NRG Energy, Inc. Comments on
Proposed Risk of Retirement CPM Designation for Sutter Energy Center

<table>
<thead>
<tr>
<th>Submitted by</th>
<th>Company</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Theaker</td>
<td>NRG Energy, Inc. (“NRG”)</td>
<td>December 16, 2011</td>
</tr>
</tbody>
</table>

NRG offers the following comments on the “California ISO Report on Basis and Need for CPM Designation for Sutter Energy Center”.

The decision by Calpine to shutter the Sutter Energy Center (“Sutter”) in 2012 suggests that the CAISO is likely to experience a reliability crisis unless it takes immediate actions to revamp capacity market structures. However, the CAISO – and more generally, California - must establish market mechanisms for ensuring that it has the resources the CAISO needs to maintain reliability, and should not rely on ad hoc, out-of-market procurements. Doing so has the potential to encourage more such ad-hoc procurements, to the competitive market’s detriment.

The unspoken premise underlying the announced retirement of the Sutter facility is that the CAISO’s energy and ancillary service markets do not provide adequate recovery of going forward costs sufficient to sustain the operation of even a clean, modern and efficient combined cycle generating resource, such as the Sutter facility. However, the CAISO should avoid solutions that do nothing to address the underlying problems with the energy and capacity markets. In short - the CAISO must implement strong and immediate reforms to its energy and the state’s capacity markets. Entering into procurements that have the potential to morph into multi-year out-of-market capacity contracts is not a viable solution.

A. The CAISO Must Address its Market Shortfalls on a Non-Discriminatory and Comprehensive Basis.

For several years now, the CAISO has recognized that its markets provide little incremental revenue to generators, and are insufficient for many units to recover their fixed costs. The decision by a market participant to retire a relatively new combined cycle facility suggests that not only is the facility not recovering its fixed costs, but that it is failing to recover its going forward costs as well. Rather than engage in one-off capacity procurements, the CAISO needs to undertake a comprehensive re-examination of the structural problems that pervade the entire California “market.”

NRG urges the CAISO to think and move beyond one-off risk-of-retirement backstop designations, and even beyond the next generation of risk-of-retirement tariff provisions, to the new market structures necessary to support the new grid. NRG also urges the CAISO to work to mature its energy and ancillary service markets so they provide price signals appropriate for the operational characteristics needed and some meaningful measure of variable and fixed cost recovery.

Specific areas in which the CAISO should focus are:

1. Establishment of a long-term capacity procurement mechanism that ensures that sufficient capacity is available to meet its needs, both now, in the near future, and beyond the next RA year.

2. Reducing reliance on out of market procurement and ensure that the CAISO’s energy markets are sending appropriate price signals. The CAISO’s continued use of out-of-market mechanisms prevent proper price formation, which in turn reduces the revenues needed for cost recovery. For example, capacity committed at minimum load to meet local capacity requirements, such as the SCIT and minimum generation nomograms, is prohibited from setting price. Instead, these costs are buried in uplift charges, and they send no price signals regarding the operational needs of the system. Further, significant reliability nomograms, such as the one that governs operation of the Pacific DC Intertie, are not yet modelled in market operations, which further depress prices.

---

1 See, e.g., the CAISO 2010 Market Issues and Performance Annual Report at pages 52-55.
NRG Energy, Inc. Comments on Proposed Risk of Retirement CPM Designation for Sutter Energy Center

3. Implementing additional market products that reward flexible dispatch characteristics and provide the opportunity for facilities such as Sutter to recover their costs.

NRG is sympathetic to Sutter’s reluctance to wait for these market reforms. A market structure that provides generators adequate compensation has been a long time in coming, and certainly has not arrived yet. However, it is problematic for the CAISO to propose to provide this type of financial support to a single market participant without establishing a comprehensive approach to fixing the underlying revenue issues.

B. The CAISO Does Not Have the Necessary Authority to Enter into What May Amount To a Multi-Year Forward Capacity Contract.

While NRG has long advocated a multi-year forward centralized capacity market in California, the CPUC has decided not to implement such a program, and instead relies on yearly Resource Adequacy designations and new-build RFOs, when warranted. As a result, there is no mechanism for preserving existing generation to meet needs projected more than one year out. The CAISO is proposing to modify its risk-of-retirement provisions on an ad hoc basis for a single market participant to address this deficiency.

However, the CAISO’s proposal to provide a risk-of-retirement CPM designation represents a material deviation from the “narrowly tailored” provisions approved by the Federal Energy Regulatory Commission (“FERC”). In its explanation of why it needed a risk-of-retirement designation, the CAISO explained to FERC that:

…. the risk of retirement designation was carefully designed to address a narrow situation, where a resource at risk of retirement that is needed for reliability in the following resource adequacy compliance year (year 2) is not procured for the current or imminent compliance year (year 1), that none of the existing measures can address. In such a situation, CAISO explains, the resource does not meet the reliability must-run eligibility requirements, as the reliability must-run structure is designed for current year procurement only, and the resource has not been procured in the bilateral resource adequacy market.

Moreover, CAISO states, because the resource is not needed in the current year, it would not qualify under the existing ICPM authority. Finally, CAISO notes that a resource that qualifies for the risk of retirement designation will not be replaced with new generation through the most recent long-term planning process in time to meet the following year’s need, and is not deemed to be needed for reliability purposes by the CPUC under its General Order 167 operating standards.

While NRG supports the CAISO’s assessment of the need for flexible generation in the 2018 timeframe, it is clear that the Sutter facility is not needed for the following resource adequacy compliance year (2012) or even the compliance year after that.

In fact, FERC expressly rejected suggestions from NRG that “the ISO should provide for a minimum of a three-year forward CPM designation,” and agreed with the CAISO’s assertion “that the CPM was not designed as a multi-year forward capacity market.” While NRG is sympathetic to Sutter’s plight, the CAISO should not – and indeed, cannot – ignore the limitations in its existing authority and preserve a single facility without providing similar designations to all other similarly situated facilities in California.

The downside of relying on a bilateral RA capacity “market” is that it is opaque, dominated by a small number of large buyers, and conducted on short-term time horizons that neither match the realities of permitting, construction or capital addition timelines nor account for operational requirements beyond the next compliance year. However, FERC took this into consideration when it approved the CAISO’s CPM proposal, and expressly declined to allow multi-year commitments.

---

3 Protest of NRG Energy, Inc., filed on December 22, 2010 in ER11-2256-000.
4 See, e.g., CPM Order at P 42.
C. Timing of the Reliability Shortfall and the CAISO Response.

NRG understands that the CAISO intends for the Sutter risk-of-retirement designation to be a short-lived, temporary bridge until a more durable risk-of-retirement framework can be crafted through the stakeholder process the CAISO has pledged to begin in January 2012. However, based on the RMR, RCST, ICPM, CPM, and the CPUC's LTPP and capacity market experiences, NRG does not share the CAISO's optimism that either new risk-of-retirement provisions, or, more appropriately, a comprehensive new capacity market structure, can be developed in just a six-month process.

The identified reliability need is for flexible system capacity and is not expected to occur until 2018. Several other markets, including PJM and ISO New England, rely on three-year forward capacity procurements. Even given California's long permitting and construction lead times for new capacity, there are many means to meet the reliability challenges projected by the CAISO other than giving out non-competitive contracts. While NRG agrees that the consequences of aggressively moving forward to meet renewable portfolio standard goals while also failing to address the attendant operational challenges could be dire, NRG finds the proposed one-off action to be problematic.

Conclusion

The CAISO's proposal does not comport with the CAISO's current tariff provisions and would result in the CAISO choosing, on an ad hoc basis, which units will be provided out-of-market payments without any regard to competitive principles. Moreover, based on NRG’s experience in other markets, this type of capacity procurement has the potential to precipitate a domino chain of similar notices. The CAISO should focus its efforts on instituting new durable and transparent capacity market structures that support retaining existing flexible generation and encourage the development of new flexible generation.