that the court or authority making such determination shall have the power to reduce the scope, duration, area or applicability of the term or provision, to delete specific words or phrases, or to replace any invalid, void or unenforceable term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision.

Section 19.10 Assignment. This Agreement may not be assigned by either Party without the prior written consent of the other Party, such consent not to be unreasonably withheld or delayed, provided, however that (a) either Party may assign this Agreement in whole, without the prior consent of the other Party, to a successor in ownership of all or substantially all of its business

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assets to which this Agreement pertains, whether by sale of assets, merger, consolidation or otherwise, and (b) either Party may assign this Agreement in whole or in part, without the prior consent of the other Party, to any one or more of its Affiliates (including, without limitation, an Affiliate formed by the amalgamation of such Party with another person or otherwise) so long as such Affiliate remains an Affiliate of such Party, provided that (i) the successor or Affiliate agrees in writing to be bound by the terms of this Agreement and (ii) no such assignment shall place the non-assigning Party in a worse financial position by virtue of such assignment (including without limitation, with respect to taxes if the assignee is subject to the laws of a jurisdiction which is different from the assigning Party). Any other purported assignments shall be void. This Agreement shall be binding upon any such permitted assignee and, subject to the restrictions on assignments herein set forth, inure to the benefit of the successors and assigns of each of the Parties hereto.

Section 19.11 Amendment; Waiver. No amendments or waiver of any provision of this Agreement, nor consent to any departure by any of the Parties therefrom, shall in any event be effective unless the same shall be in writing and signed by the Parties hereto and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it is given. No failure on the part of either Party to exercise, and no delay in exercising, any right, power or privilege hereunder shall operate as a waiver thereof or a consent thereto; nor shall any single or partial exercise of any such right, power or privilege preclude any other of further exercise thereof or the exercise of any other right, power or privilege. The remedies herein provided are cumulative and not exclusive of any remedies provided by applicable law.

Section 19.12 Entire Agreement. This Agreement (which includes the Exhibits and any other attachments hereto, and any documents referred to therein) constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes and replaces in their entirety any prior understandings, agreements or representations by or between the Parties, written or oral, with respect to the subject matter hereof including, without limitation, the 2.X Agreement (except as modified by the 2.X Agreement Addendum) and the 3.X Agreement.

Section 19.13 Force Majeure. Neither Party hereto shall be liable for any delay or failure in performance under this Agreement resulting directly or indirectly from any fire, flood, earthquake or similar natural disasters, labor dispute, market shortage of materials, riot, war, terrorism or any other similar causes beyond the reasonable control of such Party.

Section 19.14 Third Party Beneficiaries. Nothing in this Agreement shall be construed to give any person other than the Parties to this Agreement any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement.

Section 19.15 Counterparts; Electronic Delivery. This Agreement may be executed in two counterparts (which may be delivered via .pdf or other facsimile format), each of which shall be deemed an original, and both of which taken together shall constitute one agreement.

Section 19.16 Language. All notices, certificates, correspondence and other communications under or in connection with this Agreement shall be in English.

[Remainder of page left intentionally blank.]

IN WITNESS WHEREOF, the Parties hereto have executed this Asset Purchase Agreement as of the date first set forth above.

NORTHERN POWER SYSTEMS, INC.

By: /s/ Ciel R. Caldwell
Ciel R. Caldwell
President and Chief Operating Officer

WEG EQUIPAMENTOS ELÉTRICOS S.A.



By: _____
Name:
Title:

WEG ELECTRIC CORP.



By: _____
Name:
Title:

EXHIBIT A

PATENT ASSIGNMENT

EXHIBIT B

2.X AGREEMENT ADDENDUM

EXHIBIT C

SUBLEASE AGREEMENT

EXHIBIT D

MASTER SERVICE AGREEMENT

**First Amendment to the
Technological Know-How Transfer Agreement for NPS 2.X**

by and between

WEG Equipamentos Elétricos S.A.

and

Northern Power Systems, Inc.

Jaraguá do Sul (Brazil), October 26, 2016.

First Amendment to the Technological Know-How Transfer Agreement for NPS 2.X

This First Amendment to the Technological Know-How Transfer Agreement for NPS 2.X (this “Amendment”) is made and entered into this 26th day of October, 2016, by and between WEG Equipamentos Elétricos S.A., a company incorporated and existing under the laws of Brazil (“WEG”), with its principal office at Av. Prefeito Waldemar Grubba, 3000, Jaragua do Sul, SC, 89256-900, Brazil, and Northern Power Systems, Inc., a company incorporated and existing under the laws of the State of Delaware, U.S.A. (“NPS”), with its principal office at 29 Pitman Road, Barre, Vermont 05641 U.S.A. WEG and NPS are referred to herein collectively as the “Parties” and individually as a “Party”.

WHEREAS, WEG and NPS have signed on March 20, 2013, the Technological Know-How Transfer Agreement for NPS 2.X (the “Agreement”), which granted to WEG (i) the exclusive, nontransferable right (without right to sublicense) to receive the Subject Know-How and the Subject Intellectual Property necessary to manufacture, market and sell the NPS 2.X in the Exclusive Territory; and (ii) the non-exclusive, nontransferable right (without right to sublicense) regarding NPS 2.X Technology to manufacture, market and sell the NPS 2.X in the Non-Exclusive Territory;

WHEREAS, WEG, its North American subsidiary (WEG Electric Corp. (“WEC”)) and NPS have signed on October 26, 2016, an Asset Purchase Agreement (the “APA”), whereby NPS sells, conveys, transfers, assigns and delivers to WEC, NPS’s right, title and interest in and to the intellectual property, equipment, supporting materials, assumed contracts and goodwill of NPS related to utility-scale wind turbines (collectively, the “Utility Wind Assets”);

WHEREAS, the APA establishes that royalties must be paid by WEG and WEC to NPS, after the shipment of two hundred and twelve (212) 2.X Turbines (excluding units shipped due to warranty or replacement causes and returned units);

WHEREAS, considering that the Agreement is already registered before the INPI, allowing WEG to pay royalties to NPS, merely for convenience (and solely for the purpose of paying the royalties agreed in the APA), the parties have decided to keep the Agreement active during the term that royalty payments are due under the APA;

NOW, THEREFORE, in consideration of the mutual covenants and premises herein set forth and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties agree as follows:

Article 1 – Definitions and Interpretations

1.1 Definitions.

Unless specified otherwise in this Amendment, the terms in capital letters herein have the meanings already assigned to them in the Agreement.

1.2 **Interpretation.** In the interpretation of this Amendment, the following rules shall apply:

(a) The singular includes the plural and vice versa. A reference to any gender includes all genders.

(b) A reference to any document, agreement, deed or other instrument (including, without limitation, references to this Amendment and to the Agreement) includes the same as amended, supplemented, restated, novated or replaced, from time to time and shall include all schedules, annexes or other documents incorporated by reference therein.

(c) The words 'include' and 'including' are to be construed without limitation. The terms 'herein', 'hereof', 'hereto', 'hereunder' and words of similar purport refer to this Amendment as a whole.

(d) In this Amendment, headings are for the convenience of reference only and are not intended as complete or accurate descriptions of the content thereof and shall not be used to interpret the provisions of this Amendment.

(e) Any rule of interpretation which would require that an agreement be interpreted against the person or Party drafting it shall have no application in the case of this Amendment.

Article 2 – Modifications to the Agreement

2.1 Revocation of any conflicting terms, conditions and provisions.

(a) The Parties agree in maintaining active the Agreement during the period royalties are due under the APA solely for the purpose of WEG using the previous register before the INPI to transfer/pay to NPS the royalties established and agreed on in the APA.

(b) All the terms, conditions and provisions of the Agreement that in any way conflict with the terms, conditions and provisions agreed by and between the Parties in the APA are expressly revoked and neither Party has any continuing obligations under the Agreement other than those specifically set forth in this Amendment.

(c) In case of any conflicts between the Agreement, this Amendment and the APA, the terms, conditions and provisions of the APA shall prevail.

Article 2 – General

2.1 **Governing Law and Jurisdiction.** This Amendment shall be governed by, and interpreted and construed in accordance with the rules agreed by and between the Parties in the APA.

2.2 **Amendments.** No amendments or waiver of any provision of this Amendment, nor consent to any departure by any of the Parties there from, shall in any event be effective unless the same shall be in writing and signed by the Parties hereto and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it is given.

2.3 **Entire Agreement.** This Amendment, together with the APA, constitutes the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all previous agreements by and between the Parties as well as all proposals or term sheets, oral or written, and all negotiations, conversations or discussions heretofore had between the Parties related to the subject matter of the Agreement.

2.4 **Severability.** If any provision of this Amendment is held to be invalid, illegal or unenforceable in any respect, that provision shall be limited or eliminated to the minimum extent necessary so that this Amendment shall otherwise remain in full force and effect and enforceable.

2.5 **Language.** All notices, certificates, correspondence or other communications under or in connection with this Amendment, shall be in English.

2.6 **Counterparts.** This Amendment is made in three (3) original copies, each having the same contents and the Parties have read and thoroughly understand the contents hereof and have hereby affixed their respective signatures and seals before witnesses. All counterparts shall constitute but one and the same Amendment.

2.7 **Notices.** All notices, requests, demands or other communication required or permitted to be given under this Amendment and the provisions contained herein shall be written in English and shall be deemed to be duly sent by registered mail, postage prepaid or transmitted by facsimile transmission or internationally recognized courier to the other Party at the address indicated by the Parties in the APA.

2.8 **Third Party Benefit.** Nothing herein expressed or implied is intended, nor shall it be construed to confer upon or give to any third party any right, remedy or claim under or by reason of this Amendment or any part hereof.

[signatures on next page]

IN WITNESS WHEREOF, the Parties have executed this Amendment under seal as of the date first written above.

Northern Power Systems, Inc.

By /s/ Ciel R. Caldwell
(Legally valid Signature)

Ciel R. Caldwell
(Typed name of representative)

President and Chief Operating Officer
(Title)

(Place/Date signed)

WEG Equipamentos Eléctricos S.A.

By /s/ André Luis Rodrigues
(Legally valid Signature)

André Luis Rodrigues
(Typed name of representative)

Director
(Title)

(Place/Date signed)

/s/ Wilson José Watzko
(Legally valid Signature)

Wilson José Watzko
(Typed name of representative)

Director
(Title)

(Place/Date signed)

Subsidiaries of the Registrant

<u>Name</u>	<u>Jurisdiction</u>
Northern Power Systems, Inc.	DE
Northern Power Systems AG	Switzerland
Northern Power Systems SrL	Italy
Northern Power Systems Limited	United Kingdom

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 (File No. 333-197100) of Northern Power Systems Corp. and subsidiaries of our report dated March 31, 2017, relating to our audits of the consolidated financial statements and the financial statement schedules as of and for the years ended December 31, 2016 and 2015 which appears in this Annual Report on Form 10-K of Northern Power Systems Corp. for the year ended December 31, 2016.

/s/ RSM US LLP

Boston, Massachusetts
March 31, 2017

NORTHERN POWER SYSTEMS CORP.

CERTIFICATIONS

I, Ciel R. Caldwell, certify that:

1. I have reviewed this Annual Report on Form 10-K of Northern Power Systems Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2017

By: / S / C IEL R. C ALDWELL
Ciel R. Caldwell
President and Chief Operating Officer
(Principal Executive Officer)

NORTHERN POWER SYSTEMS CORP.

CERTIFICATIONS

I, Eric Larson, certify that:

1. I have reviewed this Annual Report on Form 10-K of Northern Power Systems Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2017

By: /s/ Eric Larson

Eric Larson
Vice President and Chief Accounting Officer
(Principal Financial Officer)

**NORTHERN POWER SYSTEMS CORP.
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Northern Power Systems Corp. (the "Company") for the period ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Ciel R. Caldwell, Principal Executive Officer of the Company, and Eric Larson, Principal Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to our knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 31, 2017

By: /s/ C IEL R. C ALDWELL
Ciel R. Caldwell
President and Chief Operating Officer
(Principal Executive Officer)

Date: March 31, 2017

By: /s/ Eric Larson
Eric Larson
Vice President and Chief Accounting Officer
(Principal Financial Officer)