**Center for Energy Efficiency and Renewable Technologies**
**Comments on FERC Order 764 Compliance**
**15-Minute Scheduling and Settlement Straw Proposal**
**October 23, 2012**

| Submitted by: | Company | Date Submitted |
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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 15-Minute Scheduling and Settlement Straw Proposal" of October 23, 2012. CEERT would like to commend the CAISO for their creative and forward looking proposal that will not only meet but in fact exceed the FERC Order 764 ruling on the creation of 15 minute energy markets. Most importantly, by creatively leveraging elements of their Dynamic Scheduling tariff, the CAISO is providing a mechanism for interfacing with the existing hourly transmission reservation scheduling process at the interties, while at the same time creating a financially binding 15-minute energy market within the CAISO footprint.

A WECC-wide 15-minute transmission reservation market would provide enormous benefits for integrating increasing amounts of Variable Energy Resources (VERs) and for overall system operations, and we commend the CAISO for their leadership in this direction. Shorter scheduling intervals allow the system operator to more efficiently utilize balancing resources and ancillary services, which directly translates to significant ratepayer savings. The Renewable Northwest Project (RNP), a not-for-profit advocacy group located in the Pacific Northwest, estimates that if all of the wind scheduled from the Northwest to California was done on a 15-minute basis, California consumers would decrease their exposure to BPA's wind integration rate by approximately $15 million per year. This is a significant savings that could be passed directly through to California ratepayers.

Equally as important, the ability to schedule energy closer to flow reduces VER forecast error. This reduced forecast error enables the system operator to more efficiently utilize balancing resources, resulting in the potential for significant ratepayer savings. This current CAISO proposal moves from the existing practice of scheduling energy for hourly intervals at 90 minutes before flow to scheduling energy for 15 minute intervals at 37.5 minutes before flow, and therefore represents a significantly reduced forecast error, improved granularity for following ramps, and increased efficiency at reserving and scheduling ancillary services. Such an approach may result in significant ratepayer savings. Furthermore, if and when WECC moves to 15-minute transmission reservations and shorter e-tag timelines in the future, the CAISO has suggested that it would be open to further modifying its timeline to run the 15-minute market closer to actual flow. CEERT commends the CAISO for developing an approach that will not only reap immediate benefits to system operational efficiencies, but that also provides a mechanism for continuing to improve scheduling practices if and when WECC is able to develop a 15-minute transmission market. Still, despite our overall satisfaction with this general approach, CEERT is still curious as to how MISO is able to offer Dispatchable Intermittent Resources (DIRs) the ability to update financially binding energy schedules 10 minutes prior to flow.

Our only significant concern with the current proposal is that CAISO has suggested completely eliminating the Participating Intermittent Renewable Program (PIRP). While we also have significant reservations with PIRP, it still offers financial protection to VERs due to the pricing fluctuations between hour ahead and real time energy prices. This protection has been offered to VERs because for these resources it is not possible to know the availability of the fuel source in advance of flow. And while moving to 15-minute energy schedules that are bid 37.5 minutes prior to flow is an improvement over the current scheduling practice, this still leaves a potentially significant financial exposure due to the physical limitations of these resources that are outside the control of the resource scheduling coordinator. Furthermore, convergence bidding, which can provide a hedging mechanism between price fluctuations between day ahead and real time markets, will presumably not be available to VERs to hedge against fluctuations between the 15-minute scheduling process and Real Time Dispatch. Therefore VERs are exposed to a financial risk that is simply not faced by conventional resources, leading to the possibility of an uneven playing field. Because of this, CEERT would like to see the CAISO take a more cautious approach to completely eliminating PIRP until the actual magnitude of this exposure can be studied under the new proposed 15 minute market.

The importance of FERC Order 764 compliance cannot be overstated when it comes to developing efficient market practices that aid in the integration of VERs. The elegant approach being proposed by the CAISO will offer immediate benefits to California ratepayers while interfacing with existing WECC markets, and will also provide the opportunity for increased efficiencies if and when WECC moves to 15-minute transmission reservations and shorter e-tag timelines. We commend the CAISO for developing a proposal that exceeds the necessary FERC Order 764 compliance, and hope that their approach and the ease with which it interfaces into the existing WECC market will provide the incentive for WECC to also take a more proactive approach.