



EDF Comments on CAISO's Revised Draft 2017 Stakeholder Initiatives Catalog November 17, 2016

Environmental Defense Fund (EDF) appreciates the opportunity to comment on the California Independent System Operator Corporation's (CAISO) Revised Draft 2017 Stakeholder Initiatives Catalog.

Comments on the Structure and Design of CAISO's Stakeholder Initiatives Ranking Process

In addition to specific comments on proposed stakeholder initiatives, EDF has two broad recommendations to offer on the structure and design of the stakeholder initiatives process.

Firstly, advancing the integration of renewables on the grid to facilitate the transition to a lower carbon economy is one of CAISO's key strategies outlined in its 2014-2016 Strategic Vision Plan.¹ Therefore, the question of whether a proposed stakeholder initiative is likely to advance the integration of renewables on the grid is highly relevant to consider in determining relative priority among proposed initiatives. Accordingly, EDF recommends that going forward, CAISO consider adding a new metric assessing the effectiveness of a given stakeholder initiative in advancing renewable integration, in determining relative priority among proposed initiatives.

Secondly, in order to facilitate meaningful stakeholder engagement, EDF recommends that CAISO provide explanations to support the overall rank assigned by it to each stakeholder initiative. This will allow stakeholders to more fully understand the CAISO's thinking and the rationale underpinning its ranking of proposed stakeholder initiatives.

Comments on CAISO's Ranking of Stakeholder Initiatives

1. Real Time Market Enhancements: EDF appreciates CAISO's recognition of the need to consider enhancements to the real-time market, reflected in CAISO ranking this proposed stakeholder initiative the highest among all discretionary initiatives. CAISO notes that it may consider extending the horizon of the short term unit commitment process to allow for a longer look-ahead period, enabling it to commit resources with longer start-up times, and limited starts.

¹ CAISO, Building a Sustainable Energy Future, 2014-2016 Strategic Plan at 6-7, available at <http://www.caiso.com/Documents/2014-2016StrategicPlan-ReaderFriendlyreader-friendly.pdf> ("Increasing the amount of renewable generation on the grid and advancing programs to incentivize demand response and energy efficiency will bring the state closer to its environmental policy goals. This transition to a greener grid also presents new challenges. [...] Over the next three years the ISO will [...] lead the transition to a smarter, cleaner, more reliable and secure energy future.")

To the extent that this initiative allows CAISO to consider how to more optimally commit *all* resources, with different operating characteristics, it can facilitate reliance on a more diverse set of resources to ensure electric reliability, thereby generating benefits in terms of both grid reliability and overall market efficiency.

2. Extended Pricing Mechanism: EDF urges CAISO to prioritize the Extended Pricing Mechanism stakeholder initiative, which would “explore extended pricing mechanisms to either incorporate non-priced constraints into energy prices or to reduce uplifts”. CAISO notes that extended LMP is a methodology that incorporates the costs of resource commitment and dispatch in energy prices. In its 2012 order approving Midwest ISO’s proposal for extended locational marginal pricing, which is an example of an extended pricing mechanism, FERC observed²:

“In the near term, MISO’s proposal should result in prices that better capture the costs considered in committing and dispatching resources. In the long term, it should also send more effective signals about the need for additional resources in the region. By producing a clearing price that better reflects the most expensive action taken to satisfy demand in the region, the Extended LMP algorithm should promote more efficient development of supply and demand resources in the future.”

As CAISO acknowledges³, extended LMPs may better reflect the full costs of satisfying demand, thereby facilitating more accurate price signals. Given the benefits in terms of improving overall market efficiency, a key metric used by CAISO to rank proposed initiatives, EDF recommends that CAISO prioritize this proposed effort, and ensure that it is commenced in 2017.

3. Energy and Ancillary Service Price Formation Assessment: CAISO’s decision to reject the new initiative proposed by the Western Power Trading Forum (WPTF) focused on energy and ancillary service price formation seems short-sighted considering the speed of grid transformation occurring based on economic merit and energy regulatory policy. CAISO has tended to use its stakeholder engagement process to consider discrete aspects of its market design, because of which there have been limited opportunities for broader, more holistic consideration of cross-cutting issues such as price formation. A holistic assessment of price formation issues in CAISO’s energy and ancillary services markets, in the context of increasing renewable penetration, will serve as an extremely useful basis for stakeholder discussions. Accordingly, EDF encourages CAISO to reconsider its decision to exclude such an initiative from the 2017 Stakeholder Initiatives Catalog.
4. Proposed Three Year Forward Looking Market Reliability Assessment: In its comments on CAISO’s Draft Stakeholder Initiatives document dated September 29, 2016, EDF underscored the need for CAISO to develop a Three Year-Forward Looking Market Reliability Assessment

² *Cal. Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,067 at p. 30 (2012).

³ CAISO, “2017 Stakeholder Initiatives Catalog”, November 4, 2016, at p. 20 (“LMPs only capture generator dispatch costs based on incremental production costs and do not account for unit start-up costs, minimum load costs, and minimum and maximum generation. These additional costs are typically incurred by fast start or fast response resources such as gas turbines and demand response. Extended LMPs aim to better reflect the full cost of satisfying demand.”)

- a three-year strategy for efficiently and reliably integrating variable energy resources consistent with CAISO's focus on integrating renewables on the grid as outlined in its current Strategic Plan, with the overarching objective of developing market mechanisms that enable fair competition among all technology types capable of providing products and services needed by the grid.

As noted in our earlier comments, this would allow CAISO to more holistically assess its ability to transparently and effectively procure and price these products and services, rather than examining the pricing and sufficiency of ancillary services and other market products in separate initiatives. In its response, CAISO stated, "our current process is to publish a one year roadmap. However, the ISO will consider a three-year roadmap process in the future",⁴ providing no further explanation.

Firstly, EDF seeks clarification on CAISO's reference to a one-year roadmap. To clarify, EDF is not suggesting that the current one year policy roadmap be published for a three year cycle; rather the idea is to develop a new stakeholder initiative as described above. Secondly, publishing a roadmap is vastly different than opening a stakeholder process to address the issue. Only the latter allows for true iteration between CAISO and its stakeholders. EDF submits that such a dialogue would be beneficial on this issue, given its importance. Furthermore, the fact that WPTF also suggested that CAISO take a more holistic review of its markets demonstrates that such a process is desired by multiple, diverse stakeholders.

EDF requests an explanation as to why CAISO has decided not to consider a three-year forward looking market reliability assessment at this time, and to defer action on this key issue for the future.

5. Flexible Ramping Product Enhancements: CAISO's assessment that it may be premature to schedule a stakeholder process to consider Flexible Ramping Product ("FRP") enhancements, given that the FRP was deployed as recently as November 1, is reasonable, but CAISO should commit to do so as soon as sufficient experience is garnered. Data and a track record of FRP operation will be needed to evaluate how well the FRP design is working in practice.

On a stakeholder call held on November 3, CAISO staff noted that data collected over a 12 month period should provide a sound basis for such an assessment. In order to efficiently integrate renewables on the grid, it is critically important to get the FRP design right, so that flexible ramping resources are appropriately rewarded for their capabilities, procured in sufficient volumes, and in a manner that allows all resources with the requisite capabilities to compete on an equal footing.

Stakeholders, including EDF, have observed that the FRP provides at least as much value to grid reliability as other bid-based ancillary services, and as such, should be a bid-based

⁴ CAISO, Stakeholder Comments Matrix, November 4, 2016, at p. 10, available at https://www.aiso.com/Documents/CommentsMatrix_Draft2017StakeholderInitiativesCatalog.pdf.

product.⁵ EDF concurs with the Department of Market Monitoring’s recommendation that CAISO initiate a stakeholder initiative to enhance the design of the FRP and “better facilitate the integration of DERs and VERs”.⁶

For these reasons, it is especially important that CAISO staff monitor data relating to the functioning of the FRP design on an ongoing basis over the coming months, and present this information and analysis in manner accessible to stakeholders so that an informed decision can be made on the need for FRP enhancements.

6. Fast Frequency Response: Given that CAISO’s planned Frequency Response Phase 2 study, which is needed to define a stakeholder initiative on fast frequency response, is not yet in place, EDF agrees with CAISO’s decision to not rank this initiative at this time. EDF looks forward to participating in the process of defining the proposed study aimed at determining the need for fast frequency response capability.

Thank you for considering these comments. Please feel free to reach out with any questions or comments.

Sincerely,

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⁵ Motion to Intervene and Protest of the Western Power Trading Forum, the Electric Power Supply Association and the Independent Energy Producers Association, Docket No. ER16-2023 at 7 (July 15, 2016).

⁶ CAISO Draft 2017 Stakeholder Initiatives Catalog at p. 22.