

DOCKETED

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Additional submitted attachment is included below.

August 31, 2015

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Docket No.: 15-IEPR-07**Comments of CalPeak Power LLC, CalPeak Power – Border LLC, CalPeak Power – Enterprise LLC, CalPeak Power – Panoche LLC, CalPeak Power – Vaca Dixon LLC, Malaga Power, LLC and Midway Peaking, LLC Regarding Southern California Electricity Infrastructure Assessment**

On August 4, 2015, the California Energy Commission (“CEC”) issued a “Notice of IEPR Commissioner Workshop on Southern California Electricity Reliability” relating to a workshop held on August 17, 2015, and invited submission of written comments by August 31, 2015. CalPeak Power LLC, CalPeak Power – Border LLC, CalPeak Power – Enterprise LLC, CalPeak Power – Panoche LLC, CalPeak Power – Vaca Dixon LLC (collectively “CalPeak”), Malaga Power, LLC (“Malaga”), and Midway Peaking, LLC (“Midway”) which collectively own six peaking plants in California. Information regarding these plants is provided in an Appendix.

Representatives of CalPeak, Malaga, and Midway attended the workshop on August 17, 2015, and have reviewed the presentations made. CalPeak and Malaga found the workshop valuable and commend the Commission for organizing it. CalPeak and Malaga are submitting comments solely to address an omission which the CEC should take into account in its infrastructure assessment, *i.e.* the need for the State to support repurposing some existing peakers to provide both voltage support and generation at a minimal cost, and at a net greenhouse gas (“GHG”) savings.

Several speakers at the workshop discussed the importance of building synchronous condensers to ensure adequate voltage support in Southern California. The representative of the CAISO, Tom Doughty, discussed the synchronous condenser projects that have been approved by the CAISO to ensure the adequacy of voltage support.¹ These projects cost hundreds of millions of dollars which are to be paid by ratepayers. A representative of San Diego Gas & Electric (“SDG&E”), Jim Avery, discussed the synchronous condenser projects SDG&E has been

¹ Workshop presentation by Tom Doughty for CAISO at Slides 2, 6.

authorized to build.² Jim Avery explained that these projects will make it possible to operate the system with less generation. A representative of Southern California Edison (“SCE”), Dana Cabbell, discussed a synchronous condenser project it has been authorized to build.³

Unfortunately, the California Independent System Operator (“CAISO”) and the utilities did not acknowledge that they could be securing existing synchronous condenser capability at significantly lower cost. Repurposing certain existing peakers can be done at minimal cost and would facilitate GHG emissions reductions. In particular, existing peakers in areas where synchronous condensers are needed can be modified to serve a dual role - they can be used as synchronous condensers when voltage support is needed or used as peakers when electrical power as needed. In order to modify an existing peaker to enable it to operate as either a synchronous generator or as a peaker, all that is required are simple software changes or the installation of a clutch to switch from one operating mode to the other. CalPeak would also be willing physically relocate its resources or modify existing interconnections (i.e. changing the voltages levels at which the resource is connected) if the transmission planning process analysis were to show this as warranted.

Rather than focusing on authorizing the building of new synchronous condensers, the CAISO and the CPUC should be facilitating the repurposing of peakers to provide both voltage support and generation. A key impediment to repurposing has been the failure of the CAISO to put in place tariff provisions needed to provide compensation for reactive power generally and voltage support in particular. Although FERC first required ISOs to consider providing financial compensation for reactive power in 2005, the CAISO only recently started a stakeholder proceeding in which it is considering adopting tariff rules to provide financial compensation for reactive power including voltage support.⁴ In addition, the CPUC has stood by while the CAISO and utilities move forward with plans to build expensive new synchronous condensers for voltage support without requiring the CAISO and utilities to first determine if the need for voltage support can be met, at least in part, in a much more cost-effective manner by repurposing peakers.

In light of the State’s increasingly ambitious goals for reducing GHG emissions, it is important for the CAISO, the California Public Utilities Commission (“CPUC”), and the CEC to make it state policy to consider repurposing peakers to provide both voltage support and generation. In order to reach its GHG reduction goals, the State will have to increasingly rely on intermittent renewable resources. Increasing reliance on such resources, however, will make it difficult to balance the grid without supplemental sources of voltage support. Repurposed peakers can support voltage support without increasing GHG emissions. And, in fact, in most cases, the repurposed peakers will displace GHG emissions. When operating in synchronous condenser mode to provide voltage support, no fuel is burned and no water is used, so there are no GHG or

² Workshop presentation by Jim Avery for SDG&E at Slides 2-4.

³ Workshop presentation by Dana Cabbell for SCE at Slide 4.

⁴ Documents relating to the CAISO proceeding on Reactive Power Requirements and Financial Compensation can be found at <http://www.caiso.com/informed/Pages/StakeholderProcesses/ReactivePowerRequirements-FinancialCompensation.aspx>. See especially the CAISO’s *Reactive Power and Financial Compensation Straw Proposal*, dated August 13, 2015, at pages 25-31 (setting forth the CAISO’s most recent proposal for providing financial compensation).

other air emissions. Moreover, if the system operator has adequate voltage support resources to call upon, in some situations the system operator will balance the grid with voltage support rather than using the alternative - calling upon generators to produce electrical power to balance the grid. To the extent that voltage support displaces electrical generation from fossil-fuel fired resources, there will be a reduction in GHG emissions.

CalPeak, Malaga and Midway recognize that the state agencies have for many years been following the “loading order” for considering the desirability of electricity resources and that peakers are near the bottom of the loading order.⁵ CalPeak urge the state agencies, however, to recognize that repurposed peakers which possess the capability to operate in synchronous condenser mode to provide reactive power voltage support should be relocated to the top of the loading order list along with energy efficiency. Like energy efficiency, having non-GHG producing reactive power resources can decrease the need for real power (megawatts). In addition, having such repurposed peakers enhances the ability of the system to rely on the third resource in the loading order, renewable resources.

Questions concerning these comments should be directed to Jeff Malone at 619-209-9555 or Jeff Spurgeon at 704-672-2854.

Sincerely,

Jeff Malone
Director, Asset Management
CalPeak Operating Services, LLC

⁵ See, e.g., Workshop presentation by Michelle Kito for SCE at Slide 4.

Appendix

Background Regarding CalPeak, Malaga, and Midway

CalPeak's subsidiaries, CalPeak Power – Border LLC, CalPeak Power – Enterprise LLC, CalPeak Power – Panoche LLC and CalPeak Power – Vaca Dixon LLC (CalPeak and its four subsidiaries are collectively referred to herein as the “CalPeak Companies”), operate four substantially identical peaker plants. Two of them, CalPeak Power Border Unit1 (“Border”) and CalPeak Power Enterprise Unit 1 (“Enterprise”), are located in SDG&E's electric and gas service territories. The other two, CalPeak Power Panoche Unit 1 (“Panoche”) and CalPeak Power Vaca Dixon Unit 1 (“Vaca Dixon” and collectively with Border, Enterprise and Panoche, the “CalPeak Units”), are in PG&E's electric and gas service territories.

All four plants utilize Pratt & Whitney, Model FT8-2 TWINPAC. The FT8-2 TWINPAC utilizes a Dry Low NOx combustor technology that can achieve lower emissions without using water or steam to reduce combustion temperature. Each TWINPAC is comprised of two combustion turbines (“CT”) that, singly or together (a multi-stage generator or MSG), turn a single Brush Synchronous Machine. In a 2-on-1 configuration, i.e., with both CTs operating at each unit, the minimum generation (“PMin”) in this configuration for each power plant is 44 MW and the maximum generation (“PMax”) values range between 48 and 52 megawatts (“MW”), depending on the unit. In a 1-on-1 configuration, i.e., with one CTs operating at each unit, the PMin in this configuration for each power plant is 44 MW and the PMax values range between 48 and 52 MW, depending on the unit.

The TWINPAC's industrial aero-derivative combustion turbine generator packages enable them to be used not only as generators, but also as synchronous condensers to provide voltage support (including reactive power and active power control).

Malaga acquired title to the Malaga Peaking Plant on April 14, 2015. The Malaga Peaking Plant is a 98 MW peaker located near Fresno, California, in PG&E's service territory. This power plant was previously owned by Kings River Conservation District and operated under contract with the Department of Water Resources and is now a merchant participating generator in the CAISO. Malaga could be retro-fitted with clutches to provide reactive power.

The Midway peaker plant consists of two aggregated Pratt & Whitney, Model FT8-3 SWIFTPAC units that are very similar to the CalPeak units. The two SWIFTPAC's are comprised of two combustion turbines (“CT”) each that, singly or together (a multi-stage generator or MSG), turn a single Brush Synchronous Machine. The flexible Midway plant has four configurations ranging from 21 megawatts minimum generation (“PMin”) up to 119.91 megawatts maximum generation (“PMax”).