March 6, 2018

Board of Governors
California Independent System Operator Corporation
PO Box 639014
Folsom, CA 95763-9014

Re: CAISO's Commitment Cost and Default Energy Bid Enhancements Stakeholder Process

Dear CAISO Board of Governors:

The Environmental Defense Fund ("EDF") appreciates the opportunity to comment on the California Independent System Operator Corporation's ("CAISO") March 2, 2018 Commitment Cost and Default Energy Bid Enhancements Second Revised Draft Final Proposal ("Proposal") and stakeholder process. EDF's prior advocacy before CAISO and the Federal Energy Regulatory Commission ("FERC") has demonstrated the benefits of providing generators the flexibility to better reflect the hourly value of natural gas supply and transportation costs in the electric market.[1] CAISO's recognition that its market design is skewed too heavily in favor of market power mitigation measures at the expense of suppliers' bidding flexibility is a helpful move towards a more efficient market that better values deliverability[2] and will further FERC's goals of enhancing price formation.[3]

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1 *See, e.g.*, Supplemental Comments of the Environmental Defense Fund, Docket No. ER16-1649 at 5 (September 9, 2016) ("limitations on the ability of generators to reflect sub-day fuel supply costs undercuts price formation and price signals for the value of deliverability").

2 Proposal at 13 ("By increasing the accuracy of its reference level calculations, the California ISO can better: support integration of renewable resources through improving its valuation of resources under uncompetitive conditions in a manner that will incentivize flexible resources participation during tight fuel supply; account for costs of flexible resources (gas and non-gas) to reduce risk of insufficient cost recovery, and encourage participation of non-resource adequacy and Energy Imbalance Market resources.").

3 *Offer Caps in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 41 (2016) ("the potential for resources to have short-run marginal costs above CAISO's current $1,000/MWh offer cap requires some action to ensure that resources have an opportunity to recover costs. As in other RTO/ISO markets, increasing the offer cap will improve price formation in CAISO at times when the short-run marginal costs of CAISO resources exceed $1,000/MWh.").

The market effects stemming from the limited operability of Aliso Canyon, and the implications of the Aliso Canyon leak for the function of gas storage in California's electricity markets provide additional impetus for CAISO's market enhancements. Aliso Canyon and other gas storage facilities have allowed power generators to pay for interruptible transportation services, while receiving service equivalent to far more expensive firm transportation—meaning that the cost reflected in the electricity market for generators to avoid gas delivery curtailment was minimal, if not obscured, in hourly offers and clearing prices. California's historically robust gas storage capacity has, in significant measure, concealed the cost and value of firm pipeline transportation services and sub-day (e.g., hourly) non-ratable supply.

Power plant fuel supply needs are becoming more intermittent and uncertain on both daily and sub-day levels. Consequently the need for and system value of just in time fuel delivery and varying, non-ratable takes is increasing, at the same time that overall gas use is decreasing.[4] These trends infer the need to improve price formation and price transparency for the fuel supply services on which power generators depend, and to more precisely flow the fuel supply costs incurred by power generators into the electric energy market.

These California-specific conditions will be tested with the expansion of the EIM, which presents its own host of challenges, as CAISO acknowledges: "with the expansion of the real-time footprint because of the EIM, more generators farther away from liquid trading hubs experience greater levels of basis risk than generators internal to the California balancing authority area."[5] These market conditions further highlight the importance of a more flexible bidding framework for generators.

For these reasons, the CAISO Board should approve CAISO's Proposal and the movement away from overly restrictive bidding rules, particularly in light of FERC's directive to consider long-term market design changes to its bidding rules.[6] EDF remains committed to working with CAISO Staff on future initiatives to enhance its markets, and looks forward to continuing progress in the future.

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4 2016 California Gas Report, Prepared by the California Gas and Electric Utilities at 4, *available at* https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf ("For the purpose of load-following as well as backstopping intermittent renewable resource generation, gas-fired generation will continue to be the primary technology to meet the ever-growing demand for electric power.").

5 Proposal at 15.

6 *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,284 at P 32 (2014) ("While we agree with CAISO that the current proposal represents an immediate improvement that can be implemented in time to provide generators a better opportunity to recover their costs during periods of natural gas price volatility that may occur during the 2014-2015 winter season, we expect CAISO to abide by its commitment to consider longer-term market design changes for commitment cost bids in conjunction with the bidding rules enhancements stakeholder initiative commenced earlier this month.").

Respectfully submitted,

/s/ Natalie Karas
Natalie Karas
Senior Regulatory Attorney
Environmental Defense Fund
1875 Connecticut Ave. NW
(202) 572-3389
nkaras@edf.org

N. Jonathan Peress
Senior Director of Energy Market Policy
Environmental Defense Fund
16 Tremont Street, Suite 850
Boston, MA 02108
(617) 406-1838
njperess@edf.org