The Large-scale Solar Association's Comments on Straw Proposal on Standard Resource Adequacy Capacity Product

December 18, 2008

The Large-scale Solar Association ("LSA"), an organization representing California's largest developers of utility-scale solar powered generation, appreciates this opportunity to comment on the California Independent System Operator's ("CAISO") December 4, 2008 revised Standard Resource Adequacy Capacity Product straw proposal ("December SCP Proposal").[1] LSA sees the value of the SCP effort to move toward a tariff-based set of must-offer obligation ("MOO") requirements for those resources used to satisfy the resource adequacy ("RA") capacity procurement obligation that applies to load serving entities. LSA does not desire to slow this effort, but it is concerned about the treatment of large-scale renewables in the December SCP Proposal, particularly with respect to potential financial penalties.

The CAISO's final SCP proposal that is expected to come out December 23 needs to provide an explicit methodology for determining resource availability that properly accounts for the natural and technological production constraints inherent in certain renewable-fueled generation, including large solar technologies. Specifically, the availability assessment mechanism to be included in the SPC tariff provisions must not penalize solar resources due to daily or transient limitations in their fuel source. The December SCP Proposal suggests that the availability standard—the target against which all RA generation forced outage rates will be compared—will be based solely upon outage data from the entire RA fleet derived from five seasonally-adjusted peak hour periods selected by CAISO.[2] However, other language can be read to suggest that "performance" (as opposed to "availability") will be the focus of the assessment of potential penalties.[3] LSA's concern is that this language may be interpreted to inappropriately conflate "performance"—which suggests provision of energy or Ancillary Services in response to a dispatch order or pre-existing schedule—with resource availability determined directly from facilities' forced outage rates.

In addition to LSA's concern about the use of "performance" in an availability metric or assessment, LSA also seeks clarity that the outage calculation not disadvantage solar facilities. This occurs in two contexts. The first is the extended period of resource testing and shake-out during the first year after a new solar facility comes online. This is a time after initial commercial operation when facilities of all types typically require some ongoing troubleshooting and fine-tuning that can in turn impact their annual availability factor; for new and developing technologies this can reasonably be expected to have even greater impact Given the expected role of large solar facilities in addressing the State's growing renewable portfolio standard ("RPS") goals, LSA believes it is appropriate to specifically anticipate and address this concern, perhaps through the use of technology-specific availability metrics. Moreover, as the individual units gain operating experience and there are multiple years over which to measure the forced

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[1] The December SPC Proposal is posted at http://caiso.com/2093/2093dab73af30.pdf.
[2] See December SPC Proposal, pages 18-19.
[3] See December SPC Proposal, page 18: "The assessment will look at the performance during RA peak hours in the month." LSA recognizes that use of the "performance" term may be a question of precision, but highlights its concern out of an abundance of caution.

outage rate, the impact from the start-up period is sufficiently addressed. To provide the most accurate assessment of a solar facility's availability achievement, there should be a comensurate grace period when facilities in the initial shake-out phase will be allowed an accommodation, perhaps through an adjusted deadband.

The second context concerns the impact of transient weather conditions that impact solar production. Typically these events are clouds passing over an array or the start or end of weather events such as winter storms. LSA sees this weather-related phenomenon not as a capacity issue, but rather an issue of energy production and schedule forecasting triggered by a disruption in fuel supply. This type of event is distinct and more transient as compared to the types of limitations captured by the Non-Dispatchable Use-Limited resource designation available under the tariff. Further, it does not appear appropriate to address such events as a periodic derate or outage which may be reported via SLIC. However, conveying such events to CAISO in a timely manner is a critical consideration for reliable system operations.

Although the December SCP Proposal includes some discussion of Use-Limited resources on Page 7, it is not clear whether or how CAISO plans to account for this designation in the SCP generally, or its availability metric and financial penalties, specifically. The Use-Limited Resource Guidebook describes a Use-Limited resource as a "resource that due to design considerations is unable to operate continuously on a daily basis, but is able to operate for a minimum set of consecutive Trading Hours each Trading Day."[4] While such a designation may be useful to indicate that a specific solar resource is not violating its RA MOO obligation if it does not operate when the sun is down, it would not adequately address transient events which could appear to be a partial outage.

LSA understands the desire to quickly place the SCP elements into the Tariff so that parties can streamline RA procurement transactions. LSA does not wish to slow that process per se. It does desire to avoid the creation of inappropriately discriminatory tariff provisions and financial penalties. Because of the State's renewables policies, LSA believes it is important to appropriately reflect the value of high capacity factor renewable resources that are available to satisfy both the RA and RPS procurement obligations. To the extent that renewable facilities are disfavored in the availability metric or the assessment mechanism, the timely achievement of the RPS may be hindered. LSA asks that CAISO provide greater clarity in how the availability metric is constructed. If CAISO intends the metric to account for performance of facilities (as opposed to their availability), then the CAISO must exclude hours when the solar fuel is not available or disrupted.

[4] See CAISO Use-Limited Resource Registration Guide Book (Jan. 2008), p. 3, available at: http://www.caiso.com/1f51/1f51b4a15c040.pdf