



DIVISION OF
CORPORATION FINANCE

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

March 24, 2011

Mr. Mark Weinswig
Chief Financial Officer
EMCORE Corporation
10420 Research Road, SE
Albuquerque, NM 87123

Re: EMCORE Corporation
Form 10-K for the fiscal year ended September 30, 2010
Filed January 10, 2011
File No. 000-22175

Dear Mr. Weinswig:

We have reviewed your response dated March 11, 2011 and related filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended September 30, 2010

Item 8. Financial Statements

Note 2. Revenue Recognition, page 58

1. We refer to your response to prior comment 8. You indicate that the solar panel and solar power systems contracts fall within the scope of FASB ASC 605-35. In future filings please provide a general description of the substance of the contractual arrangements to clarify why percentage-of-completion accounting is appropriate under the scope set forth in FASB ASC 605-35-15-2 and 15-3.

Form 10-Q for the quarterly period ended December 31, 2010

Notes to Condensed Consolidated Financial Statements, page 7

Note 4. Receivables, page 12

2. With respect to your receivables related to percentage-of-completion, we see the allowance for doubtful accounts is approximately 30% of outstanding receivables as of December 31, 2010 and that the proportion of receivables reserved appears to be significantly greater than for arrangements not accounted for on a percentage-of-completion basis. Please tell us the reasons for the significant reserve related to percentage-of-completion receivables, including any impact on the appropriateness of the percentage-of-completion accounting method for the underlying arrangements. Additionally, tell us how you considered whether collectability is reasonably assured in your percentage-of-completion revenue recognition policy. Refer to SAB Topic 13.A.1.

Note 13. San'an Joint Venture, page 20

3. We refer to your disclosure that you will receive \$8.5 million in consulting fees related to a technology license, related support and strategic consulting services provided to Suncore. Please tell us how you plan to account for the consulting fees and clarify the basis in GAAP for your determination.
4. In regards to the Investment and Cooperation Agreement, please tell us whether you will be required to provide funding in addition to the initial \$12 million investment in Suncore to construct the Suncore facility. To the extent you are required to provide additional funding, please tell us how you considered disclosing the amount and timing of the obligation.

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You may contact Leigh Ann Schultz at 202-551-3628 or Gary Todd at 202-551-3605 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3676 with any other questions.

Sincerely,

for

Brian Cascio
Accounting Branch Chief