

EMCORE CORP  
Form 10-K  
January 10, 2011

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended September 30, 2010

or

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 0-22175

EMCORE Corporation  
(Exact name of registrant as specified in its charter)

New Jersey  
(State or other jurisdiction of incorporation or  
organization)

22-2746503  
(I.R.S. Employer Identification No.)

10420 Research Road, SE, Albuquerque, New Mexico  
(Address of principal executive offices)

87123  
(Zip Code)

Registrant's telephone number, including area code: (505) 332-5000

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

Common Stock, no par value  
(Title of each class)

NASDAQ Stock Market  
(Name of each exchange on which registered)

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

None

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

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

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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 website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T 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 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.  Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of common stock held by non-affiliates of the registrant as of March 31, 2010 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$91.0 million, based on the closing sale price of \$1.21 per share of common stock as reported on the NASDAQ Global Market.

The number of shares outstanding of the registrant's no par value common stock as of January 7, 2011 was 85,317,970.

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DOCUMENTS INCORPORATED BY REFERENCE

In accordance with General Instruction G(3) of Form 10-K, certain information required by Part III hereof will either be incorporated into this Form 10-K by reference to the Company's Definitive Proxy Statement for the Company's 2011 Annual Meeting of Stockholders filed within 120 days of September 30, 2010 or will be included in an amendment to this Form 10-K filed within 120 days of September 30, 2010.

CAUTIONARY STATEMENT  
FOR PURPOSES OF "SAFE HARBOR PROVISIONS"  
OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Exchange Act of 1934. These forward-looking statements are largely based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports, statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. These forward-looking statements may be identified by the use of terms and phrases such as "anticipates", "believes", "can", "could", "estimates", "expects", "forecasts", "intends", "may", "plans", "targets", "will", and similar expressions or variations of these terms and similar phrases. Additionally, statements concerning future matters such as the development of new products, enhancements or technologies, sales levels, expense levels, and other statements regarding matters that are not historical are forward-looking statements. Management cautions that these forward-looking statements relate to future events or our future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation those discussed under Item 1A - Risk Factors, as well as those discussed elsewhere in this Annual Report. These cautionary statements apply to all forward-looking statements wherever they appear in this Annual Report.

Neither management nor any other person assumes responsibility for the accuracy and completeness of any forward-looking statement. All forward-looking statements in this Annual Report are made as of the date hereof, based on information available to us as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business that are addressed in this Annual Report. Certain information included in this Annual Report may supersede or supplement forward-looking statements in our other reports filed with the Securities and Exchange Commission. We assume no obligation to update any forward-looking statement to conform such statements to actual results or to changes in our expectations, except as required by applicable law or regulation.

EMCORE Corporation  
FORM 10-K  
For The Fiscal Year Ended September 30, 2010  
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PART I

ITEM 1. Business

Company Overview

EMCORE Corporation and subsidiaries (the “Company”, “we”, “our”, or “EMCORE”) offers a broad portfolio of compound semiconductor-based products for the broadband, fiber optics, space, and solar power markets. The Company was established in 1984 as a New Jersey corporation and has two reporting segments: Fiber Optics and Photovoltaics. Our Fiber Optics segment offers optical components, subsystems, and systems for high-speed data and telecommunications, cable television (“CATV”), and fiber-to-the-premises (“FTTP”) networks. Our Photovoltaics segment provides products for both space and terrestrial applications. For space applications, we offer high-efficiency gallium arsenide (“GaAs”) multi-junction solar cells, covered interconnected cells (“CICs”), and solar panels. For terrestrial applications, we offer concentrating photovoltaic (“CPV”) power systems for commercial and utility scale solar applications as well as GaAs solar cells and integrated CPV components for use in other solar power concentrator systems.

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For more information about our Company, please visit our website at <http://www.emcore.com>. The information on our website is not incorporated by reference into and is not made a part of this Annual Report on Form 10-K or a part of any other report or filing with the Securities and Exchange Commission (“SEC”).

The Company is subject to the information requirements of the Securities Exchange Act of 1934. We file periodic reports, current reports, proxy statements, and other information with the SEC. The SEC maintains a website at <http://www.sec.gov> that contains all of our information that has been filed electronically. We make available free of charge on our website a link to our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

Overview of Our Industry and Markets We Serve

Compound semiconductor-based products provide the foundation of components, subsystems, and systems used in a broad range of technology markets. Compound semiconductor materials are capable of providing electrical or electro-optical functions, such as emitting optical communications signals, detecting optical communications signals, and converting sunlight into electricity.

Collectively, our products serve the telecommunications, datacom, CATV, FTTP, high-performance computing, defense and homeland security, space, and terrestrial solar power markets.

Fiber Optics

Our fiber optics products enable information that is encoded on light signals to be transmitted, routed (switched) and received in communication systems and networks. Our Fiber Optics segment primarily offers the following product lines:

Telecom Optical Products – We believe that we are a leading supplier for tunable 10, 40, and 100 gigabit per second (“Gb/s”) transmission applications for dense wavelength division multiplexed (“DWDM”) transponders and transceivers for telecommunications transport systems. We are one of few suppliers who offer vertically-integrated products, including external-cavity laser modules, integrated tunable laser assemblies (“ITLAs”), 300-pin transponders, and tunable XFP (“TXFP”) transceivers. Our internally developed laser technology is highly suited for applications of 10, 40, and 100 Gb/s due to its superior narrow linewidth and low noise characteristics. Many of our DWDM products are fully Telcordia® qualified and comply with industry multi-source agreements (“MSAs”). We are currently shipping to customers in low volume our MSA compliant TXFP product which we believe will replace 300-pin based transponders over the next few years because the TXFP product enables a higher density transport solution required by carriers. The Company’s TXFP products leverage our proprietary external cavity laser technology to offer identical performance to currently deployed network specifications.

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§ Enterprise Products – We believe that we provide advanced optical components and transceiver modules for data applications that enable switch-to-switch, router-to-router and server-to-server backbone connections at aggregate speeds of 10 Gb/s and above. We offer one of the broadest ranges of products with XENPAK form factor which comply with the 10 Gb/s Ethernet (“10-GE”) IEEE802.3ae standard. Our 10-GE products include short-reach (“SR”), long-reach (“LR”), extended-reach (“ER”), and coarse WDM LX4 optical transceivers to connect between the photonic physical layer and the electrical section layer as well as CX4 transceivers. In addition to the 10-GE products, we offer traditional MSA compliant small form factor (“SFF”) and small form factor pluggable (“SFP”) optical transceivers for use in Gigabit Ethernet and Fiber Channel local-area and storage-area networks (“SAN”). These transceivers provide integrated duplex data links for bi-directional communication over both single-mode and multimode optical fibers at data rates of 1.25 and 4 Gb/s, respectively.

§ Laser/Photodetector Component Products - We believe that we are a leading provider of optical components including lasers, photodetectors, and various forms of packaged subassemblies. Our technology enables high speed applications for 2, 4, 8, 10, and 14 Gb/s applications for the datacom and SAN markets. Products include bare die (or chip), TO, and TOSA forms of high-speed 850nm vertical cavity surface emitting lasers (“VCSELs”), distributed feedback (“DFB”) lasers, positive-intrinsic-negative (“PIN”) and avalanche photodiode (“APD”) components for 2, 8, and 10 Gb/s Fiber Channel, 1 and 10 Gb/s Ethernet, Infiniband, FTTP, and telecom applications. We provide component products to the entire fiber optics industry, and we also leverage the benefits of our vertically-integrated infrastructure through low-cost manufacturing and early access to newly developed internally produced components.



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§ Parallel Optical Transceiver and Cable Products – We have long been a technology and product leader of optical transmitter and receiver products utilizing arrays of optical emitting or detection devices, e.g., VCSELs and photodetectors (“PDs”). These optical transmitter, receiver, and transceiver products are used for back-plane interconnects, switching/routing between telecom racks, and high-performance computing clusters. Our products include 12-lane SNAP-12 MSA compliant transmitter and receivers with single and double data rates. Based on the core competency of multi-lane parallel optical transceivers, we offer optical fiber ribbon cables (ECC - EMCORE Connects Cables) with parallel-optical transceivers embedded within the connectors. These products, with aggregated bandwidths of up to 20, 40, 56, 120, and 150 Gb/s, are ideally suited for high-performance computing clusters and server interconnect applications. Our products provide our customers with increased network capacity, increased data transmission distance and speeds, increased bandwidth, lower power consumption, improved cable management over copper interconnects (less weight and bulk), and lower cost optical interconnections for massively parallel multi-processor installations.

§ Fiber Channel Transceiver Products – We offer tri-rate SFF and SFP optical transceivers for storage area networks. The MSA compliant transceiver module is designed for high-speed Fiber Channel data links supporting up to 4.25 Gb/s (4x the Fiber Channel rate). The products provide integrated duplex data links for bi-directional communication over Multimode optical fiber.

§ Cable Television (or CATV) Products - We are a market leader in providing radio frequency (“RF”) over fiber products for the CATV industry. Our products are used in hybrid fiber coaxial (“HFC”) networks that enable cable service operators to offer multiple advanced services to meet the expanding demand for high-speed Internet, on-demand and interactive video and other advanced services, such as high-definition television (“HDTV”) and voice over IP (“VoIP”). Our CATV products include forward and return-path analog and digital lasers, photodetectors and subassembly components, broadcast analog and digital fiber-optic transmitters, and quadrature amplitude modulation (“QAM”) transmitters and receivers. Our products provide our customers with increased capacity to offer more cable services, increased data transmission distance, speed and bandwidth, lower noise video receive, and lower power consumption.

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§ Fiber-To-The-Premises (or FTTP) Products - Telecommunications companies are increasingly extending their optical infrastructure to their customers' location in order to deliver higher bandwidth services. We have developed customer qualified FTTP components and subsystem products to support plans by telephone companies to offer voice, video and data services through the deployment of new fiber optics-based access networks. Our FTTP products include passive optical network ("PON") transceivers, analog fiber optic transmitters for video overlay and high-power erbium-doped fiber amplifiers ("EDFA"), analog and digital lasers, photodetectors and subassembly components, analog video receivers, and multi-dwelling unit ("MDU") video receivers. Our products provide our customers with higher performance for analog and digital characteristics, integrated infrastructure to support competitive costs, and additional support for multiple standards.

§ Satellite Communications (or Satcom) Products - We believe that we are a leading provider of optical components and systems for use in equipment that provides high-performance optical data links for the terrestrial portion of satellite communications networks. Our products include transmitters, receivers, subsystems and systems that transport wideband radio frequency and microwave signals between satellite hub equipment and antenna dishes. Our products provide our customers with increased bandwidth and lower power consumption.

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§ Video Transport - Our video transport product line offers solutions for broadcasting, transportation, IP television (“IPTV”), mobile video, and security and surveillance applications over private and public networks. Our video, audio, data and RF transmission systems serve both analog and digital requirements, providing cost-effective, flexible solutions geared for network reconstruction and expansion.

§ Defense and Homeland Security - Leveraging our expertise in RF module design and high-speed parallel optics, we provide a suite of ruggedized products that meet the reliability and durability requirements of the U.S. government and defense markets. Our specialty defense products include fiber optic gyro components used in precision guided munitions, ruggedized parallel optic transmitters and receivers, high-frequency RF fiber optic link components for towed decoy systems, optical delay lines for radar systems, EDFAs, terahertz spectroscopy systems and other products. Our products provide our customers with high frequency and dynamic range; compact form-factor; and extreme temperature, shock and vibration tolerance.

Customers for our Fiber Optics segment include: Arris/C-Cor Electronics, Aurora Networks, BUPT-GUOAN Broadband, Ciena, Cisco, Fujitsu, Hewlett-Packard, Huawei, Motorola, Tellabs, and ZTE. For the fiscal years ended September 30, 2010, 2009, and 2008, Cisco represented 13%, 15%, and 18% of the Company’s consolidated revenue.

Photovoltaics

We believe our high-efficiency compound semiconductor-based multi-junction solar cell products provide our customers with compelling cost and performance advantages over traditional silicon-based solutions. These advantages include higher solar cell efficiency allowing for greater conversion of light into electricity as well as a superior ability to withstand extreme heat and radiation environments. The higher solar cell efficiency of our products enables our customers to reduce their solar product footprint by providing more power output with fewer solar cells, which is a benefit when our product is used in terrestrial CPV systems.

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Our Photovoltaics segment primarily targets the following markets:

§ Space Solar Power Generation - We believe that we are a leader in providing solar power generation solutions to the global communications and science satellite industry and the U.S. government space programs. A satellite's operational success depends on its available power and its capacity to transmit data. We provide advanced compound semiconductor-based solar cells and solar panel products, which are more resistant to radiation levels in space and generate substantially more power from sunlight than silicon-based solutions. Space power systems using our multi-junction solar cells weigh less per unit of power than traditional silicon-based solar cells. Our products provide our customers with higher conversion efficiency for reduced solar array size and launch costs, higher radiation tolerance, and a longer expected lifespan in harsh space environments.

We design and manufacture multi-junction compound semiconductor-based solar cells for commercial, government civil space, and military satellite applications. We currently manufacture and sell one of the most efficient and reliable, radiation resistant advanced triple-junction solar cells in the world, with an average "beginning of life" conversion efficiency of 29.5%. We believe that we are the only manufacturer to supply true monolithic bypass diodes for shadow protection in the U.S. by utilizing several EMCORE patented methods.

Additionally, we are developing an entirely new class of advanced multi-junction solar cells with even higher conversion efficiency. This new architecture, called inverted metamorphic multijunction ("IMM"), is being developed in collaboration with the National Renewable Energy Laboratory and the US Air Force Research Laboratory and to date has demonstrated conversion efficiencies nearing 34% on a research and development scale.

We also offer covered interconnected cells and solar panel lay-down services, providing us the capability to manufacture fully integrated solar panels for space applications. We can provide satellite manufacturers with proven integrated satellite power solutions that can significantly improve satellite economics. Satellite manufacturers and solar array integrators rely on us to meet their satellite power needs with our proven flight heritage.

§ Terrestrial Solar Power Generation - Solar power generation systems utilize photovoltaic cells to convert sunlight to electricity and have been used in space programs and, to a lesser extent, in terrestrial applications for several decades. We believe the market for terrestrial solar power generation solutions will continue to grow as solar power generation technologies improve in efficiency, as global prices for non-renewable energy sources (i.e., fossil fuels) continue to fluctuate, and as concern regarding the effect of fossil fuel-based carbon emissions on global warming continues to grow. Terrestrial solar power generation has emerged as a rapidly expanding renewable energy source because it has certain advantages when compared to other energy sources, including reduced environmental impact, elimination of fuel price risk, installation flexibility, scalability, distributed power generation (i.e., electric power is generated at the point of use rather than transmitted from a central station to the user), and reliability. The rapid increase in demand for solar power has created a growing demand for highly efficient, reliable, and cost-effective concentrating solar power systems.

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We have adapted our high-efficiency compound semiconductor-based multi-junction solar cell products for terrestrial applications, which are intended for use with CPV power systems in utility-scale installations. We have attained 39% conversion efficiency under 1000x illumination with our terrestrial concentrating solar cell products in volume production. This compares favorably to the 15-21% efficiency of silicon-based solar cells. We believe that solar concentrator systems assembled using our compound semiconductor-based solar cells will be competitive with silicon-based solar power generation systems, in certain geographic regions that generate high direct normal irradiance (DNI). Because our dual axis tracking CPV systems are more efficient, and, when combined with the advantages of concentration (smaller footprint, less usage of photovoltaic material, direct exposure to sunlight throughout the day), the results are a lower system cost per watt. In addition, our multi-junction solar cell technology is not subject to silicon shortages which, in the past, have led to increased prices in the raw materials required for the production of silicon-based solar cells. We currently serve the terrestrial solar market with two levels of CPV products: components (including solar cells and solar cell receivers) and CPV terrestrial solar power systems.

While the terrestrial power generation market is still developing, we have shipped several megawatts (“MW”) of production orders of CPV components to most major solar concentrating systems companies in the United States, Europe, and Asia. We have finished installations of a total of approximately 1 megawatt of CPV systems in Spain, China, and the US with our own Gen-II CPV power system design. The Gen-III product, with enhanced performance (including a module efficiency of approximately 30%) and a lower cost structure, went into volume production earlier this year.

Customers for the Photovoltaics segment include: Applied Physics Labs - Johns Hopkins University, ATK, Boeing, Dutch Space, Lockheed Martin, Loral Space & Communications, NASA-JPL, Northrop Grumman, and Orbital Sciences Corporation. For the fiscal years ended September 30, 2010, 2009, and 2008, Loral Space & Communications represented 11%, 14%, and 10% of the Company’s consolidated revenue.

## Segment Data

In the Notes to the Consolidated Financial Statements, see Footnote 16 for disclosures related to business segment revenue, geographic revenue, significant customers, and operating loss by business segment.

## Strategic Plan

Over the past several years, the Company has engaged in the design and deployment of concentrating photovoltaic (CPV) systems for commercial and utility-scale solar power applications. We believe that our current Gen-III CPV system design is superior in performance and is competitive in cost to silicon solar power modules when deployed in regions with high solar irradiance. We also believe that our CPV systems business has a potential to generate significant revenue growth for the Company.

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Our CPV systems business will require a substantial amount of capital to establish a high-volume, low-cost manufacturing infrastructure and to fund working capital needs as this business develops. As a result, the Company has pursued several strategic opportunities towards separating the Company's Photovoltaics and Fiber Optics businesses to raise capital for our CPV systems business. Additionally, the Company has also been pursuing strategies specifically related to the CPV systems business.

On July 30, 2010, the Company entered into an agreement for the establishment and operation of a joint venture (the "JV Agreement") with San'an Optoelectronics Co., Ltd. ("San'an") for the purpose of engaging in the development, manufacturing, and distribution of CPV receivers, modules, and systems for terrestrial solar power applications under technology licensing from the Company.

The JV Agreement provides for the parties to form Suncore Photovoltaics Co., Ltd., a limited liability company ("Suncore"), under the laws of the People's Republic of China. The registered capital of Suncore is \$30 million, among which, San'an will contribute \$18 million in cash, accounting for sixty percent (60%) of the registered capital of Suncore, and the Company will contribute \$12 million in cash, accounting for forty percent (40%) of the registered capital of Suncore. The establishment of the Suncore entity is subject to Chinese regional government approval on various items required for business registration which is expected to be completed in early 2011. The Chairman of San'an will serve as the Chairman of Suncore and Dr. Charlie Wang, Senior Vice President of EMCORE Corporation, will serve as the General Manager of Suncore. All operational activities and business for CPV receivers, modules, and systems currently residing at both San'an and EMCORE's Langfang, China manufacturing facilities will eventually be transferred to Suncore. In conjunction with the formation of this joint venture, the Company has agreed to grant Suncore an exclusive license to manufacture EMCORE's current and future improved CPV receivers, modules and systems in China for terrestrial solar power applications.

Concurrently with the execution of the JV Agreement, the Company entered into a cooperation agreement (the "Cooperation Agreement") with an affiliate of San'an. Pursuant to the Cooperation Agreement, the Company, or a designated affiliate of the Company, will receive an aggregate \$8.5 million in consulting fees (the "Consulting Fees"), following the establishment of Suncore, in exchange for a technology license and related support and strategic consulting services to Suncore. The Company intends to use the Consulting Fees to fund most of its capital contribution requirements to Suncore. Pursuant to the Cooperation Agreement, the San'an affiliate will provide Suncore with working capital financing in the form of loans and/or guarantees.

On December 4, 2010, the Company entered into an Investment and Cooperation Agreement (the "Agreement") with San'an and the Huainan Municipal Government ("Huainan") in China. The Agreement provides for Suncore's primary engineering, manufacturing, and distribution operations for CPV components and systems to be established in the Economic and Technology Development Zone of Huainan City in exchange for subsidies and favorable tax and other incentives to be provided by Huainan. The Agreement contemplates the development of a total of 1,000 megawatts of manufacturing capacity in Huainan over the next five years, with 200 megawatts to be in place by the end of 2011, an additional 300 megawatts by the end of 2013, and the remaining 500 megawatts by the end of 2015.

Under the terms of the Agreement, Huainan has committed to providing subsidies that include: reimbursement of fees and taxes related to the acquisition of an approximately 263-acre site on which the facility is to be constructed; reimbursement of 100% of the local portion of the business, value added and income taxes incurred during the first five years of Suncore's production activities and 50% of the amount of those taxes during the subsequent five years; reimbursement of certain administrative and utility charges within the Huainan City Economic and Technology Development Zone; cash rebates to Suncore of RMB 1.4 (approximately US\$0.21) for every watt of the first 1,000 megawatts of CPV systems manufactured in Huainan and sold in China; and a cash subsidy of RMB 500 million (approximately U.S. \$75 million) that may be used solely for the purchase of capital equipment for the development of Suncore's operations in Huainan. In the event the RMB 500 million cash subsidy is used for any

purpose other than as authorized under the Agreement, Suncore would be subject to a penalty payable to Huainan of twice the amount of the subsidy.

Under the terms of the Agreement, EMCORE and San'an agree to commence construction of the Suncore facility in Huainan within one month after the site for the facility is made available. The Agreement was subject to and received approval from the shareholders of San'an on December 23, 2010.

The commitments from the Company, San'an, and its affiliate related to cash, working capital loans, and achievement of land and cash grants as well as, the various incentives and subsidies from Huainan city, should provide Suncore with adequate working capital to establish a new high volume, low-cost manufacturing facility for our CPV systems business. As a result of this joint venture, the financial burden related to the launch of the Company's new Gen-III CPV system design should be greatly reduced.

The Company expects the business outlook to remain positive for the Company's Space Solar Power Generation and CATV product lines. We expect these more mature and stable product lines to provide a solid foundation in order for the Company to invest in and pursue growth opportunities in the Terrestrial Solar Power and Telecom/Datacom Fiber Optics product lines. Therefore, for the near future, we expect to continue to own, operate, grow, and improve the operational results of both the Company's Photovoltaics and Fiber Optics businesses.

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Operationally, the key elements of EMCORE's strategy include:

- Launch Our Terrestrial Solar Power Business through Aggressive Business Development

The establishment of the Suncore joint venture with San'an addresses the Company's key strategy of commercializing its CPV system design using a low-cost, high-volume manufacturing facility while also providing an opportunity for the Company to penetrate China's emerging renewable energy market. Through Suncore, we expect our Gen-III CPV terrestrial solar power system to provide a competitive cost of energy option for commercial and utility scale projects in certain geographic regions. Our Suncore joint venture will also be focused on its own solar project and CPV business development.

The Company will continue to develop and expand partnerships with major companies, both domestically and internationally, to drive deployment of our terrestrial CPV components and systems. We expect to accelerate the development of higher-efficiency terrestrial concentrator solar cells and CPV systems, including the use of our inverted metamorphic multijunction (IMM) technology, to further reduce the cost of CPV systems through increased power output. We expect to develop an order backlog of CPV project opportunities in fiscal year 2011 to