California Energy Commission
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EPIC - Docket #12-EPIC-0I
California Energy Commission
1516 Ninth Street
Dockets Office: M/S 4
Sacramento, CA 95814

**RE: Comments on the Electric Program Investment Charge: Proposed 2012 – 2014 Triennial Investment Plan, Staff Report Docket Number 12 – EPIC – 01**

To the California Energy Commission:

Gridco Systems commends the Commission and its staff for its intensive effort in drafting the Electric Program Investment Charge ("EPIC") Proposed 2012-2014 Triennial Investment Plan ("Plan") in shortened time frame. We strongly support the plan and offer the following comments:

**1) Integrated, Best-in-Class Technology Demonstrations**

One of the primary challenges in achieving the Commission's vision for California's future electricity system is to understand and manage the interactions between different emerging technologies. Given its mission, position, and resources, the Commission is uniquely suited to lead in this area by supporting integrated, best-in-class demonstrations. Such demonstrations would co-locate best-in-class technologies cutting across multiple initiatives within the EPIC program: energy efficiency, demand response, transportation electrification, low carbon generation, and renewables integration, to name a few.

While demonstrating all projects in such an environment will not be practical, we encourage the Commission work with the investor owned utilities to designate or create at least one integrated demonstration test bed during the first Triennial Investment Plan period.

**2) S12.3: Proposed Funding Initiative: Demonstrate and Deploy Technologies and Strategies to Improve Integration of Intermittent Renewable Energy.**

We strongly support the S12.3, which will advance multiple California policies by enabling the integration of renewable energy at higher penetration rates. These policies include the Clean Energy Jobs Plan, SBX1 2, SB 17, and AB 32.

To ensure the greatest success of S12.3, we encourage the Commission to broaden the technologies under consideration beyond the stated initiatives of energy storage and demand response. While these technologies undoubtedly merit technology demonstration and deployment investment under EPIC, several others do as well.

Power electronic-based technologies are established solutions with a demonstrated capability to manage rapidly varying voltage, power factor, and other power characteristics in a variety of environments. A proven use of these technologies is to mitigate the distribution system impacts of large, rapidly varying industrial loads, an application with significant similarities to the integration of intermittent renewable energy.

Insofar as the criteria of S12.3 is to demonstrate and deploy technologies that are (i) at or near commercial scale and (ii) have significant potential to improve the integration of intermittent renewable energy, existing and emerging power electronics-based solutions clearly meet these tests. Finally, power electronics solutions have the potential to be more easily deployable and cost-effective than solutions such as reconductoring the distribution system or energy storage.

Again, we appreciate the Commission's hard work and strongly support this draft plan. Thank you for the opportunity to provide these comments.

Sincerely,

Naimish Patel
CEO
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