California ISO Report on Basis and Need for CPM Designation for Sutter Energy Center

December 6, 2011
I. Executive Summary

This report addresses the basis and need for the California ISO (CAISO) to designate the Sutter Energy Center (Sutter plant) as capacity at risk of retirement, pursuant to the provisions of the CAISO Tariff regarding the Capacity Procurement Mechanism (CPM).\(^1\)

On November 22, 2011, Calpine submitted to the CAISO a request, and all required supporting documentation, for designation of the Sutter plant as CPM Capacity for 2012 (November 22 Calpine request). The November 22 Calpine request stated that, absent such a CPM designation, the Sutter plant must and will be retired in 2012 and thus will not be available for commercial operations in 2013 and later years.\(^2\)

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. In this case, the CAISO has determined that the Sutter plant satisfies four of the five requirements but does not meet the requirement that “the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current RA Compliance Year.” The CAISO’s analysis shows that the Sutter plant will be needed for reliability purposes for its operational characteristics in the 2017/2018 time frame. As explained below, based on information provided by Calpine, the CAISO has determined that the Sutter plant will not be available to meet reliability needs in the CAISO balancing authority area in the 2017/2018 time frame. In accordance with Section 43.2.6, the CAISO requests that stakeholders provide any written comments on this report to the CAISO by December 16, 2011. Please submit comments to Phil Pettingill at ppettingill@caiso.com.

Because the CAISO analysis shows that the plant will only be needed for reliability and operational requirements as of 2017/18, the CAISO is precluded from procuring the resource under the current tariff authority. The ISO has determined that if the Sutter plant shuts down in 2012, there will be a capacity gap of 3570 by the end of 2017, which will pose significant challenges to the reliable operation of the CAISO grid. The CAISO has determined that it must take immediate action to avoid these reliability challenges.

\(^1\) Capitalized terms not otherwise defined in this report have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff. References in this report to numbered sections are references to sections of the CAISO Tariff unless otherwise stated.

\(^2\) Certain information submitted in support of the November 22 Calpine request is subject to the confidentiality provisions of Section 20.2 of the CAISO Tariff.
and operational issues in the future. Specifically, the CAISO will be making a filing with the Federal Energy Regulatory Commission requesting waiver of existing tariff provisions that currently limit the procurement of capacity at risk of retirement to cases in which such capacity is needed the next resource adequacy compliance year. The waiver if granted will enable the ISO to procure the Sutter capacity for 2012 based on the CAISO’s determination of need by the end of 2017.

II. Background

A. Applicable CAISO Tariff Provisions

Section 43.1.2 of the CAISO Tariff authorizes the CAISO to designate Eligible Capacity to provide CPM Capacity services in order to address six listed types of circumstances. One of the CPM categories consists of the procurement of capacity at risk of retirement within the current Resource Adequacy (RA) Compliance Year that will be needed for reliability by the end of the calendar year following the current RA Compliance Year. Section 43.2.6 of the CAISO Tariff states that the CAISO may issue a CPM designation for such capacity at risk of retirement in the event that all of the following requirements apply:

1. the resource was not contracted as RA Capacity nor listed as RA Capacity in any Load Serving Entity’s (LSE) annual RA Plan during the current RA Compliance Year;

2. the CAISO did not identify any deficiency, individual or collective, in an LSE’s annual RA Plan for the current RA Compliance Year that resulted in a CPM designation for the resource in the current RA Compliance Year;

3. CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current RA Compliance Year;

4. no new generation is projected by the CAISO to be in operation by the start of the subsequent RA Compliance Year that will meet the identified reliability need; and

5. the resource owner submits to the CAISO and the Department of Market Monitoring (DMM), at least 180 days prior to terminating the resource’s Participating Generator Agreement (PGA) or removing the resource from PGA Schedule 1, a request for a CPM designation under Section 43.2.6 and the affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the Business Practice Manual (BPM) for Reliability Requirements, that attests that it will be uneconomic for the
resource to remain in service in the current RA Compliance Year and that the decision to retire is definite unless CPM procurement occurs.³

Section 43.2.6 further provides that if the CAISO determines that all five of these requirements have been met, prior to issuing the CPM designation, the CAISO will prepare a report that explains the basis and need for the CPM designation and will provide stakeholders at least seven (7) days to review and submit comments on the report.⁴ Section 43.3.7 of the CAISO Tariff also states that a CPM designation for capacity at risk of retirement under Section 43.2.6 will have a minimum commitment term of one (1) month and a maximum commitment term of one (1) year, based on the number of months for which the capacity is to be procured within the current RA Compliance Year.

B. The Sutter Plant

The Sutter plant is a combined cycle gas turbine (CCGT) generating facility located near Yuba City in Sutter County, California. Calpine Corporation (Calpine) indirectly owns the Sutter plant through its subsidiary, Calpine Construction Finance Company, L.P. (CCFC). The Sutter plant relies on air cooling rather than once-through cooling (OTC) using ocean or lake water.⁵

The Sutter plant has a net qualifying capacity for 2012 of between 500 and 525 MW.⁶ It is interconnected to the transmission system operated by the Western Area Power Administration and operates in the CAISO markets pursuant to a pseudo-tie arrangement with the CAISO.⁷ The Sutter plant can be dispatched by the CAISO and has flexible ramping capability that allows discrete portions of its capacity to be dispatched as needed to satisfy demand.

III. Demonstration of Basis and Need to Designate the Sutter Plant as Capacity at Risk of Retirement

As explained below, Sutter meets four of the five requirements to be issued a CPM designation for capacity at risk of retirement pursuant to Section 43.2.6 and the related provisions of the BPM for Reliability Requirements and will meet the fifth

---

³ Section II of this report addresses the application of these CAISO Tariff provisions and related provisions of the BPM for Reliability Requirements to the Sutter plant.

⁴ Section 43.2.6 also states that the CAISO will allow no fewer than thirty (30) days for an LSE to procure Capacity from the resource. If an LSE does not, within that period, procure sufficient RA Capacity to keep the resource in operation during the current RA Compliance Year, the CAISO may issue the risk of retirement designation; provided that the CAISO determines that the designation is necessary and that all other available procurement measures have failed to procure the resources needed for reliable operation.

⁵ Because the Sutter plant is air-cooled, it is not subject to the OTC regulations discussed in Section III.C below.

⁶ The Sutter plant's net qualifying capacity is specified for each month and varies based on seasonal factors.

⁷ See Pseudo PGA between the CAISO and CCFC, accepted by FERC letter order issued in Docket No. ER06-58-001 on March 1, 2006.
requirement upon FERC approval of a request to waive the tariff provision requiring the reliability and operational need for the plant to be “by the end of the calendar year following the current RA Compliance Year.” A FERC waiver of this tariff provision will allow the CAISO to designate the Sutter Plant as CPM Capacity at risk of retirement based on longer-term reliability and operational needs.

A. The Sutter Plant Was Not Contracted or Listed as RA Capacity

The CAISO’s review confirms that the Sutter plant was not contracted as RA Capacity nor listed as RA Capacity in any LSE’s annual Resource Adequacy Plan during the current RA Compliance Year, i.e., during 2012.

B. The CAISO Identified No Deficiency in an LSE’s Annual Resource Adequacy Plan that Resulted in a CPM Designation for the Sutter Plant

The CAISO did not identify any deficiency, individual or collective, in an LSE’s annual Resource Adequacy Plan for the current RA Compliance Year (i.e., 2012) that resulted in a CPM designation for the Sutter plant in the current RA Compliance Year.

C. CAISO Technical Assessments Project that the Sutter Plant Will Be Needed for Reliability Purposes

1. Overview of the CAISO’s Analysis and Methodology

The CAISO has conducted analysis, including technical assessments, that project that the Sutter plant will be needed for reliability purposes, specifically for its operational characteristics, in the 2017/2018 time frame.  

The CAISO conducted its analysis regarding the Sutter plant in accordance with Section 7.3.5.2 of the BPM for Reliability Requirements, which explains that the CAISO will use a diverse set of tools and follows a multi-step process whereby the generating facility is studied for its impact on local and system reliability and operational flexibility, given the best available information regarding future grid conditions and the assumed availability of RA resources procured for the current RA Compliance Year (including other known generator retirements) and any new generation that will achieve commercial operation to meet future needs. In the case of the 2017/2018 assessment the assumed availability of resources is based on the California Public Utilities Commission (CPUC) Long-Term Procurement Plant (LTPP) planning assumptions rather than the RA resource procurement.

Section 7.3.5.2 of the BPM for Reliability Requirements also explains that the CAISO’s analysis must consist of one several listed types of studies that include a

---

8 The CAISO recognizes that Section 43.2.6 states that the technical assessments are to be conducted for the end of the calendar year following the current RA Compliance Year. That subject is addressed in Section III.C(3) below.
production simulation. As explained below, the CAISO’s analysis in this case consists of a multi-step process that includes quantification of the expected flexibility requirements to meet load and supply variability and uncertainty and an assessment of fleet of resources expected to be available to simultaneously meet the load plus operating reserves requirements, plus flexibility using a production simulation conducted in accordance with the study assumptions and scope of study established by the CPUC/LTPP proceeding, with certain adjustments. Further, pursuant to the BPM requirements, the CAISO’s analysis evaluates the adverse effects on the transmission system as well as operational flexibility requirements, and also considers the characteristics of the individual resources in the fleet and will be able to highlight resources that are needed for locational and system reliability or have non-generic resource flexibility required to operate the integrated grid and have not been secured through the procurement process. As explained below, the CAISO’s analysis does address operational flexibility requirements with specific consideration to the non-generic operating characteristics of the Sutter plant and how that plant is needed for system reliability.

The CAISO’s analysis is based on the study assumptions and scope of study developed for the rulemaking proceeding established in 2010 by the CPUC/LTPP for California. The LTPP proceeding will determine the future long-term procurement obligations of the state’s investor-owned utilities. As part of that proceeding, the CAISO evaluated potential operational and resource capacity needs driven by the requirement of the state of California that LSEs implement the state’s 33 percent renewable portfolio standard (RPS) by 2020.

In accordance with the parameters established in the LTPP proceeding, the CAISO’s analyzed 2020 scenarios. The CPUC authorized several scenarios for analysis in that proceeding. The CAISO has based its analysis of the potential need for the Sutter plant based on the CPUC’s 33 percent trajectory high load (high load) scenario, which is intended to reflect future uncertainties in forecast demand. The CAISO determined that use of the high load scenario is appropriate because it reflects plausible uncertainties in which higher load growth and/or demand programs underperform.

---

9 CPUC Rulemaking 10-05-006. Filings, orders, and other documents generated in that proceeding are available at [http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/LTPP2010/index_2010.htm](http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/LTPP2010/index_2010.htm), [http://docs.cpuc.ca.gov/Published/proceedings/R1005006_doc.htm](http://docs.cpuc.ca.gov/Published/proceedings/R1005006_doc.htm), and [http://www.cpuc.ca.gov/PUC/energy/Renewables/100824_workshop.htm](http://www.cpuc.ca.gov/PUC/energy/Renewables/100824_workshop.htm).


11 CPUC Scoping LTPP Scoping Memo Section 3.1.2.3.3 Need: In the sensitivity analysis for demand levels for both gigawatt hour (GWh) and MW, the investor owned utilities shall use high and low demand levels that reflect a 10% variance from the demand forecast value for each year. This value is reflective of any combination of future uncertainties (e.g., increased or decreased load growth or programmatic performance).
consistent with CPUC assumptions. While load forecast and other assumptions may vary over time, the CAISO must plan and account for probable scenarios in its backstop procurement of capacity to ensure reliable operations of the CAISO grid.

The CAISO’s analysis uses the generating resource retirement schedule from the scoping memorandum issued by the CPUC in the LTPP proceeding, in order to determine the extent to which there is the potential for resource flexibility shortages from 2011 to 2020.\textsuperscript{12} In particular, the analysis takes into account the MW quantity of generating capacity that is expected to retired during that time frame due to regulations implemented by the State Water Resources Control Board to curb the use of once-through cooling (OTC) in coastal power plant plants.\textsuperscript{13}

2. Results of the CAISO’s Analysis

The CAISO’s analysis indicates that the Sutter plant will be required for reliability purposes, specifically for its operational characteristics, in the late 2017 or early 2018 time frame.\textsuperscript{14} Based on information provided in the CPUC scoping memo, it is expected that plant retirements due to the OTC regulations will amount to 8,099 MW by the end of 2017. An additional 3,980 MW of retirement will occur between from the end of 2017 to 2020.\textsuperscript{15} The CAISO’s analysis also indicates that, under the high load scenario, the need for new capacity in addition to the expected resource additions will be 4,600 MW by 2020. To project the needs for the 2017/2018 period, 3980 MW of capacity was added to the original 2020 high load scenario to reflect the OTC resources that will not be retired by the end of 2017. Load was not adjusted as the forecast load in 2018 and 2020 remain almost the same due to an assumption that projected load growth will be offset by increased energy efficiency, demand response and demand combined heat and power resources.

Other than the adjustments made to OTC resources expected to be available in 2018 no other supply adjustments were made to the 2020 high load scenario. Renewable supply was adjusted to reflect 2018 capacity levels. No local resources have assumed to be added by 2018 to satisfy local capacity requirement because by 2018, with 3980MW of unretired OTC all reside in SCE area and therefore are assumed to satisfy local capacity requirements. Consistent with the CPUC planning assumptions for the 2020 simulations, the Sutter plant, 525 MW of installed capacity, was assumed


\textsuperscript{13} See Board memorandum at 2; CPUC scoping memo at 18-19 (setting forth study assumptions regarding OTC retirements). Information regarding the OTC regulations is available at [http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/](http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/).

\textsuperscript{14} Because the Sutter plant is a pseudo-tie generating resource and thus is located outside of the CAISO balancing authority area, the Sutter plant will not be needed for its locational characteristics.

\textsuperscript{15} The CAISO calculated the 3,980 MW amount based on the difference between the expected retirement or repowering of 8,099 MW of OTC plant by 2018 and 12,079 MW of OTC plant by 2020 (12,079 MW – 8,099 MW = 3980 MW). See Board memorandum at 2.
available in 2017/2018 case. With these assumptions, a production simulation was performed for July to assess whether operational requirements could be met. This simulation identified a 2535 MW deficiency in flexible capacity requirements resulting in an estimated 3,570MW of additional capacity needs. The removal of 525 MW capacity of capacity identified as needed by the study would result in reliability and operational issues on the CAISO grid and would reflect as additional needs to identified 3,570MW as early as the end of 2017. Thus, there will be a need for additional capacity as early as the end of 2017. The absence of Sutter would increase the needed flexible capacity for the 2017/2018 case. Table 1 compares the load, supply and flexibility needs for the 2018 and 2020 case.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAISO Demand Forecast</td>
<td>62,324</td>
<td>62,324</td>
<td>60,754</td>
<td>1,570</td>
<td>-</td>
</tr>
<tr>
<td>Incremental Energy Efficiency (EE)</td>
<td>5,688</td>
<td>5,688</td>
<td>4,167</td>
<td>1,521</td>
<td>-</td>
</tr>
<tr>
<td>Load Net EE</td>
<td>56,636</td>
<td>56,636</td>
<td>56,587</td>
<td>49</td>
<td>-</td>
</tr>
<tr>
<td>Demand Response (DR)</td>
<td>5,145</td>
<td>5,145</td>
<td>5,051</td>
<td>94</td>
<td>-</td>
</tr>
<tr>
<td>Demand Side CHP</td>
<td>819</td>
<td>819</td>
<td>655</td>
<td>164</td>
<td>-</td>
</tr>
<tr>
<td>Load net (EE, DR, CHP)</td>
<td>50,672</td>
<td>50,672</td>
<td>50,881</td>
<td>(209)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Supply (incremental/decremental)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTC</td>
<td>19,292</td>
<td>19,292</td>
<td>19,292</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OTC Retirement</td>
<td>12,079</td>
<td>6,099</td>
<td>8,099</td>
<td>3,980</td>
<td></td>
</tr>
<tr>
<td>OTC Net OTC Retirements</td>
<td>7,213</td>
<td>11,193</td>
<td>11,193</td>
<td>-</td>
<td>(3,980)</td>
</tr>
<tr>
<td>RPS Additions (Note 1)</td>
<td>6,049</td>
<td>4,118</td>
<td>4,118</td>
<td>-</td>
<td>1,931</td>
</tr>
<tr>
<td>Other Additions</td>
<td>2,797</td>
<td>2,797</td>
<td>2,797</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Supply Changes</td>
<td>16,059</td>
<td>18,108</td>
<td>18,108</td>
<td>-</td>
<td>(2,049)</td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HE15 Load Following Requirements</td>
<td>2,935</td>
<td>2,827</td>
<td>N/A</td>
<td>N/A</td>
<td>108</td>
</tr>
<tr>
<td>Upward A/S and load following shortages (Note 3)</td>
<td>3,265</td>
<td>2,535</td>
<td>N/A</td>
<td>N/A</td>
<td>731</td>
</tr>
<tr>
<td>Need (Note 2)</td>
<td>4,600</td>
<td>3,570</td>
<td>N/A</td>
<td>N/A</td>
<td>1,030</td>
</tr>
</tbody>
</table>

Note 1: Renewable production in 2020 scenario was adjusted to reflect expected 2018 RPS capacity
Note 2: The need of in the 2018 sensitivity was estimated based on the quantity of shortage observed and 2020 observed shortages and needs (2,535MW x 4,600MW/3,266MW = 3,570MW)
Note 3: 2020 shortages occur both load following and non-spin

Table 1: Comparison of 2020 and 2018 Case

The CAISO has determined that there is no additional new capacity with needed flexibility projected to come online in time to meet the identified need. In the production simulation, Sutter was observed to have a 69.91% capacity factor. Sutter was observed to provide energy, operating reserves and flexibility in the 2017/2018 production simulation. The retirement of existing capacity that embodies the required flexible characteristics would pose a significant risk to reliability.

---

16July energy production 280.89 GWh, spinning reserve = 8.86 GWh, non-spinning reserve = 0.36 GWh, Regulation = 5.20 GWh, load following Up = 30.84 GWh, load following down = 64.38 GWh.21
The Sutter plant is needed to meet these 2017/2018 operational needs identified by the CAISO. The plant provides a significant amount of net qualifying capacity – between 500 and 525 MW. That capacity will not be available to meet system needs in the CAISO balancing authority area if the plant is retired. Moreover, the Sutter plant has valuable flexible ramping capability that allows the CAISO to dispatch discrete portions of its capacity as needed to satisfy demand. This flexible capacity will also be lost if the Sutter plant is retired in 2012.

Based on the information provided to the CAISO in the November 22 Calpine request, the Sutter plant will be unavailable to meet the 2017/2018 operational needs discussed above if the plant does not receive a CPM designation for 2012. Calpine explained 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. Even if the Sutter plant could meet then-current best available control technology (BACT) requirements and otherwise satisfy all of the new air quality permitting requirements that have gone into effect since the plant was first permitted, the permitting process is often lengthy and subject to an extended and unpredictable appeals process. Further, Calpine stated that future requirements to meet then-current BACT could require substantial new investments, making the return of the Sutter plant to service uneconomic.

3. Planned CAISO Request for Tariff Waiver

Because the Sutter plant is needed to meet the 2017/2018 operational needs discussed above, the CAISO has determined that it is appropriate to file a request with FERC for waiver of the tariff requirement in Section 43.2.6 of the CAISO Tariff that the reliability need for a risk of retirement CPM designation must be shown for “the end of the calendar year following the current RA Compliance Year.” The CAISO plans to file the request for waiver no later than January 2012, after the CAISO receives stakeholder comments on this report.

4. Stakeholder Process on Longer-Term Capacity Procurement Mechanism

The Sutter plant request highlights the benefits of developing a capacity procurement mechanism than address longer-term system needs than the CAISO’s CPM provisions. The CAISO will be initiating a stakeholder process in January 2012 to develop such a longer-term mechanism. The CAISO anticipates that the stakeholder process will take approximately six months to complete. Any requisite filings would be made shortly after the completion of the stakeholder process. Given this schedule, that stakeholder process will not be finalized in time to address the proposed retirement of the Sutter plant during 2012. Because the Sutter plant is uniquely situated as the only
plant with its operating characteristics that has informed the CAISO of its intent to retire in 2012 absent a CPM designation, the CAISO intends to seek a waiver to allow a CPM designation of the Sutter plant in 2012. After 2012, the CAISO expects that continued operation of the Sutter plant and any other resources with similar issues will be assessed under the longer-term capacity procurement mechanism to be developed.

D. The CAISO Projects No New Generation that Will Meet the Identified Reliability Need

The CAISO has reviewed the best available information on projected generation additions to the system and has determined that, even with projected generation additions, there will be insufficient generation in operation by the start of 2017/2018 that have the needed operational characteristics to meet the identified reliability need. In light of Calpine’s statement that it definitely will retire the Sutter plant in 2012 if the plant does not receive a CPM designation (or comparable bilateral capacity compensation) it is reasonable for the CAISO to provide a CPM designation to the Sutter plan in 2012 that will allow the Sutter plant to remain in operation in 2017/2018.

E. Calpine Has Submitted the Required Information to the CAISO

The Calpine request, submitted on November 22, 2011, satisfies the CASO Tariff requirements that the resource owner must submit, at least 180 days prior to terminating the PGA for the resource or removing the resource from PGA Schedule 1, a request for a CPM designation and the affidavit of an executive officer of the company who has the legal authority to bind the company, with the supporting financial information and documentation discussed in the BPM for Reliability Requirements, that attests that it will be uneconomic for the resource to remain in service and that the decision to retire is definite unless CPM procurement occurs. The November 22 Calpine request included an affidavit from Alex Makler, Vice President – Strategic Origination and Development, West Region, of Calpine Corporation, stating that Calpine has conducted extensive analyses of whether it would be economic for the Sutter plant to remain in service in the 2012 RA Compliance Year, and the company has made the definite decision to retire Sutter in 2012, unless CPM procurement (or comparable bilateral capacity procurement) occurs.

The supporting financial information and documentation required under Section 7.3.5.2 of the BPM for Reliability Requirements includes the following:

- The expected PGA termination date for the resource. This date must be at least 180 days after submission of the request for a risk of retirement CPM designation. Calpine states that its expected PGA termination date will be at least 180 days after the November 22 Calpine request, but prior to the end of 2012.

- A description of power purchase agreements and capacity contracts currently in effect (if any), including the term length, volume, and pricing provisions. Calpine states that the Sutter plant has multiple contracts with multiple entities to provide
Resource Adequacy (but not energy), all of which expire no later than December 31, 2011. Calpine further states that the Sutter plant has no Resource Adequacy contracts for 2012 and no power purchase agreements to supply third-parties with energy in 2011, 2012, or later years.

- A description of the term, length, volume, and pricing provisions of existing fuel supply contracts. Calpine states that the Sutter plant has no project-specific fuel supply contracts with non-affiliated third parties. The November 22 Calpine request indicates that Calpine purchases gas and hedges its fuel requirements on a portfolio basis for its plants and that a Calpine affiliate supplies gas to Sutter and other Calpine owned or operated plants on an as-needed basis.

- Any analyses the resource owner performed, or had performed, to determine whether it is economic for the resource to remain in service during the current year including supporting documents. Calpine has provided economic analyses in a confidential attachment submitted in support of the November 22 Calpine request.

- Any documents confirming the formal decision of the Board of Directors, officers, or management of the resource owner, as appropriate, that the resource will be retired unless CPM procurement occurs. Calpine has provided appropriate certificates from its management that reflect the requisite formal decisions.

The CAISO has reviewed the November 22 Calpine request and has determined that the request includes each of these pieces of supporting financial information and documentation.

IV. Proposed Designation of the Sutter Plant as Capacity at Risk of Retirement

Following the receipt of FERC-approval of the requested tariff-waiver, the CAISO anticipates a CPM designation for any of the remaining months of 2012 as necessary. The CAISO has determined that a designation for this period should be sufficient to ensure that the Sutter plant will remain operational through 2012. As noted above, after 2012, the CAISO expects that continued operation of the Sutter plant will be assessed under the longer-term capacity procurement mechanism to be developed in the stakeholder process discussed above.

In accordance with Section 43.6.2 of the CAISO Tariff, the price for the proposed CPM designation for the Sutter plant will be as approved by the Federal Energy Regulatory Commission in Docket ER11-2256, currently pending the outcome of settlement negotiations.

Because the need for the Sutter plant is based on operational needs in all Transmission Access Charge (TAC) Areas rather than any locational needs, the costs of the proposed CPM designation for the Sutter plant will be allocated to all Scheduling
Coordinators for LSEs that serve Load in all CAISO TAC Areas, consistent with Section 43.8.7 of the CAISO Tariff.

In accordance with Section 43.2.6, the CAISO has posted the instant report on its website and will provide stakeholders seven days (i.e., until December 16, 2011) to submit any written comments on the report.

Under Section 43.2.6 of the CAISO Tariff, issuance of this report normally triggers the start of a period of no less than thirty (30) days for an LSE to procure Capacity from a Resource before the CAISO may issue the risk of retirement designation. Because the CAISO’s authority to issue a risk of retirement designation for the Sutter plant is dependent upon FERC approval of the planned waiver request defined above, the CAISO does not intend to commence this procurement period until after FERC acts on the waiver request. The CAISO will issue a market notice announcing the start of the time period set forth in Section 43.2.6 for an LSE to procure RA Capacity from the resource after FERC issues an order granting the CAISO’s request for a tariff waiver.