



DIVISION OF
CORPORATION FINANCE

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

August 30, 2013

Via E-mail

Paul Bundschuh
Chief Executive Officer
Ideal Power Inc.
5004 Bee Creek Road, Suite 600
Spicewood, Texas 78669

**Re: Ideal Power Inc.
Registration Statement on Form S-1
Filed August 6, 2013
File No. 333-190414**

Dear Mr. Bundschuh:

We have reviewed your 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.

Prospectus Cover

1. Please revise the cover page to disclose your relationship with MDB Capital Group.
2. We note your disclosure that this is a firm commitment offering. Certain of disclosure throughout suggests a different arrangement, however. For example, we note disclosure on page 4 that you will terminate the offering if you fail to raise \$10 million, which seems inconsistent with a firm commitment to take or pay for a certain number of shares. Please revise to clarify the underwriting arrangement.

Prospectus Summary, page 1

3. Please define or remove technical terms and other jargon so that your document can be understood by an investor not in your industry. Examples include “topology,” “utility dispatchable PV,” “reference product,” “PV inverter,” and “distributed storage.” It may also be useful to include a brief introductory explanation of where your product fits into the electric power market. For example, is it a consumer or industrial product? Which types of OEMs might be interested in using your product?
4. Please provide us support for the market and industry data that you cite in the sections entitled “Our Proprietary Technology” on page 2 and “Our Target Markets” on pages 3 and 4. Clearly mark the material you provide to identify the data you cite in your document, and tell us whether you commissioned any of the data disclosed in your prospectus.
5. Please provide us support for your statements regarding your leadership throughout the prospectus, such as your statements about leadership in the first and last paragraphs on page 21 of the prospectus.

Our Proprietary Technology, page 2

6. Please provide us with support for your claims in the bullet points in this section about best-of-class safety, greater efficiency and greater reliability. In addition, where you provide statistics, please explain what they mean. For example, what does 96% efficiency mean?
7. Please expand the disclosure in the first bullet point on page 3 about “uses below 10kW to over 1MW” to briefly provide examples of the types of uses at the low and high end of the range so that the uses at either end of the range can be understood by an investor not in your industry.
8. We note the disclosure in the last sentence of this section about a government grant. Please expand the appropriate section to disclose, if applicable, any rights that the government has to your technology and patents.
9. We note the disclosure in the last sentence of this section about developing and commercializing power switches and the disclosure in the second paragraph on page 3 that you are in the process of developing two more reference products. Please expand the sections entitled “Plan of Operation” and “Business” to clearly discuss each step you must take to reach commercialization of your proposed products and your estimated capital needed to achieve each product. For example, you disclose on pages 3 and 24 that the bi-directional insulated gate bipolar transistor is being funded partially by a \$2.5 million grant. However, you do not mention the total capital needed to achieve that product or the two other products mentioned on page 24.

Our Business Model, page 3

10. Please expand the disclosure in the fifth sentence of this section to disclose the number of companies that have purchased your products. In addition, explain to us why you chose the customer names you included here. In this respect, please note that we do not consider name recognition to be a sufficient basis for identifying a customer in your disclosure.

Our Target Markets, page 3

11. Refer to the first bullet point under this heading. It is not clear why the rapid decline in the cost of solar cells causes growth in the PV inverter market or helps your business. Please revise to clarify.
12. Please eliminate disclosure that appears to be marketing. For example, we note the disclosure in this section about “dozens of markets that could benefit” and the “strength of the PPSA value proposition for those markets.”
13. Please expand the disclosure in the appropriate section of your filing to clarify your relationship with the U.S. Department of Defense and NRG Energy. In this regard, we note that you mention in the third bullet point of this section that the U.S. Department of Defense and NRG Energy are your “partners.”

Status as an Emerging Growth Company, page 4

14. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Please clarify that despite opting out of Section 102(b)(1) of the JOBS Act, you may still take advantage of all of the other provision of that Act.

The Offering, page 6

15. We note that you disclose that you intend to use some proceeds for “existing product development and commercialization,” “protection of [y]our intellectual property” and “general corporate purposes.” However, on page 57 you state that you intend to use some proceeds for the “development of existing products, including product and

equipment purchases,” “patent filings and the protection of intellectual property” and “working capital and general corporate purposes.” Please reconcile.

To date we have had a limited number of customers, page 10

16. Please expand the disclosure in this risk factor to quantify the percentage of your net revenues in the fiscal year ended December 31, 2012 from the Department of Energy and Lockheed Martin, respectively. Also, expand the disclosure to quantify the percentage of your net revenues in the fiscal year ended December 31, 2011 from Lockheed Martin and Meridian Solar, respectively.
17. If your revenues in the last two years from Lockheed Martin were received in connection with your agreements entered into in 2009 and you do not expect any additional revenues from these agreements, expand the disclosure in this risk factor and in your section entitled “Plan of Operation” to discuss the lack of future revenues from agreements with Lockheed Martin. In this regard, we note the disclosure in the last paragraph on page 28 about your agreements with Lockheed Martin.
18. If your grant revenues from the Department of Energy in the fiscal year ended December 31, 2012 and in the quarter ended March 31, 2013 represent substantially all of your revenues that you expect to receive from the grants from that agency mentioned in the third paragraph on page 29, expand the disclosure in this risk factor and in your section entitled “Plan of Operation” to discuss the lack of future revenues from those two grants from that agency.

We have not devoted significant resources toward the marketing and sale, page 11

19. Please expand the disclosure in the appropriate section of your filing to discuss the material terms of your strategic marketing and distribution agreements mentioned in this risk factor.

Business Strategy, page 23

20. Since you do not appear to have sold any 30kW hybrid converters, 30kW micro-grid converters and bidirectional insulated gate transistors, please revise throughout to remove claims about the characteristics of these product or their benefits, or revise to indicate that they represent management's belief. Examples include the disclosure on page 24 about “charging systems with greater energy and cost efficiency,” the disclosure in Figure 5 on page 24 of the incremental benefits of BD-IGBT implementation, the disclosure on page 27 about a “lower cost, more efficient integrated solution” and the disclosure on page 28 about the product “should perform at lower cost and higher efficiency.”

Intellectual Property, page 24

21. We note the reference in this section to a “proven ideation process.” Please provide us support for your statement about a “proven” process. Also, please briefly explain the phrase “ideation process.”
22. Please disclose the duration of your material patents.

Revenue Recognition, page 33

23. We note that you have been awarded two significant grants from the U.S. Department of Energy and have received approximately \$1.0 million in revenue to fund long-term research and next generation product development. Please revise to describe how you recognize revenue from grants. Describe how the revenue is earned and how you determine the timing for revenue recognition.
24. As a related matter, please clarify if the grants are for the reimbursement of costs and how you determined that grants are appropriately classified as revenue rather than netted against related expenses incurred. Please also clarify where you record expenses related to grant revenue in the statement of operations. We reference your disclosure on page F-7 that government grants are agreements that generally provide the company with cost reimbursement for certain type of research and development activities over a contractually defined period.

Stock-Based Compensation, page 33

25. Please revise to disclose how you determined each of the assumptions required in valuing stock options. In discussing how you determined the fair value of your common stock, disclose the following:
 - The aggregate intrinsic value of all outstanding options based on the midpoint of the estimated IPO price range. Please make sure to use the pre-reverse stock split IPO price.
 - Discuss the significant factors, assumptions and methodologies used in determining fair value for those options granted during the twelve months prior to the date of the most recent balance sheet.
 - Discuss each significant factor contributing to the difference between the fair value as of the date of grant and the estimated IPO price for options granted during the twelve months prior to the date of the most recent balance sheet.
 - Disclose the valuation method used and the reasons why you choose that method.
26. Please also revise to include disclosure about how you value common stock issued for services and common stock warrants issued for consulting services.

Convertible Promissory Notes and Warrants, page 34

27. Please revise to disclose the significant assumptions used to value warrants issued in connection with debt arrangements, including how you determined the estimated fair value of your common stock used in the valuation.

Results of Operations, page 34

28. Please revise to discuss the reasons for the significant increase in grant revenue in fiscal 2012. Please also further discuss the significant decline in contract revenues from Lochhead Martin in fiscal 2012.
29. Please revise to discuss why general and administrative expense increased from the three months ended March 31, 2012 to March 31, 2013. Please also further discuss the reason for the significant increase in general and administrative expenses for fiscal 2012 compared to 2011 and clarify the nature of the significant increase in business consulting and legal services.

Capitalization, page 57

30. Please provide us the adjustments used to determine the “as adjusted for the effect of the reverse split, debt conversion and issuance of shares to directors” in the Capitalization table on page 58. In addition, provide a reconciliation of the “as adjusted” amounts in the table to the amounts in the balance sheets on page F-1.

Dilution, page 59

31. Please revise to disclose how the data in the table on page 59 would change assuming the exercise of all warrants and options.

Financial Statements

32. Please update the financial statements when required by Rule 8-08 of Regulation S-X.

Condensed Financial Statements for the three months ended March 30, 2013

Condensed Balance Sheets, page F-1

33. Please revise to separately identify outstanding debt that is convertible.

Condensed Statement of Operations, page F-2

34. Please revise to disclose the pro forma net loss per share assuming the reverse stock split that you will effect after the effectiveness of the registration statement.

Note 6. Patents, page F-10

35. We reference the disclosure that you have capitalized \$426,000 for costs related to patents that have not been awarded. Please tell us the nature of the costs capitalized as patent assets. In addition, please tell us the basis in U.S. GAAP for capitalizing costs to obtain patents. We reference FASB ASC 350-30 which states that the costs of internally developing other intangible assets, such as those that are specifically identifiable, are expensed as incurred, unless other specific guidance calls for capitalization of those costs.

Note 9. Common and Preferred Stock, page F-14

36. Please explain to us the basis in U.S. GAAP for your accounting for the 29,680 shares of common stock for services that have not been issued. If the services have been performed, explain to us why the related expense is not recorded within net loss on the statement of operations.
37. As a related matter, revise to disclose how you determined the fair value of common stock to be issued in connection with services rendered of \$43,333.

Exhibit 23.1. Consent of Independent Registered Public Accounting Firm

38. To the extent there is a delay in requesting effectiveness of your registration statement, or there is any change, other than typographical, made to the financial statements, or there have been intervening events since the prior filing that are material to the company, please provide a currently dated and signed consent from your independent accountant with your next amendment.

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 Act of 1933 and all applicable Securities 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.

Paul Bundschuh
Ideal Power Inc.
August 30, 2013
Page 8

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Kristin Lochhead, Staff Accountant, at (202) 551-3664 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc (via e-mail): Kevin Friedmann, Esq.