

**Comments of the Natural Resources Defense Council (NRDC) on the  
FERC Technical Conference on Flexible and Local Resources Needed for  
Reliability in California's Wholesale Electrical Market  
Docket No AD13-5-000  
July 31, 2013  
Sacramento, California**

Submitted by: Carl Zichella and Devra Wang

**I. Introduction and Summary:**

The Natural Resources Defense Council (NRDC) appreciates the opportunity to offer these comments on the *FERC Technical Conference on Flexible and Local Resources Needed for Reliability in California's Wholesale Electrical Market*. The Natural Resources Defense Council (NRDC) is a national non-profit organization of lawyers, scientists and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC serves more than a million members, supporters, and environmental activists with offices in New York, Washington, D.C, Los Angeles, San Francisco, Chicago and Beijing.

In summary, NRDC's comments expand on the following key points, priorities and recommendations:

- NRDC supports the CPUC and ISO staffs' efforts to develop a *joint* proposal for a Multi-Year Reliability joint proposal. It is essential to have the CPUC, ISO and the California Energy Commission working together collaboratively to build the state's clean energy future.
- The state's "loading order" should be recognized explicitly as a key principle guiding the joint proposal's further development, and the joint proposal should ensure that any new procurement mechanisms avoid creating new barriers to achieving the state's loading order and AB 32 goals, as well as maintaining progress in attaining California air pollution reduction standards.

## Comments of the Natural Resources Defense Council

- NRDC supports integration of flexible capabilities into the state’s procurement framework to enable the state to rely on renewable energy for most of its needs in the future.
- The joint proposal should explicitly state that it will complement and not replace the CPUC’s Long-term Procurement Plan (LTPP) proceeding and other procurement mechanisms that provide longer-term commitments for preferred resources.
- NRDC is concerned about extending the ISO’s “backstop” procurement authority to three-years, absent further clarity on how the need for backstop procurement would be determined.
- The joint proposal must enable clean demand response and other preferred resources to fully participate from the start.
- The joint proposal should identify, target for procurement and articulate the grid support attributes and benefits that demand response and energy efficiency products can offer in meeting the operational needs associated with high penetrations of variable renewable resources on the grid.
- The joint proposal must rely on all reasonably expected energy efficiency to decrease expected loads in determining RA requirements and any ISO backstop procurement.
- NRDC supports the joint proposal’s annual reliability assessments to provide more transparency. The annual reliability assessment is a key tool in both evaluating progress and recalibrating flexible capacity programs to meet future needs. However, the assumptions about preferred resources within those assessments should be transparent and developed through a public process.

NRDC offers several overarching comments, followed by responses to selected questions posed by the FERC staff (denoted in bold italics).

## II. OVERARCHING COMMENTS

### A. NRDC supports continued consideration of the proposed Multi-Year Reliability joint proposal.

Although the joint proposal leaves some critical questions unanswered, and its success will depend on many details that have not yet been developed, we believe the basic outline is worth pursuing further, assuming the issues we discuss below can be resolved satisfactorily and the program calibrated to adjust to changing conditions or results over time.

### B. One of the joint proposal's explicit objectives should be helping California achieve its goal of deep GHG emission reductions by 2050.

The joint proposal provides relatively little context for its proposal. It describes some of the “fundamental changes” that are underway in the state’s electric system and notes that the transformation “presents challenges.” (p. 1) However, the joint proposal is not explicit about whether it is proposing to help accelerate these changes while addressing the challenges, or, conceivably, seeking to slow the changes to alleviate the challenges. While we have full confidence that the CPUC and ISO’s intent is to help enable these fundamental changes rather than slowing them, this should be explicitly discussed in the joint proposal.

Much of the joint proposal’s discussion focuses on reliability, and NRDC of course strongly supports the agencies’ efforts to maintain a reliable electric system. However, the proposed procurement joint proposal will impact not just reliability but also the state’s ability to meet its other core policy objectives including affordability and long-term GHG reductions. Therefore, the objectives driving the development of the joint proposal must include these other key policy objectives as well. For example, helping California achieve its goal of deep GHG emission reductions by 2050 should be an explicit objective guiding further development of the joint proposal. The flexibility products prioritized for procurement by both CPUC and CAISO will and should be selected by their attributes in *both* providing reliable flexibility services and accomplishing California’s statutory public policy goals with regard to long-term GHG reductions.

### C. The state’s “loading order” should be recognized explicitly as a key principle guiding the joint proposal’s further development, and the Joint proposal should ensure that any

**new procurement mechanisms avoid creating new barriers to achieving the state's loading order and AB 32 goals.**

California's "loading order," with energy efficiency and clean demand response as top priority followed by other preferred resources, is a key part of the state's procurement joint proposal. Since the Multi-Year Reliability joint proposal proposes to modify and add new elements to the state's overall procurement framework, it should explicitly recognize the loading order as a key guiding principle. Moreover, further development of the joint proposal should ensure that it avoids creating any new barriers to developing preferred resources or the state's climate goals. For example, a joint proposal that prolongs the life of GHG-emitting inflexible resources while shutting out demand response opportunities would set back achievement of the state's goals and must be avoided. Although we are confident that the CPUC and ISO's intent is to help move California's electric system in the right direction, the joint proposal should be explicit in relying on the loading order and avoiding outcomes that would set-back achievement of the state's policy objectives.

**D. NRDC supports integration of flexible capabilities into the state's procurement framework to enable the state to rely on renewable energy for most of its needs in the future.**

Resources needed to integrate very high penetrations of renewables will need to be flexible and may be unable to receive adequate compensation through short-term energy markets. Therefore, NRDC supports the integration of *flexible capabilities* into the state's procurement framework.

However, the state should also avoid unnecessarily prolonging the life of resources that will no longer be needed in the low-carbon electric system of the future. As the CPUC and ISO staff discussed at the July 17<sup>th</sup> workshop, retirement of certain power plants is consistent with the state's vision. It is unclear that non-preferred, inflexible resources need or should receive longer-term commitments than are already available under the state's existing procurement framework. Therefore, NRDC supports development of a multi-year resource adequacy (RA) requirement for flexible resources, but we take no position at this time on the proposal for a multi-year RA requirement for system or local resources.

**E. NRDC is concerned about extending the ISO’s “backstop” procurement authority to three-years, absent further clarity on how the need for backstop procurement would be determined.**

Under the state’s existing policies, the CPUC sets year-ahead resource adequacy requirements and authorizes or requires long-term procurement, and the ISO has “backstop” authority for year-ahead procurement. The joint proposal would extend the ISO’s backstop authority out to three years, however, it is unclear how the need for backstop procurement would be determined. The joint proposal notes that backstop procurement would be utilized both if a load-serving entity (LSE) fails to meet its resource adequacy obligation set by the CPUC, and if a “collective” deficiency exists even when all LSEs have met their RA obligations (p. 14); but the process for determining a collective deficiency is yet to be determined.

We are concerned about extending backstop authority out to three years absent greater certainty that it would (i) fully count preferred resources before determining the need for any additional procurement, and (ii) avoid prolonging the life of “non-preferred” resources that will not be needed to integrate renewables. Many of the preferred resources such as energy efficiency and renewable distributed generation add relatively small amounts of capacity each year but accumulate to be large resources over time. Over three years, including or excluding such resources could make a significant difference in any determination of the need for additional procurement. To date, there has a significant disconnect between the CPUC, CEC and ISO forecasts for preferred resources. We appreciate the CPUC, CEC and ISO’s commitment to begin working together on energy efficiency forecasts.<sup>1</sup> However, the significant differences in past approaches leave us concerned about the joint proposal’s approach that is undefined. We oppose extending backstop authority without assurances that any determination of need would fully rely on preferred resources, and be determined through a transparent process.

**F. The joint proposal must enable energy storage, clean demand response and other preferred resources to fully participate from the start.**

NRDC supports the joint proposal’s intention to provide “additional opportunities for preferred resources” (p. 7) and its objective of “expanding participation of demand response, storage and other preferred resources in near-term capacity markets.” (p. 8) NRDC urges the

---

<sup>1</sup> CEC, ISO, CPUC, *Letter to Senators Padilla and Fuller*, February 25, 2013, [http://www.caiso.com/Documents/CEC\\_CPUC\\_ISO-Response-SenatorsPadilla\\_Fuller\\_Feb25\\_2013.pdf](http://www.caiso.com/Documents/CEC_CPUC_ISO-Response-SenatorsPadilla_Fuller_Feb25_2013.pdf).

CPUC and ISO staff to make clear that energy storage, demand response (DR) and other preferred resources will be full participants from the start. The joint proposal should identify the grid support attributes and benefits that storage, demand response, energy efficiency and other preferred resources can offer in meeting the operational needs associated with high penetrations of variable renewable resources on the grid, and target them for procurement. This will require considerable work over the coming year to define product eligibility rules up-front to enable full use of these resources (so that they are not required to try to meet eligibility rules defined around fossil generators). Otherwise, the proposal to give the joint proposal an “amount of time to operate and mature before considering any significant alterations” (p. 15) could effectively lock out energy storage, DR, and other preferred resources for some period of time. In addition, the joint proposal should help ensure that DR is truly clean, with clear and well enforced rules against using dirty back-up generators.

Finally, as noted above, opportunities for preferred resources to participate in near-term capacity markets should supplement and not replace longer-term opportunities through other elements of the state’s procurement framework. While some resources (such as DR and storage) provide flexible capacity that could be well-valued in the near-term capacity markets, other resources such as energy efficiency and renewable distributed generation would be undervalued if they were solely examined through this joint proposal.

### **III. RESPONSES TO SELECTED FERC QUESTIONS**

***1. Would the joint proposal’s combination of multi-year ahead flexible capacity obligations procured through bilateral contracts or via CAISO’s backstop procurement, provide sufficient revenues to resources?***

NRDC does not believe this question is answerable today. This is an issue that should be examined in the annual reliability assessment and the program calibrated accordingly to ensure that revenues are sufficient to meet flexibility and reliability needs. Pricing for preferred resources providing flexibility services can be compared with those in other markets but some adjustment based on evolving market conditions is probably inevitable.

2. ***Will the joint proposal's limited forward procurement of flexible and local capacity pursuant to a three-year forward resource adequacy obligation backed by a market-based CAISO backstop procurement mechanism provide sufficient procurement tools and sufficient additional revenue to mitigate the risk of retirement and retain needed flexible and local resources?***

NRDC believes this mechanism would probably suffice, but this may in fact be the wrong question. The right question might be “does the mechanism provide the correct tools and sufficient revenues to facilitate the replacement of outdated resources with flexible and cleaner preferred resources in a reasonable timeframe as required by state policies and the public interest to reduce GHGs and other pollution?” We believe the state should avoid unnecessarily prolonging the life of resources that will no longer be needed in the low-carbon electric system of the future. Retirement of outmoded resources is not a problem. The *orderly* retirement of carbon-emitting resources as they are replaced by cleaner environmentally preferable ones should be the goal. As the CPUC and ISO staff discussed at the July 17<sup>th</sup> workshop, retirement of certain power plants is consistent with the state’s vision. It is unclear that non-preferred, inflexible resources need or should receive longer-term commitments than are already available under the state’s existing procurement framework in the name of reliability. Therefore, NRDC supports development of a multi-year resource adequacy (RA) requirement for flexible resources, but we take no position at this time on the proposal for a multi-year RA requirement for system or local resources.

3. ***(From Panel 1 Questions) In the FLRR proceeding, CAISO identified reliability concerns resulting from the retirement of resources needed for reliable operations. Are the resources necessary to ensure reliability over a forward looking period entering the market?***

California has a strong existing framework to ensure that resources are “entering the market” to maintain reliability. The CPUC has procurement frameworks for preferred resources, such as energy efficiency and renewable energy, as well as a biennial Long-Term Procurement Plan (LTPP) proceeding, which analyses and authorizes any additional need for new resources. NRDC would oppose *replacing* the state’s existing policies with the joint proposal’s new framework, as it would be inadequate to ensure both resource adequacy and achievement of the state’s long-term pollution reduction goals. However, as the CPUC and ISO staff discussed at the July 17<sup>th</sup> workshop, the

intent of the joint proposal appears to be to supplement, but not replace, the LTPP and other existing procurement mechanisms. This should be explicitly stated as a core element of the framework.

In addition, the new framework should complement and not reduce or replace the existing opportunities for long-term commitments for low-carbon resources (i.e., through the energy efficiency programs, renewable portfolio standard, etc.). Renewables in combination with energy efficiency, demand response and energy storage will be the foundation of the state's electric system in the future. This new system must be supported by long-term financial commitments that appropriately value the benefits they provide. The Multi-Year Reliability joint proposal can help supplement this move to the future and help ensure the system remains reliable.

NRDC believes that an enhanced focus on developing, prioritizing the utilization of, and appropriately compensating clean flexibility products, especially with regard to demand response (DR), is necessary in order to replace non-preferred and less flexible resources in a timely way. Simply retaining older non-preferred resource should not be the long term goal. Evaluating DR products and their market values based on their attributes and their respective utility at certain grid conditions, and at certain key locations in the system is one approach, as has been suggested by Southern California Edison with regard to replacing energy and grid services related to the retirement of the San Onofre Nuclear Generating Station.

***4. What are the appropriate planning and operating assumptions to use in determining the forward-looking system needs for flexible resources that are needed to ensure overall system reliability? How much flexible capacity will be needed to ensure that the resource mix in CAISO is able to ensure reliable operations?***

In addition to the ability to ramp rapidly and respond within specified time parameters when called upon, flexible resources should be prioritized based on: the loading order, GHG emissions profiles, and conventional pollutant emissions. The amount of flexibility needed will depend upon load growth, energy efficiency and other preferred resources' ability to reshape the load curve, diversity (by type, operational correlation and geography) of resources in the renewable generation stack, weather conditions and other factors. The quantity needed may vary in a given year.

The joint proposal would extend the ISO's backstop authority out to three years, however, it is unclear how the need for backstop procurement would be determined. We are concerned about extending backstop authority out to three years absent greater certainty that it would (i) fully count preferred resources before determining the need for any additional procurement, and (ii) avoid prolonging the life of "non-preferred" resources that will not be needed to integrate renewables. Many of the preferred resources such as energy efficiency and renewable distributed generation add relatively small amounts of capacity each year but accumulate to be large resources over time. Over three years, including or excluding such resources could make a significant difference in any determination of the need for additional procurement. To date, there has been a significant disconnect between the CPUC, CEC and ISO forecasts for preferred resources. We appreciate the CPUC, CEC and ISO's commitment to begin working together on energy efficiency forecasts.<sup>2</sup> However, the significant differences in past approaches leave us concerned about the joint proposal's approach that is undefined. We oppose extending backstop authority without assurances that any determination of need would fully rely on preferred resources, and be determined through a transparent process.

#### **IV. CONCLUSION**

NRDC appreciates the opportunity to share our views on flexible and local resources needed for reliability in the California wholesale electric market. We believe that solutions to provide needed flexibility and reliability should emphasize products and resources that: advance California's statutory obligation and the public interest to reduce GHG emissions; avoid worsening air quality caused by criteria pollutants and air toxicants; prioritize resources preferred by the state's loading order; and facilitate the increasing penetration of clean renewable energy sources at both large and distributed scales. We generally support the joint proposal as an approach to accomplish these goals, although some critical questions still need answering.

---

<sup>2</sup> CEC, ISO, CPUC, *Letter to Senators Padilla and Fuller*, February 25, 2013, [http://www.caiso.com/Documents/CEC\\_CPUC\\_ISO-Response-SenatorsPadilla\\_Fuller\\_Feb25\\_2013.pdf](http://www.caiso.com/Documents/CEC_CPUC_ISO-Response-SenatorsPadilla_Fuller_Feb25_2013.pdf).