

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): September 5, 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.)

**2240 Auto Park Way, Escondido, California**  
(Address of Principal Executive Offices)

**92029**  
(Zip Code)

**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 September 5, 2012, the Registrant issued a press release titled “Flux Power’s Battery Pack Technology Selected for TransPower’s New Semi-Truck for PortTechExpo Demonstration.”

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 September 5, 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: September 6, 2012

/s/ Craig Miller  
Craig Miller, Chief Intellectual Property Officer and Corporate  
Secretary

**Flux Power's Battery Pack Technology Selected for TransPower's New Semi-Truck for PortTechExpo Demonstration*****Flux's Batteries and Battery Management System to Provide Alternative Power Solution that Eliminates Emissions from Commercial Vehicle Used in California Ports***

ESCONDIDO, CA (September 5, 2012) — Flux Power® Holdings, Inc. (OTCQB: FLUX), an innovator in durable, scalable, and affordable battery management solutions, today announced that it was selected by TransPower, an advanced clean energy technology company, to provide the battery packs for prototype battery-electric trucks to be unveiled at PortTechExpo on September 5-6 at the DoubleTree Hotel by Hilton in San Pedro, CA.

During the Expo, TransPower, a Diamond sponsor of the event, will demonstrate the capability of its new semi-trucks powered by Flux Power batteries and battery pack technology to offload shipping containers like those used in the heavily trafficked Los Angeles and Long Beach ports. The new vehicles, funded in part by competitive grants received from the California Energy Commission, are expected to offer a solution that can eliminate the need for traditional diesel-powered engines and substantially reduce or eliminate emissions in these severely congested ports.

PortTechExpo is being hosted by PortTechLA, a public/private non-profit technology center and business incubator operated by a coalition consisting of the City of Los Angeles, Port of Los Angeles and the San Pedro and Wilmington Chambers of Commerce. Its mission is to attract and mentor companies with technologies that will enable the Port of Los Angeles, and ports worldwide, to meet their immediate and future environmental, energy, security and logistics goals.

“We are delighted to be a part of TransPower's new commercial semi-trucks. Full-battery electric or plug-in hybrid commercial vehicles hold enormous potential for reducing petroleum consumption and substantially lowering or even eliminating smog-forming and greenhouse gas emissions in heavily trafficked areas, such as the Ports of Los Angeles and Long Beach,” said Chris Anthony, Flux Power Chief Executive Officer. “Our innovative battery management solutions are ideal for automotive manufacturers looking to migrate towards efficient, clean vehicles for the future. Flux's battery management solutions are flexible enough to be used in a variety of applications, yet powerful enough to deliver the performance that industrial vehicles need to get the job done.”

“We selected Flux Power to supply the batteries and battery management system for our initial fleet of test vehicles because we're interested in seeing if the company's battery and battery management solutions will help us deliver a commercial vehicle that can substantially reduce the emissions in congested port areas, such as those we have in southern California,” said Dr. James Burns, VP and Chief Scientist of TransPower. “We look forward to including Flux products in the electric trucks to be unveiled at the PortTechExpo this week.”

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Flux Power notes that electric vehicles are displacing traditional combustion vehicles for utility and passenger vehicle needs at an ever-growing rate as electric vehicle technology becomes more advanced and costs come down. Utility vehicles and commercial trucks are an ideal market for electric power, as they are often operated in confined or congested spaces where excess emissions from combustion vehicles is difficult to manage. Moreover, lowering these combustion motor emissions is a goal of many Federal and State agencies, which has also spurred adoption of electric technologies in this space. This adoption is further assisted by increased environmental consciousness on the part of consumers, which has increased sales of both hybrid electric and all electric vehicles.

For more information about the event, visit <http://www.porttechla.org/events/expo.asp>.

#### **About Flux Power**

Flux Power designs, develops, manufactures 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 such as Dukes Garage, Electric Motor Sports, MC Electric Vehicles, and EV America. These customers benefit from Flux Power's proprietary system and cell technologies, which greatly extend cycle life and improve system performance. For more information visit [www.FLUXpwr.com](http://www.FLUXpwr.com) or email [info@FLUXpwr.com](mailto:info@FLUXpwr.com).

#### **About TransPower**

Transportation Power, Inc., doing business as TransPower, is a privately-held California company that develops and provides clean power generation and conversion technologies and products. TransPower has developed a proprietary "ElecTruck™" integrated electric drive system for large trucks, and more recently has begun developing the "ElecTrans™" drive system for school buses and transit buses. TransPower is also developing its "Grid-Saver" fast energy storage system, designed to maximize commonality with TransPower's electric vehicle products, including lithium battery modules, battery management systems, and energy management technology. TransPower also has capabilities in development of hybrid and fuel cell systems. For more information, contact [info@transpowerusa.com](mailto:info@transpowerusa.com) or visit [www.transpowerusa.com](http://www.transpowerusa.com).

Key Words: LiFe, LiFePo4, Lithium iron phosphate, Battery Management System, Electric Vehicles, Plug-in hybrid, Utility vehicles, PortTechLA, PortTechExpo, Industrial vehicles

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