



# Premium Power

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New Jersey Board of Public Utilities  
Office of Policy and Planning  
Attention: Draft EMP Comments  
Two Gateway Center  
Newark, New Jersey 07102

July 25<sup>th</sup>, 2008

Dear Sir/Madam:

## **Draft New Jersey Energy Master Plan**

Premium Power Corporation commends the Board's leadership in developing a road map that addresses the State's, and indeed the Nation's, energy challenges. We concur that future energy policy must include multiple initiatives that address key challenges such as reducing peak electricity demand, enhancing energy efficiency and significantly increasing the amount of energy produced from sustainable, renewable resources.

As one of the United States' leading developers and manufacturers of commercial electrical energy storage systems we wish to bring to the Board's attention the significant role that electrical energy storage systems can play in enabling the State to meet the Energy Master Plan's stated Goals.

Electrical energy storage systems can store large amounts of energy (in the order of GWh) for dispatch over many hours. They can be deployed as large, centralized storage systems, for example at points of generation (PV, wind or conventional power) or at utility substations, or as smaller distributed resources at the point of power consumption. In either case, energy storage can be used as an asset to deliver:

- ❑ **Peak demand management:** By using the energy storage assets to discharge during periods of peak demand, thus relieving the utilities' generation and T&D systems of meeting the obligation.
- ❑ **Time-shifting of renewable energy:** Capturing and storing renewable energy (principally PV and wind) so that it is available during periods of peak system demand.
- ❑ **Emissions reductions:** Peak demand reduction and time-shifting of RE will both reduce the amount of energy generated by traditional fossil-fueled plants thus avoiding their associated carbon emissions.

We should highlight that Jersey City Power & Light (JCP&L) has been a leader in evaluating emerging electrical energy storage technologies and Premium Power has been extremely fortunate to have had the opportunity to work with JCP&L since mid-2006 as part of an Electrical Power Research Institute (EPRI) co-funded program to

validate the performance of our flow battery systems at the East Hanover substation in New Jersey.

Large-scale deployment of electrical energy storage systems would address the Energy Master Plan's goals of:

- ✓ Reducing peak electricity demand;
- ✓ Enabling further penetration of renewable resources (by increasing the value of the energy they generate);
- ✓ Reducing emissions from traditional fossil-fueled plants; and
- ✓ Encouraging the development of innovative clean energy technologies

Premium Power welcomes the Board's innovative approach and urges consideration of programs within the State's final Energy Master Plan that mandate electrical energy storage installations via:

1. A set-aside for electrical energy storage within New Jersey's Demand Response programs; and
2. Inclusion of a minimum electrical energy storage capacity within New Jersey's PV and Wind resource development programs.

Sincerely,

On behalf of Premium Power Corporation.

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