DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

I.D. # 10999

ENERGY DIVISION **RESOLUTION E-4471**

February 16, 2012

RESOLUTION

Resolution E-4471.

PROPOSED OUTCOME: This Resolution orders Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric utilities to negotiate to enter into a contract with Calpine's Sutter Energy Center to end no later than 12/31/2012, and adopts a non-bypassable charge to pay for the cost of the contract.

ESTIMATED COST: Not to exceed $2.95 million per month, to a total of $29.5 million.

SUMMARY

This Resolution orders Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) to enter negotiations with the Calpine Corporation to offer a contract that ends by 12/31/2012 with the Sutter Energy Center (Sutter). The purpose of this order is to keep the Sutter plant online in 2012, enabling further analysis of the impacts of current and proposed dynamic transfer tariff changes at the CAISO.

BACKGROUND

The Sutter plant, located in Yuba City, is a 572 MW nameplate capacity combined cycle gas turbine (CCGT) power plant, with a net qualifying capacity of 525 MW. The Sutter plant came online on 5/4/2001 and is owned by the Calpine Corporation, indirectly through the Calpine Construction Finance Company, L.P. (Calpine). The California Independent System Operator (CAISO) Generation Capability List indicates that Sutter has three units: two gas turbines with a net dependable capacity of 185 MW each, and one steam turbine with a net dependable capacity of 191 MW. The plant is air cooled rather than once-through cooled (OTC) and is not located in a local capacity area. The Sutter plant is not directly connected to the CAISO, but is one of a small number of resources using a pseudo-tie to connect to the CAISO grid. It was originally connected to the Western Area Power Administration, which later joined the Sacramento Municipal Utility District. The pseudo-tie allows the Sutter plant to provide resources, more flexibly than via traditional import rules, using the CAISO's dynamic transfer tariff. The Sutter plant originally was under contract to Sacramento Municipal Utility District (SMUD), from 2001 to 2005.[1] The December 2005 Federal Energy Regulatory Commission (FERC) acceptance with modifications of the CAISO pseudo-tie agreement allowed the CAISO to dispatch the Sutter plant, and allows Calpine to receive revenues from CAISO markets.[2] In Calpine's General Order (GO) 167 notice to the Commission, Calpine stated that the Sutter plant was not under contract for the 2012 resource adequacy year.[3]

The Commission's GO 167, Operation and Maintenance Standards for Power Plants, adopts certain operating availability standards applicable to covered Generating Asset Owners (GAO's). As discussed in more detail in the Discussion section below, GO 167 requires power plants to provide notice to the Commission if they are going to shut down. Calpine filed a GO 167 notice (Notice) on 11/22/2011 with the Commission stating that it was planning on retiring the plant in 2012 due to a lack of a resource adequacy contract. If retired, the plant will not be available for commercial operations in 2013 and later years.

Simultaneously with the Notice filed with the Commission, Calpine filed notice with the CAISO stating their request for a Capacity Procurement Mechanism (CPM) designation. Section 43.2.6 of the CAISO Tariff states that the CAISO may issue a CPM designation for capacity at risk of retirement if all five requirements specified in the tariff section are met. On 12/06/2011, the CAISO reported that it intended to seek a FERC waiver for one requirement for the CPM that allows the CAISO to procure backstop capacity.[4] The CAISO report also

[1] Calpine signs on SMUD as long-term customer for new Sutter power plant, http://www.thefreelibrary.com/Calpine+Signs+On+Sacramento+Municipal+Utility+District+as+Long-Term...-a058619841

[2] 113 FERC 61,261. https://www.ferc.gov/whats-new/comm-meet/121505/E-9.pdf

[3] Notice of Change in Long-Term Status of Sutter Energy Center, filed 11/22/2011.

[4] California ISO Report on Basis and Need for CPM Designation for Sutter Energy Center and stakeholder comments, December 6, 2011. http://www.caiso.com/informed/Pages/StakeholderProcesses/CapacityProcurementMechanismDesignation_SutterEnergyCenter.aspx

substantiated their reasoning for seeking the FERC waiver. The CAISO determined that the Sutter plant is needed for operation flexibility in 2017 and beyond in a high load scenario. The CAISO determined that the need was system wide, and that all benefitting customers would be charged via the Transmission Access Charge (TAC) if the waiver were approved and the Sutter plant were subject to the CPM. The CAISO report's reasoning for intending to request the FERC waiver included the concern that if the Sutter plant is retired in 2012, the plant may not return to commercial operations in future years because under Environmental Protection Agency policy, the plant would likely need to undergo New Source Review and obtain a new air quality permit. Comments were requested from parties seven days after the CAISO report was issued, in accordance with the CAISO's Tariff Section 43.2.6. Seventeen stakeholders provided public comments (including the CPUC's Division of Ratepayer Advocates). Given the timing contingencies of the intended FERC waiver filing, if granted the CPM is likely to occur no earlier than June 2012.

The CAISO report did not specify the CPM's proposed duration, cost, or MW quantity. However, the recent CPM Settlement sets a price of $67.50/kW-year.[5] The CAISO has not identified the minimum capacity that would need to be procured under the CPM. The plant can be designated for the months following the approval of the FERC waiver. On the high end, if the unit were fully procured at its maximum net qualifying capacity, the CAISO TAC charge would be just over $2.9 million per month.[6] On the lower end, the 2010 Resource Adequacy Report had a median capacity payment of $1.50 / kW-month for generic system resources.[7] At the median resource adequacy price for system resources, the cost of this plant would be approximately $787,500 per month.[8]

The CAISO and Calpine have both stated that the Sutter plant is not currently under contract to any Load Serving Entity (LSE) in the 2012 resource adequacy

[5] Docket No. ER11-2256-000, CAISO offer of settlement. http://www.caiso.com/Documents/2011-12-23_ER11-2256_CPMOoS.pdf

[6] A maximum price is calculated by $67.50 kW-year (CPM price) * 1000 kW per MW / 12 months * 525 MW (max of the NQC range) = $2.95 million / month, with up to 10 months on contract leading to $29.5 million as a cap.

[7] 2010 Resource Adequacy Report. http://www.cpuc.ca.gov/NR/rdonlyres/DD04CAF6-53AD-4D52-A5A3-E576746776DF/0/2010RAreport.DOC

[8] This price is calculated by $1.50 / kW-month * 1000 kW per MW * 525 MW = $0.27 million / month.

compliance year. If the Sutter plant comes under contract from a LSE, then the FERC process would come to a halt, since the resource would have come under contract. Otherwise, the CAISO has indicated that it will start the minimum of 30 day process for an LSE to procure the resource if the waiver is granted at FERC.

Calpine has stated in its briefs on the Commission's 2010 LTPP rulemaking (R.10-05-006) that wholesale market revenues alone are insufficient to keep the plant in operation.[9] The cost and feasibility of Calpine's temporarily shutting down the Sutter plant and resuming operations in later years are unknown. Lastly, the FERC CPM mechanism has not yet been tested or used to procure resources beyond the extant resource adequacy year. The CPM is designed to designate plants only for one year. The longer-term or broader market implications of a FERC waiver for this plant are not known.

The analysis of the four Commission required-scenarios utilized in R.10-05-006 indicated there is no identified need for new system resources in 2020.[10] R.10-05-006 has examined four different scenarios, around four different renewable energy procurement futures, with high- and low-load sensitivity around the trajectory scenario. Testimony was filed on July 1, 2011.[11] The analysis was conducted by the CAISO and Joint-Investor Owned Utilities (IOUs) with stakeholder input and feedback, and demonstrated no need for additional resources in all scenarios except for the high load sensitivity. The analysis examined only the end year of 2020, not the intervening years. There has been no final decision of a Commission need determination decision in R.10-05-006.

The CAISO report did not include more recently available information. For example, the Oakley plant approved by this Commission in D.10-12-050 was excluded. Similarly, in ongoing work regarding AB 1318, Electrical System Reliability Needs of the South Coast Air Quality Basin, the CAISO has preliminarily identified an incremental need of 2,000 MW of new resources in the Los Angeles Basin based on OTC retirements.[12]

[9] Calpine September 16, 2011 brief in R.10-05-005. http://docs.cpuc.ca.gov/efile/BRIEF/143826.pdf

[10] R.10-05-006. http://docs.cpuc.ca.gov/Published/proceedings/R1005006.htm

[11] 2010 Long Term Procurement Plan System Plans. http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/LTPP2010/LTPP_System_Plans.htm

[12] CAISO August 18, 2011 Memorandum to CAISO Board of Governors on Renewable Integration.

The Commission has before it an application from SDG&E for 450 MW of facilities located in San Diego that could come online before 2016. In addition, in the case of higher than expected load growth some power plant capacity that by 2020 must be materially in compliance with the State Water Resources Control Board's OTC policy, or cease operations, could remain on-line while additional flexible capacity was developed.[13]

DISCUSSION

The Calpine GO 167 notice was filed with the Commission appropriately.

General Order 167 (GO 167) – Operation and Maintenance Standards for Power Plants - adopts certain operating availability standards applicable to covered Generating Asset Owners (GAO's). There are three GO 167 Operating Standards involved in plant retirements. Operating Standard (OS) 22 requires a GAO to maintain its unit in a state of "readiness" to provide full available power, except during specified necessary maintenance or forced outages. OS 23 requires notification of long-term changes in the operating status of a unit. OS 24 requires GAOs to obtain the Commission's approval, in consultation with the CAISO, prior to closing a generating facility or making any long-term changes in operating status, provided that there is a "mechanism to compensate the GAO for readiness services provided."

Calpine's November 22, 2011 letter to the Commission satisfies the OS-23 notice requirement.

The Commission has not made a final need determination in R.10-05-006.

In order to grant approval to close a generating facility, the Commission must determine that there is no need for the facility. We have not issued a decision on

http://www.caiso.com/Documents/Board%208)%20Briefing%20on%20renewable%20integration

[13] Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling. http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/docs/policy100110.pdf

system need in R. 10-05-006, but both Calpine and the CAISO have signed a settlement agreement filed in that proceeding.[14] In the settlement the parties agreed that no new resources were needed for system reliability. At the same time, the Commission's interest in expanding the role of renewable resources in California's energy mix has created a desire to access resources that are "flexible" for renewable integration, as well as those not connected directly to the CAISO grid. The CAISO tariff does not yet identify the precise characteristics of "flexible" resources needed for renewable integration, but there is an ongoing intensive stakeholder process reviewing the need for CAISO tariff modifications that would provide the market mechanism for procuring specific types of flexible resources.[15] Pseudo-ties and dynamic transfers are one way that may provide additional flexibility and/or lower costs by accessing resources located outside of the CAISO's transmission footprint.

Benefits associated with better understanding the changing dynamics of the CAISO's pseudo-tie and dynamic transfer tariff changes.

The pseudo-tie agreement has provided the CAISO with valuable data regarding dynamic transfers since the agreement was signed between Calpine and the CAISO. The agreement remains in effect until either party has cancelled it. In light of the CAISO's revised draft tariff language regarding dynamic transfers, maintaining facilities that have pseudo-tie agreements is beneficial to understanding the role these agreements may play in California's and other states' energy futures. As one of three resources, and the largest resource, currently connected by a pseudo-tie agreement, the Sutter plant could provide valuable information to the CAISO and stakeholders about the impact of these tariff changes. Given the concerns filed at FERC regarding the tariff language, the data from maintaining Sutter in 2012 would support greater understanding of the tariff changes. The assumptions in R.10-05-006 demonstrate the importance of understanding dynamic transfers. Fifteen percent of out-of-state renewable resources in 2020 are assumed scheduled via dynamic transfer. This assumption represents a significant increase from the three units currently dynamically transferred today (and a doubling of the capacity dynamically transferred).

We believe there is a need for more information on the strengths, weaknesses and capabilities of connecting to the grid through a pseudo-tie using the CAISO's

[14] Motion for approval of Settlement Agreement. http://docs.cpuc.ca.gov/efile/MOTION/140823.pdf

[15] Renewable integration market and product review, phase 1. http://www.caiso.com/27be/27beb7931d800.html

dynamic transfer tariff. Therefore we believe there is a need for the continued operation of the Sutter plant.

The IOUs are ordered to negotiate a limited term contract with Calpine for the Sutter plant and file a contract with the CPUC.

The IOUs should jointly negotiate a limited term contract with Calpine. A contract between the IOUs and Calpine's Sutter plant would satisfy the compensation mechanism requirement of OS 24. If any other funding source is secured in this period, the authority for the IOUs to negotiate with the Sutter plant is rescinded.

This Commission has the authority to authorize the IOUs to procure energy under Public Utilities Code Sections 454.5 and 701. Pending further renewable integration analysis in R.10-05-006, it is only prudent to execute a contract through the end of 2012. Therefore, the IOUs should contract with the Sutter plant in order to retain this dynamically transferred resource. The contract should be executed in a manner that minimizes the cost to ratepayers. It is expected that in the contract the costs should be significantly below what would be paid if the Sutter plant were subject to the CPM. This approach is consistent with the requirement to provide just and reasonable rates under Public Utilities Code Section 454.5.

The IOUs are ordered to file a joint Tier 3 advice letter. If a contract is negotiated, the advice letter will seek Commission approval of the contract and tariff sheets to implement the contract costs as a non-bypassable charge. Otherwise the advice letter will inform the Commission of negotiation failure. This filing will allow the Commission's review of any costs associated with a contract authorized by this Resolution. The IOUs shall complete negotiations and file the advice letter within 30 days from the effective date of this resolution.

Calpine is ordered not to retire the Sutter plant.

While the negotiations for a contract are ongoing, the Sutter plant is ordered by the Commission not to retire.

COMMENTS

"Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day

period may be reduced or waived upon the stipulation of all parties in the proceeding.
"The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today."

FINDINGS

1. Calpine Corporation indirectly owns the Sutter Energy Center through its subsidiary the Calpine Construction Finance Company, L.P.
2. Calpine filed a letter on November 22, 2011 in compliance with General Order 167, Operating Standards 23, stating that it was planning on retiring the Sutter plant in 2012 due to the lack of a resource adequacy contract.
3. On November 22, 2011, Calpine filed a letter with the CAISO requesting that the Sutter plant be subject to the Capacity Procurement Mechanism (CPM).
4. On December 6, 2011, the CAISO filed a notice of intent to file for waiver before FERC. The CAISO's filing notice included a report indicating that it was applying for a waiver of the CPM requirement that the Sutter plant's capacity was needed in the next resource adequacy year.
5. If the Sutter plant receives funding via some source, the need for the CPM is removed.
6. The CAISO did not find deficiencies in the 2012 resource adequacy plans.
7. The long-term impacts of FERC granting a waiver for use of the CPM mechanism for the Calpine Sutter plant are uncertain.
8. The current CPM price is $67.50 per kW-year.
9. A maximum cost of $2.95 million per month would accrue to CAISO's Transmission Access Charge if the CAISO receives a FERC waiver to use the CAISO's CPM to procure the Sutter plant.
10. The Commission's R.10-05-006 has not identified needs for new generation to meet the planning reserve margin through at least 2020, but the proceeding has not issued a final decision. There is a settlement agreement in the proceeding under the Commission's consideration regarding the need for new generation.
11. The CAISO report did not identify needs that required additional generation under the four mid load scenarios or the low load sensitivity in R.10-05-006. However, the report concluded that the Sutter plant was needed by 2017 under a high load sensitivity.
12. Calpine's Sutter plant is connected to the CAISO via a pseudo-tie and has been utilized as a fairly unique dynamic transfer pilot plant.

13. There are significant changes currently under way to the CAISO's dynamic transfer tariff and dynamic transfer units that may be very important for delivering renewable energy and/or providing operational flexibility.
14. A renewable integration product has not yet been defined by the CAISO but is under consideration in the CAISO's intensive renewable integration stakeholder process.
15. Under GO 167, a plant may change its long term status only with approval from the Commission.
16. If a plant is requested by the Commission to remain online under General Order 167, it must receive a funding mechanism to compensate it for the readiness services provided.
17. The Commission may order a utility, or utilities, to negotiate contracts.
18. Under Public Utilities Code Section 454.5, there is a requirement for just and reasonable rates.
19. The identified need of the Sutter plant is system wide, and any benefits and costs should be applied via a non-bypassable charge to all benefitting customers.

<u>THEREFORE IT IS ORDERED THAT:</u>

1. Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric are directed to enter into contract negotiations with Calpine on the Sutter plant for a price less than that available under the CPM and for a duration not to exceed nine months.
2. Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric shall file a Tier 3 advice letter upon the completion of negotiations, which shall be no later than 30 days after the effective date of this resolution.
3. Pursuant to General Order 167, Operating Standard 24, Calpine is not to retire the Sutter plant until this matter is either resolved before the Federal Energy Regulatory Commission or negotiations are successfully concluded and the Tier 3 advice letter approved.
4. When seeking approval of a contract, Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric shall include in the advice letter tariff sheets to recover the cost of the contract through a non-bypassable charge on all benefiting customers and explain how the contract meets the just and reasonable rates requirements under Public Utilities Code Section 454.5.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on February 16, 2012; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director