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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______________ to _______________

Commission File Number 001-36216

IDEAL POWER INC.

(Exact name of registrant as specified in its charter)

Delaware	**14-1999058**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

4120 Freidrich Lane, Suite 100
Austin, Texas 78744
(Address of principal executive offices)
(Zip Code)

(512) 264-1542
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period than the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☒
	Emerging growth company ☒

If an emerging growth company, indicate by check mark whether the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the issuer is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 6, 2017, the issuer had 13,996,121 shares of common stock, par value $.001, outstanding.

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PART I - FINANCIAL INFORMATION

ITEM 1. CONDENSED FINANCIAL STATEMENTS

IDEAL POWER INC.
Balance Sheets

	September 30, 2017	December 31, 2016
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 11,681,887	$ 4,204,916
Accounts receivable, net	387,081	378,658
Inventories, net	327,461	1,245,147
Prepayments and other current assets	171,147	312,593
Total current assets	12,567,576	6,141,314
Property and equipment, net	647,657	936,486
Intangible assets, net	2,059,645	1,905,556
Other assets	—	17,920
Total Assets	$ 15,274,878	$ 9,001,276
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 287,114	$ 346,767
Accrued expenses	1,250,484	1,149,129
Total current liabilities	1,537,598	1,495,896
Other long-term liabilities	493,088	265,418
Total liabilities	2,030,686	1,761,314
Commitments and contingencies (see Note 8)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000,000 shares authorized; 1,518,430 shares issued and outstanding at September 30, 2017	1,518	—
Common stock, $0.001 par value; 50,000,000 shares authorized; 13,998,465 shares issued and 13,996,121 shares outstanding at September 30, 2017 and 9,560,896 shares issued and 9,559,213 shares outstanding at December 31, 2016, respectively	13,998	9,561
Additional paid-in capital	66,806,637	52,310,481
Treasury stock, at cost; 2,344 shares at September 30, 2017 and 1,683 shares at December 31, 2016, respectively	(7,489)	(5,915)
Accumulated deficit	(53,570,472)	(45,074,165)
Total stockholders' equity	13,244,192	7,239,962
Total Liabilities and Stockholders' Equity	$ 15,274,878	$ 9,001,276

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

IDEAL POWER INC.
Statements of Operations
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
Product revenue	$ 444,640	$ 439,270	$ 973,680	$ 1,258,030
Cost of product revenue	418,529	737,937	1,894,068	1,531,628
Gross profit (loss)	26,111	(298,667)	(920,388)	(273,598)
Operating expenses:				
Research and development	1,075,849	1,231,024	3,374,386	3,914,188
General and administrative	899,882	907,335	2,976,260	2,709,325
Sales and marketing	271,844	496,794	1,240,713	1,321,757
Total operating expenses	2,247,575	2,635,153	7,591,359	7,945,270
Loss from operations	(2,221,464)	(2,933,820)	(8,511,747)	(8,218,868)
Interest income, net	3,865	11,554	15,440	26,778
Net loss	$ (2,217,599)	$ (2,922,266)	$ (8,496,307)	$ (8,192,090)
Net loss per share – basic and fully diluted	$ (0.16)	$ (0.31)	$ (0.66)	$ (0.86)
Weighted average number of shares outstanding – basic and fully diluted	13,990,202	9,549,011	12,964,452	9,547,580

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

IDEAL POWER INC.
Statements of Cash Flows
(unaudited)

	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Cash flows from operating activities:		
Net loss	$ (8,496,307)	$ (8,192,090)
Adjustments to reconcile net loss to net cash used in operating activities:		
Allowance for doubtful accounts	226,557	85,375
Write-down of inventory	703,220	73,521
Depreciation and amortization	339,493	290,474
Write-off of capitalized patents	268,789	71,109
Write-off of fixed assets	53,445	6,215
Stock-based compensation	833,637	1,135,008
Decrease (increase) in operating assets:		
Accounts receivable	(234,980)	337,480
Inventories	214,466	(689,854)
Prepayments and other current assets	159,366	147,061
Increase (decrease) in operating liabilities:		
Accounts payable	(59,653)	(729,435)
Accrued expenses	67,722	(151,178)
Net cash used in operating activities	(5,924,245)	(7,616,314)
Cash flows from investing activities:		
Purchase of property and equipment	(44,819)	(328,930)
Acquisition of intangible assets	(220,865)	(299,140)
Net cash used in investing activities	(265,684)	(628,070)
Cash flows from financing activities:		
Net proceeds from issuance of stock	13,657,331	—
Exercise of options and warrants	11,143	35,536
Payment of taxes related to restricted stock vesting	(1,574)	—
Net cash provided by financing activities	13,666,900	35,536
Net increase (decrease) in cash and cash equivalents	7,476,971	(8,208,848)
Cash and cash equivalents at beginning of period	4,204,916	15,022,286
Cash and cash equivalents at end of period	$ 11,681,887	$ 6,813,438

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

Ideal Power Inc.
Notes to Financial Statements
(unaudited)

Note 1 – Organization and Description of Business

Ideal Power Inc. (the "Company") was incorporated in Texas on May 17, 2007 under the name Ideal Power Converters, Inc. The Company changed its name to Ideal Power Inc. on July 8, 2013 and re-incorporated in Delaware on July 15, 2013. With headquarters in Austin, Texas, it develops power conversion solutions with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company are power conversion systems, including 2-port and multi-port products.

Since its inception, the Company has generated limited revenues from the sale of products and has financed its research and development efforts and operations primarily through the sale of common stock and, prior to its initial public offering, the issuance of convertible debt.

Note 2 – Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission for Form 10-Q. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. The balance sheet at December 31, 2016 has been derived from the Company's audited financial statements.

In the opinion of management, these financial statements reflect all normal recurring, and other adjustments, necessary for a fair presentation. These financial statements should be read in conjunction with the audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. Operating results for interim periods are not necessarily indicative of operating results for an entire fiscal year or any other future periods.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606), requiring an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The FASB has recently issued several amendments to the standard, including clarification on accounting for licenses of intellectual property and identifying performance obligations. The standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. The updated standard becomes effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company will not early adopt and the standard is not expected to have a material effect on the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), to increase transparency and comparability among organizations by requiring the recognition of lease assets and lease liabilities on the balance sheet. Most prominent among the amendments is the recognition of assets and liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. Under the new standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The new standard will be effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted. While the Company is continuing to assess the potential impact of this standard, it expects its lease commitment will be subject to the updated standard and recognized as a lease liability and right-of-use asset upon adoption.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230), in order to address eight specific cash flow issues with the objective of reducing the existing diversity in practice. The updated standard is effective for financial statements issued for annual periods beginning after December 15, 2017 and interim periods within those fiscal years with early adoption permitted. The adoption of the standard will not have a significant effect on the Company's financial statements.

In May 2017, the FASB issued ASU 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting. This ASU provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718 to a change to the terms or conditions of a share-based payment award. The amendments in this ASU are effective for public entities for fiscal years and interim periods beginning after December 15, 2017, with early adoption permitted. The ASU should be applied prospectively on and after the effective date. The Company is evaluating the impact of this ASU.

In July 2017, the FASB issued ASU 2017-11, Accounting for Certain Financial Instruments with Down Round Features and Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception. Part I of this ASU addresses the complexity of accounting for certain financial instruments with down round features. Per the ASU, a freestanding equity-linked financial instrument (or embedded conversion option) no longer would be accounted for as a derivative liability at fair value as a result of the existence of a down round feature. The ASU is effective for public entities for fiscal years beginning after December 15, 2018 and early adoption is permitted. The Company has elected to early adopt the ASU and will recognize the value of the effect of the down round provision, if and/or when triggered. The provision is associated with stock warrants issued as part of the Company's 2017 definitive securities purchase agreement, or the Private Placement. For more details regarding the 2017 Private Placement, see Notes 9 and 11.

Management does not believe that any other recently issued, but not yet effective, accounting standards, if adopted, would have a material impact on the Company’s financial statements.

Note 3 – Accounts Receivable

Accounts receivable, net consisted of the following:

	September 30, 2017	December 31, 2016
	(unaudited)	
Trade receivables	$ 510,562	$ 430,278
Other receivables	89,586	33,755
	600,148	464,033
Allowance for doubtful accounts	(213,067)	(85,375)
	$ 387,081	$ 378,658

At September 30, 2017, the allowance for doubtful accounts represents trade receivables from two customers which were fully reserved as it was determined that the probability of collection is remote. During the nine months ended September 30, 2017, the Company collected $62,645 of its previously reserved receivables and wrote-off $98,850 of its allowance for doubtful accounts. These changes in the allowance for doubtful accounts are reflected within the sales and marketing line item of the statement of operations.

Note 4 – Inventories

Inventories, net consisted of the following:

	September 30, 2017	December 31, 2016
	(unaudited)	
Raw materials	$ 251,892	$ 363,195
Finished goods	138,446	941,921
	390,338	1,305,116
Reserve for obsolescence	(62,877)	(59,969)
	$ 327,461	$ 1,245,147

During the nine months ended September 30, 2017, the Company recorded a non-cash inventory charge of $703,220, of which $699,243 is related to excess finished goods inventory of its end-of-life, legacy 125kW and IBC-30 battery converters and is reflected within the cost of product revenue line item of the statement of operations.

Note 5 – Property and Equipment

Property and equipment, net consisted of the following:

	September 30, 2017	December 31, 2016
	(unaudited)	
Machinery and equipment	$ 905,072	$ 894,228
Building leasehold improvements	395,335	395,335
Furniture, fixtures, software and computers	216,653	228,011
	1,517,060	1,517,574
Accumulated depreciation and amortization	(869,403)	(581,088)
	$ 647,657	$ 936,486

Note 6 – Intangible Assets

Intangible assets, net consisted of the following:

	September 30, 2017	December 31, 2016
	(unaudited)	
Patents	$ 1,507,910	$ 1,556,204
Other intangible assets	732,175	470,870
	2,240,085	2,027,074
Accumulated amortization	(180,440)	(121,518)
	$ 2,059,645	$ 1,905,556

At September 30, 2017 and December 31, 2016, the Company had capitalized $514,524 and $678,410, respectively, for costs related to patents that have not been awarded.

In June 2017, a U.S. patent was issued associated with licensing agreements and the Company recorded an intangible asset and corresponding long-term liability for the estimated present value of future payments of $261,303. The Company is amortizing the capitalized costs over the remaining term of the agreements. For further discussion of the licensing agreements, see Note 8.

Amortization expense amounted to $22,822 and $59,291 for the three and nine months ended September 30, 2017, respectively, and $16,720 and $45,786 for the three and nine months ended September 30, 2016, respectively. Amortization expense for the succeeding five years and thereafter is approximately $23,000 (2017), $92,000 (2018-2021) and $1,154,000 (thereafter).

Note 7 – Accrued Expenses

Accrued expenses consisted of the following:

	September 30, 2017	December 31, 2016
	(unaudited)	
Accrued compensation	$ 495,138	$ 519,485
Warranty reserve	357,901	335,893
Other	397,445	293,751
	$ 1,250,484	$ 1,149,129

Note 8 – Commitments and Contingencies

Lease

The Company has entered into a lease for 14,782 square feet of office and laboratory space located in Austin, Texas. The triple net lease has a term of 48 months and commenced on June 1, 2014. The annual base rent in the first year of the lease was $154,324 and increases by $3,548 in each succeeding year of the lease. In addition, the Company is required to pay its proportionate share of operating costs for the building.

At September 30, 2017, the remaining annual base rent commitments under the lease are as follows:

Year Ended December 31,		Amount
2017	$	41,242
2018		68,736
Total	$	109,978

The Company incurred rent expense of $58,543 and $175,617 for the three and nine months ended September 30, 2017, respectively, and $56,492 and $167,816 for the three and nine months ended September 30, 2016, respectively.

License Agreement

In 2015, the Company entered into licensing agreements which expire on February 7, 2033. Per the agreements, the Company has an exclusive royalty-free license which enhances its intellectual property portfolio related to semiconductor power switches. The agreements include both fixed and variable payments. The variable payments are a function of the number of associated patent filings pending and patents issued under the agreements. The Company is required to pay $10,000 for each patent filing pending and $20,000 for each patent issued within 20 days of December 21, 2017 and each subsequent year of the agreement, up to a maximum of $100,000 per year (i.e. five issued patents).

In June 2017, a U.S. patent was issued associated with the agreements and the Company recorded an intangible asset and corresponding long-term liability for the estimated present value of future payments of $261,303. This long-term liability incurred in connection with the patent issuance is a non-cash investing activity with regard to the Company’s statements of cash flows. At September 30, 2017, two patents associated with the agreements had been issued and the estimated present value of future payments under the licensing agreement is $533,088, of which $40,000 is due within 20 days of December 21, 2017 and is included in accrued expenses in the Company's balance sheet. The Company is accruing interest for future payments related to the issued patents associated with the agreement.

Litigation

On May 17, 2017, the Company provided Libra Industries, Inc. (Libra), its prior contract manufacturer, notice that it was in breach of the Master Supply Agreement (MSA) between the parties. On May 19, 2017, the Company received notice from Libra that the Company was allegedly in breach of the MSA. On June 23, 2017, the Company received a Notice of Arbitration from Libra alleging claims against the Company and demanding recovery for alleged damages. On July 13, 2017, the Company responded to Libra with a Notice of Defense and Counterclaim. On August 2, 2017, Libra provided their response to the Company's Notice of Defense and Counterclaim. The arbitration will be governed in accordance with the International Institute for Conflict Prevention and Resolution Rules for Non-Administered Arbitration by a sole arbiter. The parties have appointed an arbiter and discovery is in progress. The arbitration hearing is scheduled in Travis County, Texas for the first quarter of 2018. At this time, the Company is unable to estimate the possible loss, if any, associated with this proceeding.

Note 9 — Equity

On March 3, 2017, the Company closed on a definitive securities purchase agreement, or the Private Placement, to sell the Company’s common stock and preferred stock together with warrants to purchase shares of common stock. In the Private Placement, each share of common stock or preferred stock was sold together with a warrant to purchase one share of common stock at a collective price of $2.535. Investors purchased an aggregate of 5,220,826 shares of common stock and 708,430 shares of preferred stock together with warrants to purchase 5,929,256 shares of common stock in the Private Placement for aggregate gross proceeds of $15 million. Net cash proceeds were $13,657,331 after offering fees and expenses, including the placement agent fee of approximately $1.1 million. The Company expects to utilize net proceeds from the offering for working capital and general corporate purposes.

In February 2017, the Company's Board of Directors authorized Series A Convertible Preferred Stock consisting of 3,000,000 shares. Each share of the preferred stock has a par value of $0.001 and a stated value of $2.535 and is convertible at any time at the option of the holder into one share of common stock. The holder cannot convert the preferred stock to the extent its beneficial ownership would exceed 4.99% of the Company's common stock outstanding, subject to adjustment as provided in the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. The shares have no voting power, no liquidation preference or additional dividend entitlements. In February 2017, an investor exchanged 810,000 shares of common stock for 810,000 shares of preferred stock. As a result, in the nine months ended September 30, 2017, the Company issued 1,518,430 shares of the Company's Series A Convertible Preferred Stock.

Note 10 — Equity Incentive Plan

On May 17, 2013, the Company adopted the 2013 Equity Incentive Plan (the "Plan") and reserved shares of common stock for issuance under the Plan. The Plan is administered by the Compensation Committee of the Company's Board of Directors. At September 30, 2017, 708,953 shares of common stock were available for issuance under the Plan.

During the nine months ended September 30, 2017, the Company granted 83,625 stock options to Board members and 84,100 stock options to employees under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was $296,107, of which $130,952 was recognized during the nine months ended September 30, 2017.

During the nine months ended September 30, 2017, 96,000 performance stock units ("PSUs") were forfeited by an employee as the continued service conditions were not achieved at the time of the employee's termination. The PSUs were initially granted in 2015 and, due to the forfeiture, the Company reversed $174,804 of stock-based compensation expense in the second quarter of 2017.

During the nine months ended September 30, 2017, 26,743 options to purchase shares of the Company's common stock were exercised resulting in net proceeds of $11,143.

A summary of the Company's stock option activity and related information is as follows:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)
Outstanding at December 31, 2016	1,385,204	$ 6.89	7.5
Granted	167,725	$ 2.99	
Exercised	(26,743)	$ 0.42	
Forfeited/Expired/Exchanged	(125,551)	$ 7.39	
Outstanding at September 30, 2017	1,400,635	$ 6.50	7.1
Exercisable at September 30, 2017	984,554	$ 6.64	6.8

At September 30, 2017, there was $1,403,775 of unrecognized compensation cost related to non-vested equity awards granted under the Plan. That cost is expected to be recognized over a weighted average period of 1.8 years.

Note 11 — Warrants

In connection with the Private Placement, investors received warrants to purchase 5,929,256 shares of common stock. The warrants have an exercise price of $2.41 per share and will expire three years from the date of issuance. The placement agent also received 237,170 warrants to purchase shares of common stock as part of its placement agent fee. The placement agent warrant has an exercise price of $2.89 per share, is non-exercisable for 12 months and has a three-year term. The warrants contain a provision to protect investors from potential future dilutive events, or a down-round provision. The Company elected to early adopt ASU 2017-11 and will recognize the value of the effect of the down round provision, if and/or when triggered.

A summary of the Company's common stock warrant activity and related information is as follows:

	Warrants	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)
Outstanding at December 31, 2016	1,398,653	$ 4.57	2.5
Granted	6,166,426	$ 2.43	
Forfeited/Expired/Exchanged	(84,000)	$ 6.25	
Outstanding at September 30, 2017	7,481,079	$ 2.79	2.3

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND OTHER INFORMATION CONTAINED IN THIS REPORT

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may" or other similar expressions in this report. In particular, these include statements relating to future actions, prospective products, applications, customers, technologies, future performance or results of anticipated products, expenses, and financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our history of losses;
- our ability to achieve profitability;
- our limited operating history;
- our ability to successfully market and sell our products;
- the size and growth of markets for our current and future products;
- our expectations regarding the growth and expansion of our customer base;
- regulatory developments that may affect our business;
- our ability to successfully develop new technologies, including our bi-directional bipolar junction transistor, or B-TRAN™;
- our expectations regarding the completion of testing of new products under development and the timing of the introduction of those new products;
- the expected performance of new and existing products, including future products incorporating our B-TRAN™;
- the performance of third-party manufacturers who supply and manufacture our products;
- our expectations of the reliability of our products over the applicable warranty term and the future costs associated with warranty claims;
- our ability to cost effectively manage product life cycles, inclusive of product launches and end of product life situations;
- the rate and degree of market acceptance for our current and future products;
- our ability to successfully obtain certification for our products, including in new markets, and the timing of the receipt of any necessary certifications;
- our ability to successfully license our technology;
- our ability to obtain, maintain, defend and enforce intellectual property rights protecting our current and future products;
- our expectations regarding the decline in prices of battery energy storage systems;
- the success of our cost reduction plan;
- general economic conditions and events and the impact they may have on us and our potential customers;
- our ability to obtain adequate financing in the future, as and when we need it;
- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this

report.

The forward-looking statements are based upon management’s beliefs and assumptions and are made as of the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements included in this report. You should not place undue reliance on these forward-looking statements.

Unless otherwise stated or the context otherwise requires, the terms "Ideal Power," "we," "us," "our" and the "Company" refer to Ideal Power Inc.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q as well as our audited 2016 financial statements and related notes included in our Annual Report on Form 10-K. In addition to historical information, the discussion and analysis here and throughout this Form 10-Q contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including, but not limited, to those set forth under "Risk Factors" in Part II, Item 1A of this report.

OVERVIEW

Ideal Power is located in Austin, Texas. We design, market and sell electrical power conversion products using our proprietary technology called Power Packet Switching Architecture™, or PPSA™. PPSA™ is a power conversion technology that improves upon existing power conversion technologies in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. PPSA™ utilizes standardized hardware with application specific embedded software. Our products are designed to be used in both on-grid and off-grid applications. Our advanced technology is important to our business and we make significant investments in research and development and protection of our intellectual property. Our PPSA™ and bi-directional switch technologies are protected by a patent portfolio of 60 US and 12 foreign issued patents at September 30, 2017.

We sell our products primarily to systems integrators as part of larger turn-key systems which enable end users to manage their electricity consumption by reducing demand charges or fossil fuel consumption, integrating renewable energy sources and forming their own microgrid. Our products are made by contract manufacturers to our specifications, enabling us to scale production to meet demand on a cost-effective basis without requiring significant expenditures on manufacturing facilities and equipment. As our products establish a foothold in key power conversion markets, we may begin to focus on licensing our proprietary PPSA™-based product designs to OEMs to reach more markets and customers. We may seek to build a portfolio of relationships that generate license fees and royalties from OEMs for sales of their products which integrate PPSA™.

We were founded on May 17, 2007. To date, operations have been funded primarily through the sale of common stock and, prior to our initial public offering, the issuance of convertible debt. Total revenue generated from inception to date as of September 30, 2017 amounted to $12,939,525 with approximately 20% of that revenue coming from government grants. We may pursue additional research and development grants, if and when available, for the purpose of developing new products and improving current products.

Our Technology

PPSA™ uses indirect power flow in which power flows through input switches and is temporarily stored in our proprietary AC link inductor. Our proprietary fast switching algorithms enable the transfer of quantum packets of power between ports in our system. As the AC link becomes charged, it disconnects from its input switches, resonates without being connected to either the input or output switches, and then reconnects to its output switches when it reaches the correct voltage and frequency for the application. PPSA™ is a power conversion technology that differentiates itself from traditional power conversion technology in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. At September 30, 2017, we had been granted 36 US patents and five foreign patents related to PPSA™.

Products

We currently sell several power conversion systems, or PCS, utilizing our patented PPSA™ technology. These products are described as follows:

- The 30kW SunDial™ and the 30kW SunDial™ Plus, which are UL-1741 certified and are intended to be used for the commercial and industrial grid-tied solar and solar + storage market. The SunDial™ is a photovoltaic (PV) string inverter which is field upgradable through the addition of a drop-in second DC port to connect batteries to a solar PV array. The SunDial™ Plus includes the PV inverter and the second DC battery port in one package. The products operate in both 50Hz and 60Hz environments and include a built-in 6 string PV combiner and DC disconnects and are grid-tied, AC export only.

- The 30kW Stabiliti™ series has two product offerings, two-port (AC-DC) and multi-port (AC-DC-DC) models, which are both UL-1741 certified. These products are intended to be used in the stand-alone storage and microgrid markets, including the solar + storage market. They are bi-directional and operate in both grid-tied and grid-forming modes with near seamless transfer between operating modes. Grid-forming mode provides customers the ability to form and manage a microgrid. The products operate in both 50Hz and 60Hz environments.

Future Innovations

Bi-Directional Switches

Our existing products incorporate multiple insulated gate bipolar transistors, or IGBTs, which are power switches used in the process to convert power from one current form to another. IGBTs switch power in only one direction (DC to AC or AC to DC) and require the use of a blocking diode to prevent power from flowing back through the system. To enable our existing products to perform bi-directional power conversion, for each IGBT and diode used in our products, we must include a second IGBT and diode. These additional components have slight voltage drops that affect the electrical efficiency of our products and generate excess heat that must be dissipated. We have patented and are developing a new, highly efficient silicon switch called a bi-directional bipolar transistor, or B-TRAN™, that we believe will allow us to substitute one B-TRAN™ for two pairs of IGBTs and diodes used in our current products and is also a potential replacement for conventional power switches in certain segments of the broader power semiconductor market.

Based on third party device software simulations, we believe that the B-TRAN™ may significantly improve electrical efficiency in our power converters and that higher efficiency would substantially reduce the heat generated by the operation of our products. As a result, products incorporating our B-TRAN™ would require less space for heat dissipation which would allow us to increase power density, or power per pound, and reduce material costs.

In 2016, one of our semiconductor fabricators successfully tested single-sided B-TRAN™ silicon dies and the results were consistent with third party simulations that predict significant performance and efficiency improvements over conventional power switches such as SCRs, IGBTs and MOSFETs. Our current focus has shifted to de-risking the proof of concept phase of the B-TRAN development timeline, as this phase of development is taking longer than anticipated due to the complexity of manufacturing complicated, two-sided power semiconductor devices. To facilitate this, we have now engaged a second semiconductor fabricator, on a parallel path, to produce a simplified, easier to manufacture B-TRAN™ on an accelerated schedule for proof of concept and initial testing. The testing is intended to show key qualities of the B-TRAN™ over IGBTs including reduced losses, both switching and conduction losses, and increased speed. The next major milestone towards commercialization will be to complete, package and test prototype B-TRAN™ devices. We are currently working with two packaging houses to develop the necessary device packaging in advance of having manufactured, two-sided B-TRAN™ prototypes. We expect packaging from at least one of the packaging houses to be complete this year. The results of the testing and characterization of these prototype B-TRAN™ devices will be utilized to guide our further development and optimization efforts including potential changes in how the devices are manufactured or driven in an actual circuit.

We plan to first utilize the B-TRAN™ in our own power conversion products and then introduce it into the rapidly growing power semiconductor market, estimated to be $19 billion in 2017 according to research firm IHS Technology, or IHS, utilizing a licensing model. We believe our new B-TRAN™ technology may potentially address a significant portion of the power semiconductor market that currently relies on power semiconductor devices such as IGBTs. Potential addressable markets for B-TRAN™-based products include very low loss solid-state DC and AC contactors, electric vehicle drivetrains, variable frequency drives, solar PV inverters, bi-directional energy storage and microgrid power conversion systems, matrix converters and other power conversion products. At September 30, 2017, we had 24 US and seven foreign issued patents covering the operation, control and manufacturing of the B-TRAN™ device.

Business Strategy

Our business strategy is to promote and expand the uses of PPSA™ initially through product development and product sales. To bring our products to market, we will seek out best-in-class partners who will distribute, white-label or integrate our innovative products into higher value systems resulting in multiple strategic sales channels for our PPSA™-based products and product designs. Although our primary market is the United States, we expect to begin targeting markets outside the United States as early as 2018. As our products gain broader acceptance in the power conversion market, we intend to license our proprietary PPSA™-based product designs to OEMs within our target markets, as well as license our technologies for other markets which we do not plan to enter directly. The basis for this approach is the belief that OEMs may achieve higher product margins and gain more market share by providing PPSA™-based products, which are differentiated from the traditional product offerings in the industry, to their customers. We believe such strategic relationships with key OEM licensees would enable us to reap the benefits of PPSA™ and gain market share more quickly than by strictly manufacturing and distributing our products.

Target Markets

Currently, our primary markets are solar + storage and, to a lesser extent, microgrids. We also intend to be opportunistic with regards to the stand-alone storage market. Until recently, our primary market was the stand-alone storage market but we have shifted our strategic focus to solar + storage as that market leverages the mature and global solar market and the stand-alone storage market has been slow to develop.

Solar + Storage and Microgrid Markets

Solar PV has one of the lowest levelized costs of energy for new electrical generation capacity and we expect this to remain true in the near term. We expect distributed PV to continue to be a high growth business as system costs have fallen dramatically over the past several years. As such, the economics of generating PV for local consumption is expected to remain strong for several more years, especially given the investment tax credit, or ITC, extension passed by Congress and signed into law in 2015 for solar energy production. Our SunDial™ products were launched to directly address this market.

One shortcoming of distributed, behind-the-meter PV systems is that they require connection to the utility power grid in order to operate. For example, a business with PV on its roof will not, in most cases, benefit from the ability to generate power should the utility power grid go down. Another shortcoming of distributed PV systems is the instability they cause on the local power lines. Utility power grids were not designed to manage power inflow from the end of the lines. As such, distributed generation sources can lead to wide swings in line voltages when clouds pass and power output falls off, requiring the utility to ramp up its central power stations to make up for the shortfall in solar. We believe the proliferation of PV, its intermittency and the elimination of net metering in many states may drive growth in the solar + storage market.

Whether for emergency backup power or for baseload generation in remote locations with weak or no electric grids, microgrids are an emerging business case for solar paired with storage. A distributed PV system connected to a BESS that includes one of our Stabiliti™ multi-port PCS may enable a business to benefit from the ability to form and manage a local microgrid powered by the PV system and BESS even when the utility power grid is down. This capability is attractive to electricity consumers who need to power critical loads even in a blackout. Our Stabiliti™ PCS are also equipped to meet evolving utility requirements for low voltage ride-through and other key operating parameters, which may enable the PV and BESS it connects to the grid to help stabilize the utility power grid when voltage or frequency fluctuates due to imbalances in load and supply. In remote locations where there is no reliable electric grid or a dependence on diesel generators, which may be as diverse as a military battlefield or remote tropical island resort, or in locations where local electric rates are high due to aging and inefficient generation technology, a trend towards self-generation microgrids is developing. These sites can use solar, batteries and other forms of generation all brought together by one or more of our Stabiliti™ PCS to form and manage a microgrid using maximum solar generation for lowest cost. As such, we believe our products may become increasingly attractive to co-locate BESS with distributed PV.

According to their research, IHS believes that systems will be deployed in two principal configurations. The present configuration is to have separate BESS and PV systems tied together through the AC wiring, which is supported by all of our current products. A second, emerging configuration will be to place the BESS and the PV system behind a single PCS with two DC inputs. Our Stabiliti™ and SunDial™ Plus were designed specifically to enable this configuration which we believe is the lower cost and more efficient configuration. A key unique feature of the SunDial™'s patented technology is its ability to be deployed first as a standard commercial PV inverter and later be upgraded in the field to bring storage into the PV system using the same inverter. We believe this is the only product in the market today to have this unique field-upgrade capability for pairing solar with storage in one inverter.

According to IHS, the global commercial PV industry is projected to grow to over 33GW annually by 2020. IHS further forecasts that these commercial systems will have a 2% storage attachment rate by 2020, providing for a nearly 700MW annual commercial solar + storage market. These new solar + storage markets include providing backup power during blackouts, improving grid stability in high penetration PV areas and reducing fossil fuel consumption in remote and off-grid microgrids.

Stand-Alone Storage Market

The stand-alone storage market is served by battery energy storage systems, or BESS. BESS are racks of batteries coupled with a system controller and a power conversion system, such as those manufactured by us, to enable electric power to be captured, stored, and used in conjunction with electric power grids. These systems can be large, megawatt-scale systems operated by utilities to better manage their system resources, or smaller kilowatt-scale systems used by businesses and designed to enable these businesses to manage their power use and mitigate utility imposed time-of-use and/or "peak demand charges", which are charges utilities levy on their business customers for delivery of power at peak usage times of the day, such as mid-afternoons in the summer. The growth of peak demand charges has been substantial over the past decade and now can make up 50% or more of a commercial utility bill in certain markets. This is a trend that may continue as more intermittent resources are added to the utility power grid causing grid instability. Utilities and aggregators of distributed generation resources are also expected to adopt BESS due to the proliferation of renewables and to take advantage of additional value streams such as energy arbitrage, frequency regulation and ancillary services, infrastructure upgrade deferral and locational capacity.

There are strong economic incentives available to commercial and industrial consumers in major US markets such as California and New York in the form of reduced time-of-use and/or demand charges for installing a BESS and managing when power is drawn from the grid or reducing peak consumption. There is also strong regulatory support for such systems. For example, California has issued a mandate for over 1,800 megawatts of new energy storage to be installed by 2020. Although we believe the economic incentives and regulatory support are expected to accelerate growth in this market over coming years, to date the slow pace of realization of these economic incentives has actually hindered market growth.

We expect the cost of commercial and industrial BESS to continue to decline due primarily to lower battery costs and, as a result, expect significant expansion in the addressable market for these systems. We also believe the combination of lower BESS costs, third-party financing, increases in utility demand charges, and the entrance of large, established companies to the BESS space may contribute to accelerating market growth for the nascent stand-alone storage market.

Other Markets

Although our technology may be suitable for other vertical markets within the global power conversion market landscape, we do not currently offer products for sale directly to other power conversion markets such as the VFD, uninterruptible power supply, rail, wind or electric vehicle traction drive markets.

In addition to the markets discussed above, we may also have opportunities for market expansion into fast electric vehicle chargers in certain applications where our products’ compact size and multi-port capabilities can unlock value for the system integrator particularly in locations where battery storage is coupled with the charging system to eliminate demand charges or expand the charging systems response capabilities.

We plan to continue to monitor all power conversion markets for opportunities to create solutions for customers and unlock the broader value of our patented technology.

Critical Accounting Policies

There have been no significant changes during the nine months ended September 30, 2017 to the critical accounting policies disclosed in Management’s Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Trends, Events and Uncertainties

The early market for stand-alone storage has been, and continues to be, heavily dependent on California’s Self Generation Incentive Program, or SGIP. The pace and deployment of the SGIP has been slow and, despite in excess of 800 projects being submitted in the first two program stages in 2016 and the first quarter of 2017, few projects have reached the reservation stage where funding has been approved for the specific projects.

Historically, most of our backlog has related to orders for the stand-alone storage market and this backlog has not translated into revenue at the pace we have expected due to the stagnation in stand-alone storage deployments in California. There is significant uncertainty around the pace and timing of growth in this market and the customer representing a majority of our backlog in 2015 and 2016 exited the system integration business for commercial and industrial stand-alone storage. This customer exit has had a material adverse impact on our backlog and we are currently evaluating whether we have any recourse against this customer for unfulfilled orders.

In addition, funding has been difficult to secure for many system integration companies in the stand-alone storage market. We are monitoring the financial health and payment history of our customers but a bankruptcy or market exit by any one or more of our customers could further materially and adversely impact our backlog and revenue in this market.

To address the uncertainty surrounding the stand-alone storage market, we have transitioned our focus to the solar + storage market. This market leverages the far larger, and more mature, global solar market and we believe our products solve key customer problems in this market such as demand management, backup power and critical load support that solar only solutions are not capable of addressing. In the next several quarters we expect our revenue growth to be driven by growth in the solar + storage market and, to a lesser extent, the microgrid market.

Other than as discussed above and elsewhere in this report, we are not aware of any trends, events or uncertainties that are likely to have a material effect on our financial condition.

Results of Operations

Comparison of the three months ended September 30, 2017 to the three months ended September 30, 2016

Revenues. Revenues for the three months ended September 30, 2017 of $444,640 were $5,370, or 1%, higher than the $439,270 we earned in revenues for the three months ended September 30, 2016.

Cost of Revenues. Cost of revenues decreased for the three months ended September 30, 2017 to $418,529 compared to $737,937 for the three months ended September 30, 2016. The decrease was primarily due to a charge of $328,537 associated with excess and obsolete ("E&O") inventory in connection with the end-of-life of our IBC-30 battery converter in the three months ended September 30, 2016. We have completed the transition from our legacy products, including both our first and second generation products, to our third generation SunDial™ and Stabiliti™ products.

Gross Profit (Loss). Gross profit for the three months ended September 30, 2017 was $26,111 compared to a gross loss of $298,667 for the three months ended September 30, 2016.

Research and Development Expenses. Research and development expenses decreased by $155,175, or 13%, to $1,075,849 in the three months ended September 30, 2017 from $1,231,024 in the three months ended September 30, 2016. The decrease was due primarily to lower personnel costs. For the balance of the year, our PPSA™ research and development efforts will be focused on our SunDial™ and Stabiliti™ products including firmware development for, and certification to, the new UL-1741SA standard, and a more efficient version of our SunDial™ and Stabiliti™ products with an improved form factor.

General and Administrative Expenses. General and administrative expenses decreased by $7,453, or 1%, to $899,882 in the three months ended September 30, 2017 from $907,335 in the three months ended September 30, 2016.

Sales and Marketing Expenses. Sales and marketing expenses decreased by $224,950, or 45%, to $271,844 in the three months ended September 30, 2017 from $496,794 in the three months ended September 30, 2016. The decease was primarily due to lower bad debt expense of $117,070 due partly to a bad debt recovery in the three months ended September 30, 2017, stock-based compensation costs of $37,794 and personnel costs of $25,996 as well as lower placement, consulting and trade show costs.

Loss from Operations. Our loss from operations for the three months ended September 30, 2017 was $2,221,464 compared to $2,933,820 loss from operations for the three months ended September 30, 2016.

Interest Income, net. Net interest income was $3,865 for the three months ended September 30, 2017 compared to $11,554 for the three months ended September 30, 2016.

Net Loss. Our net loss for the three months ended September 30, 2017 was $2,217,599 as compared to a net loss of $2,922,266 for the three months ended September 30, 2016. The decrease was attributable to the E&O charge associated with our legacy products in the three months ended September 30, 2016 and our reduced operating expenses due partly to the cost reduction activities implemented in the second quarter of 2017.

Comparison of the nine months ended September 30, 2017 to the nine months ended September 30, 2016

Revenues. Revenues for the nine months ended September 30, 2017 of $973,680 were $284,350, or 23%, lower than the $1,258,030 we earned in revenues for the nine months ended September 30, 2016. The decrease was the result of lower sales into our initial target market of stand-alone storage. We have shifted our focus primarily to solar + storage as we believe this market is beginning to transact and meaningful revenue growth is achievable for us in this market in the short term.

Cost of Revenues. Cost of revenues increased by $362,440, or 24%, to $1,894,068 for the nine months ended September 30, 2017 compared to $1,531,628 for the nine months ended September 30, 2016. The increase was due to higher E&O charges of $361,150 and adjustments to the Company's warranty accrual of $77,010, both related to legacy products, partially offset by lower sales volumes.

Gross Loss. Gross loss for the nine months ended September 30, 2017 was $920,388 compared to a gross loss of $273,598 for the nine months ended September 30, 2016.

Research and Development Expenses. Research and development expenses decreased by $539,802, or 14%, to $3,374,386 in the nine months ended September 30, 2017 from $3,914,188 in the nine months ended September 30, 2016. The decrease was due primarily to lower costs associated with bi-directional power switch development.

General and Administrative Expenses. General and administrative expenses increased by $266,935, or 10%, to $2,976,260 in the nine months ended September 30, 2017 from $2,709,325 in the nine months ended September 30, 2016. The increase was primarily due to higher non-cash patent impairments of $197,680, as we abandoned certain patent filings to focus on filings with the highest strategic value, and higher legal and consulting costs.

Sales and Marketing Expenses. Sales and marketing expenses decreased by $81,044, or 6%, to $1,240,713 in the nine months ended September 30, 2017 from $1,321,757 in the nine months ended September 30, 2016. The decrease was due primarily to lower stock-based compensation costs of $284,011, due to forfeitures, offset by higher bad debt expense of $141,183 and consulting costs of $51,301. We have seen an increase in both our bad debt expense and days sales outstanding as many companies, including certain of our customers, are having difficulty securing financing or generating sufficient working capital due to the lack of growth in the stand-alone storage market.

Loss from Operations. Our loss from operations for the nine months ended September 30, 2017 was $8,511,747 compared to a $8,218,868 loss from operations for the nine months ended September 30, 2016.

Interest Income, net. Net interest income was $15,440 for the nine months ended September 30, 2017 compared to $26,778 for the nine months ended September 30, 2016.

Net Loss. Our net loss for the nine months ended September 30, 2017 was $8,496,307 as compared to a net loss of $8,192,090 for the nine months ended September 30, 2016. The increase was attributable to higher non-cash charges associated with inventory write-downs, patent impairments and bad debt expense.

Liquidity and Capital Resources

We do not currently generate enough revenue to sustain our operations. We have funded our operations through the sale of common stock and, prior to our initial public offering, the issuance of convertible debt.

At September 30, 2017, we had cash and cash equivalents of $11,681,887. Our net working capital and long-term debt at September 30, 2017 were $11,029,978 and $0, respectively.

Operating activities in the nine months ended September 30, 2017 resulted in cash outflows of $5,924,245, which were due primarily to the net loss for the period of $8,496,307, partly offset by non-cash items of $2,425,141, related primarily to stock-based compensation of $833,637, inventory write-downs of $703,220, depreciation and amortization of $339,493, patent impairments of $268,789 and bad debt expense of $226,557. Operating activities in the nine months ended September 30, 2016 resulted in cash outflows of $7,616,314, which were due primarily to the net loss for the period of $8,192,090 and negative working capital changes of $1,085,926, partly offset by non-cash items of $1,661,702, related primarily to stock-based compensation of $1,135,008 and depreciation and amortization of $290,474. Negative working capital changes included a $520,730, or 99%, increase in finished goods inventory due to lower than expected product sales in the nine months ended September 30, 2016.

Investing activities in the nine months ended September 30, 2017 and 2016 resulted in cash outflows of $265,684 and $628,070, respectively, for the acquisition of fixed assets and intangible assets.

In the second quarter of 2017, we implemented a cost reduction plan with the goal of reducing our cash outflows for operating and investing activities. This plan included the simplification of our product roadmap for the balance of 2017 to focus on our 30kW SunDial™ and Stabiliti™ products for the solar + storage and microgrid markets and elimination of activities that did not present significant near-term revenue opportunities. In addition, we discontinued our legacy products, including our

125kW product, and postponed our development and certification efforts related to international markets and electric vehicle fast charging. These changes have resulted and we believe will continue to result in a reduced cash burn in advance of our expected revenue growth.

Financing activities in the nine months ended September 30, 2017 resulted in cash inflows of $13,666,900 related primarily to our Private Placement net proceeds of $13,657,331. In the Private Placement, each share of common stock or preferred stock was sold together with a warrant to purchase one share of common stock at a collective price of $2.535. Investors purchased an aggregate of 5,220,826 shares of common stock and 708,430 shares of preferred stock together with warrants to purchase 5,929,256 shares of common stock in the Private Placement for aggregate gross proceeds of $15.0 million. Net cash proceeds are $13.7 million after offering fees and expenses, including the placement agent fee of $1.1 million. Other financing activities in the nine months ended September 30, 2017 and 2016 resulted in cash inflows of $9,569 and $35,536, respectively, relating primarily to the exercise of stock options and warrants.

On December 1, 2014, we filed a Form S-3 shelf registration statement with the Securities and Exchange Commission. The registration statement allows us to offer up to an aggregate $75 million of common stock, preferred stock, warrants to purchase common stock or preferred stock or any combination thereof and provides us with the flexibility over three years to potentially raise additional equity in public or private offerings on commercial terms. At September 30, 2017, our availability under this registration statement is $58 million.

Off-Balance Sheet Transactions

We do not have any off-balance sheet transactions.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company we are not required to provide this information.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Our management, with the participation of our Chief Executive Officer (principal executive officer) and our Chief Financial Officer (principal financial and accounting officer), has concluded that, as of September 30, 2017, our disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There have been no other material changes in our internal controls over financial reporting that occurred during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Limitations on the Effectiveness of Controls

Control systems, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control systems' objectives are being met. Further, the design of any system of controls must reflect the fact that there are resource constraints, and the benefits of all controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of error or mistake. Control systems can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

On May 17, 2017, the Company provided Libra Industries, Inc. (Libra), its prior contract manufacturer, notice that it was in breach of the Master Supply Agreement (MSA) between the parties. On May 19, 2017, the Company received notice from Libra that the Company was allegedly in breach of the MSA. On June 23, 2017, the Company received a Notice of Arbitration from Libra alleging claims against the Company and demanding recovery for alleged damages. On July 13, 2017, the Company responded to Libra with a Notice of Defense and Counterclaim. On August 2, 2017, Libra provided their response to the Company's Notice of Defense and Counterclaim. The arbitration will be governed in accordance with the International Institute for Conflict Prevention and Resolution Rules for Non-Administered Arbitration by a sole arbiter. The parties have appointed an arbiter and discovery is in progress. The arbitration hearing is scheduled in Travis County, Texas for the first quarter of 2018. At this time, the Company is unable to estimate the possible loss, if any, associated with this proceeding.

ITEM 1A. RISK FACTORS

There are no material changes from the risk factors disclosed in our 2016 Annual Report on Form 10-K except as noted below.

A material part of our success depends on our ability to manage our suppliers and contract manufacturers. Our failure to manage our suppliers and contract manufacturers could materially and adversely affect our results of operations and relations with our customers.

We rely upon suppliers to provide the components necessary to build our products and on contract manufacturers to procure components and assemble our products. There can be no assurance that key suppliers and contract manufacturers will provide components or products in a timely and cost-efficient manner, provide quality components or manufacturing and assembly services or otherwise meet our needs and expectations. Our ability to manage such relationships and timely replace suppliers and contract manufacturers, if necessary, is critical to our success. Our failure to timely replace our contract manufacturers and suppliers, should that become necessary, could materially and adversely affect our results of operations and relations with our customers.

We are currently in arbitration with our former contract manufacturer due, in part, to workmanship quality issues we have identified in the assembly of our legacy products by this contract manufacturer. The failure of our contract manufacturers to provide quality manufacturing and assembly services, as well as the resources that may be required to address any such issues on products shipped to customers with any such quality issues, could materially and adversely affect our reputation, results of operations and relations with our customers.

We are highly dependent on the services of key members of our management team. Our inability to retain these individuals could impede our business plan and growth strategies, which could have a negative impact on our business and the value of your investment.

Our ability to implement our business plan depends, to a critical extent, on the continued efforts and services of key members of our management team. If we lose the services of any of these persons during this important time in our development, the loss may result in a delay in the implementation of our business plan and plan of operations. We can give no assurance that we could find satisfactory replacements for these individuals on terms that would not be unduly expensive or burdensome to us. We do not currently carry a key-man life insurance policy that would assist us in recouping our costs in the event of the death or disability of any of these persons.

Backlog may not result in revenue.

We define backlog as consisting of accepted orders from customers for which an expected product delivery schedule has been specified. The purchase orders comprising backlog are not cancelable in most cases and such orders generally do not provide price protection. Nevertheless, deliveries against received purchase orders may be rescheduled within negotiated parameters or canceled in certain limited instances and our backlog may, therefore, not be indicative of revenues in any given period. Our backlog is highly concentrated with a limited number of customers. If any of these customers exited the energy storage market, particularly if their purchase orders with us are subject to cancellation provisions, or declared bankruptcy, our backlog would be materially adversely impacted.

In particular, there is significant uncertainty around the pace and timing of growth in the stand-alone storage market and the customer representing a majority of our backlog in 2015 and 2016 exited the system integration business for commercial and industrial stand-alone storage. This customer exit has had a material adverse impact on our backlog and we are currently evaluating whether we have any recourse against this customer for unfulfilled orders.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On March 3, 2017, we closed on a definitive securities purchase agreement to sell to certain accredited investors our common stock and preferred stock together with warrants to purchase shares of common stock, or the Private Placement. In the Private Placement, each share of common stock or preferred stock was sold together with a warrant to purchase one share of common stock at a collective price of $2.535. Investors purchased an aggregate of 5,220,826 shares of common stock and 708,430 shares of preferred stock together with warrants to purchase 5,929,256 shares of common stock in the Private Placement for aggregate gross proceeds of $15.0 million. The warrants have an exercise price of $2.41 per share and will expire three years from the date of issuance. We filed a Registration Statement on Form S-3 covering the resale of the registrable securities on March 31, 2017 with the Commission which was declared effective on April 21, 2017.

Net cash proceeds were $13.7 million after offering fees and expenses, including the placement agent fee of $1.1 million. The placement agent also received 237,170 warrants to purchase shares of common stock as part of its placement agent fee. The placement agent warrant has an exercise price of $2.89 per share, is non-exercisable for 12 months and has a three-year term. We expect to utilize net proceeds from the offering for working capital and general corporate purposes.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

Exhibit Number	Document
10.1*†	Amendment No. 1 to Employment Agreement between the Company and William C. Alexander dated August 18, 2017
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification pursuant to 18 U.S.C. 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101.INS	XBRL Instant Document *
101.SCH	XBRL Taxonomy Extension Schema Document *
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document *
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document *
10.LAB	XBRL Taxonomy Extension Label Linkbase Document *
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document *

* Filed herewith
** Furnished herewith
† Management contract or compensatory agreement

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant, has duly, caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated November 9, 2017	**IDEAL POWER INC.**	
	By:	/s/ R. Daniel Brdar
		R. Daniel Brdar Chief Executive Officer
	By:	/s/ Timothy W. Burns
		Timothy W. Burns Chief Financial Officer

Exhibit 10.1

AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT (this "***Amendment***") is made and entered into effective as of August 18, 2017 (the "***Effective Date***"), by and between Ideal Power Inc., a Delaware corporation (the "***Company***"), and William C. Alexander ("***Employee***").

WHEREAS, the Company and Employee have agreed to amend that certain Employment Agreement between the Company and Employee, dated September 16, 2014 (the "***Agreement***");

WHEREAS, the Board of Directors of the Company (the "***Board***") has determined, and the parties hereto agree, that it is in the best interests of the Company and its stockholders to amend the Agreement as set forth herein in order to reflect Employee's reassignment from Chief Technical Officer of the Company to Chief Technologist and Employee's removal as an "executive officer" within the meaning of Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), and as an "officer" of the Company within the meaning of Rule 16a-1(f) of the Exchange Act; and

WHEREAS, capitalized terms used but not otherwise defined herein shall have the same meanings as set forth in the Agreement.

NOW, THEREFORE, in consideration of the mutual promises and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Employee and the Company hereby agree as follows:

1. Amendment of Preamble and Subsequent References to "Executive." The reference in the preamble to the Agreement to "Executive" is hereby replaced with "Employee." All subsequent instances of "Executive" to reference Employee are hereby replaced with "Employee," *mutatis mutandis*.

2. Amendment of Recitals. The first recital of the Agreement is hereby amended and restated in its entirely to read as follows:

> "**WHEREAS**, Company wishes to retain the services of Employee, and Employee wishes to render services to Company, as Chief Technologist;"

3. Amendment of Section 1 and Subsequent References to "Chief Technical Officer." The reference to "Chief Technical Officer" in Section 1 of the Agreement is hereby replaced with "Chief Technologist." Each subsequent instance of "Chief Technical Officer" in the Agreement is hereby replaced with "Chief Technologist," *mutatis mutandis*.

4. Amendment to Section 2. Section 2 of the Agreement is hereby amended and restated in its entirety as follows:

> "**2 . GENERAL DUTIES.** Employee shall devote his entire productive time, ability, and attention to Company's business during Employee's employment. Employee shall report to Company's Chief Executive Officer. Employee shall do and perform all services, acts, or things necessary or advisable to discharge his duties under this Agreement, and such other duties as are commonly performed by an employee of his rank in a publicly traded corporation or as may, from time to time, be prescribed by the Company through the Chief Executive Officer and Board of Directors (the "***Board***"). Employee agrees to cooperate with and work to the best of his ability with Company's management team, which includes the Board and the officers and other employees, to continually improve Company's reputation in its industry for quality products and performance."

5. Amendment to Section 4. Section 4 of the Agreement is hereby amended and restated in its entirety as follows:

> "**4. COMPLIANCE WITH SECURITIES LAWS.** Employee agrees that he will comply with all applicable securities laws and with Company's policies that related to securities laws, as stated from time to time. Employee further agrees that he will execute any such documents and perform any such actions as Company may reasonably request in order to aid in Company's compliance with applicable securities laws."

6. Approval of Amendment. By their signatures below, the Company and Employee hereby adopt this Amendment.

7. Necessary Acts. Each party to this Amendment hereby agrees to perform any further acts and to execute and deliver any further documents that may be necessary or required to carry out the intent and provisions of this Amendment and the transactions contemplated hereby.

8. Continued Validity. Except as otherwise expressly provided herein, the Agreement shall remain in full force and effect.

9. Facsimile; Counterparts. This Amendment may be executed by facsimile or other electronic means and in any number of counterparts by the parties hereto, all of which together shall constitute one instrument.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Employment Agreement effective as of the Effective Date.

William C. Alexander

Dated: 8/21/2017 /s/ Bill Alexander

IDEAL POWER INC.

Dated: 8/21/2017 By: /s/ Timothy Burns

Name: Timothy Burns

Title: Chief Financial Officer

Exhibit 31.1

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002**

I, R. Daniel Brdar, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ideal Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15-d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 9, 2017

/s/ R. Daniel Brdar

R. Daniel Brdar
Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002

I, Timothy W. Burns, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ideal Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15-d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2017

/s/ Timothy W. Burns

Timothy W. Burns
Chief Financial Officer (Principal Financial and Accounting Officer)

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the periodic report of Ideal Power Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2017 as filed with the Securities and Exchange Commission (the "Report"), we, R. Daniel Brdar, Chief Executive Officer (Principal Executive Officer) and Timothy W. Burns, Chief Financial Officer (Principal Financial and Accounting Officer) of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: November 9, 2017

/s/ R. Daniel Brdar
R. Daniel Brdar
Chief Executive Officer (Principal Executive Officer)

/s/ Timothy W. Burns
Timothy W. Burns
Chief Financial Officer (Principal Financial and Accounting Officer)