

AMERICAN SUPERCONDUCTOR CORP /DE/

Form 10-K

May 27, 2010

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

**Form 10-K**

- Part I** **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended March 31, 2010**
- OR**
- Part II** **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the Transition Period from            to**

**Commission file number 000-19672**

**American Superconductor Corporation**  
*(Exact Name of Registrant as Specified in Its Charter)*

**Delaware**  
*(State or Other Jurisdiction of  
Incorporation or Organization)*  
**Sixty Four Jackson Road**  
**Devens, Massachusetts**  
*(Address of Principal Executive Offices)*

**04-2959321**  
*(IRS Employer  
Identification Number)*  
**01434**  
*(Zip Code)*

**Registrant's telephone number, including area code:**  
**(978) 842-3000**  
**Securities registered pursuant to Section 12(b) of the Act:**  
**Common Stock, \$0.01 par value, NASDAQ Global Market LLC**

**Securities registered pursuant to Section 12(g) of the Act:**  
**None**

Indicate by checkmark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by checkmark 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 past 90 days. Yes ☒ No ☐

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 232.405) is not contained herein, and will not be contained, to the best of the 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 the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐  
(Do not check if a smaller reporting company)

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

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant on September 30, 2009, based on the closing price of the shares of Common Stock on the Nasdaq Global Market on that date (\$33.54 per share) was \$1,456.4 million.

Number of shares outstanding of the registrant's Common Stock, as of May 21, 2010 was 44,851,804.

**DOCUMENTS INCORPORATED BY REFERENCE**

**Document**

**Form 10-K Part**

Definitive Proxy Statement with respect to the Annual Meeting of Stockholders for the fiscal year ended March 31, 2010, to be filed with the Securities and Exchange Commission no later than July 29, 2010

Part III



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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. For this purpose, any statements contained herein that relate to future

events or conditions, including without limitation, the statements under Item 1. Business, Item 1A. Risk Factors and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and located elsewhere herein regarding industry prospects and the Company's prospective results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words believes, anticipates, plans, expects, and similar expressions are intended to identify forward-looking statements. Such forward-looking statements represent management's current expectations and are inherently uncertain. The important factors discussed below under the caption Risk Factors in Item 1A, among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Any such forward-looking statements represent management's estimates as of the date of this Annual Report on Form 10-K. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this Annual Report on Form 10-K.

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**PART I**

**Item 1. BUSINESS**

**Overview**

We are a leading power technologies company, offering an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. Our company is a leader in renewable energy, providing proven, megawatt-scale wind turbine designs and electrical control systems. We also offer a host of Smart Grid technologies for power grid operators that enhance the reliability, efficiency and capacity of the grid, and seamlessly integrate renewable energy sources into the power infrastructure. These technologies include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems.

Our company manufactures two proprietary base products: programmable power electronic converters and high temperature superconductor ( HTS ) wires. These technologies and our system-level solutions are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide. Our company's growth is being driven by an increasing demand for clean and renewable sources of electricity, such as wind energy, and the demand for modernized, smart grids. These factors include increasing electricity usage, power grid capacity constraints, fossil fuel price volatility, and harmful levels of pollution and greenhouse gases. In addition, our growing digital-based economy demands better power reliability and quality. Concerns about these factors have led to increased spending by corporations and supportive government regulations and initiatives on local, state, national and global levels, including renewable portfolio standards, tax incentives and international treaties.

We conduct our operations through two business units:

*AMSC Power Systems.* AMSC Power Systems ( Power Systems ) produces a broad range of products to increase electrical grid capacity and reliability; provides full electrical control systems or a subset of those systems (core electrical components) to manufacturers of wind turbines; sells power electronic products that regulate wind farm voltage to enable their interconnection to the power grid; licenses proprietary wind turbine designs to manufacturers of such systems; provides consulting services to the wind industry; and offers products that enhance power quality for industrial operations.

*AMSC Superconductors.* AMSC Superconductors ( Superconductors ) designs and develops superconductor products, such as power cables, fault current limiters, generators, motors and degaussing systems; manages large-scale superconductor projects; and manufactures HTS wire and coils.

Our fiscal year begins on April 1 and ends on March 31. When we refer to a particular fiscal year, we are referring to the fiscal year ending on March 31 of the following year. For example, fiscal 2009 refers to the fiscal year ended March 31, 2010. Likewise, fiscal 2008 began on April 1, 2008 and concluded on March 31, 2009. Other fiscal years follow similarly.

**Competitive Strengths**

Our competitive strengths position us well to execute on our growth plans in the markets we serve.

*Technology Leadership and Engineering Expertise.* We are a technology leader in the development of power electronics and HTS wire-based solutions for the wind energy and power grid markets. As of March 31, 2010, we owned more than 550 patents and patent applications worldwide, and had rights through exclusive and non-exclusive licenses to more than 425 additional patents and patent applications. Our technology and manufacturing know-how, customer and product knowledge and patent portfolio provide us with a strong competitive position. We employ more than 20 years of development expertise toward the design and commercialization of new products and solutions and toward the implementation of proprietary manufacturing processes.

*Sophisticated, Flexible Product Design.* Our products are highly flexible, and their sophisticated design allows for a high degree of customization. These products leverage our proprietary software and hardware



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combinations that enable us to configure our power converters to efficiently and quickly meet the specific requirements of customers in a diverse range of markets. Furthermore, our proprietary HTS wire design and product engineering capabilities enable products with superior performance when compared to other market alternatives. Our wire design, for instance, allows us to tailor the lamination of our HTS wire to meet the electrical and mechanical performance requirements of widely varying end-use applications.

*Highly Scalable, Low Cost Manufacturing Platform.* Production of our proprietary power electronics and superconductor products can be increased rapidly at costs that we believe are low relative to our competitors. For instance, over the course of the past three fiscal years, we have increased our production of PowerModule power converters from several hundred units to several thousand units annually to meet the demand of our wind turbine manufacturing customers. Our proprietary manufacturing technique for 344 superconductors, which is our brand name for what is generically known as second generation (2G) HTS wire, is modular in nature, which we believe will allow us to readily expand manufacturing capacity at a relatively low incremental cost. All of the equipment we have installed for the 344 superconductors manufacturing line is designed with the capability to process either 40 millimeter (mm) or 100 mm wide strips, which will allow us to increase gross capacity by 2.5 times as we migrate from 40 mm to 100 mm production. We believe our capacity expansion on this manufacturing line will eventually enable us to manufacture this wire at approximately one-fifth the cost of our first generation (1G) HTS wire, which we no longer manufacture.

*Close Consultative Relationships with Customers.* We have built a team of skilled engineers with extensive experience in the design, structure and modeling of power transmission and distribution grids and in the operation of wind farms and industrial sites. We work closely with our customers to understand their needs and develop solutions to their unique operational challenges. By determining solutions, our team is able to identify applications for our technology. We are then able to customize and target our offerings to specific customers.

*Highly Experienced Management and Technical Team.* Our senior management has extensive power technologies experience. This team is composed of veterans of the electrical equipment, utility and wind power markets and is backed by our 714 employees worldwide as of March 31, 2010, 24 of whom hold Ph.D.s in materials science, physics, metallurgy, engineering or other fields.

## **Strategy**

Our strategy is to drive revenue growth and enhance operating results by increasing adoption of our products.

*Target High-Growth Segments with Commercial Products.* We target high-growth segments of the power and utility industry. Our Power Systems offerings are designed to meet the needs of the wind energy market, which is expected to nearly triple in size from 2009 to 2015, according to a recent report from industry research firm MAKE Consulting. Our HTS and power electronics grid-support solutions fill the needs of capacity-constrained transmission assets globally and address the demand for more reliable, secure and efficient transmission and distribution assets. The Brattle Group has reported that the U.S. transmission grid alone will require an investment of more than \$230 billion from 2010 to 2030 and that the U.S. distribution grid will require an additional \$675 billion of investment over this timeframe.

*Pursue Emerging Overseas Markets.* We are increasingly focusing our sales efforts on overseas markets and have been partially successful in targeting business in emerging economies, such as China, India and South Korea. We also have built significant sales momentum in countries where dynamic voltage standards for wind farms have been put in place, such as Australia, Canada, New Zealand and the United Kingdom. In fiscal 2009, 87 percent of our revenues came from sales outside the United States compared with 84 percent in fiscal 2008. In support of this expansion, we maintain operations in Austria, China, India, South Korea and the United

States and sales and service support centers worldwide.

*Anticipate Customer Needs in the Development of System-Level Solutions.* We develop close working relationships with our customers that enable us to provide customized solutions and identify opportunities to employ our products. Our Network Solutions team collects and analyzes data regarding our customers

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systems from entire power grids to wind farms to manufacturing operations dependent on premium quality power. For example, our Network Solutions team carries out dynamic simulations for customers on the effects power grid disturbances may have on grid reliability under all operating conditions. They then can quantify how the incorporation of Flexible AC Transmission Systems (FACTS), such as static Volt Amp Reactive (VAR) compensators (SVCs) and dynamic VAR (Statcom) systems, and advanced technologies, such as superconductor cables and fault current limiters (FCLs), can improve power grid operations. The group performs similar analyses to determine the optimum power quality solutions for industrial manufacturing sites and wind farms.

*Strengthen Our Technology Leadership While Lowering Cost.* We work continuously to strengthen our leadership position in terms of reliability, cost and total product offering. We interact with our customers and suppliers not only to improve the performance and efficiency of our Power Systems solutions, but also to reduce material and manufacturing costs. In addition, we maintain a vigorous research and development effort that continues to yield increases in electrical and mechanical performance of our 344 superconductors, which has been demonstrated at levels that are comparable to or better than our 1G HTS wire. We continue to achieve productivity enhancements in our manufacturing of 344 superconductors, which we believe will eventually enable us to manufacture this wire at approximately one-fifth the cost of our 1G HTS wire.

*Pursue Targeted Strategic Acquisitions and Alliances.* We will continue to pursue strategic business relationships and acquisitions that complement our product portfolio and increase our rate of growth. We have built strategic alliances and close corporate relationships with many industry leaders including LS Cable, Nexans, Shanghai Electric Cable Research Institute (SECRI), Siemens, Southwire, TECO-Westinghouse Motor Company and Vestas to develop and commercialize our products and to bring them to market. We also have been successful in closing key acquisitions, including Windtec and Power Quality Systems, Inc. in calendar 2007. The Windtec acquisition has provided increased access to the growing wind market and has complemented sales of our dynamic VAR (D-VAR) and PowerModule power electronics products in the wind market. The Power Quality Systems acquisition enhanced our reactive compensation product offerings for utility and industrial customers.

## **Market Opportunities**

Our products and services address two substantial global demands:

the demand for cleaner, renewable sources of electricity, such as wind power, and

the demand for a modernized, smart power grid infrastructure to alleviate capacity constraints and improve reliability, security, stability and efficiency of electricity.

## ***Wind Energy***

The market for wind-generated, zero-emission electricity has been growing dramatically for more than a decade. According to the Global Wind Energy Council ( GWEC ), more than 38,000 megawatts (MW) of wind generation capacity was added worldwide in calendar 2009, increasing the global installed base by approximately 32 percent. Industry research firm MAKE Consulting expects global wind power capacity to more than triple from 2009 to 2015. This growth is being driven in part by the substantial government incentives and mandates that have been established on local, state and national levels. Additionally, wind power costs have been declining rapidly. According to the GWEC, A modern wind turbine annually produces 180 times more electricity at less than half the cost per unit (kWh) than its equivalent twenty years ago. At good locations, wind can compete with the cost of both coal and gas-fired power. According to GWEC, approximately \$63 billion was spent on new wind power globally in 2009. We offer our

wind power solutions globally with a primary focus on emerging economies such as China and India.

Most of our wind-related revenues today are generated in China, the world's fastest growing wind power market. In China, the National Development and Reform Commission is promoting wind power concessions for large-scale commercial development. The program encourages local authorities to invite both local and international investors to develop 100 MW size wind farms at specific sites. In 2009, new feed-in tariffs were introduced

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and new policies were put in place requiring grid companies to purchase a fixed share of their power generation from renewable energy sources in China. GWEC estimates the installed base of wind generated electricity in China grew more than 100 percent for the fourth consecutive year in 2009 to 25,805 MW. The Chinese government's official target is to reach 100,000 MW of wind power capacity by the end of 2020, but industry research firms such as MAKE Consulting and Emerging Energy Research expect China's wind power capacity will exceed 200,000 MW by 2020.

GWEC estimates that India's installed base of wind generated electricity increased approximately 13 percent in 2009 to 10,926 MW. The fiscal incentives provided by the government to the wind energy sector in India include direct taxes (80 percent depreciation in the first year of installation of a project), a tax holiday for 10 years and no income tax paid on power sales to utilities. The Ministry of New and Renewable Energy has also issued guidelines to all state governments to create an attractive environment for the export, purchase, wheeling and banking of electricity generated by wind power projects.

The United States had the world's largest installed base of wind power at the end of 2009 with 35,064 MW. While growth in the U.S. market is expected to slow in 2010 due to the global economic downturn, the U.S. government is promoting more aggressive renewable energy initiatives and spending. A production tax credit (PTC) is in place through the end of calendar year 2012, providing a \$0.021 per-kilowatt-hour tax credit for electricity generated with wind turbines over the first 10 years of a project's operations. In addition, at least half of the states in the U.S. have already adopted renewable portfolio standards (RPS) that require local utilities to obtain a specified percentage of their electricity from renewable energy sources.

In 2009, GWEC estimates that over 10,000 MW of wind generated electricity was installed in the European Union. Supporting the growth of the European wind market is strong policy support at the EU and national levels. In January 2007, the European Commission released a proposal intended to enable Europe to produce 20 percent of its energy needs from renewable sources by 2020. Various incentive programs have been established in Europe, including feed-in tariffs, fixed premiums, and green certificate systems, which are often complemented by tax incentives or environmental taxes.

### ***Our Approach to the Wind Energy Market***

We address the wind energy market by providing services and designing, developing, manufacturing and selling critical components.

*Electrical Control Systems.* We provide full electrical control systems or a subset of those systems (core electrical components) to manufacturers of wind turbines. These electrical control systems and core components incorporate our PowerModule power electronic converters as well as pitch and yaw controllers, SCADA systems, programmable logic controllers and proprietary control software. These power electronics are utilized to regulate voltage, control power flows and maximize wind turbine efficiency, among other functions.

*Wind Turbine-based Grid Interconnection Solutions.* Our Dynamic VAR Ride Through (D-VAR RT) product enables individual wind turbines to continue operating smoothly by riding through voltage disturbances on power grids that might otherwise interrupt their operation. The D-VAR RT product meets the world's most stringent grid interconnection requirements, including Spain's new Procedimiento de Operación 12.3 requirement for both existing and new wind turbines.

*Development Contracts.* Our AMSC Windtec subsidiary designs and develops entire state-of-the-art wind turbines for manufacturers who are in the business of producing wind turbines or who plan to enter the business of manufacturing wind turbines. These customers typically pay us for the development work and

purchase from us the core electrical components or complete electrical control systems needed to operate the wind turbines.

*Licensed Designs.* We license our proprietary wind turbine designs to companies that wish to manufacture such systems. Companies that license our designs typically pay us for the designs, pay royalties for each system they install up to a certain number of wind turbines produced or commissioned, and purchase from us

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the core electrical components or complete electrical control systems needed to operate the wind turbines once in production.

*Service Contracts.* We offer service contracts to our customers who purchase our core electrical components or complete electrical control systems as well as our D-VAR RT systems.

*Consulting Services.* We offer consulting services to customers who want to improve their wind turbine designs.

Our AMSC Windtec offerings are well-suited for the wind turbine industry, which requires local manufacturing to meet increasing worldwide demands for renewable energy. AMSC Windtec is currently designing wind turbines for, or licensing wind turbines to, more than a dozen manufacturers around the world.

### ***Smart Grid Infrastructure Market***

Until the early part of this decade, the U.S. transmission grid investment experienced a prolonged decline caused by uncertainties regarding the ownership of and return on transmission grid investments. This period of underinvestment resulted in an increasing number of grid disturbances and blackouts, including the Northeast Blackout of August 14, 2003, which was the largest such event in U.S. history, affecting over 50 million people and costing up to an estimated \$6 billion in lost business for U.S. companies. A study conducted by researchers at Lawrence Berkeley National Laboratory found that electric power outages and blackouts cost America approximately \$80 billion annually.

Events and statistics such as these have been pivotal in prompting broad recognition worldwide of the need for concerted action to modernize and enhance the security of power grids. Renewable energy targets also are being implemented, which require vast new power grid investments. In addition, an increasing number of nations including China, South Korea and the U.S. are promoting the adoption of new Smart Grid technologies and programs to enhance grid capacity, efficiency and reliability. This includes promoting the adoption of Smart Grid infrastructure technologies that make the grid stronger, more resilient, more responsive and more fail-safe.

As these expenditures are being considered, power grid operators are increasingly confronting reliability issues arising from the capacity limitations of transmission and distribution lines (overhead) and cables (underground). Pushing too much power through a line or cable will heat it up to its thermal limit. At that point, more power flow through the line or cable will cause it to fault (forced to be taken out of service) or, in severe cases, fail. Thus, as demand for power increases, it is necessary to upgrade existing transmission and distribution corridors with additional or higher capacity lines or cables.

Traditional transmission lines and cables often reach their voltage stability limit well below their thermal threshold. Driving more power through a power grid when some of its lines and cables are operating above their voltage stability limit at peak demand times causes either low voltage in the power grid (a brownout) or risk of a sudden, uncontrollable voltage collapse (a blackout). The Northeast Blackout of 2003 in the U.S. was ascribed to a voltage collapse owing to operation of the grid above its voltage stability limit.

The traditional way to increase power grid capacity and voltage stability is to install more overhead power lines and underground cables. This allows for redundancy of power flow pathways and allows power grid operators to safely run systems closer to the thermal limits of the weakest links in the power grid. However, as a result of rising public resistance to new overhead lines due to cost allocation issues and environmental, aesthetic and health concerns, permitting processes of five to 10 years or more have become common for new projects.

In urban and metropolitan areas, installing additional conventional underground copper cables is similarly challenging for two important reasons: many existing underground corridors carrying power distribution cables are already filled to their physical capacity and cannot accommodate any additional conventional cables; and adding new conduits requires expanding or securing new corridors and digging up streets to lay new conduit. These tasks are costly and impose significant disruptions.



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### ***Our Approach to the Smart Grid Infrastructure Market***

We currently address the Smart Grid infrastructure market opportunity by providing components and solutions designed to increase the power grid's capacity, reliability, security, stability and efficiency.

*Superconductor Cables.* Our Superconductors business manufactures HTS wire used in superconductor power cables, which are a class of high-capacity, environmentally benign and easy-to-install transmission and distribution cables that address power grid capacity issues by increasing the thermal limit of existing or new corridors. Superconductor power cables are cylindrically shaped systems that consist of HTS wires, which conduct electricity, surrounded by electrical insulation, which in turn is encased in a metal or polymeric jacket. Today, power cables are made primarily using copper wires. Because our HTS wire is able to carry 150 times the electrical current of comparably sized copper wire, power cables of the same diameter can use significantly less HTS wire than copper wire and yet conduct up to 10 times the current of copper cables of the same diameter. These new cable systems also bring efficiency advantages. Traditional cable systems heat up due to the electrical resistance of copper, and this heat causes electrical losses. It is estimated that, on average, eight percent of the electricity produced at generation sites is lost due to resistance in the power grid. Conversely, HTS materials carry direct current (DC) with 100 percent efficiency and alternating current (AC) with nearly 100 percent efficiency when they are cooled below a critical temperature. As a result, AC HTS power cables lose significantly less power to resistive heating than copper cables, and DC HTS power cables have no energy losses due to resistive heating. We believe approximately \$5 billion is spent each year on medium and high-voltage cables systems worldwide.

*Flexible AC Transmission Systems (FACTS).* The power that flows through AC networks comprises both real power, measured in watts, and reactive power, measured in VARs. In simple terms, reactive power is required to support voltage in the power network. Voltage is the pressure that drives electrical current through the grid. Operators of AC power networks must closely and continuously balance real power and reactive power. Where reactive power support is inadequate, grids must be operated with heightened caution. Many lines within a power grid are rated well below their full thermal capacity because when grids are stressed, even brief voltage drops caused by transient events (e.g., line outages, plant trips, lightning strikes) can trigger instability and voltage collapse. Our Power Systems business offers FACTS solutions that rapidly inject precise amounts of reactive power into transmission grids to compensate for fluctuations in reactive power. These solutions also help to connect sources of renewable energy such as wind and solar to the power grid. We expect the need for FACTS devices to support both steady-state and transient power grid operation will continue to rise as the demand for power increases and utilities increase their focus on alternative energies and energy efficiency. Reliability-must-run generators are used by utilities to support voltage during peak load timeframes. These systems, which consume significant amounts of fuel and emit greenhouse gases, can often be replaced by reactive compensation solutions. Global Industry Analysts, Inc. estimates that the global market for FACTS solutions was \$1.5 billion in 2009.

*Fault Current Limiters and Secure Super Grids Systems.* Our Superconductors business develops stand-alone fault current limiter devices and Secure Super Grids systems, which combine the advantages of HTS power cables with fault current limiting capability in one system. Fault current limiters are designed to protect the grid against power surges. As grids continue to expand, the frequency and magnitude of power surges or fault currents that arise from short circuits also increase. In some cities, power surges are approaching and surpassing the ratings of circuit breakers that have been used to protect the power grid, resulting in an increased risk of blackouts. We believe there is a need for new Smart Grid infrastructure solutions that will be able to limit fault currents and protect ancillary utility equipment. We estimate that the worldwide addressable market for fault current limiters and Secure Super Grids systems exceeds \$1 billion annually.

**AMSC Power Systems**

Our Power Systems business unit designs, develops, manufactures and markets power electronic products, systems and solutions that generate and rapidly switch, control and modulate power. This business unit also provides proprietary wind turbine designs and extensive support services to wind turbine manufacturers. AMSC

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Power Systems offers products that service the needs of customers in a broad array of industries, including the transmission and distribution, wind power and manufacturing industries. AMSC Power Systems business unit accounted for 96%, 92% and 86% of our revenues for fiscal 2009, 2008 and 2007, respectively.

### ***Core Technologies***

Power conversion and active grid management are enabled by power electronic devices that convert or condition electric power for specific electrical applications.

*PowerModule Power Converters.* Our family of PowerModule power electronic converters incorporates power semiconductor devices that switch, control and move large amounts of power faster and with far less disruption than the electromechanical switches that have historically been used. With power ratings from 60 to 1,000 kW per converter, these products utilize a proprietary printed circuit board design that incorporates a microprocessor, thereby making them programmable for many uses. Programmability is important because individual PowerModule converters and integrated stacks of PowerModule converters can be programmed to meet the needs of different customers to control and condition varying levels of power from tens of kilowatts to megawatts across a wide range of applications. We design, manufacture and sell converters for specific applications including grid reliability and wind energy systems, such as our PowerModule PM3000W product. The PM3000W, which we introduced in fiscal 2008, is being used in wind turbine electrical control systems and also sold as part of a package of core electrical components. We also offer the PowerModule PM1000 product, which has a flexible design that can be applied in many market applications. In order to simplify the adoption of PowerModule products, we also offer the PowerModule PM1000 Product Developer Kit and PM1000 System Developer Kit to enable potential new customers to more easily integrate and adopt the product in their applications. In addition to PowerModule power converter hardware, our AMSC Power Systems business unit is responsible for software development for the family of PowerModule power converters, as well as for the software needed to integrate the PowerModule power converters into larger scale systems.

While our family of PowerModule systems today are used primarily in wind and power grid applications, they also have been incorporated into electric motor drives, distributed and dispersed generation devices (micro-turbines, fuel cells and photovoltaics), power quality solutions, batteries and flywheel-based uninterruptible power supplies.

*Thyristor Switches.* At the heart of several of our grid reliability and power quality offerings is a thyristor switching technology that we obtained in April 2007 through the acquisition of Power Quality Systems, Inc. This is a modular solid-state switch, or valve, that can be configured in a variety of different ways for specific reactive compensation and power quality needs. Today, these products are solely used as a component in our static VAR compensator and power quality static VAR compensator offerings and are not sold as a stand-alone product.

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### ***Grid Reliability, Power Quality and Grid Interconnection Systems***

Our grid reliability, power quality and grid interconnection systems consist of the following core reactive compensation and voltage regulation offerings:

<b>Product</b>	<b>Description</b>
<i>D-VAR</i>	Our D-VAR (Dynamic VAR) reactive compensation systems are Smart Grid infrastructure solutions that provide a powerful and cost-effective source of dynamic reactive compensation for a wide range of operational needs. Also known as STATCOMs, which are considered a Flexible AC-Transmission System (FACTS) device, our D-VAR solutions are customized to meet specific customer needs and include inherent flexibility to accommodate changing grid conditions. They can correct voltage instability problems on transmission networks, provide dynamic voltage and power factor control for regulating transmission and distribution networks, and support a stable point of interconnection for distributed generation facilities and wind farms. D-VAR systems utilize our proprietary and advanced control and monitoring system that detects and instantaneously compensates for voltage disturbances by injecting leading or lagging reactive power precisely where it is needed on the grid. D-VAR systems are extremely flexible and scalable, ranging from 2 megaVAR (MVAR) to more than 100 MVAR.
<i>SVC</i>	Our SVC (Static VAR Compensator) is a Smart Grid infrastructure solution that utilizes thyristor switched capacitors and reactors to alleviate power flow restraints on stability limited lines, increase overall power grid reliability, and address power system disturbances for industrial facilities. Benefits of installing a transmission-level SVC include: stabilized voltages on weaker networks, reduced transmission losses, increased transmission capacity, reducing or delaying the need for new lines, voltage control and stability, power swing damping and higher transient stability limits. Benefits of installing a distribution-level SVC include allowing large electric loads to operate on the AC power system while minimizing the impacts of voltage sags and flicker problems.
<i>PQ-IVR</i>	Our PQ-IVR (Power Quality-Industrial Voltage Restorer) systems offer large industrial customers a superior solution to disruptive power quality problems. PQ-IVR systems are voltage protection solutions that can detect power quality problems within milliseconds and counteract them before they turn into costly productivity problems. PQ-IVR systems incorporate our PowerModule power electronic converters and can be configured to meet a wide range of customer requirements. Our system engineers work with customers to find the optimum low-cost solution for any industrial application.

Our grid reliability, power quality and interconnection systems have been purchased by more than 100 customers worldwide in a variety of industries. Representative customers include:

grid operators, such as American Electric Power, Bonneville Power Authority and Northeast Utilities;

wind farm developers, owners, operators and vendors, such as Enbridge, Scottish Hydro and Suzlon; and

industrial customers, such as Bridgestone, Micron Technologies and Universal Compression.

### ***Wind Energy Systems and Solutions***

Through our AMSC Windtec subsidiary, AMSC Power Systems provides a wide range of wind turbine designs and services. To date, we have undertaken the design of turbines with power ratings ranging from 600 KW to 10 MW for use both on- and off-shore. We both license proprietary designs and sell custom designs based on specific customer

needs. We offer these designs through development or licensing agreements. As part of these agreements, we provide a wide range of services to enable our customers to quickly get into wind turbine production. These services include providing designs for their manufacturing facilities, helping to develop and localize their supply chains, and providing training on wind turbine manufacturing and installation best practices. In addition to the design/development work and support services, we sell wind turbine electrical control systems and core electrical components to our AMSC Windtec customers. These electrical control systems and core components incorporate PowerModule power electronic converters that we manufacture as well as many other systems including pitch and yaw controllers, SCADA systems, programmable logic controllers and proprietary control software. These power electronics are utilized to regulate voltage, control power flows and maximize wind turbine efficiency, among other functions.

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We currently are working with approximately a dozen wind turbine manufacturers worldwide. Representative customers include the following wind turbine manufacturers:

Ghodawat Industries in India;

Hyundai Heavy Industries in South Korea; and

Sinovel in China.

In 2008, we introduced our D-VAR RT solution. This product enables individual wind turbines to continue operating smoothly by riding through voltage disturbances on power grids that might otherwise interrupt their operation. The D-VAR RT product meets the world's most stringent grid interconnection requirements, including Spain's Procedimiento de Operación 12.3 requirement for both existing and new wind turbines.

## ***Facilities & Manufacturing***

Our Power Systems business unit currently operates out of facilities in New Berlin and Middleton, Wisconsin; West Mifflin, Pennsylvania; Klagenfurt, Austria; and Suzhou, China. In New Berlin, Wisconsin, we design, develop, assemble and test our PowerModule power electronic converters and D-VAR RT systems. We also manufacture and test our PowerModule family of products at our Suzhou, China manufacturing facility. We outsource the manufacture of components of our PowerModule power converters, allowing us to focus on our core competency of design and final assembly and test of PowerModule systems. This also provides Power Systems with the flexibility to utilize best-of-breed subcomponents in the assembly of our converters. We assemble and test components and PowerModule power converters for incorporation into our grid reliability, power quality and interconnection, products such as D-VAR and PQ-IVR systems in our Middleton, Wisconsin facility. Our West Mifflin, Pennsylvania facility is responsible for the design, manufacture, service and sale of our thyristor switch-based technology that we integrate into our SVC products. Our AMSC Windtec subsidiary operates out of Klagenfurt, Austria. This location is home to AMSC Windtec's core engineering, design and sales teams for wind turbine licensing and development activities.

## **AMSC Superconductors**

Our Superconductors business unit designs, develops, manufactures and sells HTS wire and products made with HTS wire. We sell wire to original equipment manufacturers (OEMs) that incorporate HTS wire into value-added products, which are, in turn, sold to electric utilities, ship integrators and industrial end-users, among others. We also develop power cable systems, fault current limiters and rotating machines (including electric motors, generators and synchronous condensers) based on our HTS wire. In addition, the business unit manages projects that utilize these value-added HTS products to create market demand for HTS wire. AMSC Superconductors business unit accounted for 4%, 8% and 14% of our revenues for fiscal 2009, 2008 and 2007, respectively.

## ***HTS Wire***

We estimate that we have supplied approximately 80 percent of the wire used in HTS product development and system demonstrations worldwide over the past several years. In fiscal 2007, we initiated volume production of our proprietary 2G HTS wire, which we have named 344 superconductors. Our 344 superconductors have been designed to be easily adopted by our customers who have been developing products based on our 1G HTS wire.

With the ability to carry more than 150 times the power of copper wires of the same dimensions, our 344 superconductors have demonstrated electrical and mechanical performance that is comparable to or better than our 1G HTS wire. We also expect our manufacturing costs for 344 superconductors to be significantly lower than

those for 1G HTS wire. The superconductor compound we utilize in our 2G HTS wire is  $\text{YBa}_2\text{Cu}_3\text{O}_7$ , commonly referred to as YBCO. We have an experienced R&D team which continues to develop even higher performance wire.

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Our 344 superconductors are hair-thin, ribbon-shaped wires that are approximately 4 mm wide. The core of our 344 superconductors consists of multiple thin coatings of several materials, including HTS material, on a base metal or alloy. A graphic representation of the multiple coatings in our 344 superconductors is shown in the following figure:

Architecture of the core of 344 superconductors (un-laminated, not to scale)

Many different manufacturing techniques can be utilized to produce each of the thin coatings in a 2G HTS wire. We believe we have chosen the optimal high-volume, low-cost manufacturing processes for the production of each of the coatings in our proprietary 344 superconductors, which we believe gives us a competitive edge in the marketplace.

The final form of our 344 superconductors comprises a core ribbon-shaped wire that is laminated on both sides with a thin strip of a metal or alloy in the final step of manufacturing to tailor the electrical, mechanical and thermal properties of the product. Different end-use products require different properties; so the ability to tailor these properties in the final manufacturing step is important. We also believe our ability to cost-effectively laminate our wires provides us with a competitive advantage.

Because they have the same general dimensions, and because the electrical and mechanical performance of 344 superconductors has been demonstrated to equal or exceed that of 1G HTS wire, 344 superconductors can easily replace 1G HTS wire in applications that have already adopted 1G HTS wire. However, the two generations of HTS wire differ in the superconductor materials of which they are comprised, their internal architecture, how they are manufactured, and, in some instances, their end-use applications because 344 superconductors possess unique physical properties that enable a new class of superconductor products.

Our 344 superconductors are smart materials because they are able to switch from a superconducting state with zero resistance to the flow of electricity, to the resistive state when the current passing through the wire exceeds a critical value. Because a high resistance reduces current in an electrical network, the smart switching feature of superconductor wire can be used to limit high fault currents that arise because of network short circuits. This is the basis of fault current limiting devices for utility and military applications. Our 344 superconductors are well suited for such applications because the resistance of the other layers in its structure can be kept high, thus decreasing the amount of wire required to achieve the required resistance. By contrast, the significant amount of silver in 1G HTS wire keeps the resistance low. Our lamination process also permits the economical addition of thick stabilizers to our 344 superconductors to minimize the temperature rise during a fault event. This lamination process is a further competitive advantage of our 344 superconductors and associated manufacturing process as it allows us to customize our product to meet the materials and performance needs of our customer's specific applications.

### ***HTS Wire-Based Products and Applications***

Our HTS wire is now being used in the development and commercialization of a broad array of products and applications. The business is currently focused on the development and commercialization of several main product



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areas: superconductor power cables, Secure Super Grid systems, stand-alone fault current limiters, rotating machines and degaussing systems.

*Superconductor Power Cables and Secure Super Grids Systems.* An important application for our HTS wire is high-capacity AC and DC power cables. Because of the high power capacity of HTS wire, superconductor power cables can carry up to 10 times more power (depending on the design and operating characteristics of the cable) than copper-based cables of the same diameter. The performance levels and mechanical properties of our HTS wire are sufficient today to meet the technical requirements for cables that can alleviate congestion in power transmission systems. We believe that superconductor cables can be cost competitive on a project basis with conventional transmission and distribution solutions today in certain instances. We expect that the price of superconductor cable systems will continue to decline as volumes grow, expanding the addressable market for these systems.

There are several designs for superconductor power cables being developed, tested and employed by cable manufacturers around the world. In all cases, the cryogenic coolant for the HTS wires in these cables is liquid nitrogen. Nitrogen, which comprises approximately 79 percent of the air we breathe, is an environmentally friendly, nonflammable material. When cooled by standard industrial refrigeration techniques, nitrogen gas turns into a relatively inexpensive liquid that is used in many applications, ranging from steel making and freezing of foods, to crushing of spices and cryogenic freezing of biological materials on farms.

*Key components of a co-axial, cold dielectric superconductor power cable.*

Among the advantages presented by superconductor cables over conventional copper cables are increased power density, ease of installation, reduced voltage for comparable power and increased reliability and security. In order for electric utilities and power grid operators to realize these advantages, they must first observe the successful testing and operation of superconductor cables in high voltage test facilities and in actual power grid installations. The first superconductor cable demonstration project was undertaken more than a decade ago. Since the summer of 2006, three superconductor power cables have been energized in the live grid in the United States. One of these, after a successful demonstration, has been decommissioned. The other two of these systems are currently operating and are powered with our HTS wire.

The most recent of these superconductor power cable projects is located in Long Island, New York. In April 2008, we energized a half-mile-long, 574 MW, 138 kilo-Volt (kV) superconductor cable system in the power grid of the Long Island Power Authority (LIPA). This is the world's first in-grid deployment of a transmission-voltage superconductor cable system and is expected to remain as a permanent addition to the LIPA grid. The project was led by us, and the cable, fabricated from our wire, was provided by Nexans.

In addition to the U.S. superconductor cable projects, a 22.9 kV superconductor cable system will be installed in Korea Electric Power Corporation's grid near the city of Seoul later in 2010. Capable of carrying 50 megawatts of power, the cable system will be nearly a half mile in length, making it the world's longest distribution-voltage superconductor cable system. This cable is being manufactured by LS Cable and we are serving as the wire supplier. In May 2010, LS Cable and we announced a further strengthening of our strategic partnership with LS Cable, where

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we intend to work collaboratively to deploy more than 50 kilometers of superconductor power cables in commercial power grids over the next five years. Additional demonstrations are underway in China, Japan, Korea, Russia and Spain. We estimate that we have supplied 80 percent of HTS wire for such projects worldwide.

*Fault Current Limiting Systems.* The availability of 344 superconductors with their smart switching capability, coupled with our proprietary lamination technology, opens a path for fault current limiting devices, which serve as surge suppressors for the electric power grid. Fault current limitation is becoming an increasingly critical issue for utilities with growing and highly meshed urban grids, and utility interest in finding a solution is high. Fault currents today are reaching levels that could exceed the safe operating levels of circuit breakers and other power equipment in numerous locations around the world. This results in millions of dollars in damaged utility equipment and is also a common cause of brownouts and blackouts.

We have developed Secure Super Grids power cable systems that can increase the capacity of power grids while also being able to rapidly suppress fault currents. In May 2007, we announced that we had begun working with Consolidated Edison, Inc. to develop and deploy our Secure Super Grid technology in Manhattan. Under a contract finalized in January 2008, the Department of Homeland Security is investing up to \$24.9 million in the development of this technology. We believe this technology has the potential to significantly enhance the capacity, security and efficiency of electric power infrastructures in urban and metropolitan areas around the world, enabling Secure Super Grids.

Many different designs of stand-alone FCLs have been proposed. The most widely investigated class is called a resistive FCL in which a current exceeding the critical current of the HTS material causes it to switch into a resistive state. We have years of experience and a number of patents in this area. As the first long-length 344 superconductors became available, we established, in February 2005, a development agreement with Siemens Corporate Technology in Erlangen, Germany to develop 344 superconductors for a stand-alone FCL application. In January 2007, this collaboration succeeded in demonstrating a single phase, 13 kV-class, 2.25 MVA-rated fault current limiter using our 344 superconductors and a proprietary bifilar coil concept. This work led to a cooperative agreement award in fiscal 2007 from the Department of Energy on a project to develop and perform in-grid testing of a transmission-FCL for Southern California Edison's (SCE's) grid. The team for this project includes our company, Siemens, Nexans and SCE, and this collaboration continues with the goal of developing more advanced wire and a higher rated FCL system for commercial application.

*Rotating Machines.* The use of HTS wire in rotating machines provides significant competitive advantages by enabling dramatic reductions in size, weight and manufacturing costs relative to conventional machines. Because of the manufacturing cost reductions associated with the reduced size of our superconductor rotating machines, we expect the market price for rotating machines using our design to eventually be equivalent to that of copper-based machines at power ratings of 1 MW (1,333 horsepower) and above.

We have produced several such rotating machines in the past and have pursued patent protection on many aspects of these machines. In January 2009, we announced that the U.S. Navy had successfully completed full-power testing of the world's first 36.5 MW (49,000 horsepower) superconductor ship propulsion motor designed and built by us in collaboration with Northrop-Grumman. The motor is less than half the size of conventional motors used on the first two DDG-1000 hulls and can reduce ship weight by nearly 200 metric tons. It can help make new ships more fuel-efficient and free up space for additional war-fighting capability.

In February 2009, we announced a Cooperative Research and Development Agreement (CRADA) with the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) and its National Wind Technology Center (NWTC) to validate the economics of our SeaTitan wind turbine, a 10 MW-class superconductor wind turbine. The core of this wind turbine will be a superconductor generator, which builds on the technologies developed in the

Navy ship propulsion program. We are separately developing full SeaTitan component and system designs and has an ongoing research joint venture with TECO-Westinghouse Motor Company, supported by the Advanced Technology Program of the Department of Commerce, to develop core technologies for superconductor generators that can power 10 MW-class wind turbines.

We plan to license designs for such superconductor rotating machines to companies that have the infrastructure to manufacture these systems. We believe contracts of this kind would yield license and consulting service fees from

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these companies and a growing stream of royalty payments and revenues from the sale of HTS wire and coils to licensees.

*Degaussing Systems.* Degaussing systems cloak the magnetic signature of naval ships, making them much more difficult to be seen by magnetic sensors and magnetically activated mines, thereby increasing survivability for naval ships. Degaussing systems are composed of a network of electrical cables installed in a loop formation around the circumference of a ship's hull. Historically, these cables have utilized copper. Superconductor degaussing systems are much smaller and lighter than conventional copper-based systems. We estimate that superconductor degaussing systems for the LPD-17, LCS, CG(X), DDG-1000, and CVN-21 classes of U.S. Navy ships could yield a 50%-80% reduction in total system weight and a reduced total ownership cost compared to current copper-based systems. In July 2008, the U.S. Navy installed a system powered by our HTS wire and magnet cable technology onboard the USS Higgins (DDG 76), an 8,000-ton Arleigh Burke-class destroyer. Testing of this HTS degaussing system is expected to be completed in 2010.

### ***HTS Wire Manufacturing and Facilities***

We have investigated many different techniques for manufacturing each of the layers in our 344 superconductors. We have discovered and demonstrated a combination of high-volume, low-cost manufacturing steps that yield our proprietary 344 superconductors with very high electrical performance. The manufacturing steps we currently utilize to manufacture our proprietary 344 superconductors, are illustrated in the following figure.

*Ten individual steps are utilized in our reel-to-reel manufacturing process for 344 superconductors*

We believe the manufacturing steps we currently utilize will produce 344 superconductors at substantially lower costs than the 1G and generic 2G HTS wire manufacturing techniques being pursued by competitors. We believe the performance and manufacturing costs inherent in our manufacturing process, composition and architecture for 344 superconductors will give us a competitive edge in the commercial market for HTS wires. We have also developed a strong portfolio of patents related to our fabrication methodology for 344 superconductors, with 149 worldwide patents and patent applications pending, and licenses to more than 45 worldwide patents and patent applications owned by others, as of March 31, 2010. However, we can make no assurances that we will be successful in fully scaling up our proprietary manufacturing process for 344 superconductors.

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We now produce 40 mm wide strips of superconductor material by our proprietary manufacturing process. One of the last steps of manufacturing is to slit our wide base substrate into the industry-standard width, which is approximately 4 mm. As shown below, the result is that we produce multiple, ribbon-shaped wires from one manufacturing operation, which reduces manufacturing costs.

*Multiple, ribbon-shaped HTS wires with industry-standard dimensions can be produced after first producing coatings on a wider strip. Shown is a partially slit 40 mm wide strip.*

The equipment for our 344 superconductors manufacturing line is designed with the capability to process either 40 mm wide or 100 mm wide strips. In November 2007, we initiated production of 344 superconductors on our new manufacturing line in Devens, Massachusetts, and we are now producing finished product at a rate of several hundred thousand meters per year. Because our proprietary wire manufacturing technique is modular, we are able to expand the current operation at a rate dictated by market demand by commissioning additional production modules and by widening the process strip from 40 mm to 100 mm, yielding a 2.5x increase in output with the same manufacturing equipment once we complete the migration to 100 mm strips. In January 2010, we began our migration to 100 mm substrates to meet market demand. In fiscal 2010, we plan to utilize cash generated from operations to procure additional 100 mm capital equipment to support our capacity expansion.

When fully outfitted, we estimate that our Devens, Massachusetts production facility will be able to produce more than twenty million meters of 344 superconductors annually.

## **Sales and Marketing**

We have a single, integrated sales force focused on accelerating revenue growth and better serving our target markets. Our sales force interacts closely with our Network Solutions Team, which is comprised of skilled engineers who were previously employed at electric utilities and who have extensive experience in the design and structure of transmission and distribution grids and in the operation of industrial sites and wind farms. This team plays a key role in our sales process, providing us with an in-depth understanding of customer needs. Using sophisticated software programs, which are common to the utility industry, the team performs analyses on the effects of disturbances in power grids to determine grid reliability under normal and peak loading conditions. This group also analyzes how the use of standard technologies, such as capacitors, and advanced technologies, such as superconductor cables, fault current limiters, D-VAR STATCOM systems and SVCs, will enable the reliable operation and improve the performance of power grids. This team performs similar analyses to determine the optimum power quality solution for industrial manufacturing sites and the solution needed to meet grid interconnection standards for wind farms. We believe our Network Solutions Team is a competitive differentiator because it enables us to leverage a thorough understanding of customer needs to offer highly customized solutions.

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Our products are sold directly by our sales force, which operates out of sales offices worldwide. We also utilize manufacturer's representatives for our AMSC Power Systems products as well as distributors.

Sinovel represented approximately 70%, 67% and 51% of our total revenue for fiscal 2009, 2008 and 2007, respectively. Sinovel was the only customer exceeding 10% of total revenue for those fiscal years.

The portion of total revenue derived from customers located outside the United States was 87%, 84% and 74% for fiscal 2009, 2008 and 2007, respectively. Of the revenue derived from customers outside the United States, 88%, 86% and 55% were derived from customers in China in fiscal 2009, 2008 and 2007, respectively. For additional financial information, see the Notes to Consolidated Financial Statements included herein, including Note 17, entitled "Business Segment and Geographic Information," regarding our business segments.

## **Backlog**

We had backlog at March 31, 2010 (excluding amounts included in accounts receivable) of approximately \$588.3 million from government and commercial customers, compared to \$557.7 million at March 31, 2009. Backlog represents the value of contracts and purchase orders received, less the revenue recognized to date on those contracts and purchase orders.

Of the backlog amount of \$588.3 million as of March 31, 2010, approximately 65% is billable to and collectable from our customers within the next 12 months.

## **Competition**

### ***Competition for AMSC Power Systems***

We face competition from companies offering power electronic converters for use in applications for which we expect to sell our PowerModule products. These companies include ABB, Inverpower, SatCon, Semikron and Xantrex (a subsidiary of Schneider Electric).

We face competition from companies offering wind turbine electrical system components. These companies include ABB, Converteam, Ingeteam, Mita-Teknik, The Switch, Woodward Governor and Xantrex.

We face competition from other companies offering FACTS systems similar to our D-VAR and SVC solutions. These include SVCs from ABB, Alstrom, AREVA, Mitsubishi Electric and Siemens; adaptive VAR compensators and STATCOMs produced by S&C Electric; DVRs (dynamic voltage restorers) produced by companies such as ABB and S&C Electric; and flywheels and battery-based UPS systems offered by various companies around the world.

Our AMSC Windtec business faces competition for the supply of wind turbine engineering design services from design engineering firms, such as Garrad Hassan, and from licensors of wind turbine systems, such as Aerodyn, AventisEnergy and Fuhrlander. We also face indirect competition in the wind energy market from manufacturers of wind energy systems, such as Gamesa, General Electric, Suzlon and Vestas.

### ***Competition for AMSC Superconductors***

We face competition both from vendors of traditional wires made from materials such as copper and from companies who are developing HTS wires. We also face competition for our 344 superconductors from a number of companies in the U.S. and abroad who are developing 2G HTS wire technology. These include Innova, MetOx, Superconductor Technologies and Superpower (a subsidiary of Royal Philips Electronics) in the U.S.; Fujikura, Furukawa, Showa and

Sumitomo in Japan; SuNAM in South Korea; and Bruker, evico GmbH, Nexans and Zenergy in Europe. We believe that the proprietary processes we have adopted will prove to be the best processes to provide not only high-performance wire, but also commercial quantities at the lowest cost. Six companies – evico GmbH, Furukawa, Nexans, Showa, Sumitomo Electric and Zenergy Power – have been focusing their research programs more recently on the development of 2G HTS wire made by the same or similar processes we have chosen to utilize to manufacture 2G HTS wire.

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We are developing a stand-alone FCL in collaboration with Siemens and Nexans. We also are developing Secure Super Grids technology, which incorporates fault-current-limiting capability in superconductor power cables. The industrial competition for stand-alone FCLs based on HTS includes Hypertech and SC Power (Zenergy Power) in the U.S.; Nexans and Rolls-Royce in Europe; Sumitomo Electric and Toshiba in Japan; Beijing Superconductor and Innopower in China; and Hyundai and LS Industrial Systems in Korea. Initial work on superconductor cables that incorporate fault current limiting characteristics was carried out several years ago by Bruker and Nexans using a different concept. The competition for stand-alone FCLs also includes non-HTS systems based on power electronics, including a system developed by Powell and Silicon Power. We believe we have a strong intellectual property position in Secure Super Grids technology and also a strong position on stand-alone FCLs in collaboration with Siemens.

Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we do. In addition, as our target markets develop, other large industrial companies may enter these fields and compete with us.

## **Patents, Licenses and Trade Secrets**

### ***Patent Background***

An important part of our business strategy is to develop a strong worldwide patent position in all of our technology areas. Our intellectual property (IP) patent portfolio comprises both patents we own and patents we license from others. We devote substantial resources to building a strong patent position, and we believe that we have significantly strengthened our position in the past several years. As of March 31, 2010, we owned (either alone or jointly) 108 U.S. patents and had 58 U.S. patent applications on file. We also hold licenses from third parties covering 126 issued U.S. patents and 23 U.S. patent applications. Together with the international counterparts of each of these patents and patent applications, we own more than 550 patents and patent applications worldwide, and have rights through exclusive and non-exclusive licenses to more than 425 additional patents and patent applications.

We believe that our current patent position, together with our expected ability to obtain licenses from other parties to the extent necessary, will provide us with sufficient proprietary rights to develop and sell our products. However, for the reasons described below, there can be no assurance that this will be the case.

Despite the strength of our patent position, a number of U.S. and foreign patents and patent applications of third parties relate to our current products, to products we are developing, or to technology we are now using in the development or production of our products. We may need to acquire licenses to those patents, or to successfully contest the scope or validity of those patents, or to design around patented processes or applications.

If companies holding patents or patent applications that we need to license are competitors, we believe the strength of our patent portfolio will significantly improve our ability to enter into license or cross-license arrangements with these companies. We have already successfully negotiated cross-licenses with several competitors. However, there can be no assurance that we will be able to obtain all necessary licenses from competitors on commercially reasonable terms, or at all.

We may be required to obtain licenses to some patents and patent applications held by companies or other institutions, such as national laboratories or universities, not directly competing with us. Those organizations may not be interested in cross-licensing or, if willing to grant licenses, may charge unreasonable royalties. We have successfully obtained licenses related to HTS wire from a number of such organizations with royalties we consider reasonable. Based on past experience, we expect that we will be able to obtain other necessary licenses on commercially reasonable terms. However, there can be no assurance that we will be able to do so.



Failure to obtain all necessary licenses upon reasonable terms could significantly reduce the scope of our business and have a materially adverse effect on our results of operations. We do not now know the likelihood of successfully contesting the scope or validity of patents held by others. In any event, we could incur substantial costs in challenging the patents of other companies. Moreover, third parties could challenge some of our patents or patent applications, and we could incur substantial costs in defending the scope and validity of our own patents or patent applications whether or not a challenge is ultimately successful.

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There are no patents that we own or license expiring in the next 12 months that we consider to be material to our business or competitiveness.

### ***Power Systems Patents***

We have received patents and filed a significant number of additional patent applications on power quality and reliability systems, including D-VAR and PQ-IVR systems. Our Power Systems products are covered by more than 85 patents and patents pending worldwide on both our systems and power converter products. The patents and applications are directed to inventions that significantly improve product performance and reduce product costs, thereby providing a competitive advantage. One invention of note allows for a reduction in the number of power inverters required in the system by optimally running the inverters in overload mode, thereby significantly reducing overall system costs. Another important invention utilizes inverters to offset transients due to capacitor bank switching, which provides improved system performance.

Our AMSC Windtec subsidiary designs a variety of wind turbine systems and licenses these designs, including know-how and patent rights, to third parties for an upfront fee and royalty payments for each installation of a wind turbine system. AMSC Windtec's wind turbine designs are covered by 84 patents and patents pending worldwide on wind turbine technology. AMSC Windtec has patent coverage on the unique design features of its blade pitch control system, which ensures optimal aerodynamic flow conditions on the turbine blades and improves system efficiency and performance. The pitch system includes a patented SafetyLOCK™ feature that causes the blades to rotate to a feathered position to prevent the rotor blades from spinning during a fault. We have also focused our patent protection on AMSC Windtec's SuperGEAR drive train technology, which provides additional control over a wind turbine's electrical output and enhances its power quality.

With our Power Systems business growing rapidly now in China, we recognize the importance of IP protection in that region. It is our judgment that China is steadily moving in the direction of recognizing and acting on international norms for IP. As such, we have incorporated China in our patent strategy for all of our various products. Nevertheless, we recognize that the risk of IP piracy is still higher there than in most other developed countries, and so we are careful to limit the technology we provide through our product sales and other expansion plans in China. While we take the steps necessary to ensure the safety of our IP, there can be no assurance that these measures will be fully successful.

### ***HTS Patents***

Since the discovery of high temperature superconductors in 1986, the HTS industry has been characterized by rapid technical advances, which in turn have resulted in a large number of patents, including overlapping patents, relating to superconductivity being applied for and granted worldwide. As a result, the patent situation in the field of HTS technology and products is unusually complex.

We have obtained licenses to patents and patent applications covering some HTS materials. However, we may have to obtain additional licenses to HTS materials.

We are focusing on the production of our 2G HTS wire, which we call 344 superconductors, and we intend to continue to obtain a proprietary position in 2G HTS wire through a combination of patents, licenses and proprietary know-how. In addition to our owned patents and patent applications in 2G HTS wire, we have obtained licenses from MIT for the MOD process we use to deposit the YBCO layer, Alcatel-Lucent on the YBCO material, and University of Tennessee/Battelle to the RABiTS® process we use for the substrate and buffer layers for this technology. If alternative processes become more promising in the future, we will also seek to develop a proprietary position in these alternative processes.

We have a significant number of patents and pending patents covering applications of HTS wire, such as HTS fault current limiters, Secure Super Grids technology, which includes both HTS power cables and fault current limiting capability, and HTS rotating machines. Since the superconductor rotating machine and Secure Super Grids fields are relatively new fields, we believe we are building a particularly strong patent position in these areas. At present, we believe we have the broadest and most fundamental patent position in superconductor rotating machines technology. We have also filed a series of patents on our concept for our proprietary Secure Super Grids technology.

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However, there can be no assurance that that these patents will be sufficient to assure our freedom of action in these fields without further licensing from others.

### ***Trade Secrets***

Some of the important technology used in our operations and products is not covered by any patent or patent application owned by or licensed to us. However, we take steps to maintain the confidentiality of this technology by requiring all employees and all consultants to sign confidentiality agreements and by limiting access to confidential information. No assurance can be given that these measures will prevent the unauthorized disclosure or use of that information. In addition, there is no assurance that others, including our competitors, will not independently develop the same or comparable technology that is one of our trade secrets.

### **Employees**

As of March 31, 2010, we employed a total of 714 persons, 24 of whom have a Ph.D. in materials science, physics or other fields. None of our employees are represented by a labor union. Retaining our key employees is important for achieving our goals, and we are committed to developing a working environment that motivates and rewards our employees.

### **Corporate Information**

We file reports, proxy statements and other documents with the Securities and Exchange Commission ( SEC ). You may read and copy any document we file at the SEC Headquarters at Office of Investor Education and Assistance, 100 F Street, NE, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC 's Internet site at [www.sec.gov](http://www.sec.gov).

American Superconductor Corporation was incorporated in Delaware in 1987.

Our internet address is [www.amsc.com](http://www.amsc.com). We are not including the information contained in our website as part of, or incorporating it by reference into, this annual report on Form 10-K. We make available free of charge through our web site our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such materials with, or furnish such materials to, the SEC.

We intend to disclose on our website any amendments to our code of business conduct and ethics that are required to be disclosed pursuant to the SEC rules.

American Superconductor and design, Revolutionizing the Way the World Uses Electricity, AMSC, Powered by AMSC, D-VAR, dSVC, PowerModule, PQ-IVR, Secure Super Grids, Windtec and SuperGEAR are trademarks or registered trademarks of American Superconductor Corporation or its subsidiaries. The Windtec logo and design is a registered European Union Community Trademark. All other brand names, product names, trademarks or service marks appearing in this Annual Report on Form 10-K are the property of their respective holders.

**Table of Contents****EXECUTIVE OFFICERS OF THE REGISTRANT**

The table and biographical summaries set forth below contain information with respect to our executive officers:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Gregory J. Yurek	63	Chairman of the Board and Chief Executive Officer
Daniel P. McGahn	38	President and Chief Operating Officer
Charles W. Stankiewicz	51	Executive Vice President and General Manager, AMSC Power Systems
David A. Henry	48	Senior Vice President, Chief Financial Officer and Treasurer
Timothy D. Poor	43	Senior Vice President, Global Sales and Business Development
Angelo R. Santamaria	47	Senior Vice President, Global Manufacturing Operations
John R. Collett	45	Senior Vice President, Strategic Planning and Corporate Development
Susan J. DiCecco	58	Vice President, Corporate Administration

*Gregory J. Yurek* co-founded American Superconductor in 1987 and has been chief executive officer since December 1989 and chairman of the board of directors since October 1991. Dr. Yurek also served as president from March 1989 to February 2004 and from June 2005 to December 2009, as vice president and chief technical officer from August 1988 until March 1989 and as chief operating officer from March 1989 until December 1989. Prior to joining American Superconductor, Dr. Yurek was a professor of Materials Science and Engineering at MIT for 12 years. Dr. Yurek has been a director of American Superconductor since 1987.

*Daniel P. McGahn* joined us in December 2006 and has served as president and chief operating officer since December 2009. Mr. McGahn also served as senior vice president and general manager of AMSC Superconductors, from May 2008 until December 2009. He served in this role as vice president from January 2008 to May 2008. Previously, Mr. McGahn was vice president of strategic planning and development from December 2006 to January 2008. From 2003 to 2006, Mr. McGahn served as executive vice president and chief marketing officer of Konarka Technologies. Prior to 2003, Mr. McGahn served as general manager and chief operating officer of Hyperion Catalysis. He also held managerial positions at IGEN International and Princeton Consultants.

*Charles W. Stankiewicz* joined us in July 1998 as general manager of our Power Systems business unit based in Middleton and New Berlin, Wisconsin. In March 2006, he was appointed to senior vice president, AMSC Power Systems. He was promoted to executive vice president in June 2007. Prior to joining American Superconductor, Mr. Stankiewicz spent eighteen years in a variety of technical and business management positions at Westinghouse Electric Corporation and Asea Brown Boveri (ABB) where he most recently was the vice president of power development.

*David A. Henry* joined us in July 2007 as senior vice president, chief financial officer and treasurer. He previously served as chief financial officer of AMIS Holdings, Inc., the parent company of AMI Semiconductor, from April 2004 to July 2007. For the previous seven years, Mr. Henry worked at Fairchild Semiconductor International as vice president finance, worldwide operations from November 2002 to April 2004 and as corporate controller from March 1997 to November 2002. He was appointed vice president, corporate controller in August 1999.

*Timothy D. Poor* joined us in September 2001 and serves as senior vice president, global sales and business development, responsible for our global sales, business development and marketing. From May 2007 to March 2008, Mr. Poor was the vice president and deputy general manager, Power Systems. From September 2001 to May of 2007, Mr. Poor held the position of director, Power Systems sales & business development. He was promoted to managing director in March 2006. Prior to joining our company, Mr. Poor worked at General Electric (GE) in the GE Industrial Systems division for seven years in various sales, six sigma, and sales management positions. Prior to GE, Mr. Poor was an engineering consultant at Arthur Andersen & Company.

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*Angelo R. Santamaria* joined us in April 2004 as vice president and general manager of the AMSC Superconductors business unit. In August 2007, he was named vice president of global manufacturing operations and was promoted to senior vice president in May 2009. Prior to joining us, Mr. Santamaria served as vice president and general manager at Microsemi Corporation, a semiconductor manufacturer. Mr. Santamaria had served in this role since 1997. Previously, Mr. Santamaria held various management positions in Operations and Engineering at Microsemi Corporation.

*John R. Collett* joined us in October 2009 as senior vice president, strategic planning and corporate development and is responsible for leading the development and implementation of corporate strategies aimed at accelerating the company's growth. In May 2010, Mr. Collett was appointed chief strategy officer. Prior to joining American Superconductor, Mr. Collett was a senior member of Deutsche Bank's Investment Banking Group from August 2003 to October 2009, holding such positions as COO of Mergers and Acquisitions, Managing Director and Co-Head of Large Cap Coverage and senior partner of the Global Diversified Industrials Group. Previously, he held positions in the energy sector and mergers and acquisitions for J.P Morgan Securities and Goldman Sachs.

*Susan J. DiCecco* was named to the position of vice president, corporate administration in August 2009 and is responsible for worldwide human resources, information technologies and environmental health and safety. Mrs. DiCecco joined us in 2000 and was named vice president of human resources in 2006. Previously, Mrs. DiCecco held a number of human resources and operational positions at W.A.Wilde Company, Kidde Fenwal Company and General Motors among others.

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**Item 1A. RISK FACTORS**

**I. Risks related to our financial results and our common stock.**

***We have a history of operating losses, and we may incur losses in the future.***

We incurred net losses in each year since our inception through fiscal 2008, driven primarily by the research and development activities in our AMSC Superconductors business unit. While we achieved profitable results in fiscal 2009 and expect to achieve profitable results in fiscal 2010, we cannot be certain that we will sustain profitability.

We believe our available cash, cash equivalents, marketable securities and restricted cash will be sufficient to fund our working capital, capital expenditures and other cash requirements for at least the next twelve months. However, we may need additional funds if our performance deviates significantly from our current business plan, if cash accumulates in foreign countries that we are unable or unwilling to repatriate, if there are significant changes in competitive or other market factors, or if unforeseen circumstances arise. Such funds may not be available, or may not be available under terms acceptable to us.

***Our operating results may fluctuate significantly from quarter to quarter and may fall below expectations in any particular fiscal quarter.***

Our operating results are difficult to predict and have at times fluctuated from quarter to quarter due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. If our revenue or operating results fall below the expectations of investors or any securities analysts that follow our company in any period, the trading price of our common stock would likely decline.

Our operating expenses do not always vary directly with revenue and may be difficult to adjust in the short term. As a result, if revenue for a particular quarter is below our expectations, we may not be able to proportionately reduce operating expenses for that quarter, and therefore such a revenue shortfall would have a disproportionate effect on our operating results for that quarter.

***A significant portion of our revenues are derived from a single customer.***

Revenue growth in fiscal 2009, 2008 and 2007 was driven largely by our AMSC Power Systems business unit. Our largest customer is Sinovel in China. Sinovel accounted for a majority of our total revenues during these periods. Revenues from Sinovel are supported by purchase orders and contracts for electrical system core components as well as development contracts for the design of wind turbines. If Sinovel cancelled purchase orders or development contracts, or discontinued future purchases from us, we would likely be unable to replace the related revenues. This would have a serious negative impact on our operating results and financial position.

***Adverse changes in domestic and global economic conditions could adversely affect our operating results.***

As our business has grown, we have become increasingly subject to the risks arising from adverse changes in domestic and global economic conditions. The state of both the domestic and global economies has recently become increasingly uncertain due to a significant reduction in the availability of credit, rising interest rates and financial market volatility. If credit continues to become more difficult to obtain, some customers may delay or reduce purchases. This could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies, increased accounts receivable write-offs and increased price competition. Any of these events would likely harm our business, results of operations and financial condition.



***Changes in exchange rates could adversely affect our results from operations.***

Currency exchange rate fluctuations could have an adverse effect on our revenues and results of operations, and we could experience losses with respect to our hedging activities. Unfavorable currency fluctuations could require us to increase prices to foreign customers, which could result in lower revenues by us from such customers. Alternatively, if we do not adjust the prices for our products in response to unfavorable currency fluctuations, our

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results of operations could be adversely affected. In addition, most sales made by our foreign subsidiaries are denominated in the currency of the country in which these products are sold, and the currency they receive in payment for such sales could be less valuable at the time of receipt as a result of exchange rate fluctuations. We enter into derivative instruments, including forward foreign exchange contracts and currency options to reduce currency exposure arising from intercompany sales of inventory. However, we cannot be certain that our efforts will be adequate to protect us against significant currency fluctuations or that such efforts will not expose us to additional exchange rate risks.

***Our common stock has experienced, and may continue to experience, significant market price and volume fluctuations, which may prevent our stockholders from selling our common stock at a profit and could lead to costly litigation against us that could divert our management's attention.***

The market price of our common stock has historically experienced significant volatility and may continue to experience such volatility in the future. Factors such as technological achievements by us and our competitors, the establishment of development or strategic relationships with other companies, new customer orders and contracts, our introduction of commercial products, and our financial performance may have a significant effect on the market price of our common stock. In addition, the stock market in general, and the stock of high technology companies in particular, have in recent years experienced extreme price and volume fluctuations, which are often unrelated to the performance or condition of particular companies. Such broad market fluctuations could adversely affect the market price of our common stock. Due to these factors, the price of our common stock may decline and investors may be unable to resell their shares of our common stock for a profit. Following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. If we become subject to this kind of litigation in the future, it could result in substantial litigation costs, a damages award against us and the diversion of our management's attention.

## **II. Risks related to our business and industry.**

### **General**

***If we fail to implement our business strategy, our financial performance and our growth could be materially and adversely affected.***

Our future financial performance and success are dependent in large part upon our ability to implement our business strategy successfully. Our business strategy envisions several initiatives, including driving revenue growth and enhancing operating results by increasing adoption of our products by targeting high-growth segments with commercial products, pursuing overseas markets, anticipating customer needs in the development of system-level solutions, strengthening our technology leadership while lowering cost and pursuing targeted strategic acquisitions and alliances. We may not be able to implement our business strategy successfully or achieve the anticipated benefits of our business plan. If we are unable to do so, our long-term growth and profitability may be adversely affected. Even if we are able to implement some or all of the initiatives of our business plan successfully, our operating results may not improve to the extent we anticipate, or at all. Implementation of our business strategy could also be affected by a number of factors beyond our control, such as increased competition, legal developments, government regulation, general economic conditions or increased operating costs or expenses. In addition, to the extent we have misjudged the nature and extent of industry trends or our competition, we may have difficulty in achieving our strategic objectives. Any failure to implement our business strategy successfully may adversely affect our business, financial condition and results of operations. In addition, we may decide to alter or discontinue certain aspects of our business strategy at any time.

***We may not realize all of the sales expected from our backlog of orders and contracts.***

Though we generally report significant backlog, there can be no assurances that the revenue we expect to generate from this backlog will be realized in the periods we expect to realize such revenue, or at all. In addition, the backlog of orders, if realized, may not result in profitable revenue. Backlog represents the value of contracts and purchase orders received, less the revenue recognized to date on those contracts and purchase orders. Our customers have the right under some circumstances and with some penalties or consequences to terminate, reduce or defer firm

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orders that we have in backlog. In addition, our government contracts are subject to the risks described below. If our customers terminate, reduce or defer firm orders, we may be protected from certain costs and losses, but our sales will nevertheless be adversely affected and we may not generate the revenue we expect.

Although we strive to maintain ongoing relationships with our customers, there is an ongoing risk that orders may be cancelled or rescheduled due to fluctuations in our customers' business needs or purchasing budgets.

Our largest customer, Sinovel, has in recent years accounted for a majority of our backlog. In the event that we either fail to deliver product to Sinovel within 120 days after its specific delivery time, or become bankrupt or insolvent, Sinovel would have the right to terminate any remaining orders that we have in backlog. If Sinovel cancelled orders, it would have a material negative impact on our operating results and financial position.

### ***Many of our revenue opportunities are dependent upon subcontractors and other business collaborators.***

Many of the revenue opportunities for our business involve projects, such as the installation of superconductor cables in power grids and electrical system hardware in wind turbines, in which we collaborate with other companies, including suppliers of cryogenic systems, manufacturers of electric power cables and manufacturers of wind turbines. As a result, most of our current and planned revenue-generating projects involve business collaborators on whose performance our revenue is dependent. If these business partners fail to deliver their products or perform their obligations on a timely basis or fail to generate sufficient demand for the systems they manufacture, our revenue from the project may be delayed or decreased, and we may not be successful in selling our products.

### ***Our products face intense competition, which could limit our ability to acquire or retain customers.***

The markets for our products are intensely competitive. Our AMSC Power Systems business unit faces competition from companies offering power electronic converters for use in applications for which we expect to sell our PowerModule products. These companies include ABB, Inverpower, SatCon, Semikron and Xantrex (a subsidiary of Schneider Electric).

We face competition from companies offering wind turbine electrical system components. These companies include ABB, Converteam, Ingeteam, Mita-Teknik, The Switch, Woodward Governor and Xantrex.

We face competition from other companies offering FACTS systems similar to our D-VAR and SVC solutions. These include SVCs from ABB, Alstrom, AREVA, Mitsubishi Electric and Siemens; adaptive VAR compensators and STATCOMs produced by S&C Electric; DVRs (dynamic voltage restorers) produced by companies such as ABB and S&C Electric; and flywheels and battery-based UPS systems offered by various companies around the world.

Our AMSC Windtec business faces competition for the supply of wind turbine engineering design services from design engineering firms, such as Garrad Hassan, and from licensors of wind turbine systems, such as Aerodyn, AventisEnergy and Fuhrlander. We also face indirect competition in the wind energy market from manufacturers of wind energy systems, such as Gamesa, General Electric, Suzlon and Vestas.

Our AMSC Superconductors business unit faces competition both from vendors of traditional wires made from materials such as copper and from companies who are developing HTS wires. We also face competition for our 344 superconductors from a number of companies in the U.S. and abroad who are developing 2G HTS wire technology. These include Innova, MetOx, Superconductor Technologies and Superpower (a subsidiary of Royal Philips Electronics) in the U.S.; Fujikura, Furukawa, Showa and Sumitomo in Japan; SuNAM in South Korea; and Bruker, evico GmbH, Nexans and Zenergy in Europe. We believe that the proprietary processes we have adopted will prove to be the best processes to provide not only high-performance wire, but also commercial quantities at the lowest

cost. Six companies – Evico GmbH Furukawa, Nexans, Showa, Sumitomo Electric and Zenergy Power – have been focusing their research programs more recently on the development of 2G HTS wire made by the same or similar processes we have chosen to utilize to manufacture 2G HTS wire.

We are developing a stand-alone FCL in collaboration with Siemens and Nexans. We also are developing Secure Super Grids technology, which incorporates fault-current-limiting capability in superconductor power

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cables. The industrial competition for stand-alone FCLs based on HTS includes Hypertech and SC Power (Zenergy Power) in the U.S.; Nexans and Rolls-Royce in Europe; Sumitomo Electric and Toshiba in Japan; Beijing Superconductor and Innopower in China; and Hyundai and LS Industrial Systems in Korea. Initial work on superconductor cables that incorporate fault current limiting characteristics was carried out several years ago by Bruker and Nexans using a different concept. The competition for stand-alone FCLs also includes non-HTS systems based on power electronics, including a system developed by Powell and Silicon Power. We believe we have a strong intellectual property position in Secure Super Grids technology and also a strong position on stand-alone FCLs in collaboration with Siemens.

Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we have. In addition, as the HTS wire, superconductor electric motors and generators, and power electronic systems markets develop, other large industrial companies may enter those fields and compete with us. If we are unable to compete successfully, it may harm our business, which in turn may limit our ability to acquire or retain customers.

***Our success is dependent upon attracting and retaining qualified personnel and our inability to do so could significantly damage our business and prospects.***

We have attracted a highly skilled management team and specialized workforce, including scientists, engineers, researchers, manufacturing, marketing and sales professionals. If we were to lose the services of any of our executive officers or key employees, our business could be materially and adversely impacted.

Finding and retaining good personnel for our business is challenging, and highly qualified technical personnel are likely to remain a limited resource for the foreseeable future despite current economic conditions and rising unemployment levels. We may not be able to hire the necessary personnel to implement our business strategy, or we may need to provide higher compensation or more training to our personnel than we currently anticipate. Moreover, any officer or employee can terminate his or her relationship with us at any time.

***We may acquire additional complementary businesses or technologies, which may require us to incur substantial costs for which we may never realize the anticipated benefits.***

We may in the future acquire complementary businesses or technologies. As a result of any acquisitions we pursue, management's attention and resources may be diverted from our other businesses. An acquisition may also involve a significant purchase price, which could reduce our cash position or dilute our stockholders, and significant transaction-related expenses.

Achieving the benefits of any acquisition involves additional risks, including:

difficulty assimilating acquired operations, technologies and personnel;

inability to retain management and other key personnel of the acquired business;

changes in management or other key personnel that may harm relationships with the acquired business's customers and employees;

unforeseen liabilities of the acquired business; and

diversion of management attention as a result of the integration process.

We cannot ensure that we will realize any of the anticipated benefits of any acquisition, and if we fail to realize these anticipated benefits, our operating performance could suffer.

***Our international operations are subject to risks that we do not face in the U.S., which could have an adverse effect on our operating results.***

We are expanding our sales and service operations in Europe and the Asia-Pacific region, including a new operation in China. We expect our revenue and operations outside the United States will continue to expand in the future. For fiscal years ended March 31, 2010, 2009 and 2008, a majority of our consolidated revenues were derived

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from customers outside of the United States. Our international operations are subject to a variety of risks that we do not face in the U.S., including:

difficulties in staffing and managing our foreign offices and the increased travel, infrastructure and legal compliance costs associated with multiple international locations;

potentially longer payment cycles for sales in foreign countries and difficulties in collecting accounts receivable;

additional withholding taxes or other taxes on our foreign income and repatriated cash, and tariffs or other restrictions on foreign trade or investment, including export duties and quotas, trade and employment restrictions;

imposition of, or unexpected adverse changes in, foreign laws or regulatory requirements;

increased exposure to foreign currency exchange rate risk;

reduced protection for intellectual property rights in some countries; and

political unrest, war or acts of terrorism.

Our overall success in international markets depends, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions. We may not be successful in developing and implementing policies and strategies that will be effective in managing these risks in each country where we do business or conduct operations. Our failure to manage these risks successfully could harm our international operations and reduce our international sales, thus adversely affecting our business, operating results and financial condition.

### **AMSC Power Systems Business Unit**

***We have limited experience manufacturing our Power Systems products in commercial quantities overseas.***

We currently produce our primary Power Systems products, including the PM3000, at our manufacturing facility in China. We do not have significant experience managing foreign manufacturing operations, and such operations are subject to complexities that we may not be able to adequately anticipate or manage. An inability to successfully manufacture our products at acceptable cost and quality through our China facility may affect our future revenue and profit.

***We rely upon third party suppliers for the components and subassemblies of many of our products, making us vulnerable to supply shortages and price fluctuations, which could harm our business.***

Many of the Power Systems components and subassemblies are currently manufactured for us by a limited number of suppliers. Any interruption in the supply of components or subassemblies, or our inability to obtain substitute components or subassemblies from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers, which would have an adverse effect on our business and operating results.

We are producing some Power Systems products in our manufacturing facility in China. In order to minimize costs and time to market, we have and will continue to identify local suppliers that meet our quality standards to produce certain of our subassemblies and components. These efforts may not be successful. In addition, any event which negatively impacts our supply, including, among others, wars, terrorist activities, natural disasters and outbreaks of



infectious disease, could delay or suspend shipments of products or the release of new products or could result in the delivery of inferior products. Our revenues from the affected products would decline or we could incur losses until such time as we are able to restore our production processes or put in place alternative contract manufacturers or suppliers. Even though we carry business interruption insurance policies, we may suffer losses as a result of business interruptions that exceed the coverage available under our insurance policies.

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***We are becoming increasingly reliant on contracts that require the issuance of performance bonds.***

While we have been required to provide performance bonds in the form of surety bonds or letters of credit in the past, the size of the bonds was not material. In recent years, we have entered into contracts that require us to post bonds of significant magnitude. In many instances, we are required to deposit cash in escrow accounts as collateral for these instruments, which is unavailable to us for general use for significant periods of time. Should we be unable to obtain performance bonds in the future, significant future potential revenue could become unavailable to us. Further, should our working capital situation deteriorate, we would not be able to access the escrowed cash to meet working capital requirements.

***Problems with product quality or product performance may cause us to incur warranty expenses and may damage our market reputation and prevent us from achieving increased sales and market share.***

Consistent with customary practice in our industry, we warrant our products and/or services to be free from defects in material and workmanship under normal use and service. Warranties are generally for a duration of twelve months from the date the products and/or services are put into service or 18 months from the date of delivery, whichever occurs first. In some cases, the warranty can be extended to twenty four months from date of delivery and thirty six months from in-service activation. In rare cases warranties can be for as long as five years. The possibility of future product failures could cause us to incur substantial expenses to repair or replace defective products. Furthermore, widespread product failures may damage our market reputation and reduce our market share and cause sales to decline.

***Our success in addressing the wind energy market is dependent on the manufacturers that license our designs.***

Because an important element of our strategy for addressing the wind energy market involves the license of our wind turbine designs to manufacturers of those systems, the financial benefits to us from our products for the wind energy market are dependent on the success of these manufacturers in selling wind turbines based on our designs. We may not be able to enter into marketing or distribution arrangements with third parties on financially acceptable terms, and third parties may not be successful in selling our products or applications incorporating our products.

***Growth of the wind energy market depends largely on the availability and size of government subsidies and economic incentives.***

At present, the cost of wind energy exceeds the cost of conventional power generation in many locations around the world. Various governments have used different policy initiatives to encourage or accelerate the development and adoption of wind energy and other renewable energy sources. Renewable energy policies are in place in the European Union, most notably Germany and Spain, certain countries in Asia, including China, Japan and South Korea, and many of the states in Australia and the United States. Examples of government sponsored financial incentives include capital cost rebates, feed-in tariffs, tax credits, net metering and other incentives to end-users, distributors, system integrators and manufacturers of wind energy products to promote the use of wind energy and to reduce dependency on other forms of energy. Governments may decide to reduce or eliminate these economic incentives for political, financial or other reasons. Reductions in, or eliminations of, government subsidies and economic incentives before the wind energy industry reaches a sufficient scale to be cost-effective in a non-subsidized marketplace could reduce demand for our products and adversely affect our business prospects and results of operations.

**AMSC Superconductors Business Unit**

***There are a number of technological challenges that must be successfully addressed before our superconductor products can gain widespread commercial acceptance, and our inability to address such technological challenges***

*could adversely affect our ability to acquire customers for our products.*

Many of our superconductor products are in the early stages of commercialization, while others are still under development. There are a number of technological challenges that we must successfully address to complete our development and commercialization efforts for superconductor products. We also believe that several years of

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further demonstration in the cable, fault current limiter and motor industries may be necessary before a substantial commercial market could develop. We will also need to improve the performance and reduce the cost of our HTS wire to expand the number of commercial applications for it. We may be unable to meet such technological challenges or to sufficiently improve the performance and reduce the costs of our HTS wire. Delays in development, as a result of technological challenges or other factors, may result in the introduction or commercial acceptance of our superconductor products later than anticipated.

***We have not manufactured our 344 superconductors in commercial quantities, and a failure to manufacture our 344 superconductors in commercial quantities at acceptable cost and quality levels would substantially limit our future revenue and profit potential.***

We are developing commercial-scale manufacturing processes for our 344 superconductors, which are very different from our 1G HTS wire manufacturing processes and are complex and challenging. In November 2007, we started initial production of our 344 superconductors on a new manufacturing line that was designed for an annual capacity of 720,000 meters. However, in order to be able to offer our wire at pricing that we believe will be commercially competitive, we estimate that we will need to develop the capacity to millions of meters of our 344 superconductors annually. We may not be able to manufacture satisfactory commercial quantities of 344 superconductors of consistent quality with an acceptable yield and cost. Failure to successfully scale up manufacturing of our 344 superconductors would result in a significant limitation of the broad market acceptance of our HTS products and of our future revenue and profit potential.

***The commercial uses of superconductor products are limited today, and a widespread commercial market for our products may not develop.***

To date, there has been no widespread commercial use of HTS products. Even if the technological hurdles currently limiting commercial uses of HTS products are overcome, it is uncertain whether a robust commercial market for those new and unproven products will ever develop. To date, many projects to install superconductor cables and products in power grids have been funded or subsidized by the governmental authorities. If this funding is curtailed, grid operators may not continue to utilize superconductor cables and products in their projects.

In addition, we believe in-grid demonstrations of superconductor power cables are necessary to convince utilities and power grid operators of the benefits of this technology. Even if a project is funded, completion of projects can be delayed as a result of other factors. For example, a delay in the completion of project Hydra, which involves the development and deployment of our Secure Super Grids technology in Manhattan, occurred due to a delay in construction by Consolidated Edison of a substation the cable system would be connected to.

It is possible that the market demands we currently anticipate for our HTS products will not develop and that they will never achieve widespread commercial acceptance.

***We have limited experience in marketing and selling our superconductor products and system-level solutions, and our failure to effectively market and sell our products and solutions could adversely affect our revenue and cash flow.***

To date, we have limited experience marketing and selling our superconductor products and system-level solutions, and there are few people who have significant experience marketing or selling superconductor products and system-level solutions. Once our products and solutions are ready for widespread commercial use, we will have to develop a marketing and sales organization that will effectively demonstrate the advantages of our products over both more traditional products and competing superconductor products or other technologies. We may not be successful in our efforts to market this new technology, and we may not be able to establish an effective sales and distribution

organization.

We may decide to enter into arrangements with third parties for the marketing or distribution of our products, including arrangements in which our products, such as HTS wire, are included as a component of a larger product, such as a power cable system or a motor. By entering into marketing and sales alliances, the financial benefits to us of commercializing our products are dependent on the efforts of others.

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***Our contracts with the U.S. government are subject to audit, modification or termination by the U.S. government, include certain other provisions in favor of the government, and the continued funding of such contracts remains subject to annual congressional appropriation which, if not approved, could adversely affect our results of operations and financial condition.***

As a company that contracts with the U.S. government, we are subject to financial audits and other reviews by the U.S. government of our costs and performance, accounting and general business practices relating to these contracts. Based on the results of these audits, the U.S. government may adjust our contract-related costs and fees. We cannot be certain that adjustments arising from government audits and reviews would not have a material adverse effect on our results of operations.

Our U.S. government contracts customarily contain other provisions that give the government substantial rights and remedies, many of which are not typically found in commercial contracts, including provisions that allow the government to:

obtain certain rights to the intellectual property that we develop under the contract;

decline to award future contracts if actual or apparent organizational conflicts of interest are discovered, or to impose organizational conflict mitigation measures as a condition of eligibility for an award;

suspend or debar the contractor from doing business with the government or a specific government agency; and

pursue criminal or civil remedies under the False Claims Act, False Statements Act and similar remedy provisions unique to government contracting.

All of our U.S. government contracts can be terminated by the U.S. government for its convenience. Termination-for-convenience provisions provide only for our recovery of costs incurred or committed, and for settlement of expenses and profit on work completed prior to termination. In addition to the right of the U.S. government to terminate its contracts with us, U.S. government contracts are conditioned upon the continuing approval by Congress of the necessary spending to honor such contracts. Congress often appropriates funds for a program on a fiscal-year basis even though contract performance may take more than one year. Consequently, at the beginning of many major governmental programs, contracts often may not be fully funded, and additional monies are then committed to the contract only if, as and when appropriations are made by Congress for future fiscal years. We cannot be certain that our U.S. government contracts will not be terminated or suspended in the future. The U.S. government's termination of, or failure to fully fund, one or more of our contracts would have a negative impact on our operating results and financial condition. Further, in the event that any of our government contracts are terminated for cause, it could affect our ability to obtain future government contracts which could, in turn, seriously harm our ability to develop our technologies and products.

### **III. Risks related to our intellectual property and legal matters.**

***Our technology and products could infringe intellectual property rights of others, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages and disrupt our business.***

In recent years, there has been significant litigation involving patents and other intellectual property rights in many technology-related industries. There may be patents or patent applications in the United States or other countries that are pertinent to our products or business of which we are not aware. The technology that we incorporate into and use to develop and manufacture our current and future products may be subject to claims that they infringe the patents or proprietary rights of others. The success of our business will also depend on our ability to develop new technologies

without infringing or misappropriating the proprietary rights of others. Third parties may allege that we infringe patents, trademarks or copyrights, or that we misappropriated trade secrets. These allegations could result in significant costs and diversion of the attention of management. If a successful claim were brought against us and we are found to infringe a third party's intellectual property rights, we could be required to pay substantial damages, including treble damages if it is determined that we have willfully infringed such rights, or be enjoined from using the technology deemed to be infringing or using, making or selling products deemed to be

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infringing. If we have supplied infringing products or technology to third parties, we may be obligated to indemnify these third parties for damages they may be required to pay to the patent holder and for any losses they may sustain as a result of the infringement. In addition, we may need to attempt to license the intellectual property right from such third party or spend time and money to design around or avoid the intellectual property. Any such license may not be available on reasonable terms, or at all. An adverse determination may subject us to significant liabilities and/or disrupt our business.

***Our patents may not provide meaningful protection for our technology, which could result in us losing some or all of our market position.***

We own or have licensing rights under many patents and pending patent applications. However, the patents that we own or license may not provide us with meaningful protection of our technologies and may not prevent our competitors from using similar technologies, for a variety of reasons, such as:

the patent applications that we or our licensors file may not result in patents being issued;

any patents issued may be challenged by third parties; and

others may independently develop similar technologies not protected by our patents or design around the patented aspects of any technologies we develop.

Moreover, we could incur substantial litigation costs in defending the validity of or enforcing our own patents. We also rely on trade secrets and proprietary know-how to protect our intellectual property. However, our non-disclosure agreements and other safeguards may not provide meaningful protection for our trade secrets and other proprietary information. If the patents that we own or license or our trade secrets and proprietary know-how fail to protect our technologies, our market position may be adversely affected.

***Third parties have or may acquire patents that cover the materials, processes and technologies we use or may use in the future to manufacture our HTS products, and our success depends on our ability to license such patents or other proprietary rights.***

We expect that some or all of the HTS materials, processes and technologies we use in designing and manufacturing our products are or will become covered by patents issued to other parties, including our competitors. The owners of these patents may refuse to grant licenses to us, or may be willing to do so only on terms that we find commercially unreasonable. If we are unable to obtain these licenses, we may have to contest the validity or scope of those patents or re-engineer our products to avoid infringement claims by the owners of these patents. It is possible that we will not be successful in contesting the validity or scope of a patent, or that we will not prevail in a patent infringement claim brought against us. Even if we are successful in such a proceeding, we could incur substantial costs and diversion of management resources in prosecuting or defending such a proceeding.

## **Item 1B. UNRESOLVED STAFF COMMENTS**

Not applicable.

## **Item 2. PROPERTIES**

Our corporate headquarters and HTS wire manufacturing operations are located in a 355,000-square-foot facility owned by us and located in Devens, Massachusetts. In December 2007, we completed the relocation of our corporate personnel and headquarters to this facility from leased space located in Westborough, Massachusetts.



Our AMSC Power Systems business unit operates out of leased facilities located in Middleton and New Berlin, Wisconsin; West Mifflin, Pennsylvania; Suzhou, China; and Klagenfurt, Austria with a combined total of approximately 326,000 square feet of space. The Middleton, Wisconsin facility comprises approximately 52,000 square feet of space in two buildings with leases expiring on December 31, 2010. The New Berlin, Wisconsin facility comprises approximately 50,000 square feet of space under a lease that expires on September 30, 2011. We operate at two West Mifflin, Pennsylvania facilities including approximately 17,000 square feet of space under a lease that expires on December 31, 2010 and a second lease of approximately 19,000 square feet under a

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lease that expires on May 31, 2010. Our Suzhou, China facility comprises approximately 60,000 square feet of space under a lease that expires on July 31, 2010 and an additional 56,000 square feet of space under a lease that expires on October 19, 2012. We operate our AMSC Windtec subsidiary out of approximately 72,000 square feet in four leased facilities in Klagenfurt, Austria. These leases can be terminated at our request after a six month advance notice. In May 2010, we consolidated operations of two of the leased facilities in Klagenfurt, Austria equating to approximately 11,000 square feet and took possession of approximately 30,000 square feet of another leased facility in Klagenfurt.

**Item 3. *LEGAL PROCEEDINGS***

We are not currently involved in any legal proceedings other than routine litigation or related proceedings incidental to our business which we do not consider material.

**Item 4. *[Removed and Reserved]***

**Table of Contents****PART II****Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Information**

Our common stock has been quoted on the NASDAQ Global Market under the symbol AMSC since 1991. The following table sets forth the high and low price per share of our common stock as reported on the NASDAQ Global Market for the two most recent fiscal years:

	<b>Common Stock Price</b>	
	<b>High</b>	<b>Low</b>
<b>Fiscal year ended March 31, 2009:</b>		
First quarter	\$ 47.53	\$ 23.03
Second quarter	40.00	15.94
Third quarter	24.16	8.22
Fourth quarter	19.58	11.66
<b>Fiscal year ended March 31, 2010:</b>		
First quarter	30.25	16.99
Second quarter	37.58	21.31
Third quarter	43.41	28.76
Fourth quarter	43.95	25.13

**Holders**

The number of shareholders of record on May 21, 2010 was 460.

**Dividend Policy**

We have never paid cash dividends on our common stock. We currently intend to retain earnings, if any, to fund the development and growth of our business and do not anticipate paying cash dividends for the foreseeable future.

Payment of future cash dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion.

**Securities Authorized for Issuance Under Our Equity Compensation Plans**

The following table provides information about the securities authorized for issuance under our equity compensation plans as of March 31, 2010.

**Number of Securities  
Remaining Available**

<b>Plan Category</b>	<b>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</b>	<b>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights</b>	<b>for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))</b>
Equity compensation plans approved by security holders	2,714,916	\$ 21.15	4,692,888(1)
Equity compensation plans not approved by security holders	1,000(2)	28.75	
<b>Total</b>	<b>2,715,916</b>	<b>\$ 21.15</b>	<b>4,692,888</b>

(1) In addition to being available for future issuance upon exercise of options that may be granted after March 31, 2010, 4,144,908 shares available for issuance under our 2007 Stock Incentive Plan may instead be issued in the form of restricted stock, unrestricted stock, stock appreciation rights, performance shares or other equity-based awards. Additionally, 244,000 shares are available under the 2007 Director Stock Option Plan and 303,980 shares available under the employee stock purchase plan on March 31, 2010.

(2) Represents 1,000 shares subject to outstanding non-qualified stock options granted to the former employees of Integrated Electronics, LLC ( IE ) in connection with our purchase of substantially all the assets of IE in June 2000.

**Table of Contents****Item 6. *SELECTED FINANCIAL DATA***

The following selected financial data reflects the results of operations and balance sheet data for the fiscal years ended March 31, 2006 to 2010. The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Consolidated Financial Statements and notes thereto included in Item 8, Financial Statements and Supplementary Data, of this Form 10-K, in order to understand further the factors that may affect the comparability of the financial data presented below.

	<b>2010</b>	<b>Fiscal Year Ended March 31,</b>				<b>2006</b>
		<b>2009</b>	<b>2008</b>	<b>2007</b>		
		<b>(In thousands, except per share data)</b>				
Revenues	\$ 315,955	\$ 182,755	\$ 112,396	\$ 52,183	\$ 50,872	
Net income (loss)	16,248	(16,635)	(25,447)	(34,675)	(30,876)	
Net income (loss) per common share - basic	0.37	(0.39)	(0.65)	(1.04)	(0.94)	
Net income (loss) per common share - diluted	0.36	(0.39)	(0.65)	(1.04)	(0.94)	
Total assets	400,184	309,106	261,234	132,433	133,470	
Working capital	158,705	131,187	124,334	34,942	66,220	
Cash, cash equivalents, short and long-term marketable securities and restricted cash	155,118	117,207	119,404	35,324	65,669	
Stockholders' equity	280,965	221,861	208,452	101,621	115,100	

Included in fiscal year ended March 31, 2010 net income was \$13.5 million in employee stock-based compensation expense and a \$0.5 million charge primarily for restructuring related to our decision to consolidate our Massachusetts operations into one facility in Devens, Massachusetts. Fiscal year ended March 31, 2009 net loss included \$9.7 million in employee stock-based compensation expense and a \$1.0 million charge primarily for restructuring related to our decision to consolidate our Massachusetts operations into one facility in Devens, Massachusetts. Fiscal year ended March 31, 2008 net loss included \$5.7 million in employee stock-based compensation expense, a \$6.7 million charge primarily for restructuring related to our decision to consolidate our Massachusetts operations into one facility in Devens, Massachusetts, and \$0.8 million for long-lived asset impairments. Fiscal year ended March 31, 2007 net loss included a \$3.7 million in employee stock-based compensation expense and a \$0.7 million charge for restructuring and long-lived asset impairments related to our decision to re-align the AMSC Wires and AMSC SuperMachines business units into the newly formed AMSC Superconductors business unit.

On January 5, 2007, we completed the acquisition of Windtec Consulting GmbH (Windtec). Windtec is an Austria-based designer and licensor of wind energy systems. Windtec is now a wholly-owned subsidiary and is operated by our AMSC Power Systems business unit. The Windtec purchase price was 1.3 million shares of our common stock, valued at approximately \$13.1 million based on a five-day average stock price of \$10.08 per share at the time of signing the definitive acquisition agreements and public announcement of the acquisition on November 28, 2006. The all-stock transaction also included an earn-out opportunity with the potential for the issuance of up to an additional 1.4 million shares of our common stock to be granted to the former owner and founder based on the achievement by Windtec of certain revenue growth targets for fiscal 2007 through 2010. As of March 31, 2010, an additional 1,050,000 shares were earned based on achieving the revenue growth targets for fiscal years 2007, 2008 and 2009. These shares were valued at approximately \$28.7 million, and were recorded to goodwill. Beginning on

January 5, 2007, Windtec's results of operations are included in our consolidated financial statements.

On April 27, 2007, we acquired Power Quality Systems, Inc. (PQS), a Pennsylvania corporation. Pursuant to the merger agreement, we acquired all of the issued and outstanding shares of PQS, for which we issued 295,329 shares of our common stock. We valued the acquisition at approximately \$4.3 million (excluding acquisition costs) using a value of \$14.73 per share, which represents the five-day average closing price of the common stock from the two trading days before through two trading days after the signing of the merger agreement and the public announcement of the acquisition. The all-stock transaction also included an earn-out opportunity

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with the potential for up to an additional 475,000 shares of our common stock to be issued to PQS's former owners based on the achievement of certain order growth targets for existing PQS products for fiscal 2007 and 2008. As of March 31, 2009, an additional 150,000 shares were earned based on achieving the order growth targets for fiscal 2007 and fiscal 2008. These shares were valued at approximately \$3.0 million, and were recorded to goodwill. As a result of this transaction, PQS is operated by AMSC Power Systems. The results of PQS's operations are included in our consolidated results from the date of acquisition of April 27, 2007.

The impact of the above mentioned acquisitions is discussed further in Note 15 to the Consolidated Financial Statements included in Item 8 herein.

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**Item 7. *MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS***

**Executive Overview**

American Superconductor Corporation was founded in 1987. We offer an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. Our company is a leader in alternative energy, providing proven, megawatt-scale wind turbine designs and electrical control systems for wind turbines. We also offer a host of Smart Grid technologies for power grid operators that enhance the reliability, efficiency and capacity of the grid, and seamlessly integrate renewable energy sources into the power infrastructure. These technologies include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems. Our technologies are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide.

Our company manufactures products utilizing two primary, proprietary technologies: programmable power electronic converters and high temperature superconductor (HTS) wires. The programmability and scalability of our power electronic converters differentiates them from most competitive offerings. Our power electronic converters increase the quantity, quality and reliability of electric power that is produced by a renewable source, such as wind, transmitted by electric utilities or consumed by large industrial entities. Our HTS wire can carry 150 times the electric current of comparatively sized copper wire and therefore increases the electric current carrying capacity of the transmission cables comprising these power grids and provides current limiting functionality in cables and stand-alone devices. In addition, our HTS wire, when incorporated into primary electrical equipment such as motors and generators, can provide increased manufacturing and operating savings due to a significant reduction in the size and weight of this equipment.

Our products are in varying stages of commercialization. Thousands of our power electronic converters have been sold commercially, as part of integrated systems, primarily to electric utilities, wind turbine manufacturers and wind farm developers, owners and operators, since 1999. We started production of 344 superconductors, our brand name for 2G HTS wire, in November 2007. The principal applications for HTS wire (power cables, fault current limiters, rotating machines and specialty magnets) are currently in the prototype stage. Some of these prototypes are funded by U.S. government contracts, primarily with the Department of Defense ( DOD ), Department of Energy ( DOE ) and the Department of Homeland Security ( DHS ).

Our fiscal year begins on April 1 and ends on March 31. When we refer to a particular fiscal year, we are referring to the fiscal year ending on March 31 of the following year. For example, fiscal 2009 refers to the fiscal year ending March 31, 2010. Other fiscal years follow similarly.

Our cash requirements depend on numerous factors, including successful completion of our product development activities, ability to commercialize our product prototypes, rate of customer and market adoption of our products and the continued availability of U.S. government funding during the product development phase. Significant deviations to our business plan with regard to these factors, which are important drivers to our business, could have a material adverse effect on our operating performance, financial condition, and future business prospects. We expect to pursue the expansion of our operations through internal growth and potential strategic alliances and acquisitions.

**Critical Accounting Policies and Estimates**

The preparation of consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under



the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ under different assumptions or conditions. Our accounting policies that involve the most significant judgments and estimates are as follows:

Revenue;

Impairment of long-lived assets;

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Inventory;

Income taxes;

Goodwill;

Acquisition accounting; and

Stock-based compensation.

*Revenue.* For certain arrangements, such as prototype development contracts and certain product sales, we record revenues using the percentage-of-completion method, measured by the relationship of costs incurred to total estimated contract costs. Percentage-of-completion revenue recognition accounting is predominantly used on certain turnkey power systems installations for electric utilities and long-term prototype development contracts with the U.S. government. We follow this method since reasonably dependable estimates of the revenues and costs applicable to various stages of a contract can be made. However, the ability to reliably estimate total costs at completion is challenging, especially on long-term prototype development contracts, and could result in future changes in contract estimates. For contracts where reasonably dependable estimates of the revenues and costs cannot be made, we follow the completed-contract method.

We recognize revenue for other product sales upon customer acceptance, which can occur at the time of delivery, installation, or post-installation, where applicable, provided persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collectability is reasonably assured. For multiple-element arrangements, we use the residual method to allocate value to the delivered item. Under the residual method, each undelivered item is allocated value based on verifiable objective evidence of fair value for that item and the remainder of the total arrangement price is allocated to the delivered items. For a delivered item to be considered a separate unit of accounting, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered items must be considered probable and substantially within our control. We do not provide our customers with contractual rights of return for any of our products. When other significant obligations remain after products are delivered for which verifiable evidence cannot be established, revenue is recognized only after such obligations are fulfilled. The determination of what constitutes a significant post-delivery performance obligation (if any post-delivery performance obligations exist) is the primary subjective consideration we systemically evaluate in the context of each product shipment in order to determine whether to recognize revenue on the order or to defer the revenue until all post-delivery performance obligations have been completed.

We occasionally enter into construction contracts that include a performance bond. As these contracts progress, we continually assess the probability of a payout from the performance bond. Should we determine that such a payout is likely, we would record a liability and reduce revenue to the extent a liability is recorded.

We enter into certain arrangements to license our technologies and to provide training services. We have determined that the license has no stand alone value to the customer and is not separable from the training. Accordingly, we account for these arrangements as a single unit of accounting, following the revenue recognition pattern of the last deliverable of the arrangement and recognize revenue over the period of our performance and milestones that have been achieved. Costs for these arrangements are expensed as incurred.

We have elected to record taxes collected from customers on a net basis and do not include tax amounts in Revenue or Costs of revenue.

Customer deposits received in advance of revenue recognition are recorded as deferred revenue until customer acceptance is received. Deferred revenue also represents the amount billed to and/or collected from commercial and government customers on contracts which permit billings to occur in advance of contract performance/revenue recognition.

*Impairment of long-lived assets.* We periodically evaluate our long-lived assets consisting principally of fixed and intangible assets for potential impairment. We perform these evaluations whenever events or circumstances suggest that the carrying amount of an asset or group of assets is not recoverable. Our judgments regarding

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the existence of impairment indicators are based on market and operational performance. Indicators of potential impairment include:

a significant change in the manner in which an asset is used;

a significant decrease in the market value of an asset;

a significant adverse change in its business or the industry in which it is sold;

a current period operating cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the asset; and

significant advances in our technologies that require changes in our manufacturing process.

We test for potential impairment if we believe an indicator of potential impairment exists. To analyze a potential impairment, we project undiscounted future cash flows expected to result from the use and eventual disposition of the asset or primary asset in the asset group over its remaining useful life. If these projected cash flows are less than the carrying amount, an impairment loss is recognized in the Consolidated Statements of Operations based on the difference between the carrying value of the asset or asset group and its fair value, less any disposition costs. Evaluating the impairment requires judgment by our management to estimate future operating results and cash flows. If different estimates were used, the amount and timing of asset impairments could be affected.

*Inventory.* We write down inventory for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of the inventory and the estimated realizable value based upon assumptions of future demand and market conditions. If actual market conditions are less favorable than those projected, additional inventory write-downs may be required. Program costs may be deferred and recorded as inventory on contracts on which costs are incurred in excess of approved contractual amounts and/or funding, if future recovery of the costs is deemed probable.

*Income taxes.* Our provision for income taxes is composed of a current and a deferred portion. The current income tax provision is calculated as the estimated taxes payable or refundable on tax returns for the current year. The deferred income tax provision is calculated for the estimated future tax effects attributable to temporary differences and carryforwards using expected tax rates in effect in the years during which the differences are expected to reverse.

We regularly assess our ability to realize our deferred tax assets. Assessments of the realization of deferred tax assets require that management consider all available evidence, both positive and negative, make significant judgments about many factors, including the amount and likelihood of future taxable income. Based on all the available evidence, we have recorded a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realizable due to the taxable losses incurred by us since our inception.

Accounting for income taxes requires a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if, based on the technical merits, it is more likely than not that the position will be sustained upon audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. We reevaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit and new audit activity. Any changes in these factors could result in the recognition of a tax benefit or an additional charge to the tax provision. We include interest and penalties related to gross unrecognized tax benefits within its provision for income taxes.

See Note 10 of our consolidated financial statements for further information regarding our income tax assumptions and expenses.

*Goodwill.* Goodwill represents the excess of cost over net assets of acquired businesses that are consolidated. Goodwill is not amortized. We perform an impairment review of our goodwill at least annually in our fourth quarter or when events and changes in circumstances indicate the need for such a detailed impairment analysis. Goodwill is considered impaired when the carrying value of a reporting unit exceeds its estimated fair value. In assessing the recoverability of goodwill, we make assumptions regarding estimated future cash flows and other factors to

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determine the fair value of the reporting unit. To date, we have determined that goodwill is not impaired, but we could in the future determine that goodwill is impaired, which would result in a charge to earnings.

*Acquisition accounting.* Acquisitions completed prior to January 1, 2009 were accounted for using the purchase method per generally accepted accounting principles. Future acquisitions will be accounted for under the acquisition method. Under the purchase method, contingent consideration is recorded as goodwill only in the period in which the consideration is earned. Under the acquisition method we are required to estimate the fair value of contingent consideration as an assumed liability on the acquisition date by estimating the amount of the consideration and probability of the contingencies being met. This estimate is recorded as goodwill on the acquisition date and its value is assessed at each reporting date. Any subsequent change to the estimated fair value is reflected in earnings and not in goodwill. Under the purchase method we were able to record transaction costs related to the completion of the acquisition as goodwill. Under the acquisition method we are required to expense these costs as they are incurred.

*Stock-based compensation.* We measure compensation cost arising from the grant of share-based payments to employees at fair value and recognize such cost over the period during which the employee is required to provide service in exchange for the award, usually the vesting period. Total stock-based compensation expense recognized during the fiscal years ended March 31, 2010, 2009 and 2008 was \$13.5 million, \$9.7 million and \$5.7 million, respectively, and is reflected in our unallocated corporate expenses. For awards with service conditions only, we recognize compensation cost on a straight-line basis over the requisite service/vesting period. For awards with service and performance conditions, we recognize compensation costs on an accelerated basis over the requisite service/vesting period. We use the lattice model to value market condition awards. For awards with market conditions with a single cliff vest feature, we recognize compensation costs on a straight-line basis over the requisite service period.

Determining the appropriate fair value model and calculating the fair value of share-based payment awards requires the input of highly subjective assumptions, including the expected life of the share-based payment awards and stock price volatility. Management determined that expected volatility rates should be estimated based on historical and implied volatilities of our common stock. The expected term represents the average time that the options that vest are expected to be outstanding based on the vesting provisions and our historical exercise, cancellation and expiration patterns. The assumptions used in calculating the fair value of share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if circumstances change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate an expected forfeiture rate and only recognize expense for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period.

See Note 11 of our consolidated financial statements for further information regarding our stock-based compensation assumptions and expenses.

## **Results of Operations**

We operate and report our financial results to the Chief Executive Officer in two reportable business segments: AMSC Power Systems and AMSC Superconductors.

AMSC Power Systems business unit produces a broad range of products to increase electrical grid capacity and reliability; supplies electrical systems used in wind turbines; sells power electronic products that regulate wind farm voltage to enable their interconnection to the power grid; licenses proprietary wind turbine designs to manufacturers of such systems; provides consulting services to the wind industry; and offers products that enhance power quality for

industrial operations.

AMSC Superconductors business unit manufactures HTS wire and coils; designs and develops superconductor products, such as power cables, fault current limiters and motors; and manages large-scale superconductor projects.

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Total revenues increased by 73% to \$316.0 million in fiscal 2009, from \$182.8 million for fiscal 2008. Our revenues are summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
AMSC Power Systems	\$ 304,276	\$ 168,008
AMSC Superconductors	11,679	14,747
Total	\$ 315,955	\$ 182,755

Revenues in our AMSC Power Systems business unit consist of revenues from wind turbine electrical systems and core components, wind turbine license and development contracts as well as D-VAR, D-VAR RT, SVC, and PowerModule product sales, service contracts, and consulting arrangements. We also engineer, install and commission our products on a turnkey basis for some customers. Our Power Systems business unit accounted for 96% and 92% of total revenues for fiscal 2009 and 2008, respectively. Revenues in the Power Systems business unit increased 81% to \$304.3 million in fiscal 2009 from \$168.0 million in fiscal 2008. The increases in AMSC Power Systems business unit revenues were primarily due to higher sales of wind turbine electrical systems and core components, primarily to customers in China, higher D-VAR system shipments, as well as shipments of our D-VAR RT product to ACCIONA Energy in Spain. Changes in foreign exchange rates from fiscal 2008 to fiscal 2009 had a de minimis effect on revenue in fiscal 2009.

A substantial portion of our revenues are derived from one customer, Sinovel Wind Co., Ltd., a manufacturer of wind energy systems based in China. Sales to Sinovel represented 70% and 67% of our total revenues for fiscal 2009 and 2008, respectively.

Revenues in our AMSC Superconductors business unit consist of contract revenues, HTS wire sales, revenues under government-sponsored electric utility projects, and other prototype development contracts. AMSC Superconductors business unit revenue is primarily recorded using the percentage-of-completion method. AMSC Superconductors accounted for 4% and 8% revenues for fiscal 2009 and 2008, respectively. AMSC Superconductors revenue decreased 21% to \$11.7 million in fiscal 2009 from \$14.7 million in fiscal 2008. Revenues from significant AMSC Superconductors government funded contract revenues are summarized as follows (in thousands):

<b>Project Name</b>	<b>Expected Total Contract Value</b>	<b>Revenue Earned through March 31, 2010</b>	<b>Revenue Earned for the Fiscal Years Ended March 31,</b>	
			<b>2010</b>	<b>2009</b>
HYDRA	\$ 24,908	\$ 9,573	\$ 1,721	\$ 4,207
LIPA I and II	40,141	34,351	3,616	2,934
DOE-FCL	7,898	4,406	1,403	2,080



NAVSEA Motor Study	6,511	6,212	332	2,940
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These significant projects represented 61% and 82% of AMSC Superconductors revenue for fiscal 2009 and 2008, respectively.

The decrease in AMSC Superconductors business unit revenue for the fiscal year ended March 31, 2010 was driven primarily by lower HYDRA project revenues due to delays in project milestones and the completion of the NAVSEA Motor Study. We recognize superconductor cable project revenues from the Project HYDRA contract with Consolidated Edison, Inc. ( ConEdison ), which is being funded by DHS. DHS is expected to invest up to a total of \$24.9 million in the development of a new high temperature superconductor power grid technology to enable Secure Super Grids. Secure Super Grids utilize customized HTS wires, superconductor power cables and ancillary controls to deliver more power through the grid while also being able to suppress power surges that can disrupt service. Of the total \$24.9 million in funding expected from DHS, it has committed funding of \$12.6 million

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to us as of March 31, 2010. We recognized \$1.7 million in revenue related to the Project HYDRA during fiscal 2009, compared to \$4.2 million in fiscal 2008. ConEdison and Southwire Company are subcontractors to us on this project. On April 1, 2010, we received a modification to the contract that re-aligns the project funding to correlate with our current project plans to do further development and testing until parties can evaluate future in-grid cable demonstration options.

LIPA I, completed in the first quarter of fiscal 2009, was a project to install an HTS power cable system at transmission voltage using our first generation HTS wire for the Long Island Power Authority. LIPA II is a project to install an HTS power cable utilizing our second generation HTS wire for the Long Island Power Authority. DOE-FCL is a project to develop and demonstrate a transmission voltage SuperLimiter fault current limiter ( FCL ). The NAVSEA Motor Study is a project designed to test the 36.5 MW superconductor motor developed for the U.S. Navy.

### ***Cost-sharing funding***

In addition to reported revenues, we also received funding of \$1.8 million for fiscal 2009 under U.S. government cost-sharing agreements with the U.S. Air Force and DOE, compared to \$2.1 million for fiscal 2008. The decrease in cost-sharing funding is primarily due to programs nearing completion. All of our cost-sharing agreements provide funding in support of development work on 344 superconductors being done in our AMSC Superconductors business unit. We anticipate that a portion of our funding in the future will continue to come from cost-sharing agreements as we execute joint programs with government agencies. Funding from government cost-sharing agreements is recorded as an offset to research and development ( R&D ) and selling, general and administrative ( SG&A ) expenses, rather than as revenue. As of March 31, 2010, we anticipate recognizing an additional \$0.3 million offset to R&D and SG&A expenses related to these cost-sharing agreements over the next year.

### ***Cost of Revenues and Gross Margin***

Cost of revenues increased by 54% to \$201.0 million for fiscal 2009, compared to \$130.9 million for fiscal 2008. Gross margin was 36.4% for fiscal 2009, compared to 28.4% for fiscal 2008. The increases in gross margin in fiscal 2009 as compared to fiscal 2008 was due primarily to a shift in mix towards higher margin wind turbine core electrical component shipments and material cost reductions, primarily resulting from the localization of component supply in China for our power electronic converters which are now manufactured there.

During the fourth quarter of the fiscal year ended March 31, 2010, we adjusted our Cost of revenues by \$0.7 million for an understatement of Cost of revenues of \$0.4 million and \$0.3 million, net of tax, in the second and third quarters, respectively. The adjustment had no impact to the full year results for the year ended March 31, 2010. We evaluated this adjustment taking into account both qualitative and quantitative factors and considered the impact of this adjustment in relation to the fourth quarter of the fiscal year ended March 31, 2010. Management believes this adjustment is immaterial to both the consolidated quarterly and annual financial statements for all periods affected.

### ***Operating Expenses***

#### ***Research and development***

A portion of our R&D expenditures related to externally funded development contracts has been classified as cost of revenues (rather than as R&D expenses). Additionally, a portion of R&D expenses was offset by cost-sharing funding. Our R&D expenditures are summarized as follows (in thousands):

**Fiscal Years Ended**

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
R&D expenses per Consolidated Statements of Operations	\$ 23,593	\$ 19,675
R&D expenditures reclassified as cost of revenues	14,869	18,720
R&D expenditures offset by cost-sharing funding	971	1,129
Aggregated R&D expenses	\$ 39,433	\$ 39,524

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R&D expenses (exclusive of amounts classified as cost of revenues and amounts offset by cost-sharing funding) increased by 20% to \$23.6 million, or 7% of revenue, for fiscal 2009 from \$19.7 million, or 11% of revenue, for fiscal 2008. The increase in R&D expenses was driven primarily by increased headcount and related labor spending, as well as added material and overhead spending to support new product development in our Power Systems business unit. The decrease in R&D expenditures reclassified to cost of revenues was a result of decreased efforts under our government funded contracts in our AMSC Superconductors business unit compared to the prior year periods. Aggregated R&D expenses, which include amounts classified as cost of revenues and amounts offset by cost-sharing funding, remained flat at \$39.4 million or 12% of revenue, for fiscal 2009, compared to \$39.5 million, or 22% of revenue, for fiscal 2008.

***Selling, general, and administrative***

A portion of the SG&A expenditures related to externally funded development contracts has been classified as cost of revenues (rather than as SG&A expenses). Additionally, a portion of SG&A expenses was offset by cost-sharing funding. Our SG&A expenditures are summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
SG&A expenses per Consolidated Statements of Operations	\$ 50,446	\$ 37,516
SG&A expenditures reclassified as cost of revenues	352	617
SG&A expenditures offset by cost sharing funding	846	983
Aggregated SG&A expenses	\$ 51,644	\$ 39,116

SG&A expenses (exclusive of amounts classified as cost of revenues and amounts offset by cost-sharing funding) increased by 34% to \$50.4 million, or 16% of revenue, in fiscal 2009 from \$37.5 million, or 21% of revenue, for fiscal 2008. The increase in SG&A expenses was due primarily to higher stock-based compensation expense and higher labor and related costs driven by headcount growth, partially offset by a reduction in bad debt expense. Aggregated SG&A expenses, which include amounts classified as cost of revenues and amounts offset by cost sharing funding, increased 32% to \$51.6 million, or 16% of revenue, for fiscal 2009 from \$39.1 million, or 21% of revenue, for fiscal 2008, for the reasons described above.

We present Aggregated R&D and Aggregated SG&A expenses, which are non-GAAP measures, because we believe this presentation provides useful information on our aggregate R&D and SG&A spending and because R&D and SG&A expenses as reported on the Consolidated Statements of Operations have been, and may in the future be, subject to significant fluctuations solely as a result of changes in the level of externally funded contract development work, resulting in significant changes in the amount of the costs recorded as cost of revenues rather than as R&D and SG&A expenses, as discussed above.

We plan to continue to increase R&D and SG&A expenditures in absolute terms in the coming quarters to provide the platform for growth in subsequent years, but expect them to decline in fiscal 2010 as a percent of revenue from fiscal 2009 levels.

***Amortization of acquisition related intangibles***

In both fiscal 2009 and 2008, we recorded \$1.8 million in amortization related to our contractual relationships/backlog, customer relationships, core technology and know-how, trade names and trademark intangible assets. These intangible assets are a result of our Windtec and PQS acquisitions.

***Restructuring and impairments***

On October 25, 2007, our Board of Directors approved a restructuring plan (the Fiscal 2007 Plan ) to reduce operating costs through the closure of our last remaining facility in Westborough, Massachusetts and the

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consolidation of operations there, including our corporate headquarters, into our Devens, Massachusetts facility. No headcount reductions were associated with this plan.

Aggregate restructuring charges associated with the Fiscal 2007 Plan were \$7.9 million, of which \$0.5 million was recorded in fiscal 2009 and \$1.0 million in fiscal 2008 related to the closure of our Westborough, Massachusetts facility.

All restructuring charges associated with the Fiscal 2007 Plan have resulted in cash disbursements and had been completed at the end of the second quarter of fiscal 2009. Cash payments under this plan in fiscal 2009 and 2008 were \$2.6 million and \$3.9 million, respectively.

***Operating income (loss)***

Our operating income (loss) is summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
AMSC Power Systems	\$ 77,604	\$ 26,492
AMSC Superconductors	(24,432)	(23,655)
Unallocated corporate expenses	(14,511)	(11,033)
Total	\$ 38,661	\$ (8,196)

AMSC Power Systems operating income increased to \$77.6 million in fiscal 2009 from \$26.5 million in fiscal 2008. The increase in fiscal 2009 was primarily the result of higher sales and gross margins, as described above.

AMSC Superconductors operating loss increased to \$24.4 million in fiscal 2009 from \$23.7 million in fiscal 2008. The increase in operating loss for the fiscal year ended March 31, 2010 is primarily due to lower sales and higher expensed material costs.

Unallocated corporate expenses include stock-based compensation expense of \$13.5 million for fiscal 2009 compared to \$9.7 million for fiscal 2008. Unallocated corporate expenses also include \$0.5 million and \$1.0 million of restructuring charges related primarily to the closure of our facility in Westborough, Massachusetts for fiscal 2009 and 2008, respectively.

***Non-operating expenses/Interest income***

Interest income decreased to \$0.8 million for fiscal 2009 from \$2.8 million in fiscal 2008, primarily due to lower interest rates, as we are investing in more conservative assets due to the current economic environment.

Other expense, net, was \$2.7 million in fiscal 2009, compared to \$2.5 million in fiscal 2008. Other income (expense), net, for fiscal 2009 primarily relates to net foreign currency transaction and translation gains and losses as well as net realized and unrealized gains and losses on hedging contracts. Other income (expense), net, for fiscal 2008 primarily relates to net foreign currency transaction and translation gains and losses as well as \$1.3 million charged to expense from mark-to-market adjustments on a warrant that had been held by Provident Premier Master Fund.

### ***Income Taxes***

During fiscal 2009 and 2008, we recorded income tax expense of \$20.5 million and \$8.7 million, respectively. Income tax expense in both periods was driven by income generated in foreign jurisdictions. We incurred losses in the U.S. in fiscal 2009 and 2008 for which no tax benefit was recognized.

Section 382 of the Internal Revenue Code of 1986, as amended (the "IRC"), provides limits on the extent to which a corporation that has undergone an ownership change (as defined) can utilize any net operating loss ("NOL") and general business tax credit carryforwards it may have. We commissioned a study to determine whether Section 382 could limit the use of our carryforwards in this manner. After completing this study, we have concluded, that the limitation will not have a material impact on our ability to utilize our net operating loss carryforwards.

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Please refer to the Risk Factors section in Item 1A for a discussion of certain factors that may affect our future results of operations and financial condition.

**Years Ended March 31, 2009 and March 31, 2008*****Revenues***

Total revenues increased by 63% to \$182.8 million in fiscal 2008, from \$112.4 million for fiscal 2007. Our revenues are summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2009</b>	<b>2008</b>
AMSC Power Systems	\$ 168,008	\$ 96,823
AMSC Superconductors	14,747	15,573
Total	\$ 182,755	\$ 112,396

Our Power Systems business unit accounted for 92% and 86% of total revenues for fiscal 2008 and 2007, respectively. Revenues in the Power Systems business unit increased 74% to \$168.0 million in fiscal 2008 from \$96.8 million in fiscal 2007. The increase in AMSC Power Systems revenues were primarily due to higher sales of wind electrical systems and core components, including our PowerModule product, primarily to customers in China. Based on the average Euro and renminbi exchange rates for fiscal 2008, revenue denominated in these foreign currencies translated into U.S. dollars was \$2.3 million higher compared to the translation of these revenues using the average exchange rates of these currencies for fiscal 2007.

A substantial portion of our revenues are derived from one customer, Sinovel Wind Co., Ltd., a manufacturer of wind energy systems based in China. Sales to Sinovel represented 67% and 51% of our total revenues for fiscal 2008 and 2007, respectively.

AMSC Superconductors accounted for 8% and 14% revenues for fiscal 2008 and 2007, respectively. AMSC Superconductors revenue decreased 5% to \$14.7 million in fiscal 2008 from \$15.6 million in fiscal 2007. Revenues from significant AMSC Superconductors government funded contract revenues are summarized as follows (in thousands):

<b>Project Name</b>	<b>Expected Total Contract Value</b>	<b>Revenue Earned through March 31, 2009</b>	<b>Revenue Earned for the Fiscal Years Ended March 31,</b>	
			<b>2009</b>	<b>2008</b>
HYDRA	\$ 24,908	\$ 7,852	\$ 4,207	\$ 3,645
LIPA I and II	36,606	30,735	2,934	4,345
DOE-FCL	3,065	3,003	2,080	923
36.5 MW Motor	90,150	90,150		1,283
NAVSEA Motor Study	5,886	5,880	2,940	2,551



These significant projects represented 82% of AMSC Superconductors revenue for both fiscal 2008 and fiscal 2007, respectively.

The decrease in AMSC Superconductors revenue for fiscal 2008 was driven primarily by lower LIPA I and II and 36.5 MW motor project revenues due to the completion of these programs, partially offset by higher revenues from our DOE-FCL and HYDRA projects.

We recognized superconductor cable project revenues in fiscal 2008 from the Project HYDRA contract was signed on January 22, 2008. Of the total \$24.9 million in funding expected from DHS, it committed funding of \$16.3 million to us through March 31, 2009. We recognized \$4.2 million in revenue related to the Project HYDRA during fiscal 2008, compared to \$3.6 million in fiscal 2007.

**Table of Contents*****Cost-sharing funding***

In addition to reported revenues, we also received funding of \$2.1 million for fiscal 2008 under U.S. government cost-sharing agreements with the U.S. Air Force and DOE, compared to \$2.5 million for fiscal 2007. The decrease in cost-sharing funding is primarily due to the DOE Wire Initiative program nearing completion.

***Cost of Revenues and Gross Margin***

Cost of revenues increased by 63% to \$130.9 million for fiscal 2008, compared to \$80.4 million for fiscal 2007. Gross margin was 28.4% for fiscal 2008, compared to 28.5% for fiscal 2007. The slight decrease in gross margin in fiscal 2008 as compared to fiscal 2007 was due primarily to a loss recorded in fiscal 2008 on a turnkey SVC contract of \$1.3 million and higher warranty expenses in Power Systems of \$3.6 million, as well as higher expensed material costs and a full year of depreciation in our Superconductors manufacturing operations. This was partially offset by a higher percentage of higher-margin Power Systems sales as compared to Superconductor sales.

***Operating Expenses******Research and development***

A portion of our R&D expenditures related to externally funded development contracts has been classified as cost of revenues (rather than as R&D expenses). Additionally, a portion of R&D expenses was offset by cost-sharing funding. Our R&D expenditures are summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2009</b>	<b>2008</b>
R&D expenses per Consolidated Statements of Operations	\$ 19,675	\$ 15,651
R&D expenditures reclassified as cost of revenues	18,720	16,218
R&D expenditures offset by cost-sharing funding	1,129	1,323
Aggregated R&D expenses	\$ 39,524	\$ 33,192

R&D expenses (exclusive of amounts classified as cost of revenues and amounts offset by cost-sharing funding) increased by 26% to \$19.7 million, or 11% of revenue, for fiscal 2008 from \$15.7 million, or 14% of revenue, for fiscal 2007. The increase in R&D expenses was driven primarily by internal product development costs in our AMSC Power Systems business unit to support future growth opportunities and our next-generation product offerings. The increase in R&D expenditures reclassified to cost of revenues were a result of increased efforts under license and development contracts for wind turbine designs in AMSC Windtec. Aggregated R&D expenses, which include amounts classified as cost of revenues and amounts offset by cost-sharing funding, increased 19% to \$39.5 million, or 22% of revenue, for fiscal 2008 compared to \$33.2 million, or 30% of revenue, for fiscal 2007. The increase in fiscal 2008 was driven primarily by the factors described above.

***Selling, general, and administrative***

A portion of the SG&A expenditures related to externally funded development contracts has been classified as cost of revenues (rather than as SG&A expenses). Additionally, a portion of SG&A expenses was offset by cost-sharing

funding. Our SG&A expenditures are summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2009</b>	<b>2008</b>
SG&A expenses per Consolidated Statements of Operations	\$ 37,516	\$ 28,752
SG&A expenditures reclassified as costs of revenue	617	1,014
SG&A expenditures offset by cost sharing funding	983	1,216
Aggregated SG&A expenses	\$ 39,116	\$ 30,982

SG&A expenses (exclusive of amounts classified as cost of revenues and amounts offset by cost-sharing funding) increased by 30% to \$37.5 million, or 21% of revenue, in fiscal 2008 from \$28.8 million, or 26% of revenue, for fiscal

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2007. The increase in SG&A expenses were due primarily to higher bad debt expense of \$1.4 million and higher stock-based compensation expense of \$2.3 million. The balance of the SG&A increase was due primarily to higher labor and related costs driven by headcount growth. For these same reasons, Aggregated SG&A expenses, which include amounts classified as cost of revenues and amounts offset by cost sharing funding, increased 26% to \$39.1 million, or 21% of revenue, for fiscal 2008 from \$31.0 million, or 28% of revenue, for fiscal 2007.

***Amortization of acquisition related intangibles***

We recorded \$1.8 million and \$5.1 million in fiscal 2008 and 2007, respectively, in amortization related to our contractual relationships/backlog, customer relationships, core technology and know-how, trade names and trademark intangible assets. These intangible assets are a result of our Windtec and PQS acquisitions. The decrease was primarily driven by lower amortization related to Windtec's contractual relationships/backlog intangible asset, which was nearly fully amortized as of March 31, 2009.

***Restructuring and impairments***

On October 25, 2007, our Board of Directors approved a restructuring plan (the "Fiscal 2007 Plan") to reduce operating costs through the closure of our last remaining facility in Westborough, Massachusetts and the consolidation of operations there, including our corporate headquarters, into our Devens, Massachusetts facility. No headcount reductions were associated with this plan.

Aggregate structuring charges associated with the Fiscal 2007 Plan were \$7.4 million, of which \$1.0 million was recorded in fiscal 2008 and \$6.4 million in fiscal 2007. All costs in both fiscal years were recorded to complete the closure of our Westborough, Massachusetts facility. This aggregate charge included an assumption that the Westborough facility would not be subleased. The remaining \$0.9 million in restructuring and impairment charges in fiscal 2007 relates primarily to a separate impairment charge for certain 1G manufacturing assets associated with a prior restructuring plan. All restructuring charges associated with the Fiscal 2007 Plan are expected to result in the disbursement of cash. Cash payments under this plan in fiscal 2008 and 2007 were \$3.9 million and \$1.4 million, respectively.

***Operating income (loss)***

Our operating income (loss) is summarized as follows (in thousands):

	<b>Fiscal Years Ended March 31,</b>	
	<b>2009</b>	<b>2008</b>
AMSC Power Systems	\$ 26,492	\$ 10,865
AMSC Superconductors	(23,655)	(21,784)
Unallocated corporate expenses	(11,033)	(13,971)
Total	\$ (8,196)	\$ (24,890)

AMSC Power Systems operating income increased to \$26.5 million in fiscal 2008 from \$10.9 million in fiscal 2007. The increase in fiscal 2008 was primarily the result of higher sales, partially offset by a loss recorded on a turnkey SVC project of \$1.3 million, higher warranty expenses of \$3.6 million and higher operating expenses, primarily

resulting from higher bad debt costs of \$1.4 million and costs from increased headcount to support our growth.

AMSC Superconductors operating loss increased to \$23.7 million in fiscal 2008 from \$21.8 million in fiscal 2007. The increase in operating loss for the fiscal year ended March 31, 2009 is primarily due to lower sales, higher expensed material costs and a full year of depreciation on the 2G manufacturing assets, partially offset by an impairment charge of \$0.8 million for 1G assets and \$0.3 million related to our fiscal 2006 restructuring plan in the fiscal year ended March 31, 2008.

Unallocated corporate expenses include stock-based compensation expense of \$9.7 million for fiscal 2008 compared to \$5.7 million for fiscal 2007. Fiscal 2008 Unallocated corporate expenses also include \$1.0 million of restructuring charges related primarily to the closure of our facility in Westborough, Massachusetts. Unallocated corporate expenses for fiscal 2007 included rent and occupancy costs associated with the unoccupied portion of our Westborough, Massachusetts headquarters facility of \$1.3 million.

**Table of Contents*****Non-operating expenses/Interest income***

Interest income decreased to \$2.8 million for fiscal 2008 from \$4.0 million in fiscal 2007, primarily due to lower interest rates, as we invested in less risky assets due to the deteriorating economic conditions in fiscal 2008.

Other expense, net, was \$2.5 million in fiscal 2008 compared to \$1.7 million in fiscal 2007. Other expense, net, for fiscal 2008 and 2007 included mark-to-market adjustments on the revaluation of a warrant issued in April 2005 related to a litigation settlement, which was held by Provident Premier Master Fund ( Provident ). In August 2008, Provident exercised the entire warrant in exchange for 148,387 shares of our common stock. Amounts charged to expense from mark-to-market adjustments on the warrant were \$1.3 million and \$1.6 million for fiscal 2008 and 2007, respectively. The remaining amounts charged to other expense, net, primarily relate to foreign currency transaction gains and losses and hedging impacts, particularly in fiscal 2008.

***Income Taxes***

During fiscal 2008 and 2007, we recorded income tax expense of \$8.7 million and \$2.9 million, respectively. Income tax expense in both periods was driven by income generated in foreign jurisdictions. We have provided a valuation allowance against all deferred tax assets in the U.S. as it is more likely than not that these deferred tax assets are not currently realizable due to the net operating losses we have incurred since inception.

**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 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 define non-GAAP net income (loss) as net income (loss) before amortization of acquisition-related intangibles, restructuring and impairments, stock-based compensation, re-valuation of stock warrants, other unusual charges and any tax effects related to these items. We believe non-GAAP net income (loss) is an important measurement for management and investors given the effect that these non-cash or non-recurring charges have on our net income (loss). We regard non-GAAP net income (loss) as a useful measure of operating performance which more closely aligns net income with cash earnings generated by continuing operations. A reconciliation of non-GAAP to GAAP net income (loss) is set forth in the table below (in thousands, except per share data):

**Reconciliation of GAAP Net Income (Loss) to Non-GAAP Net Income (Loss)**  
**(In thousands, except per share data)**

	<b>Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Net income (loss)	\$ 16,248	\$ (16,635)	\$ (25,447)
Amortization of acquisition-related intangibles	1,827	1,848	5,058
Restructuring and impairments	451	1,030	7,462
Stock-based compensation	13,494	9,672	5,665
Re-valuation of warrant		1,335	1,652

Tax effects	(367)	(373)	(1,158)
Non-GAAP net income (loss)	\$ 31,653	\$ (3,123)	\$ (6,768)
Non-GAAP earnings (loss) per share	\$ 0.70	\$ (0.07)	\$ (0.17)
Weighted average shares outstanding*	45,290	42,718	39,137

\* Diluted shares are used for periods where non-GAAP net income is generated.

We generated non-GAAP net income of \$31.7 million, or \$0.70 per diluted share, for fiscal 2009, compared to a non-GAAP net loss of \$3.1 million, or \$0.07 per share for fiscal 2008 and a non-GAAP net loss of \$6.8 million, or \$0.17 per share, for fiscal 2007. The increase in non-GAAP net income in fiscal 2009 over 2008 was driven primarily by higher net income and higher stock-based compensation expense which was added back to net income. The increase in stock-based compensation expense was due primarily to higher stock prices at the time stock grants

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were made in fiscal 2009. The increase in non-GAAP net income in fiscal 2008 over 2007 was driven primarily by lower net loss and higher stock-based compensation expense partially offset by lower restructuring and impairment costs which were added back to net income.

**Liquidity and Capital Resources**

At March 31, 2010, we had cash, cash equivalents, marketable securities and restricted cash of \$155.1 million, compared to \$117.2 million at March 31, 2009, an increase of \$37.9 million. Our cash, cash equivalents, marketable securities and restricted cash are summarized as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Cash and cash equivalents	\$ 87,594	\$ 70,674
Marketable securities	61,811	39,255
Restricted cash	5,713	7,278
Total cash, cash equivalents, marketable securities and restricted cash	\$ 155,118	\$ 117,207

The increase in cash and cash equivalents, marketable securities and restricted cash was primarily the result of increased net income and improved collection of accounts receivable.

For fiscal 2009, net cash provided by operating activities was \$40.7 million, compared to a use of \$2.4 million in fiscal 2008. The increase in cash provided by operations is due primarily to an improvement of net income by \$32.9 million, an increase in non-cash stock-based compensation expenses of \$3.8 million and cash provided by working capital in fiscal 2009, compared to cash used for working capital in fiscal 2008.

For fiscal 2009, net cash used in investing activities was \$40.0 million, compared to a use of \$3.5 million in fiscal 2008. The increase in cash used in investing activities was driven primarily by higher capital expenditures for the increase of our manufacturing capacity in both of our business units, upgrade operations and facilities in Austria and Wisconsin and IT infrastructure and a net increase in marketable securities.

For fiscal 2009, cash provided by financing activities was \$19.0 million, compared to \$12.5 million in fiscal 2008. The increase was due to proceeds from the exercise of employee stock options.

Although our cash requirements fluctuate based on a variety of factors, including customer adoption of our products and our research and development efforts to commercialize our products, we believe that our available cash will be sufficient to fund our working capital, capital expenditures, and other cash requirements for at least the next twelve months.

We also have unused, unsecured lines of credit of 0.5 million (approximately \$0.7 million), which is available until June 30, 2010, and CNY 12.9 million (approximately \$1.9 million) which is available until June 30, 2012. We were able to reduce our long term restricted cash in the U.S. during fiscal 2009 through the establishment of credit relationships with a number of U.S. banks. We also have an additional \$1.8 million in bank guarantees and letters of credit supported by unsecured lines of credit.



The possibility exists that we may pursue additional acquisition and joint venture opportunities in the future that may affect liquidity and capital resource requirements.

***Off-Balance Sheet Arrangements***

We do not have any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating transactions that are not required to be reflected on our balance sheet except as discussed below.

We occasionally enter into construction contracts that include a performance bond. As these contracts progress, we continually assess the probability of a payout from the performance bond. Should we determine that such a payout is likely, we would record a liability. As of March 31, 2010, there were no recorded performance-based liabilities.

**Table of Contents*****Contractual Obligations***

As of March 31, 2010, we are committed to make the following payments under contractual obligations (in thousands):

		<b>Payments Due by Period</b>			
	<b>Total</b>	<b>Less Than 1 Year</b>	<b>1-3 Years</b>	<b>3-5 Years</b>	<b>More Than 5 Years</b>
Operating leases (rent)	\$ 3,039	\$ 2,009	\$ 951	\$ 79	\$
Operating leases (other)	228	78	121	29	
Purchase obligations (subcontracts)	10,928	10,928			
Purchase obligations (purchase orders)	79,609	79,609			
Total contractual cash obligations	\$ 93,804	\$ 92,624	\$ 1,072	\$ 108	\$

***New Accounting Pronouncements***

In June 2008, the Financial Accounting Standards Boards ( FASB ) issued guidance in determining whether instruments granted in share-based payment transactions are participating securities for purposes of calculating earnings per share. Under the provisions of this standard, unvested awards of share-based payments with non-forfeitable rights to receive dividends or dividend equivalents are considered participating securities for purposes of calculating earnings per share. This accounting standard is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those years. We adopted this standard on April 1, 2009. The adoption required us to modify its prior year weighted average number of common shares outstanding but did not have a material effect on our financial condition or results of operations.

In April 2009, the FASB issued a standard, which amends and clarifies a previous standard for business combinations, to address application issues on initial recognition and measurement, subsequent measurement and accounting, and disclosure of assets and liabilities arising from contingencies in a business combination. Under this standard, an acquirer is required to recognize at fair value an asset acquired or liability assumed in a business combination that arises from a contingency if the acquisition date fair value can be determined during the measurement period. If the acquisition date fair value cannot be determined, then the acquirer applies the recognition criteria in accounting for contingencies, and makes a reasonable estimation of the amount of a loss, to determine whether the contingency should be recognized as of the acquisition date or after it. The adoption of this standard could materially change the accounting for business combinations consummated subsequent to its effective date of April 1, 2009. On April 1, 2009, we adopted the provisions of this standard and the results of adoption did not have a material effect on our financial condition or results of operations.

In June 2009, the FASB issued the FASB Accounting Standards Codification ( Codification ). The Codification became the single source for all authoritative U.S. generally accepted accounting principles ( U.S. GAAP ) recognized by the FASB to be applied for financial statements issued for periods ending after September 15, 2009. The Codification does not change U.S. GAAP and will not have an effect on our financial condition or results of operations.

In July 2009, the FASB issued new guidance for all U.S. GAAP financial statements for public and private companies, which significantly amends the existing consolidation accounting model for variable interest entities, and

includes extensive new disclosure requirements. This new guidance is effective for fiscal years (and interim periods in those fiscal years) beginning after November 15, 2009. We do not currently have a variable interest entity and do not expect this standard to have a material impact on our financial condition or results of operations.

In September 2009, the Emerging Issues Task Force issued new rules pertaining to the accounting for revenue arrangements with multiple deliverables. The new rules provide an alternative method for establishing fair value of a deliverable when vendor specific objective evidence or third party evidence cannot be determined. The rules provide for the determination of the best estimate of selling price of separate deliverables and allow the allocation of arrangement consideration using this relative selling price model. The rules supersedes the prior multiple element revenue arrangement accounting rules that are currently used by us. The new rules can be prospectively applied beginning January 1, 2011 or can be earlier or retrospectively adopted. We are currently evaluating the impact of adopting the rules.

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**Item 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK***

We face exposure to financial market risks, including adverse movements in foreign currency exchange rates and changes in interest rates. These exposures may change over time as our business practices evolve and could have a material adverse impact on our financial results.

**Cash and cash equivalents**

Our exposure to market risk through financial instruments, such as investments in marketable securities, is limited to interest rate risk and is not material. Our investments in marketable securities consist primarily of government-backed securities and sovereign debt and are designed, in order of priority, to preserve principal, provide liquidity, and maximize income. Investments are monitored to limit exposure to mortgage-backed securities and similar instruments responsible for the recent turmoil in the credit markets. Interest rates are variable and fluctuate with current market conditions. We do not believe that a 10% change in interest rates would have a material impact on our financial position or results of operation.

**Foreign currency exchange risk**

Our earnings and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Our most significant foreign currency exposures relate to Austria and China. We enter into derivative instruments, including forward foreign exchange contracts and currency options, to manage this risk. We do not enter into or hold foreign currency derivative financial instruments for trading or speculative purposes.

The functional currency of all our foreign entities is the U.S. dollar ( USD ), except for our wholly-owned Austrian subsidiary, AMSC Windtec GmbH, for which the local currency (Euro) is the functional currency, and our wholly-owned Chinese subsidiary, Suzhou AMSC Superconductor Co., Ltd., for which the local currency (renminbi) is the functional currency. We monitor foreign currency exposures and hedge currency risk when deemed appropriate. Cumulative translation adjustments are excluded from net loss and reported as a separate component of stockholders equity. Foreign currency transaction and translation gains, excluding the effects from hedging, were \$0.8 million for the fiscal year ended March 31, 2010. Future operating results could be impacted by material foreign currency fluctuations. In the future, should foreign currency fluctuations become material, management will review options to limit the financial impact to our operations.

Our foreign currency risk management strategy is principally designed to mitigate the potential financial impact of changes in the value of transactions and balances denominated in foreign currency, resulting from changes in foreign currency exchange rates. Our foreign currency hedging program uses forward contracts and currency options to manage the foreign currency exposures that exist as part of our ongoing business operations. The contracts primarily are denominated in Euros and Chinese renminbi ( CNY ) and have maturities of less than six months. On March 31, 2010, we had two forward contracts outstanding to hedge our wholly-owned Austrian subsidiary, AMSC Windtec GmbH ( Windtec ) USD exposure, with notional values of \$25.0 million each, which expired on April 30, 2010. The forward contracts sold US dollars and bought Euros at \$1.3522 and \$1.3523, respectively. We also had two forward contracts outstanding to hedge receivables exposure at our wholly-owned China subsidiary, Suzhou AMSC Superconductor Co., Ltd., selling CNY and buying USD at \$6.772 and \$6.7615, respectively, with notional values of \$15.0 million and \$10.0 million, one of which expired on April 30, 2010 and the second of which expires on June 30, 2010, respectively. In April 2010, we executed offsetting transactions for both open CNY hedges effectively closing these contracts. There were no hedging contracts outstanding as of March 31, 2009.

Generally, we do not designate forward contracts or currency option contracts as hedges for accounting purposes, and changes in the fair value of these instruments are recognized immediately in earnings. Gains and losses on these contracts are included in other income (expense), net.

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**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of  
American Superconductor Corporation:

In our opinion, the consolidated balance sheets and the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows present fairly, in all material respects, the financial position of American Superconductor Corporation and its subsidiaries at March 31, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2010 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of March 31, 2010, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's 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 for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, 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.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

May 27, 2010

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED BALANCE SHEETS****(In thousands)**

	<b>March 31, 2010</b>	<b>March 31, 2009</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 87,594	\$ 70,674
Marketable securities	54,469	39,255
Accounts receivable, net	62,203	48,071
Inventory	35,858	35,129
Prepaid expenses and other current assets	15,381	12,345
Restricted cash	5,713	5,872
Deferred tax assets, net	1,776	1,160
Total current assets	262,994	212,506
Property, plant and equipment, net	64,315	54,838
Goodwill	36,696	26,233
Intangibles, net	7,770	8,859
Marketable securities	7,342	
Restricted cash		1,406
Other assets	21,067	5,264
Total assets	\$ 400,184	\$ 309,106
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 84,319	\$ 60,253
Deferred revenue	19,970	21,066
Total current liabilities	104,289	81,319
Deferred revenue	13,302	4,902
Deferred tax liabilities, net	1,248	840
Other	380	184
Total liabilities	119,219	87,245
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Common stock, \$0.01 par value Authorized shares 100,000,000; shares issued and outstanding 44,829,541 and 43,297,635 at March 31, 2010 and 2009, respectively	448	433
Additional paid-in capital	698,417	653,054
Deferred contract costs - warrant		(2)
Accumulated other comprehensive loss	(7,011)	(4,487)



Accumulated deficit	(410,889)	(427,137)
Total stockholders' equity	280,965	221,861
Total liabilities and stockholders' equity	\$ 400,184	\$ 309,106

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

Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED STATEMENTS OF OPERATIONS****(In thousands, except per share data)**

	<b>Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Revenues	\$ 315,955	\$ 182,755	\$ 112,396
Cost and operating expenses:			
Cost of revenues	200,977	130,882	80,363
Research and development	23,593	19,675	15,651
Selling, general and administrative	50,446	37,516	28,752
Amortization of acquisition related intangibles	1,827	1,848	5,058
Restructuring and impairments	451	1,030	7,462
Total cost and operating expenses	277,294	190,951	137,286
Operating income (loss)	38,661	(8,196)	(24,890)
Interest income	788	2,785	3,977
Other income (expense), net	(2,693)	(2,489)	(1,654)
Income (loss) before income tax expense	36,756	(7,900)	(22,567)
Income tax expense	20,508	8,735	2,880
Net income (loss)	\$ 16,248	\$ (16,635)	\$ (25,447)
Net income (loss) per common share			
Basic	\$ 0.37	\$ (0.39)	\$ (0.65)
Diluted	\$ 0.36	\$ (0.39)	\$ (0.65)
Weighted average number of common shares outstanding			
Basic	44,445	42,718	39,137
Diluted	45,290	42,718	39,137

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

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED STATEMENTS OF CASH FLOWS****(In thousands)**

	<b>For the Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Cash flows from operating activities:			
Net income (loss)	\$ 16,248	\$ (16,635)	\$ (25,447)
Adjustments to reconcile net income (loss) to net cash used in operations:			
Depreciation and amortization	9,789	8,403	10,095
Stock-based compensation expense	13,494	9,672	5,665
Stock-based compensation expense non-employee	138	7	232
Impairment charges on long-lived assets			757
Inventory write-down charges			933
Allowance for doubtful accounts	457	1,495	
Re-valuation of warrant		1,335	1,652
Deferred income taxes	(2,717)		(3,424)
Other non-cash items	1,155	826	697
Changes in operating asset and liability accounts:			
Accounts receivable	(21,603)	(18,845)	(20,330)
Inventory	(656)	(24,382)	(4,410)
Prepaid expenses and other current assets	(6,421)	(6,277)	(2,853)
Accounts payable and accrued expenses	23,775	27,210	11,635
Deferred revenue	7,021	14,765	6,975
Net cash provided by (used in) operating activities	40,680	(2,426)	(17,823)
Cash flows from investing activities:			
Purchase of property, plant and equipment	(16,541)	(6,534)	(8,598)
Proceeds from the sale of property, plant and equipment		2	1,360
Purchase of marketable securities	(81,980)	(89,576)	(174,650)
Proceeds from the maturity of marketable securities	59,387	88,605	155,917
Change in restricted cash	1,602	5,699	(13,172)
Acquisition costs, net of cash acquired in acquisitions			(102)
Purchase of intangible assets	(1,516)	(1,120)	(1,264)
Change in other assets	(948)	(566)	49
Net cash used in investing activities	(39,996)	(3,490)	(40,460)
Cash flows from financing activities:			
Proceeds from follow-on public offering, net			93,612
Proceeds from exercise of employee stock options and ESPP	19,003	12,463	14,820
Net cash provided by financing activities	19,003	12,463	108,432

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Effect of exchange rate changes on cash and cash equivalents	(2,767)	(3,707)	1,760
Net increase in cash and cash equivalents	16,920	2,840	51,909
Cash and cash equivalents at beginning of year	70,674	67,834	15,925
Cash and cash equivalents at end of year	\$ 87,594	\$ 70,674	\$ 67,834
Supplemental schedule of cash flow information:			
Non-cash issuance of common stock	\$ 1,915	\$ 556	\$ 362
Non-cash contingent consideration in connection with acquisitions	10,828	11,008	9,856
Issuance of common stock in connection with acquisitions			4,349
Cash paid for income taxes	12,387	5,269	34

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

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY****(In thousands)**

	<b>Common Stock Number of Shares</b>	<b>Par Value</b>	<b>Additional Paid-in Capital</b>	<b>Deferred Contract Costs-Warrant</b>	<b>Accumulated Other Comprehensive Income (Loss)</b>	<b>Accumulated Deficit</b>	<b>Total Stockholders' Equity</b>
Balance at March 31, 2007	35,016	350	486,194	(14)	146	(385,055)	101,621
Exercise of stock options	1,392	14	14,551				14,565
Exercise of warrants	26						
Public offering of common stock	4,700	47	93,565				93,612
Acquisition of Power Quality Systems	295	3	4,346				4,349
Issuance of common stock ESPP	14		254				254
Issuance of common stock restricted shares	79	1					1
Stock-based compensation expense			5,665				5,665
Non-employee stock-based compensation expense			232				232
Issuance of stock for calendar 2007 401(k) match	20		362				362
Contingent consideration			9,856				9,856
Amortization of deferred warrant costs				6			6
Unrealized gains on investments					264		264
Cumulative translation adjustment					3,112		3,112
Net loss						(25,447)	(25,447)
Balance at March 31, 2008	41,542	415	615,025	(8)	3,522	(410,502)	208,452
Exercise of stock options	738	7	12,167				12,174
Exercise of warrants	148	2	4,339				4,341
Issuance of common stock ESPP	17		289				289
Issuance of common stock restricted shares	404	4	(4)				
Stock-based compensation expense			9,672				9,672
Non-employee stock-based compensation expense			7				7

Issuance of stock for calendar 2008 401(k) match	25		556				556
Contingent consideration	424	5	11,003				11,008
Amortization of deferred warrant costs				6			6
Unrealized losses on investments					(113)		(113)
Cumulative translation adjustment					(7,896)		(7,896)
Net loss						(16,635)	(16,635)
Balance at March 31, 2009	43,298	433	653,054	(2)	(4,487)	(427,137)	221,861
Exercise of stock options	810	8	18,632				18,640
Issuance of common stock ESPP	14		363				363
Issuance of common stock restricted shares	217	2	(2)				
Stock-based compensation expense			13,494				13,494
Non-employee stock-based compensation expense			138				138
Issuance of stock for calendar 2009 401(k) match	33	1	857				858
Contingent consideration	426	4	10,824				10,828
Minority Interest Investment	32		1,057				1,057
Amortization of deferred warrant costs				2			2
Unrealized losses on investments					(37)		(37)
Cumulative translation adjustment					(2,487)		(2,487)
Net income						16,248	16,248
Balance at March 31, 2010	44,830	\$ 448	\$ 698,417	\$	\$ (7,011)	\$ (410,889)	\$ 280,965

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

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**

**(In thousands)**

	<b>Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Net income (loss)	\$ 16,248	\$ (16,635)	\$ (25,447)
Other comprehensive income (loss)			
Foreign currency translation	(2,487)	(7,896)	3,112
Unrealized gain (loss) on investments	(37)	(113)	264
Other comprehensive income (loss)	(2,524)	(8,009)	3,376
Comprehensive income (loss)	\$ 13,724	\$ (24,644)	\$ (22,071)

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

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Nature of the Business and Operations**

American Superconductor Corporation (the Company or AMSC) was founded on April 9, 1987. The Company offers an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. The Company is a leader in alternative energy, providing proven, megawatt-scale wind turbine designs and electrical control systems and components. The Company also offers a host of Smart Grid technologies for power grid operators that enhance the reliability, efficiency and capacity of the power grid, and seamlessly integrate renewable energy sources into the power infrastructure. These technologies include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems. The Company operates in two business segments: AMSC Power Systems and AMSC Superconductors.

**2. Summary of Significant Accounting Policies**

A summary of the Company's significant accounting policies follows:

***Basis of Consolidation***

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions are eliminated. Certain reclassifications of prior years' amounts have been made to conform to the current year presentation.

***Use of Estimates***

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The Company bases its estimates on historical experience and various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. On an ongoing basis, the Company evaluates its estimates, including those related to revenue recognition, accounting for the collectability of receivables, realizability of inventory, goodwill and intangible assets, warranty provisions, stock-based compensation and deferred tax assets. Provisions for depreciation are based on their estimated useful lives using the straight-line method. Some of these estimates can be subjective and complex and, consequently, actual results may differ from these estimates under different assumptions or conditions. While for any given estimate or assumption made by the Company's management there may be other estimates or assumptions that are reasonable, the Company believes that, given the current facts and circumstances, it is unlikely that applying any such other reasonable estimate or assumption would materially impact the financial statements.

***Cash Equivalents***

The Company considers all highly liquid debt instruments with original maturities of three months or less to be cash equivalents. Cash equivalents consist principally of money market accounts and corporate debt instruments.

***Marketable Securities***



Short-term marketable securities, with current maturities of greater than three months from original purchase date but less than twelve months from the date of the balance sheet, consist primarily of government-backed securities and sovereign debt. The Company determines the appropriate classification of its marketable securities at the time of purchase and re-evaluates such classification as of each balance sheet date. All marketable securities are considered available-for-sale and are carried at fair value. Fair values are based on quoted market prices. The unrealized gains and losses related to these securities are included in accumulated other comprehensive income

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(loss). When securities are sold, the cost is determined based on the specific identification method and realized gains and losses are included in interest income. The Company periodically reviews the realizability of each short and long-term marketable security when impairment indicators exist with respect to the security. If an other-than-temporary impairment of value of the security exists, the carrying value of the security is written down to its estimated fair value.

***Accounts Receivable***

The Company's accounts receivable are comprised of amounts owed by commercial companies and government agencies. The Company does not require collateral or other security to support customer receivables.

Due to scheduled billing requirements specified under certain contracts, a portion of the Company's accounts receivable balance at March 31, 2010 and 2009 was unbilled (see Note 5). As of March 31, 2010, the Company had one customer that represented approximately 61% of the total accounts receivable balance. At March 31, 2009, the same customer represented approximately 48% of the Company's total accounts receivable balance.

***Inventories***

Inventories are stated at the lower of cost (determined on a first-in first-out basis) or market.

***Derivatives***

Derivatives are financial instruments whose values are derived from one or more underlying financial instruments, such as foreign currency. The Company enters into derivative transactions, specifically forward contracts and foreign currency option contracts, to manage its exposure to fluctuations in foreign exchange rates that arise primarily from its non-functional currency-denominated receivables and payables. The contracts entered into during the year ended March 31, 2010 were primarily denominated in Euros and Chinese renminbi ( CNY ) and have maturities of less than six months. The contracts were settled for U.S. dollars at maturity of the contracts at rates agreed to at inception of the contracts. The Company does not enter into or hold derivatives for trading or speculative purposes. Generally, the Company does not designate forward contracts or currency option contracts as hedges for accounting purposes, and changes in the fair value of these instruments are recognized immediately in earnings. Net realized losses associated with exchange rate fluctuations on forward contracts and currency option contracts were \$3.5 million and \$0.2 million for the fiscal years ended March 31, 2010 and 2009, respectively.

All derivatives, whether designated in a hedging relationship or not, are required to be recorded on the balance sheet at fair value. This guidance also requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met, and that the Company formally document, designate, and assess the effectiveness of transactions that receive hedge accounting. The effectiveness of the derivative as a hedging instrument is based on changes in its market value being highly correlated with changes in the market value of the underlying hedged item.

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Property, Plant and Equipment***

Property, plant and equipment are carried at cost less accumulated depreciation and amortization. The Company accounts for depreciation and amortization using the straight-line method to allocate the cost of property, plant and equipment over their estimated useful lives as follows:

<b>Asset Classification</b>	<b>Estimated Useful Life in Years</b>
Building	40
Process upgrades to the building	10-40
Machinery and equipment	3-10
Furniture and fixtures	3-5
Leasehold improvements	Shorter of the estimated useful life or the remaining lease term

Expenditures for maintenance and repairs are expensed as incurred. Upon retirement or other disposition of assets, the costs and related accumulated depreciation are eliminated from the accounts and the resulting gain or loss is reflected in operating expenses.

***Goodwill and Other Intangible Assets***

The Company reviews its goodwill at least annually (in the Company's fiscal fourth quarter) or when events or changes in circumstances indicate that the carrying amount of such assets may not be fully recoverable. If the carrying amount of the net tangible and intangible assets in a given reporting unit exceeds the reporting unit's fair value, management will perform a detailed analysis to calculate any impairment.

The Company has intangible assets consisting of licenses, patents, contractual relationships/backlog, customer relationships, trade names and trademarks, core technology and know-how and goodwill.

The Company amortizes its licenses, patents, customer relationships, trade names and trademarks, and core technology and know-how, using the straight-line method over a period of 3 to 10 years, which approximates the expected economic consumption of these assets. The Company amortizes its contractual relationships/backlog using the economic consumption method over an estimated period of 2 years.

***Accounting for Impairment of Long-Lived Assets***

The Company periodically evaluates its long-lived assets for potential impairment. The Company performs these evaluations whenever events or circumstances suggest that the carrying amount of an asset or group of assets is not recoverable. The Company's judgments regarding the existence of impairment indicators are based on market and operational performance. Indicators of potential impairment include:

a significant change in the manner in which an asset is used;

a significant decrease in the market value of an asset;

a significant adverse change in its business or the industry in which it is sold;

a current period operating cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the asset; and

significant advances in the Company's technologies that require changes in the manufacturing process.

If the Company believes an indicator of potential impairment exists, it tests to determine whether impairment recognition criteria in this guidance has been met. To analyze a potential impairment, the Company projects undiscounted future cash flows expected to result from the use and eventual disposition of the asset or primary asset in the asset group over its remaining useful life. If these projected cash flows are less than the carrying amount, an

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

impairment loss is recognized in the Consolidated Statements of Operations based on the difference between the carrying value of the asset or asset group and its fair value, less any disposition costs. Evaluating the impairment requires judgment by the Company's management to estimate future operating results and cash flows. If different estimates were used, the amount and timing of asset impairments could be affected.

***Revenue Recognition***

For certain arrangements, such as contracts to perform research and development, prototype development contracts and certain product sales, the Company records revenues using the percentage-of-completion method, measured by the relationship of costs incurred to total estimated contract costs. The Company uses the percentage-of-completion revenue recognition method. Percentage-of-completion revenue recognition accounting is predominantly used on long-term prototype development contracts with the U.S. government and certain commercial turnkey contracts. The Company follows this method since reasonably dependable estimates of the revenues and costs applicable to various stages of a contract can be made. However, the ability to reliably estimate total costs at completion is challenging, especially on long-term prototype development contracts, and could result in future changes in contract estimates. For the fiscal years ended March 31, 2010 and 2009, the Company recorded losses of \$2.1 million and \$1.3 million, respectively, on a turnkey static VAR compensator ( SVC ) contract as a result of a cost overrun due to a change in design. No such loss was recorded for the fiscal year ended March 31, 2008. For contracts where reasonably dependable estimates of the revenues and costs cannot be made, the Company follows the completed-contract method.

The Company recognizes revenue for other product sales upon customer acceptance, which can occur at the time of delivery, installation or post-installation, provided persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and the collectibility is reasonably assured. For multiple-element arrangements, the Company uses the residual method to allocate value to each delivered item. Under the residual method, each undelivered item is allocated value based on verifiable objective evidence of fair value for that item and the remainder of the total arrangement price is allocated to the delivered items. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered items must be considered probable and substantially within the Company's control. The Company does not provide its customers with contractual rights of return for any of its products. When other significant obligations remain after products are delivered for which verifiable objective evidence cannot be established, revenue is recognized only after such obligations are fulfilled. The determination of what constitutes a significant post-delivery performance obligation (if any post-delivery performance obligations exist) is the primary subjective consideration the Company systemically evaluates in the context of each product shipment in order to determine whether to recognize revenue on the order or to defer the revenue until all post-delivery performance obligations have been completed.

The Company occasionally enters into construction contracts that include a performance bond. As these contracts progress, the Company continually assesses the probability of a payout from the performance bond. Should the Company determine that such a payout is likely, the Company would record a liability. The Company would reduce revenue to the extent a liability is recorded.

The Company enters into certain arrangements to license its technologies and to provide training services. The Company has determined that the license has no stand alone value to the customer and is not separable from the training. Accordingly, the Company accounts for these arrangements as a single unit of accounting, following the revenue recognition pattern of the last deliverable of the arrangement and recognizes revenue over the period of the

Company's performance and milestones that have been achieved. Costs for these arrangements are expensed as incurred.

The Company has elected to record taxes collected from customers on a net basis and does not include tax amounts in Revenue or Costs of revenue.

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Customer deposits received in advance of revenue recognition are recorded as deferred revenue until customer acceptance is received. Deferred revenue also represents the amount billed to and/or collected from commercial and government customers on contracts which permit billings to occur in advance of contract performance/revenue recognition.

***Research and Development Costs***

Research and development costs are expensed as incurred.

***Income Taxes***

The Company's provision for income taxes is composed of a current and a deferred portion. The current income tax provision is calculated as the estimated taxes payable or refundable on tax returns for the current year. The deferred income tax provision is calculated for the estimated future tax effects attributable to temporary differences and carryforwards using expected tax rates in effect in the years during which the differences are expected to reverse.

Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each fiscal year end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. The Company has provided a valuation allowance against its U.S. deferred income tax assets since the Company believes that it is more likely than not that its U.S. deferred tax assets are not currently realizable due to the net operating losses incurred by the Company since its inception. The Company has not provided a valuation allowance against its other foreign deferred income tax assets since the Company believes that it is more likely than not that those deferred tax assets will be realized.

Accounting for income taxes requires a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if, based on the technical merits, it is more likely than not that the position will be sustained upon audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. The Company reevaluates these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit and new audit activity. Any changes in these factors could result in the recognition of a tax benefit or an additional charge to the tax provision. The Company includes interest and penalties related to gross unrecognized tax benefits within its provision for income taxes.

***Stock-Based Compensation***

The Company accounts for stock-based payment transactions using a fair value-based method and recognizes the related expense in the results of operations.

Stock-based compensation is estimated at the grant date based on the fair value of the award and is recognized as expense over the requisite service period of the award. The fair value of restricted stock awards is determined by reference to the fair market value of the Company's common stock on the date of grant. The Company uses the Black-Scholes option pricing model to estimate the fair value of awards with service and performance conditions. For

awards with service conditions, the Company recognizes compensation cost on a straight-line basis over the requisite service/vesting period. For awards with service and performance conditions and graded-vesting features (a certain percentage of stock awards vest each period), the Company recognizes compensation costs on an accelerated, graded-vesting basis over the requisite service/vesting period. The Company uses the lattice model to value market condition awards. For awards with market conditions with a single cliff vest feature, the Company recognizes compensation costs on a straight-line basis over the requisite service period.



Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Determining the appropriate fair value model and related assumptions requires judgment, including estimating stock price volatilities of the Company's common stock and expected terms. The expected volatility rates are estimated based on historical and implied volatilities of the Company's common stock. The expected term represents the average time that the options that vest are expected to be outstanding based on the vesting provisions and the Company's historical exercise, cancellation and expiration patterns.

The Company estimates pre-vesting forfeitures when recognizing compensation expense based on historical and forward-looking factors. Changes in estimated forfeiture rates and differences between estimated forfeiture rates and actual experience may result in significant, unanticipated increases or decreases in stock-based compensation expense from period to period. The termination of employment of certain employees who hold large numbers of stock-based awards may also have a significant, unanticipated impact on forfeiture experience and, therefore, on stock-based compensation expense. The Company will update these assumptions on at least an annual basis and on an interim basis if significant changes to the assumptions are warranted.

***Computation of Net Loss per Common Share***

Basic earnings per share (EPS) is computed by dividing net earnings (loss) by the weighted-average number of common shares outstanding for the period. Diluted EPS is computed by dividing the net earnings (loss) by the weighted average number of common shares and dilutive common equivalent shares outstanding during the period, calculated using the treasury stock method. Common equivalent shares include the effect of restricted stock, exercise of stock options and warrants, and contingently issuable shares. For the fiscal years ended March 31, 2010, 2009, and 2008, common equivalent shares of 688,300, 3,316,629 and 4,306,699, respectively, were not included in the calculation of diluted EPS as they were considered antidilutive. The following table reconciles the numerators and denominators of the earnings per share calculation for the fiscal years ended March 31, 2010, 2009, and 2008 (in thousands except per share amounts):

	<b>Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Numerator:			
Net income (loss)	\$ 16,248	\$ (16,635)	\$ (25,447)
Denominator:			
Weighted-average shares of common stock outstanding	44,493	43,323	39,492
Weighted-average shares subject to repurchase	(48)	(605)	(355)
Shares used in per-share calculation — basic	44,445	42,718	39,137
Dilutive effect of employee equity incentive plans	845		
Shares used in per-share calculation — diluted	45,290	42,718	39,137
Net income (loss) per share — basic	\$ 0.37	\$ (0.39)	\$ (0.65)
Net income (loss) per share — diluted	\$ 0.36	\$ (0.39)	\$ (0.65)

On April 1, 2009, the Company began determining whether instruments granted in share-based payment transactions are participating securities. Under the applicable standard, the unvested restricted stock awards that contain non-forfeitable rights to receive dividends or dividend equivalents are considered participating securities, and therefore, are included in the computation of earnings per share pursuant to the two class method. Application of the standard had an insignificant effect on shares outstanding. This standard required retrospective application. Net income allocable to participating securities was immaterial for all periods presented.

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Foreign Currency Translation***

The functional currency of all the Company's foreign subsidiaries is the U.S. dollar, except for Windtec, for which the local currency (Euro) is the functional currency and China, for which the local currency (renminbi) is the functional currency. The assets and liabilities of Windtec, as well as those of the Company's China operation, are translated into U.S. dollars at the exchange rate in effect at the balance sheet date and income and expense items are translated at average rates for the period. Cumulative translation adjustments are excluded from net income (loss) and shown as a separate component of stockholders' equity. Foreign currency transaction losses, net of hedging losses, are included in net income (loss) and were \$2.5 million and \$1.1 million for the fiscal years ended March 31, 2010 and 2009 respectively. Foreign currency transactions were immaterial for the fiscal year ended March 31, 2008.

***Risks and Uncertainties***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates and would impact future results of operations and cash flows.

The Company invests its available cash with high-credit, quality financial instruments and invests primarily in investment grade-marketable securities, including, but not limited to, government obligations, money market funds and corporate debt instruments.

Several of the Company's government contracts are being funded incrementally, and as such, are subject to the future authorization, appropriation, and availability of government funding. The Company has a history of successfully obtaining financing under incrementally-funded contracts with the U.S. government and it expects to continue to receive additional contract modifications in the fiscal year ending March 31, 2011 and beyond as incremental funding is authorized and appropriated by the government.

***Disclosure of Fair Value of Financial Instruments***

The Company's financial instruments consist principally of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. The carrying amounts of its cash equivalents and marketable securities, accounts receivable, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

**3. Marketable Securities**

The following is a summary of marketable securities at March 31, 2010 and 2009 (in thousands):

<b>Cost at March 31, 2010</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Market Value at March 31, 2010</b>
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Short-term commercial paper	\$ 54,438	\$ 35	\$ (4)	\$ 54,469
Long-term commercial paper	\$ 7,267	\$ 75	\$	\$ 7,342

	<b>Cost at March 31, 2009</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Market Value at March 31, 2009</b>
Short-term commercial paper	\$ 39,099	\$ 157	\$ (1)	\$ 39,255

Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company's marketable securities are classified as available-for-sale securities and, accordingly, are recorded at fair value. The difference between amortized cost and fair value is included in stockholders' equity. At March 31, 2010 and 2009, respectively, there were investments with an immaterial gross unrealized loss.

The Company adopted SFAS guidance for Fair Value Measurements, as of April 1, 2008, with the exception of the application of the statement to non-recurring nonfinancial assets and nonfinancial liabilities. The Company has determined that cash equivalents, short-term and long-term marketable securities and derivative instruments for hedging activities are the only assets affected by this guidance at this time.

***Valuation Hierarchy***

A valuation hierarchy for disclosure of the inputs to valuation used to measure fair value has been established. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1** Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2** Inputs 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, inputs other than quoted prices that are observable for the asset or liability, and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).
- Level 3** Unobservable inputs that reflect the Company's assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.

A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The following table provides the assets carried at fair value, measured as of March 31, 2010 (in thousands):

	<b>Total</b>	<b>Quoted Prices in</b>	<b>Using Significant</b>	<b>Using</b>
	<b>Carrying</b>	<b>Active Markets</b>	<b>Other</b>	<b>Significant</b>
	<b>Value</b>	<b>(Level 1)</b>	<b>Observable</b>	<b>Unobservable</b>
			<b>Inputs (Level 2)</b>	<b>Inputs (Level 3)</b>
March 31, 2010:				
Cash equivalents	\$ 29,054	\$ 29,054	\$	\$
Short-term marketable securities	54,469		54,469	
Long-term marketable securities	7,342		7,342	
March 31, 2009:				

Cash equivalents	\$ 30,483	\$ 30,483	\$	\$
Marketable securities	39,255		39,255	

***Valuation Techniques***

Cash equivalents consist of highly liquid instruments with maturities of three months or less that are regarded as high quality, low risk investments, are measured using such inputs as quoted prices and are classified within Level 1 of the valuation hierarchy.

Marketable securities are measured using such inputs as quoted prices for identical or similar assets in markets that are not active, inputs other than quoted prices that are observable for the asset (for example, interest rates and yield curves observable at commonly quoted intervals), and inputs that are derived principally from or corroborated by observable market data by correlation or other means, and are classified within Level 2 of the valuation hierarchy.

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Effective April 1, 2009, the Company implemented a newly issued accounting standard for fair value measurements of all nonfinancial assets and nonfinancial liabilities not recognized or disclosed at fair value in the financial statements on a non-recurring basis. Adoption of the new accounting standard for the Company's nonfinancial assets and nonfinancial liabilities that are measured at fair value on a non-recurring basis did not impact its financial position or results of operations; however, could have an impact in future periods. The Company may have additional disclosure requirements in the event of a completed acquisition or if an impairment of these occurs in a future period.

**4. Derivative Financial Instruments**

On April 1, 2009, the Company adopted a newly issued accounting standard regarding disclosure of derivative instruments and hedging activities. This statement improves transparency in financial reporting by requiring enhanced disclosures of an entity's derivative instruments and hedging activities and their effects on the entity's financial position, financial performance and cash flows.

The Company's foreign currency risk management strategy is principally designed to mitigate the potential financial impact of changes in the value of transactions and balances denominated in non-functional currencies, resulting from changes in foreign currency exchange rates. The Company's foreign currency hedging program uses both forward contracts and currency options to manage the foreign currency exposures that exist as part of its ongoing business operations. The contracts primarily are denominated in Euros and Chinese renminbi ( CNY ) and have maturities of less than six months. On March 31, 2010, the Company had two forward contracts outstanding to hedge its wholly-owned Austrian subsidiary, AMSC Windtec GmbH ( Windtec ) USD exposure, with notional values of \$25.0 million each, which expired on April 30, 2010. The forward contract sold US dollars and bought Euros at \$1.3522 and \$1.3523, respectively. The Company also had two forward contracts outstanding to hedge receivables exposure at its wholly-owned China subsidiary, Suzhou AMSC Superconductor Co., Ltd., selling CNY and buying USD at \$6.772 and \$6.7615, respectively, with notional values of \$15.0 million and \$10.0 million, one of which expired on April 30, 2010 and the second of which expires on June 30, 2010, respectively. In April 2010, the Company executed offsetting transactions for both open CNY hedges effectively closing these contracts. For the years ended March 31, 2010 and 2009, the Company recorded realized losses of \$3.5 million and \$0.2 million, respectively, associated with exchange rate fluctuations on forward contracts and currency option contracts in other expense, net. For the year ended March 31, 2010, unrealized gains on such contracts had an immaterial effect on the balance sheet. There were no hedging contracts outstanding as of March 31, 2009.

Generally, the Company does not designate forward contracts or currency option contracts as hedges for accounting purposes, and changes in the fair value of these instruments are recognized immediately in earnings. Gains and losses on these contracts are included in other expense, net.

**5. Accounts Receivable**

Accounts receivable at March 31, 2010 and 2009 consisted of the following (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Accounts receivable (billed)	\$ 53,825	\$ 40,173

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Accounts receivable (unbilled)	10,305	9,241
Less: Allowance for doubtful accounts	(1,927)	(1,343)
Accounts receivable, net	\$ 62,203	\$ 48,071

The Company recorded an allowance for doubtful accounts provision of \$0.5 million in the fiscal year ended March 31, 2010 primarily due to customer disputes and the unfavorable economic impact to several of the Company's customers.



**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company also recorded net long-term receivables of \$14.1 million and \$4.1 million in the fiscal years ended March 31, 2010 and 2009, respectively that are also classified within long-term deferred revenue.

**6. Inventory**

Inventory at March 31, 2010 and 2009 consisted of the following (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Raw materials	\$ 18,065	\$ 16,098
Work-in-progress	7,318	6,522
Finished goods	7,879	8,150
Deferred program costs	2,596	4,359
Inventory	\$ 35,858	\$ 35,129

Finished goods inventory as of March 31, 2010 includes \$1.1 million which represents costs of product shipped to customers on contracts for which revenue was deferred until final customer acceptance.

Deferred program costs as of March 31, 2010 and 2009 primarily represent costs incurred on wind turbine development programs where the Company needs to complete development programs before revenue and costs will be recognized. Included in deferred program costs as of March 31, 2009 is \$2.6 million reflecting costs incurred on a long-term turnkey D-VAR system project and were subsequently recorded in cost of revenue in the year ended March 31, 2010 when the related revenue was recognized.

**7. Property, Plant and Equipment**

The cost and accumulated depreciation of property and equipment at March 31, 2010 and 2009 are as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Land	\$ 4,022	\$ 4,022
Construction in progress equipment	13,099	1,463
Buildings	36,599	36,587
Equipment	34,980	32,372
Furniture and fixtures	1,502	1,453
Leasehold improvements	3,389	3,097
Property, Plant and equipment, gross	93,591	78,994

Less accumulated depreciation and amortization	(29,276)	(24,156)
Property, plant and equipment, net	\$ 64,315	\$ 54,838

Depreciation expense was \$7.1 million, \$5.6 million and \$4.1 million for the fiscal years ended March 31, 2010, 2009 and 2008, respectively.

Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****8. Intangible Assets**

Intangible assets at March 31, 2010 and 2009 consisted of the following (in thousands):

	For the Year Ended March 31, 2010			2009			Estimated Useful Life
	Gross Amount	Accumulated Amortization	Net Book Value	Gross Amount	Accumulated Amortization	Net Book Value	
Licenses	\$ 1,924	\$ (1,690)	\$ 234	\$ 1,734	\$ (1,666)	\$ 68	7
Patents	7,531	(3,965)	3,566	6,743	(3,602)	3,141	7
Contractual relationships/ backlog	3,463	(3,416)	47	3,401	(3,353)	48	2
Customer relationships	2,638	(1,908)	730	2,601	(1,284)	1,317	3 - 5
Trade names and trademarks	1,223	(568)	655	1,200	(385)	815	7
Core technology and know-how	5,646	(3,108)	2,538	5,572	(2,102)	3,470	5 - 10
Intangible assets, net	\$ 22,425	\$ (14,655)	\$ 7,770	\$ 21,251	\$ (12,392)	\$ 8,859	

The Company recorded intangible amortization expense of \$2.7 million, \$2.8 million and \$6.0 million for the fiscal years ended March 31, 2010, 2009 and 2008, respectively.

Amortization expense for the next five years is expected to be as follows (in thousands):

	For the Fiscal Years Ended March 31,				
	2011	2012	2013	2014	2015
Amortization expense	\$ 2,523	\$ 2,072	\$ 1,046	\$ 806	\$ 500

Goodwill of \$36.7 million and \$26.2 million at March 31, 2010 and 2009, respectively, primarily represents the excess of the purchase price paid for the calendar year 2007 acquisitions of Windtec Consulting, GmbH and Power Quality Systems, Inc. over the estimated fair value of the net assets acquired. Goodwill at March 31, 2010 also includes \$10.8 million representing the fair value of common shares earned as contingent consideration for the Windtec acquisition and \$11.0 million at March 31, 2009, representing the fair value of common shares earned as contingent consideration for the Windtec and Power Quality Systems acquisitions. The following table presents Goodwill for the fiscal years ended March 31, 2010 and 2009 (in thousands):

**Power Systems**

Balance March 31, 2008	\$	18,530
Contingent Consideration		11,008
Currency Translation		(3,305)
Balance March 31, 2009		26,233
Contingent Consideration		10,828
Currency Translation		(365)
Balance March 31, 2010	\$	36,696

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The geographic composition of goodwill and intangible assets is as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Goodwill by geography:		
U.S.	\$ 6,861	\$ 6,862
Europe	29,835	19,371
Total	\$ 36,696	\$ 26,233

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Intangible assets by geography:		
U.S.	\$ 4,475	\$ 4,444
Europe	3,295	4,415
Total	\$ 7,770	\$ 8,859

The goodwill is associated with the Power Systems segment for the fiscal years ended March 31, 2010 and 2009. The business segment composition of intangible assets is as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Intangible assets by business segments:		
AMSC Power Systems	\$ 5,034	\$ 6,367
AMSC Superconductors	2,736	2,492
Total	\$ 7,770	\$ 8,859

During the Company's annual testing for impairment, the Company assessed Goodwill and concluded that Goodwill was not impaired as of March 31, 2010 and 2009.

**9. Accounts Payable and Accrued Expenses**

Accounts payable and accrued expenses at March 31, 2010 and 2009 consisted of the following (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
Accounts payable	\$ 33,762	\$ 23,881
Accrued miscellaneous expenses	9,047	7,920
Accrued subcontractor program costs	5,671	6,370
Accrued compensation	8,938	6,399
Income taxes payable	20,470	8,824
Accrued warranty	6,431	4,749
Accrued restructuring		2,110
Total	\$ 84,319	\$ 60,253

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Product Warranty***

The Company generally provides a one to two year warranty on its products, commencing upon installation. A provision is recorded upon revenue recognition to Cost of revenues for estimated warranty expense based on historical experience. The following is a summary of accrued warranty activity (in thousands):

	<b>For the Fiscal Year Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
Beginning balance	\$ 4,749	\$ 1,775
Accruals for warranties during the period	6,232	6,531
Settlements during the period	(3,865)	(3,443)
Adjustments relating to preexisting warranties	(685)	(114)
Ending balance	\$ 6,431	\$ 4,749

**10. Income Taxes**

Net income (loss) before income taxes for the fiscal years ended March 31, 2010, 2009 and 2008 are provided in the table as follows (in thousands):

	<b>For the Fiscal Years Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Net income (loss) before income tax expense:			
U.S.	\$ (43,672)	\$ (38,802)	\$ (32,242)
Foreign	80,428	30,902	9,675
Total	\$ 36,756	\$ (7,900)	\$ (22,567)

The components of income tax expense (benefit) attributable to continuing operations consist of the following (in thousands):

	<b>For the Fiscal Years Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>

Current

Federal	\$	\$	\$
State			
Foreign	23,215	8,589	5,998
Total current	23,215	8,589	5,998
Deferred			
Federal	30	30	161
State	5	6	29
Foreign	(2,742)	110	(3,308)
Total deferred	(2,707)	146	(3,118)
Income tax expense	\$ 20,508	\$ 8,735	\$ 2,880



**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The reconciliation between the statutory federal income tax rate and the Company's effective income tax rate is shown below.

	<b>For the Fiscal Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Statutory federal income tax rate	34%	(34)%	(34)%
State income taxes, net of federal benefit	(6)	(24)	(9)
State rate change		36	
Foreign income tax rate differential	(20)	(38)	(3)
Stock options	3	5	2
Nondeductible expenses	1		
Research and development credit	(2)	(7)	(1)
Valuation allowance	46	173	58
Effective income tax rate	56%	111%	13%

The following is a summary of the principal components of the Company's deferred tax assets and liabilities (in thousands):

	<b>For the Year Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
Deferred tax assets:		
Net operating loss carryforwards	\$ 176,028	\$ 164,886
Research and development and other credits	7,439	6,501
Accruals and reserves	4,664	6,353
Fixed assets and intangibles	63	22
Other	9,373	5,301
Gross deferred tax assets	197,567	183,063
Valuation allowance	(187,358)	(174,695)
Total deferred tax assets	10,209	8,368
Deferred tax liabilities:		
Intangibles from acquisitions	(710)	(1,040)
Fixed assets and intangibles	(5,946)	(6,482)
Total deferred tax liabilities	(6,656)	(7,522)

Net deferred tax assets	\$	3,553	\$	846
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The Company has provided a valuation allowance against its net U.S. deferred income tax assets since the Company believes that it is more likely than not that its deferred tax assets are not currently realizable due to the net operating losses incurred by the Company since its inception. The Company has not provided a valuation allowance against its net foreign deferred income tax assets since the Company believes that it is more likely than not that its deferred tax assets will be realized. The Company has recorded a deferred tax asset of approximately \$14.9 million reflecting the benefit of deductions from the exercise of stock options. This deferred tax asset has been fully reserved since it is more likely than not that the tax benefit from the exercise of stock options will not be realized. The tax benefit will be recorded as a credit to additional paid-in capital if realized.

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

At March 31, 2010, the Company has aggregate net operating loss carryforwards for its U.S. operations for federal and state income tax purposes of approximately \$517.3 million and \$318.4 million, respectively, which expire in the years ending March 31, 2011 through 2030. Also included in the U.S. net operating losses is approximately \$4.4 million and \$3.7 million of acquired losses from Superconductivity, Inc. and Power Quality Systems, Inc., respectively. Of this amount, \$42.4 million results from excess tax deductions from stock option exercised in 2006 through 2010. Pursuant to the guidance on accounting for stock-based compensation, the deferred tax asset relating to excess tax benefits from these exercises was not recognized for financial statement purposes. The future benefit from these deductions will be recorded as a credit to additional paid-in capital when realized. Research and development and other tax credit carryforwards amounting to approximately \$5.8 million and \$1.6 million are available to offset federal and state income taxes, respectively, and will expire in the fiscal years ending March 31, 2011 through 2030.

At March 31, 2010, the Company had an immaterial amount of net operating losses carryforwards for its foreign operations, which can be carried forward indefinitely.

Section 382 of the Internal Revenue Code of 1986, as amended (the IRC), provides limits on the extent to which a corporation that has undergone an ownership change (as defined) can utilize any net operating loss (NOL) and general business tax credit carryforwards it may have. The Company commissioned a study to determine whether Section 382 could limit the use of its carryforwards in this manner. After completing this study, the Company has concluded that the limitation will not have a material impact on its ability to utilize its net operating loss carryforwards.

A portion of the deferred tax liabilities were created by goodwill as a result of a U.S. acquisition. These deferred tax liabilities are not allowed as an offset to deferred tax assets for purposes of determining the amount of valuation allowance required. As a result, a deferred tax provision is required to increase the Company's valuation allowance. The deferred tax liability associated with goodwill as of March 31, 2010 was approximately \$0.3 million.

The estimated amount of undistributed earnings of our foreign subsidiaries is approximately \$88.3 million at March 31, 2010. No amount for U.S. income tax has been provided on undistributed earnings of its foreign subsidiaries because the Company considers such earnings to be indefinitely reinvested. In the event of distribution of those earnings in the form of dividends or otherwise, the Company would be subject to both U.S. income taxes, subject to an adjustment, if any, for foreign tax credits, and foreign withholding taxes payable to certain foreign tax authorities. Determination of the amount of U.S. income tax liability that would be incurred is not practicable because of the complexities associated with this hypothetical calculation.

The Company did not establish any additional reserves for uncertain tax liabilities upon adoption of this standard. A summary of the Company's adjustments to its uncertain tax positions for the fiscal year ended March 31, 2010 is as follows (in thousands):

Balance at March 31, 2008	\$
Increase for tax positions related to fiscal 2008	105
Balance at March 31, 2009	105
Increase for tax positions related to fiscal 2009	90

Balance at March 31, 2010

\$ 195

The Company has not recognized any interest and penalties in the statement of operations because of the Company's net operating losses and tax credits that are available to be carried forward.

The Company accounts for interest and penalties related to uncertain tax positions as part of its provision for federal and state income taxes. At March 31, 2010, approximately \$0.2 million unrecognized tax benefits, if recognized, would favorably affect its effective tax rate in any future period.

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company does not expect that the amounts of unrecognized benefits will change significantly within the next 12 months.

Major tax jurisdictions include the U.S., China and Austria. All U.S. income tax filings for years ending March 31, 1995 through 2010 remain open and subject to examination and all years from calendar year 2003 through fiscal 2009 remain open and subject to examination in Austria. Tax filings in China for calendar years 2008 and 2009 will remain open and subject to examination.

**11. Stockholders Equity*****Public Offering***

In July 2007 the Company completed a public offering of 4,700,000 shares of its common stock and received net proceeds (after the underwriters discount and offering expenses) of \$93.6 million.

***Stock-Based Compensation***

The components of stock-based compensation for the fiscal years ended March 31, 2010, 2009 and 2008 were as follows (in thousands):

	<b>For the Fiscal Year Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Stock options	\$ 5,895	\$ 3,599	\$ 3,139
Restricted stock and stock awards	7,535	6,022	2,481
Employee stock purchase plan	64	51	45
Total stock-based compensation expense	\$ 13,494	\$ 9,672	\$ 5,665

The estimated fair value of the Company's stock-based awards, less expected annual forfeitures, is amortized over the awards' service period. The total unrecognized compensation cost for unvested outstanding stock-based compensation awards was \$17.7 million for the fiscal year ended March 31, 2010. This expense will be recognized over a weighted average expense period of approximately 2.0 years.

The Company's consolidated statement of operations for the fiscal years ended March 31, 2010, 2009 and 2008 include the following stock-based compensation expense (in thousands):

	<b>For the Fiscal Years Ended March 31,</b>		
<b>Stock-Based Compensation in the Statement of Operations by Line Item</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>

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Cost of revenues	\$ 1,199	\$ 1,350	\$ 515
Research and development	2,023	1,934	1,046
Selling, general and administrative	10,272	6,388	4,104
Total stock-based compensation expense	\$ 13,494	\$ 9,672	\$ 5,665

Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table summarizes the information concerning currently outstanding and exercisable employee and non-employee options and warrants:

	<b>Options/ Shares</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Term</b>	<b>Aggregate Intrinsic Value (Thousands)</b>
Outstanding at March 31, 2009	2,705,546	\$ 19.97		
Granted at fair value	868,765	28.29		
Exercised	(810,196)	23.01		
Canceled/Forfeited	(48,199)	52.73		
Outstanding at March 31, 2010	2,715,916	\$ 21.15	6.4	\$ 24,249
Fully vested at March 31, 2010	1,319,140	\$ 17.55	4.1	\$ 16,379

The weighted-average grant-date fair value of stock option awards granted during the fiscal years ended March 31, 2010, 2009 and 2008 was \$28.29 per share, \$13.85 per share and \$9.10 per share, respectively. Intrinsic value represents the amount by which the market price of the common stock exceeds the exercise price of the options. The aggregate intrinsic value of exercisable options at March 31, 2010, 2009 and 2008 was \$16.4 million, \$6.4 million and \$15.2 million, respectively. The aggregate intrinsic value of options exercised at March 31, 2010, 2009 and 2008 was \$11.4 million, \$20.5 million and \$15.8 million, respectively. The total fair value of options vested during the fiscal years ended March 31, 2010, 2009 and 2008 was \$3.1 million, \$3.3 million and \$1.9 million, respectively.

The restricted stock granted during the fiscal year ended March 31, 2010 includes approximately 112,490 shares of performance-based restricted stock, which will vest upon achievement of certain financial performance measurements. At March 31, 2010, the Company determined that achievement of the performance measures is probable and as such, is recognizing the fair value of the performance-based awards over the estimated performance period. The remaining shares granted vest upon the passage of time. For awards that vest upon the passage of time, expense is being recorded over the vesting period.

The weighted average assumptions used in the Black-Scholes valuation model for stock options granted during the fiscal years ended March 31, 2010, 2009 and 2008 are as follows:

	<b>For the Fiscal Years Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Dividend yield	None	None	None

Expected volatility	68.9%	61.5%	58.9%
Risk-free interest rate	2.6%	3.0%	4.7%
Expected life (years)	4.8	4.9	5.3

The expected volatility rate was estimated based on an equal weighting of the historical volatility of the Company's common stock and the implied volatility of the Company's traded options. The expected term was estimated based on an analysis of the Company's historical experience of exercise, cancellation, and expiration patterns. The risk-free interest rate is based on five-year U.S. Treasury rates.



Table of Contents**AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table summarizes the employee and non-employee restricted stock activity for the fiscal year ended March 31, 2010:

	<b>Shares</b>	<b>Weighted Average Grant Date Fair Value</b>	<b>Weighted Average Remaining Contractual Term</b>	<b>Intrinsic Aggregate Value (Thousands)</b>
Outstanding at March 31, 2009	611,083	\$ 23.17		
Granted	248,585	27.47		
Vested	(345,969)	20.16		
Forfeited	(5,325)	24.46		
Outstanding at March 31, 2010	508,374	\$ 27.31	8.56	\$ 14,692

The total fair value of restricted stock that was granted during the fiscal years ended March 31, 2010, 2009 and 2008 was \$6.8 million, \$12.0 million and \$8.1 million, respectively. The total fair value of restricted stock that vested during the fiscal years ended March 31, 2010, 2009 and 2008 was \$8.4 million, \$1.8 million and \$2.2 million, respectively.

***Stock-Based Compensation Plans***

As of March 31, 2010, the Company had two active stock plans: the 2007 Stock Incentive Plan (the 2007 Plan ) and the 2007 Director Stock Option Plan (the 2007 Director Plan ). The 2007 Plan replaced the Company's 2004 Stock Incentive Plan upon the approval by the Company's stockholders on August 3, 2007. The 2007 Director Plan replaced the Second Amended and Restated 1997 Director Stock Option Plan, which expired pursuant to its terms on May 2, 2007.

The Plans provide for the issuance of restricted stock, incentive stock options and non-qualified stock options to purchase the Company's common stock. In the case of incentive stock options, the exercise price shall be equal to at least the fair market value of the common stock, as determined by the Board of Directors, on the date of grant. The contractual life of options is generally 10 years. Options generally vest over a 3-5 year period while restricted stock generally vests over a 2-5 year period. The 2007 Director Plan is for members of the Board of Directors who are not also employees of the Company (outside directors). Effective August 8, 2007, under the 2007 Director Plan, certain outside directors were entitled to receive an annual award of 5,000 fully-vested shares of common stock. For the year ended March 31, 2009, the outside directors elected to voluntarily reduce their annual award to 3,000 shares. Under an amendment to the 2007 Director Plan effective April, 2009, outside directors are entitled to receive an annual award of 3,000 fully-vested shares of common stock.

As of March 31, 2010, the 2007 Plan had 4,144,908 shares and the 2007 Director Plan had 244,000 shares available for future issuance.

***Employee Stock Purchase Plan***

The Company has an employee stock purchase plan (ESPP) which provides employees with the opportunity to purchase shares of common stock at a price equal to the market value of the common stock at the end of the offering period, less a 15% purchase discount. The Company recognized compensation expense of \$0.1 million for the fiscal year ended March 31, 2010 related to the ESPP. The Company issued 13,862 shares of common stock related to the ESPP during the year ended March 31, 2010. As of March 31, 2010, the ESPP had 303,980 shares available for future issuance.

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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Stock Purchase Warrants***

At March 31, 2010, there are outstanding warrants held by UT-Battelle, LLC (UT-Battelle) for 5,000 shares of common stock at an exercise price of \$13.68 per share which became exercisable over a five-year period following the date of grant. These warrants were granted in exchange for a reduction in annual minimum royalty payments to UT-Battelle, which manages the Oak Ridge National Laboratory under a contract from the U.S. Department of Energy, and vested over a five year period and expire on June 23, 2014. Expense related to these warrants was immaterial to the consolidated statement of operations for the fiscal years ended March 31, 2010, 2009 and 2008. As of March 31, 2010, no warrants have been exercised.

In addition, the Company also granted a warrant to TM Capital in April 2005. See Note 12.

**12. Commitments and Contingencies**

In April 2005, the Company issued to TM Capital (which subsequently assigned it to Provident Premier Master Fund, Ltd. ( Provident )) a common stock purchase warrant for 200,000 shares of the Company's common stock, exercisable for a five-year term, with an exercise price of \$9.50 per share (the Warrant ). In August 2008, Provident utilized the cashless exercise provision and exercised the entire Warrant in exchange for 148,387 shares of the Company's common stock. The Warrant was re-valued at \$4.3 million at the time of exercise, resulting in a charge of \$1.3 million for the fiscal year ended March 31, 2009, (reported in Other income (expense) in the Consolidated Statements of Operations). The Warrant was valued at \$3.0 million as of March 31, 2008, and a loss of \$1.7 million was recorded reflecting the change in value for the fiscal year ended March 31, 2008.

The Company leases facilities located in Middleton and New Berlin, Wisconsin, West Mifflin, Pennsylvania, Suzhou, China and Klagenfurt, Austria. The Company leases two operating facilities in Middleton, Wisconsin, under leases which expire on December 31, 2010, one facility in New Berlin, Wisconsin under a lease which expires on September 30, 2011 and two West Mifflin, Pennsylvania facilities with one lease that expires on December 31, 2010 and a second lease that expires on May 31, 2010. The Company also leases a Suzhou, China facility which comprises approximately 60,000 square feet of space that expires on July 31, 2010 and an additional 56,000 square feet of space that expires on October 19, 2012. The Company also leases space for its Windtec subsidiary of approximately 72,000 square feet in four facilities in Klagenfurt, Austria. These leases can be terminated at the Company's request after a six month advance notice.

The Company also had an operating lease for a facility in Westborough, Massachusetts, its former corporate headquarters, which expired on August 31, 2009. In October 2007, the Company entered into a restructuring plan to consolidate its headquarters into its Devens, Massachusetts facility (see Note 16). In December 2007, the Company vacated this facility and recorded a lease restructuring charge of \$3.8 million and facility closing costs of \$2.6 million in the fiscal year ended March 31, 2008 in connection with the restructuring. During the year ended March 31, 2010 and 2009, the Company recorded \$0.5 million and \$1.0 million of additional facility closing costs, respectively.

Rent expense under the operating leases mentioned above was as follows (in thousands):

**For the Fiscal Years Ended  
March 31,**

	<b>2010</b>	<b>2009</b>	<b>2008</b>
Rent expense	\$ 2,153	\$ 1,777	\$ 2,819

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Minimum future lease commitments at March 31, 2010 were as follows (in thousands):

<b>For the Fiscal Years Ended March 31,</b>	<b>Total</b>
2011	2,009
2012	643
2013	308
2014 and beyond	79
<b>Total</b>	<b>\$ 3,039</b>

From time to time, the Company enters into long-term construction contracts with customers that require the Company to obtain performance bonds. The Company is required to deposit an amount equivalent to some or all the face amount of the performance bonds into an escrow account until the termination of the bond. When the performance conditions are met, amounts deposited as collateral for the performance bonds are returned to the Company.

On June 26, 2008, the Company entered into a performance bond for CNY 1.1 million (approximately \$0.2 million) which expires June 30, 2012. On October 28, 2009, the Company entered into a performance bond for CNY 0.3 million (approximately \$0.1 million), which expires June 30, 2012. Both performance bonds are with a Chinese customer to guarantee supply of core components and software. The performance bonds were issued utilizing a Bank of China CNY 20.0 million (approximately \$2.9 million) unsecured line of credit, which is available until June 25, 2010.

As of March 31, 2010, the Company had outstanding performance bonds issued on behalf of AMSC Windtec, for 0.9 million (approximately \$1.2 million) in connection with two contracts to provide power electronics for two customers. The first performance bond for 0.3 million (approximately \$0.4 million) will expire on September 30, 2010 and the second performance bond for 0.6 million (approximately \$0.7 million) will expire on December 31, 2010. In the event that the payment is made in accordance with the requirements of any of these performance bonds, the Company would record the payment as an offset to revenue. The performance bonds are secured with restricted cash, included in current assets.

At March 31, 2010 and 2009, the Company had \$5.7 million and \$5.9 million, respectively, of restricted cash included in current assets, which includes the restricted cash securing the Windtec performance bonds noted above, and \$1.4 million of long-term restricted cash at March 31, 2009. Total restricted cash as of March 31, 2010 and 2009 was \$5.7 million and \$7.3 million, respectively. The Company also has an additional \$1.8 million in bank guarantees and letters of credit supported by unsecured lines of credit.

The Company also has unused, unsecured lines of credit consisting of 0.5 million (approximately \$0.7 million) which is available until June 30, 2010, and CNY 12.9 million (approximately \$1.9 million) which is available until June 30, 2012. During the year ended March 31, 2010, the Company was able to reduce its long term restricted cash in the U.S. through the establishment of credit relationships with a number of U.S. banks.

### **13. Cost-Sharing Arrangements**

The Company has entered into several cost-sharing arrangements with various agencies of the United States government. Funds paid to the Company under these agreements are not reported as revenues but are used to directly offset the Company's research and development (R&D) and selling, general and administrative (SG&A) expenses, and to purchase capital equipment.

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Costs incurred and R&D and SG&A expenditures offset by cost sharing funding received under these contracts is as follows (in thousands):

	<b>For the Fiscal Years Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
Costs incurred	\$ 3,861	\$ 4,478	\$ 6,066
R&D expenditures offset by cost sharing funding received	971	1,129	1,323
SG&A expenditures offset by cost sharing funding received	846	983	1,216

At March 31, 2010, total funding received to date under these agreements was \$29.6 million.

**14. Employee Benefit Plans**

The Company has implemented a deferred compensation plan (the Plan) under Section 401(k) of the Internal Revenue Code. Any contributions made by the Company to the Plan are discretionary. The Company has a stock match program under which the Company matched, in the form of Company common stock, 35% of the first 6% of eligible contributions. Effective October 1, 2007 this contribution increased to 50% of the first 6% of eligible contributions. The Company recorded expense of \$0.7 million, \$0.6 million and \$0.4 million for the fiscal years ended March 31, 2010, 2009 and 2008, respectively, and corresponding charges to additional paid-in capital related to this program.

**15. Acquisitions*****Acquisition of Power Quality Systems, Inc.***

On April 27, 2007, the Company acquired Power Quality Systems, Inc. ( PQS ), a Pennsylvania corporation, for \$4.5 million in common stock. PQS offers reactive compensation products known as Static VAR Compensators, or SVCs, based on its proprietary thyristor switch technology. These products enhance the reliability of power transmission and distribution grids and improve the quality of power for manufacturing operations.

The acquisition agreement included an earn-out provision for the issuance of up to an additional 0.5 million shares of common stock based on the achievement of certain order growth targets for existing PQS products for the fiscal years ended March 31, 2008 and 2009. During the fiscal year ended March 31, 2008, the Company recorded contingent consideration related to the acquisition of PQS of \$1.7 million to Goodwill and Additional paid-in capital, representing 75,000 shares earned. These shares were issued during the first quarter of the fiscal year ended March 31, 2009. In addition, the Company recorded contingent consideration of \$1.2 million to Goodwill and Additional paid-in capital, representing 75,000 shares earned for the fiscal year ended March 31, 2009. These shares were issued in the first quarter of the fiscal year ended March 31, 2010.

The results of PQS operations are included in the Company's consolidated results from the date of acquisition of April 27, 2007. Assuming the acquisition of PQS had occurred on April 1, 2007, the impact on the consolidated results of the Company would not have been significant.

***Acquisition of Windtec Consulting GmbH***

On January 5, 2007, the Company acquired Windtec Consulting GmbH ( Windtec ), a corporation incorporated according to the laws of Austria. Windtec develops and sells electrical systems for wind turbines. Windtec also provides technology transfer for the manufacturing of wind turbines; documentation services; and training and support regarding the assembly, installation, commissioning, and service of wind turbines.

The acquisition agreement included an earn-out provision for the issuance of up to an additional 1,400,000 shares of common stock upon Windtec's achievement of specified revenue objectives during the first four fiscal years following closing of the acquisition. During the fiscal year ended March 31, 2008, the Company



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**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

recorded contingent consideration of \$8.1 million to Goodwill and Additional paid-in capital, representing 350,000 shares earned. These shares were issued during the first quarter of the fiscal year ended March 31, 2009. In addition, the Company recorded contingent consideration of \$9.8 million to Goodwill and Additional paid-in capital during the fiscal year ended March 31, 2009, representing 350,000 shares earned. The 350,000 shares earned are the maximum amount of contingent consideration that can be earned in a fiscal year. These shares were issued in the first quarter of the fiscal year ending March 31, 2010. During the fiscal year ended March 31, 2010, the Company recorded contingent consideration of \$10.8 million to Goodwill and Additional paid-in capital representing 350,000 shares earned. These shares will be issued in the first quarter of the fiscal year ended March 31, 2011.

***Investment in Tres Amigas***

On October 13, 2009, the Company made a minority investment in Tres Amigas LLC ( Tres Amigas ), a merchant transmission company, for \$1.8 million. Consideration for the investment was \$0.8 million in cash and \$1.0 million in common stock. The investment was recorded under the equity method of accounting and is included in Other assets on the consolidated balance sheet. The Company's minority interest in the losses of Tres Amigas are included in Other income (expense) on the consolidated statements of operations and were immaterial for the fiscal year ended March 31, 2010.

**16. Restructuring**

The Company's restructuring charges for the fiscal years ended March 31, 2010, 2009 and 2008 were \$0.5 million, \$1.0 million and \$6.7 million, respectively.

On March 26, 2007, the Company's Board of Directors approved a restructuring plan (the Fiscal 2006 Plan ) to reduce future operating costs and to transition its high temperature superconductor products to the manufacturing stage by consolidating the Company's AMSC Wires, SuperMachines and Power Electronic Systems business segments into two operating segments: AMSC Superconductors and AMSC Power Systems.

The Company's aggregate restructuring charges associated with the Fiscal 2006 Plan were \$0.8 million, of which \$0.3 million was expensed in the fiscal year ended March 31, 2008. These charges consisted of severance, relocation and lease termination costs. The restructuring charge was allocated to the AMSC Superconductors operating segment. As of March 31, 2008, the plan was substantially completed.

On October 25, 2007, the Company's Board of Directors approved a restructuring plan (the Fiscal 2007 Plan ) to reduce operating costs through the closure its last remaining facility in Westborough, Massachusetts, and the consolidation of operations there, including its corporate headquarters, into its Devens, Massachusetts, facility. No headcount reductions were associated with this plan.

Aggregate restructuring charges associated with the Fiscal 2007 Plan were \$7.9 million, of which \$0.5 million, \$1.0 million and \$6.4 million were recorded in the fiscal years ended March 31, 2010, 2009 and 2008, respectively. The charge primarily represents \$4.4 million in costs associated with the write-off of the present value of the remaining lease payments, \$3.1 million in unforeseen costs determined necessary to return the building back to its original state to the landlord, and \$0.4 million in costs associated with the relocation of people and equipment to its Devens facility. The aggregate expected charge above assumed the facility was not subleased. All restructuring charges associated with the Fiscal 2007 Plan resulted in cash disbursements and were included in unallocated

corporate expenses.

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The following table presents the restructuring expense and cash disbursements for the fiscal years ended March 31, 2010, 2009 and 2008 (in thousands).

	<b>Lease Termination Costs</b>	<b>Decontamination and Other Facility Closing Costs</b>	<b>Employee Severance &amp; Related Benefits</b>	<b>Total</b>
Balance March 31, 2007	\$ 94	\$	\$ 370	\$ 464
Charges to operations	3,765	2,723	217	6,705
Cash disbursements	(759)	(814)	(587)	(2,160)
Balance March 31, 2008	3,100	1,909		5,009
Charges to operations	222	808		1,030
Cash disbursements	(2,860)	(1,069)		(3,929)
Balance March 31, 2009	462	1,648		2,110
Charges to operations	445	6		451
Cash disbursements	(907)	(1,654)		(2,561)
Balance March 31, 2010	\$	\$	\$	\$

**17. Business Segment and Geographic Information**

The Company reports its financial results in two reportable business segments: AMSC Power Systems and AMSC Superconductors.

AMSC Power Systems business unit produces a broad range of products to increase electrical grid capacity and reliability; supplies electrical systems used in wind turbines; sells power electronic products that regulate wind farm voltage to enable their interconnection to the power grid; licenses proprietary wind turbine designs to manufacturers of such systems; provides consulting services to the wind industry; and offers products that enhance power quality for industrial operations.

AMSC Superconductors business unit focuses on manufacturing HTS wire and coils; designs and develops superconductor products, such as power cables, fault current limiters and motors; and manages large-scale superconductor projects.

The operating results for the two business segments are as follows (in thousands):

**For the Fiscal Years Ended March 31,**

<b>Revenues</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
AMSC Power Systems	\$ 304,276	\$ 168,008	\$ 96,823
AMSC Superconductors	11,679	14,747	15,573
Total	\$ 315,955	\$ 182,755	\$ 112,396

	<b>For the Fiscal Years Ended March 31,</b>		
<b>Operating Income (Loss)</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
AMSC Power Systems	\$ 77,604	\$ 26,492	\$ 10,865
AMSC Superconductors	(24,432)	(23,655)	(21,784)
Unallocated corporate expenses	(14,511)	(11,033)	(13,971)
Total	\$ 38,661	\$ (8,196)	\$ (24,890)

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Total assets for the two business segments are as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
AMSC Power Systems	\$ 179,873	\$ 136,777
AMSC Superconductors	32,978	21,830
Corporate assets	187,333	150,499
Total	\$ 400,184	\$ 309,106

The accounting policies of the business segments are the same as those for the consolidated Company, except that certain corporate expenses which the Company does not believe are specifically attributable or allocable to either of the two business segments have been excluded from the segment operating income (loss). Unallocated corporate expenses include stock-based compensation expense of \$13.5 million, \$9.7 million and \$5.7 million for the fiscal years ended March 31, 2010, 2009 and 2008, respectively. For the fiscal years ended March 31, 2010, 2009 and 2008, unallocated corporate expenses also include \$0.5 million \$1.0, million and \$7.5 million, respectively, of restructuring charges related primarily to the closure of the Company's Westborough, Massachusetts facility. For the fiscal years ended March 31, 2010, 2009 and 2008, unallocated corporate expenses also include rent and occupancy costs associated with the unoccupied portion of the Company's former corporate headquarters facility located in Westborough, Massachusetts.

Geographic information about revenue, based on shipments to customers by region is as follows (in thousands):

	<b>For the Fiscal Years Ended March 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>2008</b>
U.S.	\$ 40,750	\$ 29,826	\$ 29,671
Other North America	4,434	6,256	3,531
Europe	14,755	5,123	4,838
Asia-Pacific	256,016	141,550	74,356
Total	\$ 315,955	\$ 182,755	\$ 112,396

In the fiscal year ended March 31, 2010, 2009 and 2008, 87%, 84% and 74% of the Company's revenues, respectively, came from sales outside the United States. Of the revenue derived from customers outside the United States, 88%, 86% and 55% were derived from customers in China in the fiscal years ended March 31, 2010, 2009 and 2008, respectively. The Company maintains operations in Austria, China and the United States and sales and service support centers around the world.

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For the fiscal years ended March 31, 2010, 2009 and 2008, the Company had one customer, Sinovel, which represented approximately 70%, 67% and 51% of total revenue, respectively.

Geographic information about property, plant and equipment associated with particular regions is as follows (in thousands):

	<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>
U.S.	\$ 58,538	\$ 50,597
Europe	3,602	2,421
Asia-Pacific	2,175	1,820
Total	\$ 64,315	\$ 54,838

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****18. Quarterly Financial Data (Unaudited)****(In thousands, except per share amount)****For the Fiscal Year Ended March 31, 2010:**

<b>Three Months Ended</b>	<b>June 30, 2009</b>	<b>September 30, 2009</b>	<b>December 31, 2009</b>	<b>March 31, 2010</b>
Total revenue	\$ 73,000	\$ 74,672	\$ 80,659	\$ 87,624
Operating income (loss)	6,391	10,330	10,440	11,500
Net income (loss)	1,792	4,340	5,179	4,937
Net income (loss) per common share Basic	0.04	0.10	0.12	0.11
Net income (loss) per common share Diluted	0.04	0.10	0.11	0.11

**For the Fiscal Year Ended March 31, 2009:**

<b>Three Months Ended</b>	<b>June 30, 2008</b>	<b>September 30, 2008</b>	<b>December 31, 2008</b>	<b>March 31, 2009</b>
Total revenue	\$ 39,817	\$ 40,375	\$ 41,334	\$ 61,229
Operating income (loss)	(2,688)	(3,813)	(5,736)	4,041
Net income (loss)	(6,103)	(4,068)	(7,772)	1,308
Net income (loss) per common share Basic	(0.15)	(0.10)	(0.18)	0.03
Net income (loss) per common share Diluted	(0.15)	(0.10)	(0.18)	0.03

During the fourth quarter of the fiscal year ended March 31, 2010, the Company adjusted Cost of revenues by \$0.7 million for an understatement of Cost of revenues of \$0.4 million and \$0.3 million, net of tax, in the second and third quarters, respectively. The adjustment had no impact to the full year results for the year ended March 31, 2010. The Company evaluated this adjustment taking into account both qualitative and quantitative factors and considered the impact of this adjustment in relation to the fourth quarter of the fiscal year ended March 31, 2010. Management believes this adjustment is immaterial to both the consolidated quarterly and annual financial statements for all periods affected.

**19. Subsequent Events**

The Company has performed an evaluation of subsequent events through May 27, 2010, which is the date the financial statements were issued.

**20. New Accounting Pronouncements**

In June 2008, the Financial Accounting Standards Boards ( FASB ) issued guidance in determining whether instruments granted in share-based payment transactions are participating securities for purposes of calculating earnings per share. Under the provisions of this standard, unvested awards of share-based payments with non-forfeitable rights to receive dividends or dividend equivalents are considered participating securities for purposes of calculating earnings per share. This accounting standard is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those years. The Company adopted this standard on

April 1, 2009. The adoption did not have a material effect on its financial condition or results of operations.

In April 2009, the FASB issued a standard, which amends and clarifies a previous standard for business combinations, to address application issues on initial recognition and measurement, subsequent measurement and accounting, and disclosure of assets and liabilities arising from contingencies in a business combination. Under this standard, an acquirer is required to recognize at fair value an asset acquired or liability assumed in a business combination that arises from a contingency if the acquisition date fair value can be determined during the



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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

measurement period. If the acquisition date fair value cannot be determined, then the acquirer applies the recognition criteria in accounting for contingencies, and makes a reasonable estimation of the amount of a loss, to determine whether the contingency should be recognized as of the acquisition date or after it. The adoption of this standard could materially change the accounting for business combinations consummated subsequent to its effective date of April 1, 2009. On April 1, 2009, the Company adopted the provisions of this standard and the adoption did not have a material effect on its financial condition or results of operations.

In June 2009, the FASB issued the FASB Accounting Standards Codification ( Codification ). The Codification became the single source for all authoritative United States generally accepted accounting principles ( U.S. GAAP ) recognized by the FASB to be applied for financial statements issued for periods ending after September 15, 2009. The Codification does not change U.S. GAAP and did not have an effect on the Company's financial condition or results of operations.

In July 2009, the FASB issued new guidance for all U.S. GAAP financial statements for public and private companies, which significantly amends the existing consolidation accounting model for variable interest entities, and includes extensive new disclosure requirements. This new guidance is effective for fiscal years (and interim periods in those fiscal years) beginning after November 15, 2009. The Company does not currently have a variable interest entity and does not expect this standard to have a material impact on its financial condition or results of operations.

In September 2009, the Emerging Issues Task Force issued new rules pertaining to the accounting for revenue arrangements with multiple deliverables. The new rules provide an alternative method for establishing fair value of a deliverable when vendor specific objective evidence or third party evidence cannot be determined. The rules provide for the determination of the best estimate of selling price for separate deliverables and allows for the allocation of arrangement consideration using this relative selling price model. The guidance supersedes the prior multiple element revenue arrangement accounting rules that are currently used by the Company. The new guidance can be prospectively applied in fiscal years beginning on or after June 15, 2010 or can be earlier or retrospectively adopted. The Company is currently evaluating the impact of adopting the guidance.

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**Item 9. *CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE***

Not Applicable.

**Item 9A. *CONTROLS AND PROCEDURES***

**Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2010. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2010, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

**Management's Report on Internal Control over Financial Reporting**

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 Exchange Act as a process designed by, or under the supervision of, a company's chief executive officer and chief financial officer, and effected by the 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 generally accepted accounting principles, and includes those policies and procedures that:

- (1) Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets;
- (2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and directors; and
- (3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, an evaluation was conducted of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of March 31, 2010.



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The effectiveness of our internal control over financial reporting as of March 31, 2010 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

**Changes in Internal Control Over Financial Reporting**

There was no change in our internal control over financial reporting that occurred during the fiscal quarter ended March 31, 2010 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. *OTHER INFORMATION***

None.

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**PART III**

**Item 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE***

The response to this item is contained in part under the caption Executive Officers in Part I of this Annual Report on Form 10-K, and in part in our Proxy Statement for the Annual Meeting of Stockholders for the fiscal year ended March 31, 2010 (the 2010 Proxy Statement ) in the sections Corporate Governance Members of the Board, Other Matters Section 16(a) Beneficial Ownership Reporting Compliance, Corporate Governance Code of Business Conduct and Ethics, Corporate Governance Board Committees and Corporate Governance Board Committees Aud Committee, which sections are incorporated herein by reference.

**Item 11. *EXECUTIVE COMPENSATION***

The sections of the 2010 Proxy Statement titled Information About Executive and Director Compensation, Compensation Committee Interlocks and Insider Participation and Compensation Committee Report are incorporated herein by reference.

**Item 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS***

The sections of the 2010 Proxy Statement titled Stock Ownership of Certain Beneficial Owners and Management and Information about Executive Officer and Director Compensation Securities Authorized for Issuance Under our Equity Compensation Plans are incorporated herein by reference.

**Item 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE***

The sections of the 2010 Proxy Statement titled Certain Relationships and Related Transactions and Corporate Governance Board Determination of Independence and Corporate Governance Board Committees are incorporated herein by reference.

**Item 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES***

The section of the 2010 Proxy Statement titled Ratification of Selection of Registered Independent Public Accounting Firm (Proposal 2) is incorporated herein by reference.

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**PART IV**

**Item 15. *EXHIBITS AND FINANCIAL STATEMENT SCHEDULES***

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

1. Financial Statements

The financial statements required by this item are included in Item 8, Financial Statements and Supplementary Data herein.

2. Financial Statement Schedules

See Schedule II Valuation and Qualifying Accounts for the fiscal years ended March 31, 2010, 2009 and 2008. All other schedules are omitted because they are not applicable, not required or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits

The list of Exhibits filed as a part of this Annual Report on Form 10-K is set forth on the Exhibit Index immediately preceding such Exhibits, and is incorporated herein by reference.

**Table of Contents****American Superconductor Corporation****Schedule II Valuation and Qualifying Accounts  
(In thousands)**

<b>Description</b>	<b>Balance,</b>	<b>Additions</b>	<b>Deductions</b>		<b>Balance,</b>
	<b>Beginning of</b>	<b>Charged to</b>	<b>Actual</b>	<b>Less</b>	<b>End of</b>
	<b>Year</b>	<b>Costs</b>	<b>Write-Off</b>	<b>Recoveries</b>	<b>Year</b>
		<b>and Against</b>			
		<b>Revenue</b>			
Allowance for doubtful notes and accounts receivable:					
Fiscal year ended March 31, 2010	\$ 1,343	\$ 1,447	\$ 54	\$ 809	\$ 1,927
Fiscal year ended March 31, 2009	5	1,652	203	111	1,343
Fiscal year ended March 31, 2008	5				5
	<b>Balance,</b>	<b>Additions</b>	<b>Expirations</b>	<b>Adjustments</b>	<b>Balance,</b>
	<b>Beginning of</b>				<b>End of</b>
	<b>Year</b>				<b>Year</b>
Deferred Tax Asset Valuation Allowance:					
Fiscal year ended March 31, 2010	\$ 174,695	\$ 16,189	\$ (4,148)	\$ 622	\$ 187,358
Fiscal year ended March 31, 2009	171,664	7,055		(4,024)	174,695
Fiscal year ended March 31, 2008	162,703	8,961			171,664
		85			

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**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.

AMERICAN SUPERCONDUCTOR CORPORATION

By: /s/ Gregory J. Yurek  
**Gregory J. Yurek**  
**Chairman of the Board and**  
**Chief Executive Officer**

Date: May 27, 2010

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.

<b>Name</b>	<b>Title</b>	<b>Date</b>
/s/ Gregory J. Yurek <b>Gregory J. Yurek</b>	Director, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	May 27, 2010
/s/ David A. Henry <b>David A. Henry</b>	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	May 27, 2010
/s/ Vikram S. Budhraj <b>Vikram S. Budhraj</b>	Director	May 27, 2010
/s/ Peter O. Crisp <b>Peter O. Crisp</b>	Director	May 27, 2010
/s/ Richard Drouin <b>Richard Drouin</b>	Director	May 27, 2010
/s/ David R. Oliver, Jr. <b>David R. Oliver, Jr.</b>	Director	May 27, 2010
/s/ John B. Vander Sande <b>John B. Vander Sande</b>	Director	May 27, 2010



/s/ John W. Wood, Jr.

Director

May 27, 2010

**John W. Wood, Jr.**

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**EXHIBIT INDEX**

<b>Exhibit No.</b>	<b>Description</b>
3.1a	Restated Certificate of Incorporation of the Registrant(1)
3.1b	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant(2)
3.2	Amended and Restated By-laws, as amended, of the Registrant(3)
*10.1	1993 Stock Option Plan(4)
*10.2	Amended and Restated 1996 Stock Incentive Plan(5)
*10.3	Form of incentive stock option agreement under Amended and Restated 1996 Stock Incentive Plan(6)
*10.4	Form of non-statutory stock option agreement under Amended and Restated 1996 Stock Incentive Plan(6)
*10.5	Second Amended and Restated 1997 Director Stock Option Plan, as amended(7)
*10.6	Form of Stock Option Agreement under Second Amended and Restated 1997 Director Stock Option Plan, as amended(8)
*10.7	2004 Stock Incentive Plan, as amended(7)
*10.8	Form of incentive stock option agreement under 2004 Stock Incentive Plan, as amended(8)
*10.9	Form of non-statutory stock option agreement under 2004 Stock Incentive Plan, as amended(8)
*10.10	Form of restricted stock agreement under 2004 Stock Incentive Plan, as amended(8)
*10.11	2007 Stock Incentive Plan, as amended
*10.12	Form of Incentive Stock Option Agreement under 2007 Stock Incentive Plan, as amended(9)
*10.13	Form of Nonstatutory Stock Option Agreement under 2007 Stock Option Plan, as amended(9)
*10.14	Form of Restricted Stock Agreement Regarding Awards to Executive Officers under 2007 Stock Option Plan, as amended(9)
*10.15	Form of Restricted Stock Agreement Regarding Awards to Employees, under 2007 Stock Option Plan, as amended(9)
*10.16	Form of Restricted Stock Agreement (regarding performance-based awards to executive officers and employees) under 2007 Stock Incentive Plan, as amended(10)
*10.17	2007 Director Stock Plan, as amended(11)
*10.18	Form of Nonstatutory Stock Option Agreement Under 2007 Director Stock Plan, as amended(9)
*10.19	Executive Incentive Plan for the fiscal year ended March 31, 2010(6)
*10.20	Executive Incentive Plan for the fiscal year ending March 31, 2011
*10.21	Employment Agreement dated as of December 4, 1991 between the Registrant and Gregory J. Yurek(12)
10.22	Form of Employee Nondisclosure and Developments Agreement(12)
*10.23	Noncompetition Agreement dated as of July 10, 1987 between the Registrant and John Vander Sande(12)
*10.24	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Gregory J. Yurek(7)
*10.25	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and David A. Henry(7)
*10.26	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Charles W. Stankiewicz(7)
*10.27	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Angelo R. Santamaria(7)
*10.28	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Daniel P. McGahn(7)
*10.29	

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First Amendment to Amended and Restated Executive Severance Agreement, effective as of December 11, 2009, between the Registrant and Daniel P. McGahn(13)

- \*10.30 Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Timothy D. Poor(7)
  - \*10.31 Executive Severance Agreement dated as of September 8, 2009 between the Registrant and Susan J. DiCecco.(14)
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<b>Exhibit No.</b>	<b>Description</b>
*10.32	Executive Severance Agreement dated as of May 18, 2010 between the Registrant and John R. Collett.
10.33	Stock Purchase Agreement, dated November 28, 2006, between the Registrant and Gerald Hehenberger Privatstiftung(15)
10.34	Purchase Contract No. 06.7IC014 for the Core Components of the Electrical Control System of FL 1500 Wind Turbine, dated as of December 15, 2006, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH(10)
10.35	Purchase Contract No. 06.7IC015 for the Software of FL 1500 Wind Turbine, dated as of December 15, 2006, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH(10)
10.36	Contract Amendment to the Purchase Contract No. 06.7IC014 for the Core Components of the Electrical Control System of FL 1500 Wind Turbine, dated as of March 6, 2007, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH(10)
10.37	Contract Amendment to the Purchase Contract No. 06.7IC015 for the Software of FL 1500 Wind Turbine, dated as of March 6, 2007, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH(10)
10.38	Purchase Contract No. FDCG07060 for the Core Components of the Electrical Control System of SL 1500 Wind Turbine, dated as of December 24, 2007, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH(10)
10.39	Purchase Contract No. FDCG07061 for the Software of SL 1500 Wind Turbine, dated as of December 24, 2007, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH(10)
10.40	Purchase Contract No. FDCG08050 for the Electrical System of SL 3000 Wind Turbine, dated as of March 7, 2008, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH(10)
10.41	Purchase Contract No. FDCG08051 for the Core Components of the Electrical Control System of SL 3000 Wind Turbine, dated as of March 7, 2008, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH(10)
10.42	Purchase Contract No. FDCG08045-01 for the Core Components of the Electrical Control System and Software of SL 1500 Wind Turbine, effective as of June 5, 2008, between Sinovel Wind Co., Ltd and Suzhou AMSC Superconductor Co., Ltd.(16)
10.43	Amendment No. HB-FDCG08045-01-2, dated July 24, 2009, to Purchase Contract No. FDCG08045-01 for the Core Components of the Electrical Control System and Software of SL 1500 Wind Turbine, effective as of June 5, 2008, between Sinovel Wind Co., Ltd. and Suzhou AMSC Superconductor Co., Ltd.(11)
+10.44	Purchase Contract No. HCG1.5MW-10016-01, effective as of May 12, 2010, between Sinovel Wind Group Co., Ltd. and Suzhou AMSC Superconductor Co., Ltd.(17)
21.1	Subsidiaries
23.1	Consent of PricewaterhouseCoopers LLP
31.1	Chief 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
31.2	Chief 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	Chief Executive Officer Certification pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

32.2 Chief Financial Officer Certification pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(1) Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3, filed with the Commission on January 24, 2000 (File No. 333-95261).

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- (2) Incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed with the Commission on August 9, 2004 (File No. 000-19672).
- (3) Incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed with the Commission on February 7, 2008 (File No. 000-19672).
- (4) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on June 29, 1993 (Commission File No. 000-19672).
- (5) Incorporated by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K filed with the Commission on June 27, 2001 (Commission File No. 000-19672).
- (6) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on May 28, 2009 (Commission File No. 000-19672).
- (7) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 10-Q filed with the Commission on February 5, 2009 (Commission File No. 000-19672).
- (8) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 9, 2004 (Commission File No. 000-19672).
- (9) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 10-Q filed with the Commission on November 9, 2007 (Commission File No. 000-19672).
- (10) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on May 29, 2008 (Commission File No. 000-19672).
- (11) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on August 6, 2009 (Commission File No. 000-19672).
- (12) Incorporated by reference to Exhibits to the Registrant's Registration Statement on Form S-1, filed with the Commission on December 13, 1991 (File No. 333-43647).
- (13) Incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on February 3, 2010 (Commission File No. 000-19672).
- (14) Incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 5, 2009 (Commission File No. 000-19672).
- (15) Incorporated by reference to Exhibit 10.01 to the Registrant's Current Report on Form 8-K filed with the Commission on November 29, 2006 (Commission File No. 000-19672).
- (16) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 11, 2008 (Commission File No. 000-19672).
- (17) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on May 17, 2010 (Commission File No. 000-19672).

Confidential treatment previously requested and granted with respect to certain portions, which portions were omitted and filed separately with the Commission.

- + Confidential treatment has been requested with respect to certain portions of this exhibit, which portions have been filed separately with the Commission.
- \* Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Form 10-K.