

IDEAL POWER INC.

October 11, 2013

VIA EDGAR

Ms. Amanda Ravitz, Assistant Director
Securities and Exchange Commission
Washington, D.C. 20549

Re: Ideal Power Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed September 18, 2013
File No. File No. 333-190414

Dear Ms. Ravitz:

This letter is in response to your letter dated October 4, 2013 to Ideal Power Inc. (the "Company") regarding Amendment No. 1 to the Company's Registration Statement on Form S-1 (the "Registration Statement"). For your ease of reference, we have repeated the comments included in your letter immediately above each response. In conjunction with this letter, the Company is providing amendment number 2 to the Registration Statement (the "Amendment") for your review.

Risk Factors, page 11

1. We note your response to prior comment 8. Please add a risk factor to highlight the risk related to the right to sublicense the invention mentioned on page 26 and the march-in rights mentioned on page 27.

We have revised the Registration Statement to include a risk factor relating to the rights of the United States, as you requested. Please see page 13 of the Amendment.

Business Strategy, page 27

2. We note your response to prior comment 12. Please continue to eliminate disclosure that appears to be marketing. For example, we note the disclosure in the first sentence on page 29 to "continuously improve the value proposition of [y]our technology," the disclosure in the penultimate paragraph on page 37 that you still are "currently negotiating a strategic supplier agreement with an industry leader" and the disclosure in the last paragraph on page 37 about the market "may be one of [y]our fastest growing market opportunities."

We have removed or revised the disclosure throughout the summary and the discussion of the business, as you requested.

Research and Development Costs, page 35

3. Please revise to also disclose the amount of research and development costs recorded as cost of sales or tell us why you do not believe that this disclosure is required.

The Company has revised the cost of revenues line item in the statement of operations to include two sub-captions: products and services costs, and grant research and development costs. Grant research and development costs represent costs paid to university research departments for their efforts with respect to the development of parts that may improve the efficiency of the Company's technology. Research and development costs not associated with grants are included as a line item in operating expenses in the statement of operations.

We have revised the disclosure on page 36 as follows:

During the years ended December 31, 2012 and December 31, 2011, we incurred \$1,837,146 and \$914,851, respectively, in research and development costs, of which \$709,954 and \$0, respectively, was included in cost of revenues. During the six months ended June 30, 2013 and June 30, 2012, we incurred \$1,370,592 and \$666,692, respectively, in research and development costs, of which \$816,941 and \$110,953, respectively, was included in cost of revenues.

The Company also revised the revenue recognition discussion and the discussion of research and development costs included at footnote 2 to the June 30, 2013 and December 31, 2012 financial statements so that the information included in them is consistent with the information included in the prospectus. Please see pages F-8, F-9 and F-27 of the Amendment.

Critical Accounting Policies and Estimates, page 39

Revenue Recognition, page 39

4. We reference your response to prior comments 23 and 24. Please revise to disclose the terms and conditions of the research and development grants, including how and when you receive “reimbursement” for related research and development expenses. Please also disclose how the conditions under which the grants were provided are considered in your revenue recognition. In addition, please clarify any contingencies or ongoing obligations related to these arrangements and whether you are required under any circumstances to repay monies received under the grants. We reference the statement on page 41 that the APRA-E grant requires that you contribute to cost-sharing. Please clarify what this means and how you account for cost-sharing amounts.

We have revised this disclosure, as you requested. Please see page 41 of the Amendment.

5. As a related matter, please further clarify how the economics of the research and development arrangements support the classification as revenue rather than other operating income or as a reduction to research and development expense.

The Company believes that recognizing the government grants as revenues is a better reflection of the economics of the arrangements as (i) there are no contingencies or ongoing obligations of the Company associated with its receipt of or right to retain the funds that it receives under its grants, (ii) the Company is the primary obligor of all the costs incurred under the work plans for the grants, and (iii) the Company has full discretion on the use of the monies that it receives under the grants. In addition, the Company earns the grant funding through the performance of research and development activities, which is one of the Company’s primary business activities. The Company also believes that this presentation provides transparency to users of the Company’s financial statements of the business activities associated with these grants, specifically, grant revenues and grant costs. We have included this information at page 41.

Stock-Based Compensation and Convertible Promissory Notes and Warrants, page 40

6. We note the revisions made on page 40 in response to our comments 25 – 27. Please also revise to disclose how you determined the estimated fair value of your stock that is used in the Black-Scholes option valuation model.

The price used for the fair value of the issuance of securities for the past 12 months was based upon the estimated IPO price at the date of grant. The grant prices used were approximately equal to the price of the current offering. The Company has revised the discussion of accounting policies included in the MD&A and footnote 2 to the June 30, 2013 and December 31, 2012 financial statements to include this information. Please see pages 42, F-9 and F-28.

Interest expense, page 41

7. Please revise to disclose the reason for the significant increase in amortization of debt discount during the six months ended June 30, 2013.

We have revised the disclosure as you requested. Please see page 44 of the Amendment.

Directors, Executive Officers and Corporate Governance, page 44

8. We note the reference on page 46 to “Satcon Technology Corporation, a public company.” Please briefly update the disclosure regarding Satcon Technology Corporation.

We have updated the information relating to Satcon Technology Corporation, as you requested. Please see page 50 of the Amendment.

9. Please balance the disclosure on page 46 regarding Mr. Eisenhaure’s business experience with Satcon Technology Corporation with any negative information, like losses.

We have revised the disclosure to Mr. Eisenhaure’s biography, as you requested. Please see page 50 of the Amendment.

Security Ownership of Certain Beneficial Owners and Management, page 54

10. Please include a row in the table for Mr. Eisenhaure.

We have added Mr. Eisenhaure to the beneficial ownership table. Please see page 59 of the Amendment.

Capitalization, page 65

11. We note the response to prior comment 30. We continue to not be able to reconcile the last two columns in the table on page 66. Please provide a detailed reconciliation from the amounts in the balance sheet at June 30, 2013 to the adjusted amounts in the table.

We have included with this letter an Excel spreadsheet illustrating the reconciliation.

Financial Statements

Condensed Financial Statements for the six months ended June 30, 2013

Condensed Statement of Operations, page F-3

12. Please revise to separately state the cost of revenues related to royalty revenues on the face of the statement of operations.

We have revised the face of the statement of operations and separately reported the cost of revenue related to grant revenue. As revenues from royalties have no related cost of revenues, no cost of revenue line item for royalties has been provided. Please see pages F-3 and F-21.

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

13. We reference the disclosure that the fair value of common stock issued for services was based upon the evaluation of fair value made by the Board of Directors which considered the values associated with securities offerings during the periods. Please tell us what securities offerings the Board of Directors considered and how it determined that this was the best estimate of fair value of the company.

The grant price of these shares was \$1.46 per share, which was based on the Company's best estimate of fair value at the time of grant. However, upon further consideration, the Company believes that it should have revised the number of shares in the grant downward or increased the grant price of the shares to the approximate IPO price, or \$2.10 per share. The difference in value between the grant price used and the IPO price amounts to less than \$40,000, which is approximately 1% of net loss. The Company believes that the amount is not quantitatively material to users of the financial statements, nor to their understanding of the financial statements, and is not qualitatively significant enough to require the amount to be adjusted. (This information above is not adjusted for the reverse stock split.)

Note 17. Subsequent Events, page F-17

14. We see that you issued 838,756 stock options in July 2013. Please revise to disclose how you determined the estimated fair value of your common stock used in the Black-Scholes pricing model. Please reconcile the fair value used in the valuation with the IPO price.

We have revised the disclosure in Note 17 as you requested. Please see page F-18.

In responding to your comments, the Company acknowledges 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.

We hope that this letter has adequately addressed your comments. If you have additional comments or questions, please contact Kevin Friedmann, Esq. via e-mail at kfriedmann@richardsonpatel.com or by telephone at (212) 561-5559.

Very truly yours,

IDEAL POWER INC.

By: /s/ Paul Bundschuh
Paul Bundschuh
Chief Executive Officer

Ideal Power Inc.**Reconciling the number in the S-1 balance sheet to the CAP table in the S1****Convertible debt net of debt discount**

Convertible Debt at face value, net of debt discount	\$ 3,387,919	column 1
Convertible Debt at face value, net of debt discount	3,387,919	column 2
Add value of new notes issued after 6/30/2013 - MDB round 3	750,000	
Add value of new notes issued after 6/30/2013 - Richardson Patel	213,293	
Conversion to stock - Amount that goes to Common stock and Paid in capital	(3,387,919)	
Conversion to stock - Amount that goes to Common stock and Paid in capital	(750,000)	
Conversion to stock - Amount that goes to Common stock and Paid in capital	(213,293)	
Convertible Debt at face value, net of debt discount	-	column 3
Convertible Debt at face value, net of debt discount	\$ -	column 4

Texas Emerging Technology fund debt

Texas Emerging Technology fund debt	\$ 1,172,690	column 1
Texas Emerging Technology fund debt	1,172,690	column 2
Texas Emerging Technology fund debt	1,172,690	column 3
Texas Emerging Technology fund debt	\$ 1,172,690	column 4

at .001

Common stock at par value / number of shares - reconciliation

	number of shares	par value	
Original # of shares (column 1)	3,524,504	\$ 3,525	column 1
Number of shares currently after 2.381 reverse stock split (column 2)	1,480,262	\$ 1,480	column 2
The convertible notes converted to shares - see detail below)	1,688,711	\$ 1,689	
Board of directors shares	25,170	\$ 25	
Number of shares after conversion	3,194,143	\$ 3,194	column 3
Add: shares sold at IPO	2,500,000	\$ 2,500	
Common stock shares / at .001 par value	5,694,143	\$ 5,694	column 4

Additional Paid in capital - reconciliation

Paid in capital (column 1)	\$ 7,121,227	column 1
Change in par value (from 3,525 to 1,480)	2,045	
Paid in capital (column 2) (due to change in par value)	7,123,272	column 2
Add value on the balance sheet for convertible notes	3,387,919	
Add value of new notes issued after 6/30/2013 - MDB round	750,000	
Add value of new notes issued after 6/30/2013 - Richardson P	213,293	
Add interest accrued (note: continues to accrue)	114,400	
Less: part value allocated to common stock at .001 - Convertibles	(1,689)	
Add value on the balance sheet for board comp	87,497	
Less: part value allocated to common stock at .001	(25)	
Paid in capital (column 3)	11,674,667	column 3
Add paid in cap from IPO proceeds	10,467,000	
less: par value for the shares	(2,500)	
Paid in capital (column 4)	\$ 22,139,167	column 4

Additional paid in capital - stock to be issued to directors

Additional paid in capital - stock to be issued to directors	\$ 87,497	column 1
Additional paid in capital - stock to be issued to directors	87,497	column 2
Transferred to Additional paid in capital and stock is issued	(87,497)	
Additional paid in capital - stock to be issued to directors	-	column 3
Additional paid in capital - stock to be issued to directors	\$ -	column 4

Accumulated deficit

Total stockholders' equity (deficit)	\$ (11,012,475)	column 1
Total stockholders' equity (deficit)	(11,012,475)	column 2
Total stockholders' equity (deficit)	(11,012,475)	column 3
Total stockholders' equity (deficit)	\$ (11,012,475)	column 4

Total stockholders' equity (deficit)

	Column 1	Column 3	Column 4
Commonstock par value	\$ 3,525	\$ 3,194	\$ 5,694
Common stock to be issued	87,497	0	-
Additional paid-in capital	7,121,227	11,674,667	22,139,167
Treasury stock	(2,657)	(2,657)	(2,657)
Accumulated deficit	(11,012,475)	(11,012,475)	(11,012,475)
Total stockholders' equity (deficit)	\$ (3,802,883)	\$ 662,729	\$ 11,129,729

Total capitalization calculation

Total debt	\$ 4,560,609	\$ 1,172,690	\$ 1,172,690
Total stockholders' equity (deficit)	(3,802,883)	662,729	11,129,729

	\$ 757,726	\$ 1,835,419	\$ 12,302,419
Stockholder's Equity (deficit) per share	Column 2	Column 3	Column 4
number of shares after reverse stock split	1,480,262	3,194,143	5,694,143
Stockholder's Equity (deficit) per share	\$ (2.57)	\$ 0.21	\$ 1.95

Description of 4 step process to show how we reconcile the numbers from the F-1 page to the as is capitalization page. A four step process.

Column 1 = shows the notes and cap structure for the balance sheet six months ended June 30, 2013 the first column of the F-1 balance sheet

Column 2 = shows the same as #1 but converts common stock at \$.001 par value of 3,525 into 1,480 to reflect the reverse stock split of 2.381. The 2,045 par value difference is added to the additional paid in capital line.

Column 3 = takes into consideration the \$3,387,919 in convertible debt and stock to be issued to the directors of \$87,497, the new notes for \$750,000 and the Richardson Patel note for \$213,293 and converts it to equity. \$1,714 goes to common stock and the remainder goes to paid in capital.

Column 4 - takes into consideration we receive IPO net proceeds of \$10,467,000 from the sale of 2,500,000 shares. \$2,500 is added to the common stock at \$.001 par value and the remaining \$10,464,500 is added to the paid in capital.

IDEAL POWER INC - CAP TABLE INFO

Pre reverse split price	\$ 2.1000
Reverse split multiplier	\$ 2.381
IPO PRICE	\$ 5.00
Raise	\$ 12,500,000
Number of shares issued	2,500,000
MDB fee	\$ 1,250,000
Net	\$ 11,250,000
Other fees	\$ 783,000
Net proceeds	\$ 10,467,000

Convertible debt	6/30/2013	6/30/2013	6/30/2013	6/30/2013	Pre IPO	Pre IPO	face value of notes prior to IPO
	Notes - face value	Notes with accrued interest	Conversion rate	in shares	\$ - with the other financing rounds	in shares	
As of June 30, 2013							
Notes 1 - Pre MDB notes (\$360,000+695,151) due 12/31	\$ 1,055,151	\$ 1,145,715	\$ 5.00000	229,143	\$ 1,145,715	229,143	\$ 1,055,151
Notes 2 - MDB round 1 due 11/21	\$ 750,000	\$ 756,250	\$ 3.47626	217,547	\$ 756,250	217,547	\$ 750,000
Notes 3 - MDB round 2 due 11/21	\$ 3,250,000	\$ 3,267,153	\$ 3.47626	939,847	\$ 3,267,153	939,847	\$ 3,250,000
Notes 3 - MDB round 3 due 7/29/14 (after 6/30)	\$ -	\$ -	\$ 3.47626	-	\$ 750,000	215,749	\$ 750,000
Notes 4 - Richardson Patel 12/31/2012 due 11/21/2013	\$ 86,707	\$ 87,141	\$ 3.47626	25,067	\$ 87,141	25,067	\$ 87,141
Notes 4 - Richardson Patel - second note after 6/30	\$ -	\$ -	\$ 3.47626	-	\$ 213,293	61,357	\$ 213,293
Total convertible debt	\$ 5,141,858	\$ 5,256,258		1,411,604	\$ 6,219,551	1,688,711	\$ 6,105,585
debt disc	(1,753,939)	(1,753,938)			(1,753,938)		
Convertible debt net of debt discount	\$ 3,387,919	\$ 3,502,320		1,411,604	\$ 4,465,613	1,688,711	
Note: of the \$5,141,858 in notes \$1,753,939 is already included in the additional paid in capital as debt discount. The net increase to total capitalization from the conversion of the debt is \$3,397,919							
Texas Emerging Technology fund debt	\$ 1,172,690	\$ 1,172,690			\$ 1,172,690		
Total Debt (net of debt discount) w/TEFT	\$ 4,560,609	\$ 4,675,010			\$ 1,172,690		

	(1)	(2)	(3)	(4)
			with stock split, debt conversion, additional debt and director shares and cost	
	As of June 30, 2013 Actual	As of June 30, 2013 Actual with effect of reverse stock split		With effect of IPO
Capitalization Table				
Total debt at face value, net of debt discount:				
Convertible Debt at face value, net of debt discount	\$ 3,387,919	\$ 3,387,919	\$ -	\$ -
Texas Emerging Technology fund debt	1,172,690	1,172,690	1,172,690	1,172,690
Total debt	<u>\$ 4,560,609</u>	<u>\$ 4,560,609</u>	<u>\$ 1,172,690</u>	<u>\$ 1,172,690</u>
Stockholders' equity:				
Common stock, par value \$0.001 per share: 50,000,000 shares of common stock authorized; 1,480,262 shares issued and outstanding as of June 30 with stock split, 5,694,143 shares issued and outstanding as adjusted.				
	\$ 3,525	\$ 1,480	3,194	5,694
Additional paid in capital	7,121,227	7,123,272	11,674,667	22,139,167
Additional paid in capital - stock to be issued to directors	87,497	87,497	-	-
Treasury Stock	(2,657)	(2,657)	(2,657)	(2,657)
Accumulated deficit	(11,012,475)	(11,012,475)	(11,012,475)	(11,012,475)
Total stockholders' equity (deficit)	<u>\$ (3,802,883)</u>	<u>\$ (3,802,883)</u>	<u>\$ 662,729</u>	<u>\$ 11,129,729</u>
Total capitalization	<u>\$ 757,726</u>	<u>\$ 757,726</u>	<u>\$ 1,835,419</u>	<u>\$ 12,302,419</u>
Stockholder's Equity (deficit) per share	\$ (1.08)	\$ (2.57)	\$ 0.21	\$ 1.95

(1) Convertible notes and interest of \$6,219,551 including \$750,000 and \$213,293 raised after the 2nd quarter of 2013, convert into 1,688,711 shares at the time if the offering. Of the \$6,219,551 in debt \$1,753,939 is already accounted for in paid in capital as debt discount.

Includes 23,973 shares to be issued to the directors for compensation to June 30, 2013.

(2) - Assumes that 2,500,000 shares of common stock is sold in this offering at \$5.00 per share and that the net proceeds thereof are approximately \$10,467,000 (\$2500 goes to common stock at \$.001 par value the rest to paid in capital) after deducting underwriting discounts and commissions and our estimated expenses. If the underwriter's over-allotment option is exercised in full, net proceeds will increase to approximately \$1.7 million.

DILUTION

Our net tangible book value as of June 30, 2013 was a negative 3,802,883 or a negative \$1.08 per share of our common stock or negative 2.57 after taking into effect the reverse stock split. Our net tangible book value represents our total tangible assets less total liabilities divided by the number of shares of our common stock outstanding as of June 30, 2013. Assuming we issue all of the shares of our common stock offered by us at the public offering price of \$5.00 per share, and after deducting the commissions and estimated offering expenses payable by us, converting convertible notes net of debt discount already on the books, including the issuance of shares to three board members in the amount of 25,170 for work to June 30th., our net tangible book value would be approximately \$11.13 million or \$1.95 per share of our common stock. This amount represents an immediate increase in net tangible book value of \$1.75 to our existing shareholders and an immediate dilution in net tangible book value of \$3.05 per share to new investors purchasing shares of our common stock in this offering.

We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the public offering price per share of our common stock. The following table illustrates the dilution in net tangible book value per share to new investors:

Public offering price per share	\$	5.00
Net tangible book value per share as of June 30, 2013, after conversion of notes	0.21	
Increase per share attributable to new investors	<u>1.74</u>	
Adjusted net tangible book value per share after this offering.		1.95
Dilution in net tangible book value per share to new investors		3.05

director shares

\$	150,000.00	for 3 directors - annual	
\$	12,500.00	per month	
	7	months to June 2013	
\$	87,500.00	seven months	
	3	3 directors	
\$	29,166.67	per director	
	3.476		
	8,390	each director	8390
	25,170	three directors	
\$	43,333.0	\$	87,497.46
	29,680		59,930
	2.3810		2.3810
	split		
	<u>12,465</u>		<u>25,170</u>
			shares

IDEAL POWER INC.
Condensed Balance Sheets

	June 30, 2013	December 31, 2012	Pro Forma Stockholders' Deficit as of June 30, 2013
	(unaudited)	(unaudited)	(note 15)
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 372,538	\$ 1,972,301	\$
Accounts receivable, net	633,836	485,674	
Inventories, net	233,087	217,867	
Prepayments and other current assets	22,771	28,468	
Prepaid offering costs	120,219	-	
Total current assets	<u>1,382,451</u>	<u>2,704,310</u>	
Property and equipment, net	29,779	27,903	
Patents, net	588,564	474,790	
Total Assets	<u>\$ 2,000,794</u>	<u>\$ 3,207,003</u>	<u>\$</u>
LIABILITIES AND STOCKHOLDERS' DEFICIT			
Current liabilities:			
Convertible debt, net of debt discount of \$1,753,939 at June 30, 2013 and \$3,828,711 at December 31, 2012.	\$ 3,387,919	\$ 1,313,146	\$
Accounts payable	936,005	684,558	
Accrued expenses	257,063	178,003	
Deferred revenue	50,000	-	
Total current liabilities	<u>4,630,987</u>	<u>2,175,707</u>	
Long-term debt	<u>1,172,690</u>	<u>1,132,690</u>	
Commitments			
Stockholders' deficit:			
Common stock, \$0.001 par value; 50,000,000 shares authorized; 3,524,505 issued and outstanding at June 30, 2013 and December 31, 2012.	3,525	3,525	1,480
Common stock to be issued	87,497	-	87,497
Additional paid-in capital	7,121,227	7,098,252	7,123,272
Treasury stock	(2,657)	(2,657)	(2,657)
Accumulated deficit	<u>(11,012,475)</u>	<u>(7,200,514)</u>	<u>(11,012,475)</u>
Total stockholders' deficit	<u>(3,802,883)</u>	<u>(101,394)</u>	<u>(3,802,883)</u>
Total Liabilities and Stockholders' Deficit	<u>\$ 2,000,794</u>	<u>\$ 3,207,003</u>	<u>\$</u>

The accompanying notes are an integral part of these condensed financial statements

The only change between column C and G is that we reflect the reverse stock split, so the number of shares goes down to 1.480 million and the difference goes to paid in capital.