April 1, 2025

Ideal Power Successfully Completes Deliverables Related to First Design Win for Solid-State Circuit Breakers

AUSTIN, Texas, April 1, 2025 /PRNewswire/ -- Ideal Power Inc. (Nasdaq: IPWR) ("Ideal Power," the "Company," "we," "us" or "our"), developer and innovative provider of the highly efficient and broadly patented B-TRAN® bidirectional semiconductor power switch, today announced all deliverables related to our first design win for solid-state circuit breakers (SSCBs) were successfully completed three months ahead of schedule.

In connection with our design win announced in December 2024, the Company entered into a joint development agreement for a SSCB product incorporating multiple B-TRAN® devices with one of the largest circuit protection equipment manufacturers in Asia serving the data center, renewable energy, energy storage, industrial, and utility markets. In accordance with the agreement, we installed multiple B-TRAN® devices and related drive circuitry and controls into the customer's SSCB prototypes. The replacement of SiC devices with B-TRAN® devices in their SSCB prototypes resulted in a greater than a 60% reduction in total losses and added bidirectionality. Based on our testing, we confirmed the B-TRAN®-based circuit breaker design meets or exceeds all of the customer-defined target specifications. The SSCB prototypes were then shipped to the customer for further testing and to enable them to begin marketing this new ultra-low loss breaker to their customers sooner than planned. The B-TRAN®-based solution easily fits into the customer's existing design for a SSCB product, accelerating the time to market for their initial B-TRAN®-enabled circuit breaker product.

"Our first design win and related joint development agreement represented significant validation of B-TRAN® as an enabling technology for solid-state circuit breakers. We are now excited to deliver the circuit breaker prototypes to this customer a full quarter ahead of schedule. This customer will be the first to offer an innovative ultra-low loss and inherently bidirectional circuit breaker to a market that has long been waiting for such a solution. We expect the marketing and successful launch of this B-TRAN®-enabled SSCB product to lead to an expanded opportunity with this customer and accelerate engagements and potentially design wins with the large global companies currently evaluating our technology for circuit protection applications. Given the size of these companies, any one of them could represent millions of dollars or more of annual revenue to us over time. A few key design wins would be enough to get us to profitability," stated Dan Brdar, President and Chief Executive Officer of Ideal Power.

Based on the customer's projections, for Ideal Power, the opportunity from this customer's first B-TRAN®-based product alone could translate to revenue of several hundred thousand

dollars in its first year of sales, with the opportunity to exceed a million dollars in revenue in the second year of sales. This initial B-TRAN®-enabled SSCB will be marketed to renewable energy and energy storage equipment providers and utility electric distribution network companies. We expect this product to be their first of multiple products incorporating B-TRAN® into SSCBs as the customer is interested in offering a suite of B-TRAN®-enabled SSCBs with a wide range of ratings. As a result, the overall opportunity with this customer could eventually lead to sales of a million units per year based on the customer's projections. Other potential applications for future products with this customer include data centers, lighting and air conditioning systems, and electric vehicles, including vehicle-to-grid power conversion and EV contactors.

About Ideal Power Inc.

Ideal Power (NASDAQ: IPWR) is the developer and innovative provider of its broadly patented bidirectional semiconductor power switch, creating highly efficient and ecofriendly energy control solutions for electric vehicle, electric vehicle charging, renewable energy, energy storage, UPS/data center, solid-state circuit breaker and other industrial and military applications. The Company is focused on its patented Bidirectional, Bipolar Junction Transistor (B-TRAN®) semiconductor technology. B-TRAN® is a unique double-sided bidirectional AC switch that delivers substantial performance improvements over today's conventional power semiconductors. Ideal Power's B-TRAN® can reduce conduction and switching losses, complexity of thermal management and operating cost in AC power switching and control circuitry. For more information, visit the Company's website at www.IdealPower.com, on LinkedIn, on Twitter, and on Facebook.

Safe Harbor Statement

All statements in this release that are not based on historical fact are "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. While Ideal Power's management has based any forward-looking statements included in this release on its current expectations, the information on which such expectations were based may change. Such forward-looking statements include, but are not limited to, statements regarding the timing of revenue and revenue potential for the customer's B-TRAN®-based SSCB product, our expectation that this product will be the first of multiple products from the customer incorporating B-TRAN® into SSCBs, that the overall opportunity with this customer could eventually lead to sales of a million units per year based on the customer's projections, and our expectation that the marketing and successful launch of this B-TRAN®-enabled SSCB product will lead to an expanded opportunity with this customer and accelerate engagements and potentially design wins with the large global companies currently evaluating our technology for circuit protection applications. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control that could cause actual results to materially differ from such statements. Such risks, uncertainties, and other factors include, but are not limited to, the success of our B-TRAN® technology, including whether the patents for our technology provide adequate protection and whether we can be successful in maintaining, enforcing and defending our patents, our inability to predict with precision or certainty the pace and timing of development and commercialization of our B-TRAN® technology, the rate

and degree of market acceptance for our B-TRAN®, the impact of global health pandemics on our business, supply chain disruptions, and the expected performance of future products incorporating our B-TRAN®, and uncertainties set forth in our quarterly, annual and other reports filed with the Securities and Exchange Commission. Furthermore, we operate in a highly competitive and rapidly changing environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. We disclaim any intention to, and undertake no obligation to, update or revise forward-looking statements, except as required by applicable law.

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