



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

October 28, 2016

Via E-mail

Arthur D. Sams
Chief Executive Officer
Polar Power, Inc.
249 E. Gardena Boulevard
Gardena, CA 90248

**Re: Polar Power, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed October 20, 2016
File No. 333-213572**

Dear Mr. Sams:

We have reviewed your amended registration statement 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 by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our October 5, 2016 letter.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 38

1. Please expand your response to prior comment 13 to clarify why you deleted the disclosure referenced in that comment. Please also clarify the extent to which AC power systems are currently used, the reasons underlying AC power's historical predominance and the reasons underlying a shift towards DC power.

Increased data traffic has resulted in increased investments..., page 51

2. We note your response to prior comment 16. Please supplementally provide the report that you cite. Also, we note your revisions regarding wireless expenditures relates only to 2014. Please expand to address 2015.

A 2012 report..., page 53

3. We note your added disclosure in response to prior comment 54 that divesting real estate assets has allowed your major customer to reinvest capital into upgrading equipment at cell tower sites, including power generating equipment. Please clarify whether those upgrades are occurring at the remaining cell tower sites owned by your major customer and whether your major customer continues to make improvements to towers it leases from tower companies.

Executive Officers, page 73

4. We note your response to prior comment 20. Please revise your disclosure to clarify the position Mr. Masina held in his family business.

Executive and Director Compensation, page 80

5. We note your response to prior comment 22. Please clarify your statement in your response that Mr. Ulinski was at no time an employee of the company, given the title you say he had and deleted disclosure that he was a “key” employee. Please also expand to address Item 402(m)(2)(iii) of Regulation S-K and the requirement of Item 402(m)(1) that all compensation for “all services rendered in all capacities” be disclosed under that item.

Index to Financial Statements

Notes to Financial Statements

Note 1. Nature of Business and Significant Accounting Policies

-Income Taxes, page F-9

6. We note your response to comment 27 and that your updated disclosure herein that “Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will either expire before the Company is able to realize their benefits, or that future deductibility is uncertain.” Please tell us how the referenced policy complies with ASC 740-10-30-5(e).

Arthur D. Sams
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You may contact Tara Harkins at (202) 551-3639 or Jay Webb, Senior Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Heather Percival at (202) 551-3498 or Geoff Kruczek, Senior Attorney, at (202) 551-3641 with any other questions.

Sincerely,

/s/ Geoff Kruczek for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Larry A. Cerutti, Esq.
Troutman Sanders LLP