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Large-scale Solar Association Comments on 2015 Draft IEPR

Attached please find the comments of the Large-scale Solar Association on the 2015 Draft IEPR.

Additional submitted attachment is included below.



November 9, 2015

Chair Weisenmiller and Commissioner McAllister California Energy Commission Docket Office, MS-4 Docket No. 15-IEPR-06 1516 Ninth Street Sacramento, CA 95814

Submitted electronically

Dear Chair Weisenmiller and Commissioner McAllister,

Thank you for your efforts to put together a Draft IEPR that is both thorough and direct. LSA is pleased that the Energy Commission decided to take on a number of important issues in this IEPR, not the least of which is the topic of Renewables and Reliability.

The large-scale solar industry is interested in opportunities to better utilize the capabilities of renewables and other clean energy resources (e.g. storage and demand response) to provide critical reliability services. More importantly, ensuring reliability as we transition to a 50% RPS will require continual improvement both to optimize the current system and to ensure careful coordination of complementary policies.

We would like to direct you once again to a white paper developed by GE Energy Consulting, which aligns with and elaborates on a number of the recommendations currently outlined in the Draft IEPR. The report, *Integrating Higher Levels of Variable Energy Resources in California*, outlines ways to rethink over-generation and the duck chart by targeting the suite of resources and system mechanics that keep it afloat.

This paper indicates that the excess supply on the system is not simply due to large amounts of solar, but rather the lack of efficiency and responsiveness of the rest of the system. In particular, California is (1) heavily dependent on imports, over which the CAISO has less control, and (2) has a large amount of resources that do not economically bid into energy markets, but are self-scheduled (i.e. they decide when they will be on-line). This limits the CAISO's ability to balance the system.

Specific recommendations to increase the flexibility and price-responsiveness of the system include:

Reduce self-scheduling in the real-time market, generally, with a focus on unlocking
flexibility from imports through market changes and appropriate compensation structures
for new and renewing contracts.

- Harness greater flexibility from existing resources by encouraging combined heat and power units to provide available flexibility and retrofitting existing thermal generators to increase their range (lower minimum and higher maximum levels of output).
- Improve the way the energy markets incorporate forecasts of renewable energy generation, so the system is better positioned at the start of each day.
- Remove barriers for the full economic dispatch of new renewables through contract compensation structures and reducing risks of forecast error in the energy markets.
- Capitalize on the capabilities of storage, demand response and grid-friendly renewables to provide essential reliability services that, in some cases, do a better and faster job of providing these services than conventional generators. This includes: inertia, down/up reserves, over/under frequency response and voltage regulation.
- Schedule exports midday on spring weekends.
- Increase regional markets, building on the CAISO's Energy Imbalance Market.
- Adopt price-responsive rate structures for load, particularly electric vehicles, water pumping and desalination loads to take advantage of midday solar production.

You can find the white paper docketed here:

http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-06/TN205828_20150825T141913_Rachel_Gold_Largescale_Solar_Association_Comments_Report_Integr.pdf

Lastly, with regard to the recommendation on page 86 of the Draft IEPR to carefully evaluate the role of distributed resources in the Renewables Portfolio Standard, we note this issue was the subject of much discussion during the passage of SB 350 and the final bill made no changes to the existing treatment of behind-the-meter renewables. We do not feel that it is necessary or appropriate to reopen those discussions. LSA would like to reiterate the importance of using appropriate policy drivers to encourage market growth: The wholesale renewables market continues to be driven by the 50% RPS in SB 350 and distributed, behind-the-meter resources are driven by a suite of other more focused policies, including net energy metering. We also suggest that the revised IEPR emphasize the role of the Integrated Resource Planning effort that was included in SB 350 and will be underway by 2017 as a potential forum for discussion of procurement planning and understanding how the wholesale and distributed markets complement one another.

If climate change is truly the foundation of California's energy policy, as the Draft IEPR states, it is imperative for the state to work on solutions to the institutional barriers that could impede integration of higher levels of renewable energy generation, and to encourage the growth of both the wholesale and distributed markets through appropriate and respective policy drivers.

Sincerely,

Rachel Gold Policy Director