



CalPeak Power LLC

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Wednesday, February 26, 2014

California ISO
Attn: regionaltransmission@caiso.com
250 Outcropping Way
Folsom, CA 95630

Re: Stakeholder Input for Draft 2013-14 Transmission Plan

Dear Sirs,

CalPeak Power, LLC ("CalPeak") is pleased to provide comments on the Draft 2013-14 Transmission Plan ("Draft TP"). CalPeak provided study requests for several cost-effective non-transmission alternatives for consideration in the 2013-2014 Transmission Planning Process.

CalPeak owns four flexible natural gas generation units (nominally 50 megawatts each) which are also capable of providing additional service to the CAISO grid as synchronous condensers. These units are the CalPeak Power Border Unit 1 located in San Diego at the SDG&E Border 69 KV Substation ("CalPeak Border"), the CalPeak Power Enterprise Unit 1 located in Escondido at the SDG&E Escondido 69 KV Substation ("CalPeak Escondido"), the CalPeak Power Panoche Unit 1 located in Fresno County at the PG&E Panoche 115 KV Substation ("CalPeak Panoche"), and the CalPeak Power Vaca Dixon Unit 1 located in Vacaville at the PG&E Vaca Dixon 115 KV Substation ("CalPeak Vaca Dixon").

As the CAISO has recognized, there is ample justification for adding reactive power support to meet reactive margin requirements and to partially replace the inertia and dynamic reactive capability of retiring the San Onofre Nuclear Generating Station ("SONGS") and once-through-cooling ("OTC") generation. Adding reactive power support also furthers the renewable integration objectives of the State of California and the CAISO by providing dynamic reactive capabilities that wind and photovoltaic solar generation cannot provide while at the same time reducing the risk of voltage collapse during high import conditions.

Since the CAISO has recognized a need for adding reactive power, during the transmission planning process request window CalPeak submitted requests to study a change in the way the CalPeak units are used. The CalPeak units all utilize Pratt & Whitney, Model FT8 (DLN), Twin-Pac industrial gas turbine packages which enable the plants to operate not only as generators, but also as synchronous condensers to provide voltage support, and, with minimal capital investment, the ability to toggle between being generators and synchronous condensers. Currently, the ability of these units to provide voltage support (outside of what is provided when operating as a generator) is not being utilized. CalPeak believes enabling the units to run as either generators or synchronous condensers is a fast, low-cost way to provide additional voltage

support with no environmental impact. Since the units are already constructed and permitted, the solution is available almost immediately and without construction and permitting risks. The recommended solution provided by the CAISO will not be available for years and still needs to cross the hurdles related to developing the sites/projects (acquiring site, permitting, construction, etc.). To support its request, CalPeak submitted information regarding the existing units, power flow study results prepared by its consultant, Navigant, and our proposal for providing this product. The power flow studies showed that each of the CalPeak units can provide significant voltage support, particularly in SDG&E's service territory where, with the shutdown of SONGS, the need for voltage support is most acute.

Unfortunately, it appears from the Draft Transmission Plan that the CAISO did not properly evaluate CalPeak's proposal to provide synchronous condenser capability.

- In Draft Transmission Plan, Appendix B, "Reliability Assessment Study Results," there is no mention whatsoever of the proposal for the CalPeak Enterprise unit although it is in Escondido which is in the vicinity of SONGS and electrically within the area where the CAISO has indicated that new synchronous condensers are needed for voltage support.
- Information in Draft Transmission Plan, Appendix E, "2013 Request Window Submittals," contains some statements that are incorrect.
 - The reference to the proposal for CalPeak Border erroneously suggests that the proposal to use the synchronous condenser capability would cost \$10 million and that the proposals for the other units would cost \$3 million. Appendix E, Table E-1 at items 8-11. The cost figures are for the project proposals at their 230-kV interconnection cost rather than their 69-kV/115-kV cost. The cost of the 69-kV solution is significantly less -- estimated to be between \$300,000 and \$500,000.
 - The references to the proposals for the CalPeak Panoche and CalPeak Vaca-Dixon erroneously state that the units are in SDG&E's service territory. See Appendix E, Table E-1 at items 10-11. They are in PG&E's service territory.

Given the absence of any discussion in the Draft Transmission Plan of Escondido, representatives of CalPeak met with representatives of the CAISO to determine the extent of the CAISO's efforts to evaluate the CalPeak proposals. The CAISO stated in the meeting they believe the CalPeak units are more valuable as generators (in part because the CAISO assumed it has no way to compensate units as synchronous condensers if they are also generators¹). As a result, the CAISO simply did not analyze the system benefits the CalPeak units could offer if modified to operate as synchronous condensers when not called upon for generation.

¹ CalPeak understands that its proposal may require a non-conforming reliability must-run agreement such as the agreement CAISO currently uses to compensate AES Huntington Beach, LLC for operating two synchronous condensers to produce reactive power to provide voltage support in the Los Angeles Basin and the San Diego/Imperial Valley local capacity areas. See *AES Huntington Beach, LLC*, FERC Docket No. ER13-351-000, 142 FERC ¶ 61,017 (2013). CalPeak understands that there is likely a better way to procure reactive power and has actively supported the development of competitive voltage procurement within the California market, as has been suggested by FERC. Unfortunately, however, development of competitive voltage procurement within the California market has not been made a priority.



CalPeak understands our proposal may require an RMR contract until a better way to procure MVARS, as has been instructed by FERC, is developed by the regulatory agencies in California. However, our proposal could be much less expensive, available quicker, and with fewer environmental impacts than what is currently in the Draft Transmission Plan. *Simply put, if existing generators can provide synchronous condensing when not generating, the need for additional MWs can be reduced. In addition, based on our understanding that some existing generators are currently dispatched in order to provide MVARS, making use of units like CalPeak avoids what is currently a very expensive and environmentally harmful way to address the situation.*

Although the CAISO did not model the CalPeak proposals, it did find a need for synchronous condensers to provide voltage support. In particular, the Draft Transmission Plan indicates that the CAISO has identified the need for an additional 450 - 700 MVAR of dynamic reactive support at future SONGS Mesa Substation or electrically equivalent location in the vicinity. Draft TP at 103. To address this need the ISO recommends installing two synchronous condensers at the San Luis Rey substation totaling 450 MVAR and notes there is a potential need for 250 MVAR of additional dynamic reactive support at SONGS Mesa or an electrically equivalent location which will be reviewed in future planning cycles. *Id.* The cost of the synchronous condensers at the San Luis Rey substation is estimated to be \$80 million and they would not be in service until June of 2018. Draft TP at 284. The synchronous condensers would be constructed by SDG&E rather than being subject to competitive solicitation process. Draft TP at 288.

The CAISO's determination to not study the CalPeak proposal, while finding a need for synchronous condensers, is not in ratepayer interests. CalPeak believes that the possible use of existing units to provide voltage support should be studied before ratepayers are asked to pay the bill for synchronous condensers that may be larger than necessary and will not be available for many years. Making the changes needed to enable the CalPeak units to run as both generators and synchronous condensers is desirable because:

- Making changes to the existing units is much less expensive than building new synchronous condensers.
- Voltage support can be available almost immediately from the units, rather than waiting many years for new synchronous condenser units to be built (and taking the risk that the new units can't be permitted/constructed as proposed).
- There is no environmental impact associated with the enabling the units to run as synchronous condensers.

Allowing the peakers to earn some additional income for providing voltage support also helps to address the so-called "missing money problem" which is being experienced by many owners of units that do not have power purchase agreements. Earning extra income for providing voltage support helps ensure that the peakers meet the revenue requirements necessary to stay in operation and, thus, to be available to provide power or voltage support to the grid.

Even if the CAISO is not able to evaluate the CalPeak proposals and thus make them part of the Final Transmission Plan, CalPeak believes that the CPUC may well be interested in further evaluation of the proposal. CalPeak has intervened in the CPUC Long-Term Procurement Proceeding to raise the need to consider procurement of voltage support. Thus, CalPeak requests



that the CAISO modify the Draft Transmission Plan to make it accurate and complete with respect to what it did and did not do when it reviewed the CalPeak proposal. Making these changes will make it clear that the CAISO has not “rejected” the proposal - it simply did not evaluate it – as using the units as both generators and synchronous condensers.

Thank you for this opportunity to provide comments.

Sincerely,

Clifford D. Evans, Jr.
Vice President

CalPeak Power LLC
CalPeak Power – Border LLC
CalPeak Power – Enterprise LLC
CalPeak Power – Panoche LLC
CalPeak Power – Vaca Dixon LLC