Center for Energy Efficiency and Renewable Technologies
Comments on the CAISO's FERC Order 764 Compliance
Revised Straw Proposal of February 5, 2013

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The Center for Energy Efficiency and Renewable Technologies (CEERT) appreciates the opportunity to comment on the CAISO's FERC Order 764 Compliance and Settlement Revised Straw Proposal of February 5, 2013.

A key requirement for the low cost integration of Variable Generation (VG) resources into the electric grid is the implementation of sub hourly scheduling, along with the ability to provide schedules as close to flow as possible. Matching the granularity of VG output profiles with appropriately resolved scheduling and settlement mechanisms has the potential to minimize VG forecast error and allows for the efficient dispatch of balancing reserves at least cost. This CAISO proposal creates a binding 15 minute energy market within the CAISO footprint that, while meshing with the existing hourly transmission scheduling in the rest of WECC, also provides incentives for import and exports at the interties to move in a similar direction, consistent with FERC Order 764. Furthermore, hourly schedules within CAISO which previously had to be submitted by T - 90 will, under the new proposal, be submitted at T - 37.5, leading to a reduction in forecast error. In addition, if and when WECC moves to 15-minute transmission reservations and shorter e-tag timelines, the CAISO is claiming that it will be able to further modify its timeline to run the 15-minute market even closer to actual flow. These are significant improvements to the CAISO markets that will not only improve the efficiency of scheduling VG resources both within and outside of the CAISO footprint, but will hopefully provide a strong incentive for resources outside of California to move towards 15 minute scheduling as well. CEERT commends the CAISO for developing this proposal in a manner not only satisfies FERC Order 764 compliance but does so in a forward looking manner.

One significant holdover is the Participating Intermittent Renewable Program (PIRP). The original purpose of PIRP was to reduce uninstructed imbalance energy risk for VG resources due to having to operate in an hourly market. Currently PIRP resources must submit the CAISO hourly forecast generated 90 minute prior to the hour to be eligible for monthly netting of uninstructed imbalance energy.

Under the 15 minute market being proposed here by the CAISO, the very meaning of PIRP becomes unclear. Under the new 15 minute market, does a PIRP resource still need to submit an hourly forecast 90 minutes prior to the hour? Clearly this would be nonsensical and would defeat the very purpose of moving towards sub hourly scheduling. But if an existing PIRP resource is expected to operate under the new 15 minute market by submitting 15 minute schedules, how does this affect the existing contractual obligation between the buyer and seller? Under this scenario, the uninstructed imbalance energy (UIE) will be based on deviations from the 5 minute Real Time Dispatch (RTD), which will presumably be small since not only is the scheduling granularity significantly smaller than under existing market rules, but the forecast error upon which the UIE will be based comes from energy forecasts 7.5 minutes before the RTD interval. Under this circumstance where UIE has become so small, does PIRP even make sense anymore? Even the concept of 'grandfathering' contracts may not make sense here, since the new proposed market significantly reduces UIE that PIRP was originally supposed to protect against.

The proposed 15 minute market will greatly diminish the UIE of VG resources as compared to the current hourly market. However, under this new market, VG resources will be exposed to instructed imbalance energy (IIE) resulting from the difference in forecast errors between the T - 37.5 schedule (submitted in the 15 minute market) and the respective T - 7.5 instruction (from the 5 minute RTD). Clearly there is financial risk associated with taking a forward position in any market. But it is unclear whether the current PIRP construct would be more or less financially risky to VG resources than the situation under the proposed 15 minute market. So while CEERT fully supports moving towards sub hourly scheduling, we would like to see the CAISO develop a side by side comparison of the financial exposure of VG resources under the existing PIRP to the proposed 15 minute market using some real data before advocating for dismantling PIRP.

CEERT commends the CAISO for developing this proposal to create a binding 15 minute energy market. The proposal includes elements that will incentivize proper treatment of VG resources at the interties, and helps move California and WECC closer to efficient integration of renewable resources. The remaining issue of how to handle VG resources currently enrolled in PIRP will require taking a look at the relative financial implications of moving towards the proposed 15 minute market, and may need to be managed on a contract by contract basis. CEERT is confident that both parties will recognize the mutual value of moving towards this proposed new market and will act in good faith to preserve their relative financial positions.