

January 24, 2020

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Subject: Load Management Rulemaking - Docket No. 19-OIR-01

Dear Commissioners:

The California Independent System Operator Corporation (CAISO) supports the California Energy Commission's (Commission) decision to open the *2020 Load Management Rulemaking* (19-OIR-01) to increase peak efficiency and demand flexibility. The Draft Load Management Rulemaking Scoping Memo dated January 10, 2020 (Scoping Memo) properly recognizes the current and emerging grid needs as California relies on increasing supplies of renewable energy resources to meet the state's commitment to a 100-percent carbon-free electricity supply. The rapid growth of renewable energy has increased the need for more flexible demand. Demand that is "grid-condition informed," can flexibly consume or capture excess renewable energy, use or release that energy when needed to support system reliability, reduce costs, and minimize operational challenges, while helping California achieve its decarbonization goals.

The CAISO appreciates the Scoping Memo's emphasis on joint agency collaboration, and the CAISO plans to actively participate in this rulemaking. It is essential that this and similar forums enable stakeholders from across the industry to collaborate to produce the required technologies, standards, and dynamic and time-variant rates that incentivize end-users to shift and shape load to meet the operational and reliability needs of the transforming grid. The CAISO agrees with the Scoping Memo's emphasis on the design of load management tariffs "that enable time and location sensitive response to marginal cost pricing in a way that benefits the system"¹ and to increase demand flexibility so that it can respond to energy market prices that reflect grid conditions.

The CAISO notes that the load management tariffs contemplated in the Scoping Memo differ from demand-side wholesale market participation, which has existed in the CAISO market since 2010. The CAISO's market participation models allow demand to bid into the wholesale energy and ancillary service markets as a supply-side resource and respond to CAISO dispatch instructions. The CAISO's supply-side model serves a purpose, but load modification can also provide significant benefits. The CAISO believes greater and more effective load modification can be achieved through grid-informed dynamic and time-variant retail rates. Using retail rates to incentivize a more favorable load shape that reduces renewable energy curtailment, produces

¹ Scoping Memo, page 4, paragraph 1, bullet 1.

less steep and more manageable evening ramps, and lowers peak demand will facilitate California achieving its carbon-free energy supply goals.

The Scoping Memo specifically seeks stakeholder input regarding whether there are “additional technologies, strategies, studies, or other materials that should be considered in this rulemaking.”² The CAISO recommends that the Commission consider two emerging operational issues.³ First, the Commission should consider how its load management standards can help California capture and consume increasing amounts of excess clean energy produced by its growing renewable energy fleet, and, in so doing, minimize the operationally challenging steep energy ramps that continue to grow more extreme. The Commission should study and vet in this rulemaking what positive impact dynamic and time-variant rates could have on these challenges, and what price spreads, behaviors, and technologies are necessary to shift consumption into periods of high solar resource production.

Second, the Commission should consider in this rulemaking how long-term storage (defined in the Scoping Memo as 40 hours or more) can ensure grid reliability during multi-day low renewable output weather events (*e.g.*, persistent cloud coverage from monsoonal storm in summer or a cloudy and windless week in February).

The CAISO appreciates this opportunity to provide comments on the Scoping Memo and looks forward to working with the Commission going forward.

Respectfully submitted,

By: /s/ Delphine Hou

Delphine Hou
Director, California Regulatory Affairs
California Independent System
Operator Corporation

² Scoping Memo, p. 6.

³ See: *Briefing on post 2020 grid operational outlook*, presented by Mark Rothleder to the California ISO Board of Governors, December 19, 2019. Available at:

<http://www.caiso.com/Documents/BriefingonPost2020GridOperationalOutlook-Presentation-Dec2019.pdf>