Comments of the California Wind Energy Association
On FERC Order 764 Market Changes;
CAISO July 26, 2013, Intermittent Resource Protective Measures Straw Proposal

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The California Wind Energy Association ("CalWEA") appreciates the thought and effort of California Independent System Operator Corporation ("CAISO") staff in connection with the FERC Order 764 Market Changes; Intermittent Resource Protective Measures Straw Proposal ("Straw Proposal") and offers the following comments thereon.

1. **The proposed eligibility criteria should be clarified to include resources of which at least 25% of the generation equipment is unable to respond timely to CAISO dispatch instructions or market price signals.**

The Straw Proposal states that, in order to be eligible for protective measures, the resource must be "composed of old technology (constructed and on-line before 2005 or earlier) that is unable to curtail output without significant investment." As discussed at the recent stakeholder meeting, existing intermittent resources may not all be comprised of equipment of the same vintage; some resources have both old equipment and more modern equipment. Resources of which a substantial part are unable to respond to CAISO dispatch instructions or market price signals should be eligible for protective measures, as they will be disadvantaged by the market changes in the same manner as resources that are entirely unable to so respond (albeit to a relatively lesser degree). CalWEA proposes 25% as an appropriate eligibility threshold; a resource that is unable to control 25% or more of its output in time to respond to market signals faces material financial exposure in the new market. Might a lower threshold be appropriate under certain circumstances? Yes; however, CalWEA proposes the 25% level as a fairly conservative cut-off. While some resources may merit protective measures at a threshold below 25%, CAISO can be comfortable that all resources at or above 25% merit protective measures.

2. **The proposed eligibility criteria should be modified to include resources comprised of post-2005 vintage equipment and resources that require something less than**

turbine replacement (or its equivalent) if it can be demonstrated that such resources would be required to bear a substantial cost in order to become able to respond timely to CAISO dispatch instructions or market price signals.

As mentioned above, the Straw Proposal defines "old" equipment eligible for protective measures to be equipment on-line by 2005. CalWEA appreciates CAISO's desire to have a bright line test to determine eligibility, and that 2005 (or earlier) vintage equipment has been used as a demarcation for protective measures by at least one other RTO. However, it is overly simplistic to expect that all generation equipment installed after 2005 is necessarily either at a point, or able to be brought up to a point at manageable cost, where it is feasible to timely respond to CAISO dispatch instructions or market price signals. CalWEA agrees that the need to add telemetry or metering equipment alone is not costly enough to justify protective measures; however, changing a facility from manual to automated control or adding dispatch equipment could be cost prohibitive and such automation is necessary to participate in the new market effectively.

In order to avoid subjective determinations of cost and relative burden, CalWEA proposes that, if a resource can reasonably demonstrate that it would cost at least $10,000/MW to retrofit a resource's existing generation equipment so as to be able to respond timely to CAISO dispatch instructions or market-price signals, the resource should be eligible for protective measures.

3. **The proposed eligibility criteria should be modified to include resources that are contractually prevented from responding to CAISO market price signals.**

One of the principle goals of the FERC Order 764 market changes is to promote greater market responsiveness from renewable resources. If a renewable resource, irrespective of the vintage or nature of its equipment, is contractually prevented from responding to CAISO dispatch instructions or changing market prices as a result of a pre-Order 764 world view when it executed its contract, it makes no sense to subject the resource to the financial risks and potential detriments associated with the post-Order 764 market changes. In other words, projects whose contracts prohibit them from responding to CAISO dispatch instructions or market price signals are unable to protect themselves from the deviation risks associated with 15-minute or 5-minute market prices, can't alleviate constraints on the CAISO system and should retain protections similar to those provided under the current PIRP to mitigate such risks. Although it is very common for renewable resource power purchase agreements in California to require the generator to generate whenever the resource is available (e.g., whenever the wind is blowing or the sun is shining) and the facility is not experiencing an outage, thus prohibiting them from responding to changing market price signals, CalWEA expects that the number of resources that fit into this category to be relatively few. That is because only a few renewable resources with modern generating and control equipment (i.e., those whose eligibility for protective measures depends on their contract status) will meet the CAISO's proposed criterion that their contract also allocate deviation risk to the generator. While CAISO may prefer to leave it to renewable generators and their contract counterparties to address contractual issues, addressing these contract provisions is undeniably not within the generator's exclusive control, and it would make no sense to penalize the generator simply because its utility counterparty was unwilling to negotiate an appropriate modification to the contract. Therefore, the proposed eligibility criteria should be modified to include resources that are contractually prevented from responding to CAISO market price signals.

4. QFs with generating capacity of 20 MW or less should be eligible for protective measures.

The Straw Proposal requires that to be eligible for protective measures there be no bilateral contract opportunity to mitigate a resource's real-time energy imbalance risk. The Straw Proposal presumes that Qualifying Facility ("QF") generators of 20 MW or less whose existing PURPA standard offer contracts expire in the near term will be able to enter into new PURPA standard offer contracts under which the utility buyers absorb deviation risk, and thus considers QFs of 20 MW or less to be ineligible for protective measures. The problem with this, however, is that the new PURPA standard offer contracts are priced at variable short run avoided cost ("SRAC") energy and capacity prices, which ignore the value of the renewable attributes available from the generators, and last for a term of no longer than seven years. Some existing QF projects may find it simply impossible to operate at these prices going forward, belying the view that there is a contract opportunity available to all QFs at 20 MW or less. And, those QFs that are able to continue to operate at the SRAC prices certainly will not be able to repower their generators or upgrade their control equipment so as to become able to respond timely to CAISO dispatch instructions or market price signals under a modern contract for renewable generation. In a sense, one could always find some contract opportunity under which the buyer absorbs deviation risk, if the price for the product were low enough. This does not translate, however, into a viable bilateral contract option for renewable generators; in reality, the deviation risk is being passed on to the generator in the form of undervalued product prices. In addition, QFs that enter into the new PURPA standard offer contracts will continue to retain Regulatory Must Take Generation status under the CAISO Tariff. This entitles them, among other things, to curtailment priority over other generators. It makes no sense to encourage small renewable generators to enter into these PURPA contracts that undervalue their product, do not enhance their chances of updating their facilities, and expands regulatory benefits vis-à-vis other generators when they may be able to more readily transition into market-based contracts that would enable repowering if they had the benefit of protective measures to bridge the transition. As such, CalWEA urges CAISO to expand the eligibility criteria to include QFs of 20 MW or less.

5. For resources under contracts (other than standard offer QF contracts) pursuant to which the resources bear deviation risk, protective measures should last for the term of the underlying contracts.

The Straw Proposal would limit the duration of protective measures for all eligible facilities at three years from the FERC order adopting the CAISO's Order 764 market design changes. While CalWEA can appreciate and accept the desire to adopt protective measures as a relatively brief transition mechanism for facilities not subject contractually to deviation risk, the three-year proposed term makes no sense for projects that are locked into long-term contracts that obligate them to bear deviation risk for the full term of the contracts. Admittedly, some of these contracts require the parties to negotiate with each other in the event of significant changes to PIRP, and the three-year duration could be seen as a transition to allow the negotiations to be completed and any amended contracts to be approved by governing regulatory agencies. But no one can be certain at this point that all affected contracts will require negotiation or that the negotiations for those contracts that do require negotiations will be successful. As a result, no one can be certain at this point that in three years' time the generators will find themselves anywhere other than right back under contracts that allocate to them all deviation risk (which by then will have increased significantly since the monthly netting feature of PIRP will have been eliminated).

CAISO might be concerned that providing protective measures for the duration of a renewable generator's contract might remove an incentive for that generator to upgrade its facilities or renegotiate the contract. This concern, however, is misplaced. First, as discussed below, the protective measures proposed in the Straw Proposal do not fully mitigate the increased deviation risk associated with the new market paradigm; were these protective measures to be adopted, the generators would maintain a direct financial incentive to try to find a better solution through contract negotiations. Second, even if CAISO addresses CalWEA's concerns with the protective measures, renewable generators will greatly prefer a contractual solution to their imbalance exposure as opposed to a regulatory solution. The fleeting application of the monthly imbalance netting feature under PIRP is perfect illustration of this notion. Third, and perhaps most importantly, by limiting the protective measures to only three years, the Straw Proposal would hang the proverbial Sword of Damocles over the head of the generator and completely tilt any contract negotiations in favor of the utility-buyer, which already holds a distinct negotiating advantage over the generator. Providing protective measures for the duration of the contracts would help to level this playing field. Finally, it is worth emphasizing again that the amount of generation falling within this category is probably a very small fraction of the total renewable generation in existence today, let alone that which is expected in the future.

6. **The transition protective measures should not start before the Order 764 market is implemented, should start upon expiration of each QF's existing PURPA standard offer contract and should last for five years.**

As mentioned above, the Straw Proposal would provide protective measures for three years from the FERC order approving the CAISO's Order 764 market structure. To the extent that the protective measures apply for a limited term, which CalWEA believes is appropriate only for QFs currently under standard offer contracts, that term should start no sooner than upon the implementation of the CAISO's Order 764 market changes. Otherwise, the term of the protective measures will automatically be shorter then the term for which they are intended to apply. Moreover, if a QF is currently under a PURPA standard offer contract, the term of the protective measure should not start before that contract expires or is otherwise terminated. Absent this treatment, some QFs for whom protective measures are intended to apply may not actually get the benefit of protective measures, if their QF contracts expire more than 3 years after FERC adopts the Order 764 market changes. Until the existing QF contract has expired, the resource will not be able to take any physical steps to upgrade its equipment so as to be able to effectively participate in the new markets. While QFs could seek to enter into new contracts during the interim, there is no assurance that they will have a new contract available and ready upon expiration of the existing QF contract. As a result, the protective measures for a QF under an existing standard offer contract should not start before the expiration or termination of the current contract. Finally, CalWEA believes that a three-year transition mechanism is insufficient in light of today's market realities. California's three largest investor-owned utilities are long on renewable energy for a number of years. It is not uncommon these days for the utilities to seek contracts that start several years into the future. There is no reason to expect these trends to change in the near term. A five-year transition is much more likely to protect generators that may have to bridge a gap between their existing QF contract and a new long-term power purchase agreement.

7. **A resource should be able to opt out of the protective measures at any time; once it opts out, it cannot opt back in.**

CAISO's monthly netting formulas used for PIRP resources today mitigate the imbalance risk that is associated with CAISO's current market structure, e.g., the imbalance risk between hourly forward schedules (forecasted 90 minutes before real time) and actual metered generation. These formulas have worked and continue to work as expected.

The proposed protective measure, which attempts to simulate the current PIRP program, may not, in fact, work as well to mitigate imbalance risk because CAISO will use an hourly schedule for the protective measures, even though the market will actually function based on fifteen minute schedules, and because market prices may be very different in the new market than they are today.[1] Hence, the protective measure charge/credit calculated may have no relationship to the actual imbalance risk that a renewable resource faces in the CAISO's new market, and thus may not offer risk reasonable risk protection. Indeed, CAISO staff indicated during the stakeholder call on August 5, 2013, that the protective measure may in fact *increase* the actual imbalance risk for a generator relative to its risk in the new market paradigm, and anticipates that some generators will be worse off under the protective measure than they would be operating in the market without it. In that circumstance, a resource may determine, after living with the protective measure for a period of time, that it can manage its risk better in the new market. In that event, the resource should be able to opt out of the protective measure, even before one full year has elapsed, with the understanding that it will not be able to opt back in. This approach is consistent with the CAISO's stated desire to minimize the number of renewable projects that rely on its protective measure.

[1] While the netting function could be based on the 15-minute and real-time schedule and prices, the CAISO has determined that this would be more beneficial to generators than a methodology that simulates the current PIRP netting function.