

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 20, 2012

FLUX POWER HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Nevada
(State or Other Jurisdiction of
Incorporation)

000-25909
(Commission File Number)

86-0931332
(IRS Employer
Identification No.)

877-505-3589
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Section 8 – Other Events

Item 8.01. Other Events.

On December 20, 2012, the Registrant issued a press release titled “Flux Power Introduces New Technology to Increase Usable Energy and Extend the Life of Lithium Battery Systems.”

A copy of the press release attached hereto as Exhibit 99.1 is incorporated herein by reference.

Section 9 – Financial Statements and Exhibits

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Exhibit Description</u>
99.1	Press Release dated December 20, 2012

SIGNATURE

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

Flux Power Holdings, Inc.,
A Nevada Corporation

Dated: December 20, 2012

/s/ Craig Miller

Craig Miller, Chief Intellectual Property Officer and Corporate Secretary

Flux Power Introduces New Technology to Increase Usable Energy and Extend the Life of Lithium Battery Systems***Patent-Pending Technology Intuitively Manages Advanced Energy Storage Systems to Increase Cycle Life and Usable Energy while Decreasing Charging Times in Wind, Solar, Back-Up Power and EV Applications***

ESCONDIDO, CA (December 20, 2012) — Flux Power[®] Holdings, Inc. (OTCQB: FLUX), a fully reporting company and an innovator in durable, scalable, and affordable advanced energy storage systems, today announced that it has developed a technology that can learn and adapt to the changes that occur at the cell level within a battery pack over time. This innovative, patent-pending technology will enable Flux to provide its customers with advanced energy storage solutions that can adapt to a changing environment to increase usable energy and cycle life while decreasing charge times.

In any advanced energy storage system there is a tendency for individual cells to have different characteristics, such as energy storage capacity and discharge rates. These differences are caused by many variables, such as temperature, material impurities, surface contamination, and age. These variances can also change over the life of a cell and such changes can also vary from one cell to the next. The failure of any individual cell can cause substantial damage to the entire battery system and accompanying equipment. Therefore, monitoring an individual or group of cells is critical to preventing overcharging and overdischarging of cells.

Current battery management systems (BMS) utilize a system of voltage set-points to identify 'out of balance' groups of battery cells. With this information, operators are notified of an 'out of balance' condition or the system can choose to add power to or take power away from a certain group of cells. As energy storage systems become larger, more sophisticated management platforms need to be developed in order to maximize usage and efficiency. Flux Power's advanced technology provides a new management methodology that doesn't simply react to inconsistent voltage conditions, but intuitively manages each cell in an advanced energy storage system. The proprietary algorithms of the technology preemptively identify cell metrics to ensure accelerated balancing, charging and adapt the control of each cell in a battery system over time. This feature ultimately widens the total usable energy in a given storage system while providing a significant volume of information at any given point during an individual cell's life.

Paulus Geantil, Flux Power's Director of Engineering and the inventor of this technology commented, "Less advanced energy solutions typically only monitor the charging and discharging of the batteries, by monitoring unit parameters such as voltage of the batteries, which is then recorded and analyzed by a microprocessor to determine the condition and state of each cell in the battery string. This means the system can only react to poor conditions instead of preemptively enhancing system performance. As a result, balancing can take much longer and cause delays in charge times or create systems that potentially never attain a full charge, thus sacrificing capacity."

“The market and our customers consistently request more granularity of information on the storage demands of their specific applications to maximize the efficiency of their advanced storage system applications. Our new technology will deliver that functionality to them and sets our advanced energy storage systems well ahead of anyone else in the market today,” Geantil added.

The key benefit of this technology is its ability to recognize and adapt to the degradation of each cell in a battery pack through a comparative analysis of various perimeters, including the other cells within the battery pack and historical data regarding the cell. Furthermore, this technology can provide Flux’s customer with real cell degradation data while being application agnostic. It will serve as a base for all of the company’s advanced energy storage systems for solar, wind, back-up power, and EV (electric vehicle) applications.

“This is a key addition to our core technology as it provides our customers with one of the most robust advanced energy storage solutions available on the market today. The amount of data and the ability to monitor the changes in capacity of each cell over the cycle life will be a key differentiator in our advanced battery management systems,” said Chris Anthony, CEO of Flux Power. “We are working hard to incorporate this technology into all of our future product releases in order to provide our customers with the critical data they have been requesting.”

About Flux Power

Flux Power designs, develops, and sells cost efficient advanced energy storage systems. Incorporated in October 2009, Flux Power began shipping prototype products in the second quarter of 2010 while continuing to develop its intellectual property portfolio. Currently, Flux Power’s product offerings include batteries in various sizes and forms, packaged modules, fully tested and validated advanced energy storage systems and various system accessories. These accessories include: stand-alone battery management, stackable chargers, programming software and display systems. Flux Power sells modular advanced energy storage products through distributors and directly to original equipment manufacturers. These customers benefit from Flux Power’s advanced systems technologies, which greatly extend cycle life and improve system performance. For more information visit www.FLUXpwr.com or email info@FLUXpwr.com.

For more information contact:

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Forward-Looking Statements

This release contains certain "forward-looking statements" relating to the business of the Company. These forward looking statements are often identified by the use of forward-looking terminology such as "believes," "expects" or similar expressions. Further the forward looking statements involve known and unknown risks and uncertainties that may cause actual results to be materially different from those described herein as anticipated, believed, estimated or expected. Such forward-looking statements include, among other things, regulatory incentives, the development of new business opportunities, and projected costs, revenue, profits and results of operations. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, the inherent uncertainties associated with new projects and development stage companies. These forward-looking statements are made as of the date of this news release, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Although we believe that any beliefs, plans, expectations and intentions contained in this press release are reasonable, there can be no assurance that any such beliefs, plans, expectations or intentions will prove to be accurate. Investors should consult all of the information set forth herein and should also refer to the risk factors disclosure outlined in our annual report on Form 10-K for the most recent fiscal year, our quarterly reports on Form 10-Q and other periodic reports filed from time-to-time with the Securities and Exchange Commission and available on its website (www.sec.gov).

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