

Renewable Integration Market Vision & Roadmap October 11, 2011

Submitted by	Company	Date Submitted
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GenOn Energy, Inc. (GenOn) has actively participated in each phase of this initiative, and provides these brief comments focusing on the changes from the CAISO's Revised Straw Proposal.

GenOn supports the phased approach in the CAISO's October 11 Renewable Integration Market Vision & Roadmap (Roadmap) and the plan to accelerate development of a transparent market product to replace the flexible ramping constraint. Our brief comments on other elements of the Roadmap are provided below.

Short Term Enhancements

As explained in our previous comments, GenOn supports the short term enhancements proposed by the CAISO. The only notable change in the Roadmap is the apparent delay of implementation of 72 hour RUC. While the October 11 Roadmap indicated that implementation would occur in Spring 2012, the CAISO stated during the October 18 conference call that 72 hour RUC would be delayed to Fall 2012. It is unclear why this market feature, which provides important efficiency benefits by reducing the uneconomic cycling of long-start units is being delayed. The CAISO should further explain the reasons for this proposed delay.

Mid-Term Enhancements

The CAISO has excluded any products to provide frequency response and inertia from consideration in the mid-term horizon of 2013-2015, and has also determined that no products to replace minimum on line commitment constraints will be pursued. GenOn believes these conclusions are premature, and that the need for such products should be given further consideration after a) stakeholders have had an opportunity to consider the General Electric study commissioned by the CAISO to evaluate the system's need for frequency response and inertia which is scheduled to be released by the end of October, and b) the in-depth discussion of the system requirements and design details of the Flexi-ramp product are completed over the coming months.

Variable Energy Resource Availability Updates

The CAISO's Revised Straw Proposal had included a proposal to improve the ability of intermittent resources to schedule or update their availability, which could allow the

CAISO to reduce the need for regulation by improving the accuracy of the real time dispatch. This proposal was excluded from the mid-term phase in the Roadmap, which caused some stakeholders to object strongly during the October 18 conference call based on a concern that the cost of integrating 33% renewables will be increased significantly as a direct result.

There are two important points about the potential value of resource availability updates. First, such updates may lead to cost savings if the CAISO is actually able to reduce the amount of Regulation or Flexi-ramp procured to balance the system. However such savings may not be available if the CAISO has already procured the balancing services before the updates are provided, or if the updates indicate that required balancing services are as large as or larger than the original forecast requirements.

Second, and perhaps more importantly, it is very unlikely that better forecasting or near real time scheduling will reduce the amount of installed flexible capacity that must be available for commitment. With perfect forecasting, the CAISO may be able to avoid unnecessarily committing resources or procuring excessive Flexi-ramp, but the total available capacity requirement is dependent on the plausible range of inherent variability in intermittent resources. If the maximum inherent variability leads to an hourly deviation of 10,000 MW, the system still needs to be capable of balancing that 10,000 MW of variability. Forecast error might lead to excessive resource commitment or ancillary service procurement, but improved forecasting won't somehow decrease the maximum plausible inherent variability in the system, which is what should determine the required investment in flexible capacity.

In terms of the CAISO's Roadmap, better forecasting might reduce the amount of Flexi-ramp procured on a DA or RT basis, but it would not seem to have any meaningful impact on the installed capability the IOUs must procure through LTPP, or that the CAISO procures through its new forward capacity procurement mechanism. GenOn believes a reasonable timeframe for developing new resources is 7 to 9 years, which argues that it may be necessary to authorize any new capacity required for integrating 33% renewables through the current LTPP process underway at the CPUC if that capacity is to be available by 2020.