



DIVISION OF
CORPORATION FINANCE

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

June 28, 2011

Via E-mail

Mr. Eric J. Pyenson
Vice President & General Counsel
A123 Systems, Inc.
200 West Street
Waltham, MA 02451

Re: A123 Systems, Inc.
Form 10-K for the fiscal year ended December 31, 2010
Filed March 11, 2011
Form 10-Q for the quarterly period ended March 31, 2011
Filed May 10, 2011
File No. 001-34463

Dear Mr. Pyenson:

We have reviewed your filing 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 December 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 62

Certain Trends and Uncertainties, page 67

1. We note the statements by your CEO during your fourth quarter 2010 earnings call conducted on February 28, 2011 indicating that total revenue was expected to increase by over 100% sequentially in the second quarter and that unabsorbed manufacturing expenses were expected to approximately double in the first quarter as compared to fourth quarter levels. In your future filings, as applicable, please revise your disclosure to describe and where applicable, quantify known trends that you reasonably expect will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. Please refer to Item 303(a)(3)(ii).

Impairment of Long-Lived Assets, page 70

2. In light of your losses and the start-up nature of a significant portion of your operations, in future filings, please clarify:
 - How you estimate future cash flows for purposes of testing definite-lived long-lived assets, particularly property and equipment, for potential impairment, including how you determine the level at which impairment testing is performed.
 - How fair value would be measured in the event there was a short-fall in estimated future cash flows, including a description of the models you use and the types of assumptions that are key inputs to those models.
 - The nature of the events and circumstances that could lead you to test these assets for recoverability and (2) the subjectivity and the potential variability inherent to estimates of future cash flows and other key assumptions that underlie your process and models.

Please make these disclosures specific to your business.

Government Grants, page 70

3. We note the significance of government grants to your results of operations, financial position and liquidity. Please explain to us the underlying basis in GAAP for your policy with respect to timing of recognition of government grants. To the extent you have applied other GAAP by analogy, please explain your rationale.

4. Please also describe to us, with a view toward future disclosure, the factors you consider in assessing whether there is reasonable assurance that you will comply with the conditions attached to a grant and that the grant will be received.

Revenue, page 72

5. In future filings please more fully describe the material factors contributing to significant changes in revenues as referred to in your disclosure, including a description of the underlying reasons for the cited increases and decreases. In general, the discussion of revenues should describe the underlying business reasons for factors cited as responsible for material changes in revenues, such as changes arising from varying demand, changing prices, new products, new markets and other significant matters. For guidance please refer to Item 303(a)(3) of Regulation S-K and Securities Act Release 33-8350, Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations.

Cost of Revenue and Gross Profit (Loss), page 72

6. It appears that the change in sales mix to prismatic cell products had a significant negative impact on product margin. In future filings please describe the underlying reasons for the lower margins on these products. In general, when you cite changes in sales mix in explaining changes in gross margins, please also describe the factors responsible for the impact on margins.

Credit Facilities, page 81

7. In future filings please include a description of material credit facility covenants, events of defaults and remedies. Please also definitively disclose whether you are in compliance with covenants as of the period end.

Item 8. Financial Statements

Segment, Geographic and Significant Customer Information, page 94

8. Please tell us how you evaluated whether you operate in more than one reportable operating segment under FASB ASC 280-10-50-10. In this regard, we see that you discuss your business by business organization including the Automotive Solutions Group, Cell Products Group and Energy Solutions Group.

Revenue Recognition, page 95

9. We refer to your disclosure in the first paragraph on page 99 that you have received license-related fees of \$28 million, which will be recognized on a straight-line basis over the longer of the patent term or the expected customer relationship. As the agreement was entered into in 2008, in future filings, please clarify the status of the transfer of technology which you disclose is the driver to begin revenue recognition.

Note 12. Income Taxes, page 113

10. In future filings please disclose loss before income taxes separately for foreign and domestic operations. Refer to Rule 4-08(h) of Regulation S-X.

Form 10-Q for the quarterly period ended March 31, 2011

Item 1. Financial Statements

Note 10. Subsequent Events, page 15

11. We see you issued convertible unsecured subordinated notes in April 2011. Please tell us how you evaluated the conversion option in assessing whether derivative accounting under FASB Codification Topic 815 is applicable.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 17

Revenue, page 23

12. Please tell us in more detail the underlying business reasons causing the electric grid industry sales decline. In that regard, please more fully explain what you are intending to convey when you attribute the decline to the timing of electric grid storage shipments and the timing of revenue recognition.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

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- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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. Please contact Joseph McCann at (202) 551-6262 or Timothy Buchmiller at (202) 551-3635 with any other questions. You may also contact me at (202) 551-3676 with any other questions.

Sincerely,

Gary Todd for

Brian Cascio
Accounting Branch Chief

cc: Susan L. Mazur, Latham & Watkins LLP