

# DOCKET

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## Comments on Integrated Energy Policy Report

### Update Workshop on Renewables Integration - June 11, 2012

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## **Background:**

In support of state RPS goals and AB 2514, the California ISO has developed a new market mechanism, NGR-REM (Non-generator Resource - Regulation Energy Management) to enable market participation by small dispersed grid resources. These resources are typically LESR's (Limited Energy Storage Resources) that range from fly-wheels to used 'second-life' vehicle batteries and home energy storage appliances. Successful development of this market mechanism along with new 'pay for performance rules' (FERC 755) provides, perhaps, the largest economic incentive in terms of market settlements to summon the true potential of the smart grid investments being made today.

## **The Issue:**

The ISO's Revenue Metering requirements are a significant barrier to the use of aggregated resources in their markets. Aggregation will be an essential strategy for dispersed energy storage resources, dispatch of multiple EV charging stations and participation of demand response resources. The California ISO requires 4-second telemetry data to dispatch aggregated resources and meter data from ISO revenue quality meters from a single dispatch-able resource. ISO certified Revenue Quality meters cost approximately \$5,000 each. This represents a significant barrier to entry for market participation by the very resources the smart grid is being built to harness. This list includes:

1. Electric Vehicle Supply Equipment (Level II EVSE modulated-charging as Dispatch-able Demand Resources (DDR) or potentially bi-directional DC Fast Chargers)

2. LESR's (Second-Life Vehicle Batteries or Home Energy Storage Appliances and CES)

### **The Cost of the Issue:**

Quick calculations tell the story: Assume the state had 1,000,000 devices to aggregated with an average 15-minute power rating of 3.3Kw. Enabling market participation of these resources would provide the state with 3,300MW of fast-ramping and regulation resources. The cost to do it, however, would be \$5B for the metering infrastructure.

### **The Solution:**

Capitalize on the utilities current investment in Smart Meters as adequate meter data quality for ISO settlements system which will remove a significant barrier for aggregated resources. Data from the aggregators could be audited periodically to ensure quality practices for managing and presenting resource data to the ISO.