

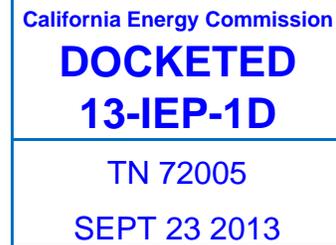


CALPINE CORPORATION

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September 23, 2013

California Energy Commission
Docket Office, MS-4
Re: Docket No. 13-IEP-1D
1516 Ninth Street
Sacramento, CA 95814-5512
docket@energy.state.ca.us



Re: Comments of Calpine Corp. (“Calpine”) on the California Energy Commission Docket No. 13-IEPR-1D Workshop on Southern California Electricity Infrastructure and Reliability Issues

To Whom It May Concern:

Calpine welcomes the opportunity to comment on the September 9, 2013 workshop on Southern California Electricity Infrastructure and Reliability Issues. The presentation at the workshop provided a helpful overview of CAISO, CEC, and CPUC staff thinking on maintaining reliability in Southern California in light of the retirement of the San Onofre Nuclear Generating Station and the prospective retirement of gas-fired generation dependent on once-through cooling technology, including how specific aspects of the problem will be addressed in CPUC proceedings, CAISO stakeholder processes, and other venues. Calpine limits its comments to three aspects of the presentation.

First, Calpine strongly supports the full consideration of transmission and other non-conventional generation alternatives to maintaining reliability in Southern California. Calpine is a large conventional generator, with approximately 5,600 MW of gas-fired generation in California. The majority of this capacity is CCGTs built within the last decade. Because of slow load growth and the overbuilding of the market due to renewable and other procurement mandates, this capacity operates at relatively low capacity factors.¹ Resolving Southern California reliability problems with transmission or with resources that do not produce large volumes of energy, such as synchronous condensers, storage, and demand response, would enable the State to better utilize its existing fleet of conventional generation.

Conversely, the operation of existing OTC units suggests that resources that produce large volumes of energy are not necessary to maintain reliability. Plants that the CEC classifies as “aging,” including OTC units, operated at only a 4.1% capacity factor in 2011.² Not only is replacing such low capacity factor conventional generation with new and efficient conventional generation not necessary, but it is also likely to lead to the development of resources that while more efficient and less polluting on per MWh basis are likely to run at much higher capacity factors with attendant local environmental impacts.³

¹ CEC analysis suggests that the average capacity factor of all CCGTs in California was 37% in 2011, the most recent year examined by the CEC. See Table 2 of <http://www.energy.ca.gov/2013publications/CEC-200-2013-002/CEC-200-2013-002.pdf>.

² *Ibid.*

³ For example, recent CAISO modeling results suggest that CCGTs as a class will operate at 30-40% capacity factors in 2022. Because any new CCGTs that replace existing OTC units are likely to be more efficient than the class average, they likely will run

Second, Calpine supports a capacity market that is open to a broad array of resources. At the workshop, the CAISO introduced a proposal to administer a capacity market that would be limited to demand response and energy efficiency.⁴ CPUC and CAISO staff indicated that this would be distinct from the Reliability Services Auction (RSA) capacity market that is part of the Joint Reliability Framework proposal.⁵ As Calpine has articulated repeatedly, Calpine strongly endorses capacity markets. Capacity markets enable competition between different resource types, including new and existing conventional generation, renewables, demand response, and energy efficiency to satisfy reliability requirements.⁶ In contrast, Calpine does not support capacity markets that are limited to specific types of resources. Restricting capacity markets to specific types of resources limits competition between different resource types and ultimately increases the cost of satisfying reliability requirements.

Third, while it was not discussed extensively at the workshop, section 3.3 of the *Preliminary Reliability Plan for LA Basin and San Diego*, the ostensible basis for the workshop, acknowledges the fact that under current SCAQMD rules, it is virtually impossible for all but the owners of existing units to obtain emission reduction credits for new conventional generation in the LA Basin. To the extent that new conventional generation is developed in the LA Basin, Calpine believes that the market would benefit from more competition. Calpine encourages SCAQMD to develop rules that would enable developers beyond the owners of existing units to access emission reduction credits in order to compete to fulfill needs for new conventional generation in the LA Basin.

Sincerely,

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at higher capacity factors. (See slide 40 of <http://www.cpuc.ca.gov/NR/rdonlyres/C856A74F-1B6A-45A4-8272-98883F909583/0/CAISOOperatingFlexibilityModelingResults.ppt>.)

⁴ See slide 17 of the presentation from the September 9 workshop.

⁵ <http://www.caiso.com/informed/Pages/StakeholderProcesses/Multi-YearReliabilityFramework.aspx>

⁶ For example, DR and energy efficiency accounted for 8 percent of all of the capacity that cleared PJM's most recent Base Residual Auction. (See Table 6 of <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2016-2017-base-residual-auction-report.ashx>.)