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 March 31, 2022

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

5508 Highway 290 West, Suite 120
Austin, Texas 78735
(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)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	IPWR	The Nasdaq Capital Market

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 every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the 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 ☒	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 May 11, 2022, the issuer had5,903,797 shares of common stock, par value $0.001, outstanding.

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PART I-FINANCIAL INFORMATION

ITEM 1. CONDENSED FINANCIAL STATEMENTS

IDEAL POWER INC.
Balance Sheets
(unaudited)

	March 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 21,725,410	$ 23,170,149
Accounts receivable, net	262,137	233,262
Prepayments and other current assets	120,906	43,900
Total current assets	22,108,453	23,447,311
Property and equipment, net	59,811	56,158
Intangible assets, net	2,035,423	2,055,650
Right of use asset	292,887	307,172
Other assets	11,189	11,189
Total assets	$ 24,507,763	$ 25,877,480
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 380,033	$ 130,500
Accrued expenses	315,785	353,507
Current portion of lease liability	60,265	58,864
Total current liabilities	756,083	542,871
Long-term lease liability	252,092	267,584
Other long-term liabilities	922,439	917,100
Total liabilities	1,930,614	1,727,555
Commitments and contingencies (Note 5)		
Stockholders' equity:		
Common stock, $0.001 par value; 50,000,000 shares authorized; 5,905,118 shares issued and 5,903,797 shares outstanding at March 31, 2022 and 5,893,767 shares issued and 5,892,446 shares outstanding at December 31, 2021	5,905	5,894
Additional paid-in capital	104,395,175	104,063,321
Treasury stock, at cost, 1,321 shares at March 31, 2022 and December 31, 2021	(13,210)	(13,210)
Accumulated deficit	(81,810,721)	(79,906,080)
Total stockholders' equity	22,577,149	24,149,925
Total liabilities and stockholders' equity	$ 24,507,763	$ 25,877,480

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

IDEAL POWER INC.
Statements of Operations
(unaudited)

	Three Months Ended March 31, 2022	Three Months Ended March 31, 2021
Grant revenue	$ 125,008	$ 242,061
Cost of grant revenue	125,008	242,061
Gross profit	—	—
Operating expenses:		
Research and development	828,547	260,880
General and administrative	852,949	600,686
Sales and marketing	219,429	62,578
Total operating expenses	1,900,925	924,144
Loss from operations	(1,900,925)	(924,144)
Interest expense, net	(3,716)	(6)
Net loss	$ (1,904,641)	$ (924,150)
Net loss per share – basic and diluted	$ (0.31)	$ (0.17)
Weighted average number of shares outstanding – basic and diluted	6,155,352	5,344,025

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

IDEAL POWER INC.
Statements of Cash Flows
(unaudited)

	Three Months Ended March 31, 2022	Three Months Ended March 31, 2021
Cash flows from operating activities:		
Net loss	$ (1,904,641)	$ (924,150)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	44,190	29,515
Stock-based compensation	231,765	61,933
Stock issued for services	100,100	68,680
Decrease (increase) in operating assets:		
Accounts receivable	(28,875)	44,400
Prepaid expenses and other assets	(62,721)	(17,715)
Increase (decrease) in operating liabilities:		
Accounts payable	249,533	5,306
Accrued expenses	(46,474)	(111,306)
Net cash used in operating activities	(1,417,123)	(843,337)
Cash flows from investing activities:		
Purchase of property and equipment	(11,031)	(1,462)
Acquisition of intangible assets	(16,585)	(29,275)
Net cash used in investing activities	(27,616)	(30,737)
Cash flows from financing activities:		
Net proceeds from issuance of common stock	—	21,204,609
Exercise of options and warrants	—	3,301,226
Net cash provided by financing activities	—	24,505,835
Net increase (decrease) in cash and cash equivalents	(1,444,739)	23,631,761
Cash and cash equivalents at beginning of period	23,170,149	3,157,256
Cash and cash equivalents at end of period	$ 21,725,410	$ 26,789,017

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

IDEAL POWER INC.
Statements of Stockholders' Equity
For the Three Months Ended March 31, 2022 and 2021
(unaudited)

	Common Stock		Additional Paid-In	Treasury Stock		Accumulated	Total Stockholders'
	Shares	Amount	Capital	Shares	Amount	Deficit	Equity
Balances at December 31, 2020	3,265,740	$ 3,266	$ 78,974,964	1,321	$ (13,210)	$ (75,135,811)	$ 3,829,209
Issuance of shares of common stock in public offering	1,352,975	1,353	21,203,256	—	—	—	21,204,609
Exercise of options and warrants	1,250,652	1,250	3,299,976	—	—	—	3,301,226
Stock issued for services	4,000	4	68,676	—	—	—	68,680
Stock-based compensation	—	—	61,933	—	—	—	61,933
Net loss for the three months ended March 31, 2021	—	—	—	—	—	(924,150)	(924,150)
Balances at March 31, 2021	5,873,367	$ 5,873	$ 103,608,805	1,321	$ (13,210)	$ (76,059,961)	$ 27,541,507
Balances at December 31, 2021	5,893,767	$ 5,894	$ 104,063,321	1,321	$ (13,210)	$ (79,906,080)	$ 24,149,925
Exercise of options	1,351	1	(1)	—	—	—	—
Stock issued for services	10,000	10	100,090	—	—	—	100,100
Stock-based compensation	—	—	231,765	—	—	—	231,765
Net loss for the three months ended March 31, 2022	—	—	—	—	—	(1,904,641)	(1,904,641)
Balances at March 31, 2022	5,905,118	$ 5,905	$ 104,395,175	1,321	$ (13,210)	$ (81,810,721)	$ 22,577,149

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, the Company is focused on the further development and commercialization of its Bidirectional bipolar junction TRANsistor (B-TRAN™) solid-state switch technology.

Since its inception, the Company has financed its research and development efforts and operations primarily through the sale of common stock and warrants. The Company's continued operations are dependent upon, among other things, its ability to obtain adequate sources of funding through future revenues, follow-on stock offerings, issuances of warrants, debt financing, co-development agreements, government grants, sale or licensing of developed intellectual property or other alternatives.

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 (the "SEC") 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, 2021 has been derived from the Company's audited financial statements included in its Annual Report on Form 10-K filed with the SEC on March 25, 2022.

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, 2021. Operating results for interim periods are not necessarily indicative of operating results for an entire fiscal year or any other future periods.

Net Loss Per Share

In accordance with Accounting Standards Codification 260, shares issuable for little or no cash consideration are considered outstanding common shares and included in the computation of basic net loss per share. As such, for the three months ended March 31, 2022 and 2021, the Company included pre-funded warrants to purchase 253,828 shares of common stock in its computation of net loss per share. The pre-funded warrants were issued in November 2019 with an exercise price of $0.001.

In periods with a net loss, no common share equivalents are included in the computation of diluted net loss per share because their effect would be anti-dilutive. At March 31, 2022, potentially dilutive shares outstanding amounted to 1,382,402 shares and exclude prefunded warrants to purchase shares of common stock.

Recent Accounting Pronouncements

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

Note 3 – Intangible Assets

Intangible assets, net consisted of the following:

	March 31, 2022 (unaudited)	December 31, 2021
Patents	$ 1,150,426	$ 1,133,841
Other intangible assets	1,391,479	1,391,479
	2,541,905	2,525,320
Accumulated amortization – patents	(171,142)	(158,516)
Accumulated amortization – other intangible assets	(335,340)	(311,154)
	$ 2,035,423	$ 2,055,650

Amortization expense amounted to $36,812 and $23,698 for the three months ended March 31, 2022 and 2021, respectively. Amortization expense for the succeeding five years and thereafter is $110,732 (2022), $147,642 (2023-2026) and $1,016,200 (thereafter).

At March 31, 2022 and December 31, 2021, the Company had capitalized $317,923 and $306,640, respectively, for costs related to patents that have not been awarded.

Note 4 – Lease

The Company previously leased 14,782 square feet of office and laboratory space located in Austin, Texas and subleased approximately seventy-five percent (75%) of this space to a third party. This lease and sublease expired concurrently on May 31, 2021.

In March 2021, the Company entered into a lease agreement for 4,070 square feet of office and laboratory space located in Austin, Texas. The commencement of the lease occurred on June 1, 2021 and the initial term of the lease is 63 months. The actual base rent in the first year of the lease was $56,471 and was net of $18,824 in abated rent over the first three months of the lease term. The annual base rent in the second year of the lease is $77,330 and increases by $2,035 in each succeeding year of the lease. In addition, the Company is required to pay its proportionate share of operating costs for the building under this triple net lease. The lease contains a 5-year fair market renewal option. It does not contain a termination option. The Company recognized a right of use asset of $339,882 and a corresponding lease liability for this lease upon lease commencement.

For purposes of calculating the right of use asset and lease liability included in the Company's financial statements, the Company estimated its incremental borrowing rate at 6% per annum.

Future minimum payments under the lease are as follows:

For the Year Ended December 31,	
2022 (remaining)	$ 57,659
2023	78,517
2024	80,552
2025	82,587
2026	56,132
Total lease payments	355,447
Less: imputed interest	(43,090)
Total lease liability	$ 312,357

At March 31, 2022, the remaining lease term was 53 months.

For the three months ended March 31, 2022 and 2021, operating cash flows for lease payments totaled $18,824 and $49,889 respectively. For the three months ended March 31, 2022 and 2021, operating lease cost, recognized on a straight-line basis, totaled $19,018 and $48,488, respectively.

Note 5 – Commitments and Contingencies

License Agreement

In 2015, the Company entered into licensing agreements which expire in February 2033. Per the agreements, the Company has an exclusive royalty-free license associated with semiconductor power switches which enhances its intellectual property portfolio. The agreements include both fixed payments, all of which were paid prior to 2017, and ongoing variable payments. The variable payments are a function of the number of associated patent filings pending and patents issued under the agreements. The Company will pay $10,000 for each patent filing pending and $20,000 for each patent issued annually with one-half the annual payment due within 20 days of December 21st of each year and one-half annual the payment due within 20 days of June 21st of each year of the agreements, up to a maximum of $100,000 per year (i.e. five issued patents). All five patents associated with the agreements are issued.

At March 31, 2022 and December 31, 2021, the other long-term liability for the estimated present value of future payments under the licensing agreements was $922,439 and $917,100, respectively. The Company is accruing interest for future payments related to the issued patents associated with these agreements.

Legal Proceedings

The Company may be subject to litigation from time to time in the ordinary course of business. The Company is not currently party to any legal proceedings.

Indemnification Obligations

The employment agreements of Company executives include an indemnification provision whereby the Company shall indemnify and defend, at the Company's expense, its executives so long as an executive's actions were taken in good faith and in furtherance of Company's business and within the scope of executive's duties and authority.

COVID-19 Pandemic

As of the date of these financial statements, the COVID-19 pandemic continues throughout the United States and the rest of the world. The ultimate extent of the impact of COVID-19 on the financial performance of the Company will depend on future developments, including, among other things, the duration and spread of COVID-19 and its related variants, the timing, scope and efficacy of vaccination efforts, additional governmental restrictions in response to the COVID-19 pandemic and the overall economy, all of which are highly uncertain and cannot be predicted. If the COVID-19 pandemic contributes to additional significant volatility in the global financial markets in the future, the Company's ability to raise additional capital, if necessary, on acceptable terms or at all, may be impacted, though such risk has not materialized to date. If the financial markets and/or the overall economy are negatively impacted for an extended period, the Company's operating results may be materially and adversely affected.

Note 6 — Common Stock

Public Offering

In February 2021, the Company issued and sold 1,352,975 shares of its common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter's option to purchase additional shares in full, in an underwritten public offering at a price of $17.00 per share (the "Public Offering"). The net proceeds to the Company from the Public Offering were $21.2 million. The Company intends to use the net proceeds from the Public Offering to fund commercialization and development of its B-TRAN™ technology and general corporate and working capital purposes.

Stock Issuances

In January 2022, the Company issued 10,000 unregistered shares of common stock, valued at $100,100 at the time of issuance, to a third-party vendor as compensation for services performed. In February 2021, the Company issued 4,000 unregistered shares of common stock, valued at $68,680 at the time of issuance, to a third-party vendor as compensation for services performed.

Note 7 — Equity Incentive Plan

In May 2013, the Company adopted the 2013 Equity Incentive Plan (as amended and restated, the “Plan”) and reserved shares of common stock for issuance under the Plan, which was last amended in June 2021. The Plan is administered by the Compensation Committee of the Company’s Board of Directors.At March 31, 2022, 412,945 shares of common stock were available for issuance under the Plan.

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, 2021	492,886	$	7.35	7.6
Granted	23,096	$	11.11	
Exercised	(3,750)	$	5.36	
Forfeited	(16,250)	$	9.33	
Outstanding at March 31, 2022	495,982	$	7.48	7.2
Exercisable at March 31, 2022	386,828	$	6.46	6.6

During the three months ended March 31, 2022, the Company granted13,096 stock options to Board members and10,000 stock options to employees under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was $185,889, $29,998 of which was recognized during the three months ended March 31, 2022.

In January 2022, the Compensation of the Company’s Board of Directors (the “Board”) approved a modification of stock option grants to David Eisenhaure, the Company’s former Chairman of the Board, whom passed away in Octobor 2021. The modification extended the post-termination exercise period of his vested stock option grants from 12 months to 5 years. During the three months ended March 31, 2022, the Company recognized $49,327 of expense related to this modification.

At December 31, 2021 and March 31, 2022, there were100,000 unvested restricted stock units (“RSUs”) outstanding.No RSUs were granted, vested or forfeited during the three months ended March 31, 2022.

At March 31, 2022, there was $1,650,209 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 1.3 years.

Note 8 — Warrants

At March 31, 2022 and December 31, 2021, the Company had786,420 warrants outstanding with a weighted average exercise price of $5.19 per share and 253,828 pre-funded warrants outstanding with an exercise price of $0.001 per share. The weighted average remaining life, excluding the253,828 pre-funded warrants with no expiration date, of the outstanding warrants is 3.0 years.

At March 31, 2022, all warrants were exercisable, although the warrants held by certain of the Company’s warrant holders may be exercised only to the extent that the total number of shares of common stock then beneficially owned by such warrant holder does not exceed 4.99% (or, at the investor’s election, 9.99%) of the outstanding shares of the Company’s common stock.

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, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements include, but are not limited to, statements regarding our future financial performance, business condition and results of operations and pursuing additional government funding. 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,” “hopes,” “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 generate revenue;
- our limited operating history;
- the size and growth of markets for our technology;
- regulatory developments that may affect our business;
- our ability to successfully develop new technologies, particularly our bidirectional bipolar junction transistor, or B-TRAN™;
- our expectations regarding the timing of prototype and commercial fabrication of B-TRAN™ devices;
- our expectations regarding the performance of our B-TRAN™ and the consistency of that performance with both internal and third-party simulations;
- the expected performance of future products incorporating our B-TRAN™;
- the performance of third-party consultants and service providers whom we have and will continue to rely on to assist us in development of our B-TRAN™ and related drive circuitry;
- the rate and degree of market acceptance for our B-TRAN™;
- the time required for third parties to redesign, test and certify their products incorporating our B-TRAN™;
- our ability to successfully commercialize our B-TRAN™ technology;
- our ability to secure strategic partnerships with semiconductor fabricators and others related to our B-TRAN™ technology;
- our ability to obtain, maintain, defend and enforce intellectual property rights protecting our technology;
- the success of our efforts to manage cash spending, particularly prior to the commercialization of our B-TRAN™ technology;
- general economic conditions and events and the impact they may have on us and our potential partners and licensees;

- our ability to obtain adequate financing in the future, if and when we need it;
- the impact of the novel coronavirus (COVID-19) on our business, financial condition and results of operations;
- 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 2021 financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2021. 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 I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2021.

Overview

Ideal Power Inc. is located in Austin, Texas. The Company is solely focused on the further development and commercialization of its Bidirectional bipolar junction TRANsistor (B-TRAN™) solid state switch technology.

To date, operations have been funded primarily through the sale of common stock and warrants. Total revenue generated from inception to date as of March 31, 2022 amounted to $16.0 million with approximately $12.4 million of that revenue from discontinued operations and the remainder from grant revenue for bidirectional power switch development. Revenue was $125,008 and $242,061 in the three months ended March 31, 2022 and 2021, respectively. Revenue for both the three months ended March 31, 2022 and 2021 related to government grants. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

COVID-19 Impact

As of the date of this report, the COVID-19 pandemic continues throughout the United States and the rest of the world. The ultimate extent of the impact of COVID-19 on our financial performance will depend on future developments, including, among other things, the duration and spread of COVID-19 and its related variants, the timing, scope and efficacy of vaccination efforts, additional governmental restrictions in response to the COVID-19 pandemic, and the overall economy, all of which are highly uncertain and cannot be predicted. If the COVID-19 pandemic contributes to significant additional volatility in the global financial markets in the future, our ability to raise additional capital, if necessary, on acceptable terms or at all, may be impacted, though such risk has not materialized to date. If the financial markets and/or the overall economy are negatively impacted for an extended period, our operating results may be materially and adversely affected.

While the COVID-19 pandemic has caused some disruption to our business, it has not had a material adverse impact on our operations to date. However, the COVID-19 pandemic may disrupt our business in the future and cause electrical component shortages and unavailability, difficulties in securing fabrication capacity, delays in critical development and commercialization activities and/or result in potential incremental costs associated with mitigating the effects of the COVID-19 pandemic. There has been a significant disruption in the supply chain for semiconductors due both to the COVID-19 pandemic and increased demand for semiconductors. While this disruption has not materially impacted us to date, it may materially and adversely impact us in the future. The COVID-19 pandemic is ongoing, and its dynamic nature, including uncertainties relating to the ultimate spread of the virus and its related variants, the duration of the pandemic, the timing, scope and efficacy of vaccination efforts and additional actions that may be taken by governmental authorities in response to the pandemic, makes it difficult to forecast the effects on our business and results of operations for the remainder of 2022 and thereafter.

Results of Operations

Comparison of the three months ended March 31, 2022 to the three months ended March 31, 2021

Grant Revenues. Grant revenues for the three months ended March 31, 2022 and 2021 were $125,008 and $242,061, respectively. The grant revenues relate primarily to a $1.2 million subcontract with Diversified Technologies, Inc. ("DTI") to supply B-TRAN™ devices as part of a two-year contract awarded to DTI by the United States Naval Sea Systems Command ("NAVSEA") for the development and demonstration of a B-TRAN™ enabled high efficiency direct current solid state circuit breaker ("SSCB"). The program started in late June 2020. In September 2021, we entered into and began work under a $50,000 subcontract with DTI under a Phase I Small Business Innovation Research ("SBIR") grant from the Department of Energy ("DOE") to develop a B-TRAN™-driven low loss alternating current SSCB. We completed our work under this subcontract in February 2022. We expect the grant revenue related to the subcontract with DTI for the NAVSEA program to continue over the next quarter with minimal revenue recognized thereafter through completion of the NAVSEA demonstration. We also expect to pursue additional government funding that may result in additional grant revenues in the future.

We expect to introduce our initial product for commercial sale in late 2022.

Cost of Grant Revenues. Cost of grant revenues for the three months ended March 31, 2022 and 2021 was $125,008 and $242,061, respectively. The cost of grant revenues relates to the subcontracts with DTI discussed above and are equal to the associated grant revenues resulting in no gross profit. We expect no gross profit under the remaining subcontract with DTI or from other grants that we are pursuing or may pursue in the remainder of 2022.

Research and Development Expenses. Research and development expenses increased by $567,667, or 218%, to $828,547 in the three months ended March 31, 2022 from $260,880 in the three months ended March 31, 2021. The increase was due to higher semiconductor fabrication costs of $250,537, personnel costs of $99,917, stock-based compensation expense of $82,177, professional fees of $52,722, contract labor of $39,608, engineering services of $36,360 and other B-TRAN™ development spending of $6,346. In the three months ended March 31, 2021, all of our semiconductor fabrication costs were funded by government grants. In the three months ended March 31, 2022, a majority of our semiconductor fabrication costs were not funded by government grants. We expect higher research and development expenses in the remainder of 2022 as we continue to accelerate development of our B-TRAN™ technology and self-fund, at least in the short term, semiconductor fabrication costs and other development previously funded through government grants. Research and development expenses will be subject to quarterly variability due primarily to the number, size and timing of semiconductor fabrication runs and their associated cost.

General and Administrative Expenses. General and administrative expenses increased by $252,263, or 42%, to $852,949 in the three months ended March 31, 2022 from $600,686 in the three months ended March 31, 2021. The increase was due to higher investor relations spending, inclusive of services paid in stock, of $107,128, board of directors' search and placement fees and expenses of $85,941, stock-based compensation expense of $55,301 and other general and administrative spending of $3,893. We expect relatively flat to slightly lower general and administrative expenses in the remainder of 2022.

Sales and Marketing Expenses. Sales and marketing expenses increased by $156,851, or 251%, to $219,429 in the three months ended March 31, 2022 from $62,578 in the three months ended March 31, 2021. The increase was due to higher personnel costs of $93,956 as we hired our first two sales and marketing employees in 2021, stock-based compensation expense of $32,355 and other spending as we work towards commercializing our B-TRAN™ technology of $30,540. We expect higher sales and marketing expenses in the remainder of 2022 as we engage more broadly with prospective customers and commercialize our B-TRAN™ technology.

Loss from Operations. Our loss from operations for the three months ended March 31, 2022 was $1,900,925, or 106% higher, as compared to the $924,144 loss from operations for the three months ended March 31, 2021, for the reasons discussed above.

Interest Expense, Net. Interest expense, net was $3,716 for the three months ended March 31, 2022 compared to $6 for the three months ended March 31, 2021.

Net Loss. Our net loss for the three months ended March 31, 2022 was $1,904,641, or 106% higher, as compared to a net loss of $924,150 for the three months ended March 31, 2021, for the reasons discussed above.

Liquidity and Capital Resources

We currently generate grant revenue only. We expect to generate grant revenue and potentially commercial revenue in 2022, depending on the ultimate date that our initial product is introduced for commercial sale. We have incurred losses since inception. We have funded our operations to date through the sale of common stock and warrants.

At March 31, 2022, we had cash and cash equivalents of $21.7 million. Our net working capital at March 31, 2022 was $21.4 million. We had no outstanding debt at March 31, 2022. Accordingly, management expects that our cash and cash equivalents will be sufficient to fund our activities for at least the next twelve months from the date of filing this Quarterly Report on Form 10-Q; however, we may require additional funds to fully implement our plan of operation.

Operating activities in the three months ended March 31, 2022 resulted in cash outflows of $1,417,123, which were due to the net loss for the period of $1,904,641, partly offset by stock-based compensation of $231,765, favorable balance sheet timing of $111,463, stock issued for services of $100,100 and depreciation and amortization of $44,190. Operating activities in the three months ended March 31, 2021 resulted in cash outflows of $843,337, which were due to the net loss for the period of $924,150 and unfavorable balance sheet timing $79,315, partly offset by stock issued for services of $68,680, stock-based compensation of $61,933 and depreciation and amortization of $29,515.

We expect an increase in cash outflows from operating activities throughout 2022 as we continue to accelerate development and commercialization of our B-TRAN™ technology.

Investing activities in the three months ended March 31, 2022 and 2021 resulted in cash outflows of $27,616 and $30,737, respectively, for the acquisition of intangible assets and fixed assets.

Financing activities in the three months ended March 31, 2022 did not result in any cash inflows or outflows. Financing activities in the three months ended March 31, 2021 resulted in cash inflows of $21,204,609 from the net proceeds from our Public Offering (as defined below) in February 2021 and $3,301,226 from the exercise of warrants and stock options.

Public Offering

In February 2021, we issued and sold 1,352,975 shares of our common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter's option to purchase additional shares in full, in an underwritten public offering at a price of $17.00 per share (the "Public Offering"). The net proceeds to us from the Public Offering were $21.2 million. We intend to use the net proceeds from the Public Offering to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

Critical Accounting Estimates

There have been no significant changes during the three months ended March 31, 2022 to the critical accounting estimates 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, 2021.

Trends, Events and Uncertainties

There are no material changes from trends, events or uncertainties disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

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 (as defined in Rule 13a-15(e) under the Exchange Act) include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the Company's reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. The Company's disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that this information is accumulated and communicated to management, including the principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. The Company conducted an evaluation (pursuant to Rule 13a-15(b) of the Exchange Act), under the supervision and with the participation of its Chief Executive Officer (principal executive officer) and its Chief Financial Officer (principal financial and accounting officer) of the effectiveness of the Company's disclosure controls and procedures as of March 31, 2022 and has concluded that, as of March 31, 2022, the Company's disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There have been no material changes in our internal controls over financial reporting that occurred during the quarter ended March 31, 2022 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

We may be subject to litigation from time to time in the ordinary course of business. We are not currently party to any legal proceedings.

ITEM 1A. RISK FACTORS

There are no material changes from the risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2021.

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

In January 2022, we issued 10,000 unregistered shares of common stock, valued at $100,100 at the time of issuance, to a third-party vendor as compensation for services performed. The shares of common stock were issued in a private placement pursuant to Section 4(a)(2) of the Securities Act.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

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ITEM 6. EXHIBITS

Exhibit Number	Document
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*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
10.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and contained in Exhibit 101).

* Filed herewith
** Furnished herewith

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 May 16, 2022

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 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: May 16, 2022

/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: May 16, 2022

/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 March 31, 2022 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: May 16, 2022

/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)