

**COMMENTS OF THE CALIFORNIA WIND ENERGY ASSOCIATION,  
THE LARGE-SCALE SOLAR ASSOCIATION, AND  
THE AMERICAN WIND ENERGY ASSOCIATION ON  
THE 2009 ISO MARKET INITIATIVES ROADMAP UPDATE**

The California Wind Energy Association (CalWEA), the Large-scale Solar Association (LSA), and the American Wind Energy Association (AWEA) hereby submit these comments on the ISO's June 12, 2009 *Catalog of Market Design Initiatives* (Catalog), produced to initiate this year's Market Initiatives Roadmap update.

Our comments relate to Item 4.1 of the Catalog, where the ISO proposes an examination of market rules to "encourage dispatchability of wind and solar resources." The potential market changes given as examples are:

- **Changing Participating Intermittent Resource Program (PIRP) rules**, to permit retention of monthly netting of imbalances if real-time decremental energy bids are submitted; and
- **Lowering the current -\$30/MWh decremental energy bid floor**, to permit recovery of "the opportunity costs of being dispatched down" (which, in addition to the lost Production Tax Credits (PTCs) cited, would presumably include lost bilateral energy-contract payments, applicable Investment Tax Credits (ITCs), and any other variable actual or opportunity costs).

**Overall comments:** CalWEA has long supported ISO market-design changes like this that would allow intermittent generation resources to use their excellent decremental flexibility to help accommodate overall grid variability, lowering renewables integration costs overall. Consistent with this position, our organizations strongly urge the ISO to rank this initiative as high-priority. (As noted before, this should be accompanied by Power Purchase Agreement (PPA) modifications to provide for payment for foregone production, rather than the MWh-based payments in most current intermittent-resource contracts.)

**Additional comments:** We offer the following additional suggestions, to clarify and expand the scope of this initiative:

- **PIRP rules:** There is no obvious reason why PIRP resources could not provide the following services without impairment of the PIRP program:
  - **Real-time decremental-energy bids:** Dispatched decremental energy (and associated ramping changes) could be:
    - **Added to actual real-time production**, to determine what output would have been without the decremental-energy dispatch, for purposes of predicting next-hour output and calibrating the PIRP forecasting model; and
    - **Subtracted from actual real-time imbalances**, to determine the imbalances from forward schedules that would be used for monthly netting under PIRP.
  - **Other services:** PIRP resources could also provide Ancillary Services or other market services (especially those in the downward direction), such as Regulation (or potential future services like Frequency Response or Ramping), if they otherwise meet the technical requirements for doing so. The adjustments suggested above for decremental-energy bids could also be used to preserve the PIRP structure if the resources were dispatched in real-time to provide these other services.

- **Lower decremental-energy bid floor:** As we have stated in prior comments, a lower decremental-energy bid floor would incent both intermittent resources and other resources to offer market/operating flexibility. For example, a lower floor could promote:
  - **A more realistic price signal to encourage investments to increase operational flexibility** by both new and existing ISO-area generation, e.g., to lower minimum-load set points and reduce the cost of start-up and shut-down cycles;
  - **Economic response to ISO price signals under the MRTU framework**, i.e., decremental market bids between the -\$30 bid floor and the -\$2,500 LMP price floor that could: (1) aid the system operationally; (2) help prevent extreme prices close to the LMP limits; and (3) allow Market Participants to better protect themselves from impacts of extreme prices that do occur; and
  - **Additional dynamic scheduling arrangements with flexible resources outside the ISO area**, to free such resources from the current inflexible hourly WECC inter-BAA scheduling practices.

Thus, we encourage the ISO to set a new, lower bid-price floor that considers not just intermittent-resource operating flexibility, but also such flexibility by other resources that could help manage renewables integration generally.