PROTEST OF SOUTHERN CALIFORNIA EDISON COMPANY TO
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION’S
RESPONSE TO POST TECHNICAL CONFERENCE

Pursuant to Rule 211 of the Rules and Regulations of the Federal Energy Regulatory
Commission (“Commission” or “FERC”), Southern California Edison Company (“SCE”) hereby
respectfully submits its protest to the California Independent System Operator Corporation’s
(“CAISO”) November 15, 2007 Response to the Post-Technical Conference on Business Practice

I. COMMENTS AND PROTEST

A. Unresolved Issues In The Outage Management And CRR BPM

The overall issue of changes to the ISO Outage Coordination Procedures under MRTU is
a top issue for SCE’s Transmission and Distribution Business Unit. SCE is concerned that
there are key unresolved MRTU issues in the Outage Management and CRR Business Process
Manual (BPM) that would impact CAISO and SCE’s customer’s costs and rates.
On September 21, 2007 in response to comments to FERC that the CAISO’s proposal was unreasonable and unduly burdensome, SCE, PG&E, CPUC and the FERC accepted the CAISO revised proposal for outages:

The CAISO proposes to modify its transmission maintenance outage scheduling requirements to address commenter concerns and to make a compliance filing to revise MRTU Tariff section 9.3.6.3.2 to: (1) specify that advance scheduling is only required for those transmission outages that have a “significant” impact on CRR revenue adequacy and (2) modify the advance notice requirements from 45 days to 30 days in advance of the first day of the month when the outage is scheduled. For transmission outages that would not have a significant impact on CRR revenue adequacy, the current 72-hour advance notice would be maintained. The CAISO states that the criteria for determining what constitutes a “significant” impact on CRR revenue adequacy will be developed with stakeholders and incorporated into a Business Practice Manual. (Paragraph 1333, September 21, 2006 Order)

SCE has been participating in the CAISO BPM development efforts to determine what constitutes a “significant” impact on CRR revenue adequacy and in the development of the Outage Management BPM overall. The CAISO has had a two pronged approach involving two different sets of stakeholders. The CAISO sought advice from the CAISO Transmission Maintenance Coordination Committee (TMCC) and also had a stakeholder meeting on November 16 to roll out its proposal to a broader stakeholder group. SCE has participated in developing proposals and solutions throughout this process, including:

1. Participated as a member of the TMCC to propose criteria and requested updates to the Outage BPM.

2. SCE also participated on the broader stakeholder meetings to understand and respond to the CAISO’s draft proposed Exception List Criteria.

3. SCE submitted comments to the CAISO on November 16, 2007.

4. SCE has also initiated meetings with the ISO on Outage Management unresolved issues.
Overall the MRTU tariff will result in tremendous changes to SCE’s Transmission Business and the draft Outage Management BPM as proposed by the CAISO will have a significant negative impact on SCE’s Transmission operations. SCE is committed to working with the ISO to address the unresolved issues in a timely manner before MRTU start up. SCE requests that the FERC direct the CAISO to make a true good faith effort to work with stakeholders to develop revisions to the Outage Management BPM that more fully reflect reasonable stakeholder needs. Furthermore, SCE requests that FERC direct the CAISO to develop economic test criteria, consistent with the CAISO MRTU Tariff, to determine whether an outage will have a significant impact on CRR revenue adequacy. These issues are discussed below.

1. **SCE Requests the CAISO Continue to Update the Outage Management BPM to reflect the Consensus of the TMCC**

Section 4.2.1.1 of the BPM\(^1\) fleshes out the term “Significant Facilities” to include only Transmission facilities of the CAISO Controlled Grid:

1. rated above 200 kV (except for CAISO-approved exceptions), or
2. that are part of any defined flow limit as described in a CAISO operating procedure (except for CAISO-approved exceptions) or
3. that were out of service in the last three years and for which the CAISO determined a special flow limit was needed for real-time

\(^1\) Revised November 15, 2007
SCE appreciates that this list reflects a portion of the consensus the CAISO obtained from the TMCC. For example, the CAISO has included an exemption for Facilities Rated under 200 kV. By way of background, from a reliability perspective without consideration of market economics, increasing the outage submittal requirement to the CAISO from 3 days to 30 days does not improve the outage coordination process but in fact will increase its complexity. In addition to the technical analysis performed at the initial 30 day submittal point by Grid Control and the CAISO as well, the technical analysis will need to be performed again a few days prior to the actual requested outage date because the status of the electrical grid is so dynamic and will be different 30 days later. Conditions initially assumed at the 30 day submittal time to determine grid reliability and performance measures will very likely change in 30 days such as status of generation facilities, transmission facilities, weather, load, etc.

SCE estimates that the 30 day rule will at least double the technical analysis time for any one outage to ensure grid viability on the date of the facility outage, as such reducing the facilities subject to the "Significant Facilities" definition and exempting facilities rated under 200 kV is recommended; SCE would support that this language be added to the tariff.

SCE also supports that one of the CAISO’s objectives includes, “The CAISO emphasizes that the 30-day rule is not intended to prevent needed maintenance on significant facilities in circumstances where the 30-day rule cannot be followed without affecting the grid reliability”(BPM, 4.2.1.1). The CAISO outlined the follow exceptions to the 30-day rule will be used to approve outages without classifying them as forced:

1. Outages that are less than 24 hours in duration beginning and ending entirely within a single calendar day.
2. Outages previously approved by CAISO that are moved within the same calendar month either by the CAISO or by request of the PTO.

3. CAISO approved allowable transmission maintenance activities during restricted maintenance operations as covered in CAISO operating procedure E-509A.

4. The most current list of specific Significant Transmission Equipment will be covered in CAISO operating procedure T-113.

However, other key exceptions/recommendations from the TMCC white paper were not incorporated. Some examples of key omissions include Off Peak Outages and Outages during a 24 hour period rather than being limited to a calendar day.

The TMCC, which includes CAISO personnel, worked on a consensus white paper which reflects other proposed changes to the Outage Management BPM. While the draft BPM picks up a couple of recommendations; however, other key critical consensus items have not been incorporated. SCE urges FERC to direct the CAISO to include the other recommendations from the TMCC stakeholder consensus white paper in the BPM because it is consistent with good business practices and will help ensure that SCE’s and other stakeholder maintenance efforts are readily scheduled and coordinated and that a reasonable level of scheduling flexibility is retained.
2. **SCE Opposes the CAISO’s Proposed Criteria For The Exception List For The 30-Day Rule**

The CAISO’s draft proposal dated November 8, 2007, titled, *Exception List Criteria for the 30 Day Rule for Scheduled Outage Submission* was discussed on November 16, 2007 during a one hour conference call. ²

The CAISO is proposing that a transmission facility may be on the exception list for the 30 day rule if / when the facility is taken out of service and there are no changes to the flow patterns on the grid. Specifically, the ISO is proposing that the PTO must show that with the outage modeled into the base full network model (FNM), the shift factor on each constraint for each possible source and sink combination does not change as compared to the same shift factor in the base FNM. Essentially, the CAISO is demanding perfection based on the Revenue Adequacy Theorem, which is a stark contrast to the term “significant” as described in the tariff. The CAISO proposed standard for exemptions is unreasonable and wholly inconsistent with the tariff.

The tariff language governing the Outage Management BPM, which is based on the FERC September 21, 2006, is provided below:

9.3.6.8. For Outages that may have a significant effect upon CRR revenue adequacy, an Operator may, upon thirty (30) days notice in advance of the first day of the month the Outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4A, 9.3.6.7 and

² See CAISO website at http://www.caiso.com/1c91/1c9167085c370.pdf.
9.3.6.8. (Original Sheet130A, Conformed MRTU Tariff based on FERC Filings at http://www.caiso.com/1c40/1c4085f440300.doc) (Bold added for emphasis.)

The CAISO tariff language above specifies that outages that may have a significant effect upon CRR revenue adequacy be subject to the “30 day” outage scheduling rule. This tariff language clearly states that the criteria be based on an economic test, specifically, that outages that may have a significant effect upon CRR revenue adequacy be the test.

However, the CAISO is now heading down a different path in that they are proposing a very rigid criterion that looks at a significant facility test which is not the same thing as a significant effect upon CRR revenue adequacy. The ISO is misguided in developing a test to assess whether an outage will result in a physical flow change, regardless of whether or not the outage has a significant effect upon CRR revenue adequacy.

Instead, the exception list should consider the economic impact of the outage, not the strict requirements of the Revenue Adequacy Theorem. Any outage that is not “significant” should be placed on the exemption list.

Moreover, the CAISO must have the ability to determine if an outage is “significant” and develop the exemption list prior to the start of MRTU. While SCE agrees that the CAISO should eventually develop robust tools and consider actual market data, it is not necessary to have this level of rigor at the start of the MRTU market. That is, prior to the start of the market the CAISO will have information on expected congestion costs based on their CRR auctions. The CAISO could use simple tools to see an approximate impact of an outage and compare this to total expected CRR payments. If based on this initial analysis the outage is below some minimal amount of the total expected CRR payments, the line/outage should be placed on the exception
Within the next few weeks, SCE will provide a proposal on how to do this prior to Day-1 of MRTU.

SCE notes that the CAISO tariff already has provisions in the event that the CAISO under or over collects revenues related to CRR payments. Moreover, no ISO or RTO is able to perfectly model their transmission system to completely eliminate the possibility of a shortfall. Simply requiring SCE to schedule outages in advance will not fully address concerns over revenue adequacy, but it does place an unreasonable amount of costs on our customers without any demonstrated justification there are comparable benefits.

3. **An Alternative Approach Based On An Economic Test as Required By the Tariff**

SCE proposes that the CAISO incorporate economic approach which utilizes the CRR auctions. We propose the following outline could be the basis for an economic test:

- Utilize the annual CRR results and the auction prices which will be known by the CAISO
- Develop the total market value of all CRRs
- Determine the value of any line or line segment
- If a line is a very small fraction of the total (to be determined), that line would be placed on the exceptions list

Once the auction results are known, which will be soon, this analysis would be performed.

As put forth in SCE’s November 16, 2007 comments to the CAISO, to comply with the tariff, ensure appropriate flexibility in maintenance outage procedures, and to ensure that transmission maintenance costs be minimized, SCE requests that FERC direct the ISO to abandon its current proposal and work with stakeholders to develop an economic test to comply...
with the tariff. SCE is committed to working with the CAISO to develop an economic test as outlined above.

This approach is just and reasonable and allow the PTOs and the CAISO to implement an outage management subject to the 30 day rule that would indeed be based on whether or not the transmission facility outage had a significant effect on CRR revenue adequacy. The shift factor approach is rigid and is not just and reasonable.

4. **SCE Requests Clarification That The CAISO Will Perform The “Exception List” Analysis**

At an October 18, 2007 meeting, the CAISO communicated to the TMCC that it would develop a list of the transmission facilities that satisfy the exemption criteria. However, in a recent memo the CAISO proposed that the PTOs would have to perform this analysis (please see November 8 CAISO whitepaper, page 2). As described above, SCE believes the use of an economic test is more appropriate, but in any event, the CAISO and not the PTO should perform the analysis.

The CAISO is the entity that should be performing analysis in order to develop an “Exception List”. The CAISO has the data and modeling tools for applying the adopted criteria developing the exemption list. The PTOs are not set up to perform this analysis and it would be burdensome and inappropriate for the PTOs to do so. The CAISO has all of the information to perform the analysis. Additionally, assuming the analysis would involve market sensitive data, it is not appropriate for SCE to perform the analysis—this function should be properly preformed by the CAISO. SCE requests that FERC direct the CAISO to clarify that the CAISO will

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1 The CAISO circulated a draft document dated August 2007.
perform any necessary analysis required by the MRTU and work in good faith with the stakeholders to explain the proposed list and resolve timely any disputes that may arise.

SCE recognizes the challenges ahead in finalizing the BPMs and the issues are challenging in that they include stakeholder efforts both from the operations and maintenance area and market design stakeholder group. To ensure that the outstanding issues are resolved in a timely fashion SCE requests that FERC:

1. Direct the CAISO to incorporate the TMCC consensus white paper proposal in the Outage BPM;
2. Direct the ISO to work with stakeholders to develop an economic test as described in Section IV above to be consistent with the ISO MRTU Tariff; and
3. Direct the CAISO to set a schedule for 1 and 2 so stakeholders are assured there is a meaningful process to resolve these outstanding issues.

B. **CAISO Updates to the BPM Configuration Guides**

In the November 13, 2007 CAISO updates to the BPM Configuration Guides, there were a total of 38 configuration guides that were updated. Of this total, two charge codes were deemed obsolete while 27 charge codes (CC) and 9 pre-calculation (PC) guides were updated. Most of the updates affected the Day Ahead (DA) Energy Congestion-Losses (8) and HASP-RT Settlement (16) Charge Groups. The updates ranged from new business rules to business name changes to calculation logic. Although these changes are reflective of the on-going effort to clarify and further define the technical aspects of the Charge Codes, they also present adverse implementation issues.
SCE recommends use of the consistent and standard practice evidenced in the BPM Configuration Guide for Charge Code 6788 of using a revision history log. This provides the reader an instant overview of the material changes.

Also, prior to communicating and distributing updated documents, the CAISO should ensure that the configuration guides are synchronized with SaMC specifications.

There is continued inconsistency between the BPM business names found in the Configuration Guide formulas and the Bill Determinant names in the SaMC (Settlements and Market Clearing) system equations for many of the settlement charge codes. The BPM Configuration Guides provide documentation on settlement calculation formulas using a set of variables called BPM business names. The CAISO SaMC Settlements System uses its own set of names in the settlement equations called “Bill Determinants.” The CAISO has published a cross-reference matrix to assist Market Participants to match the SaMC bill determinant names to their corresponding BPM business names.

SCE has found numerous instances where BPM business names do not exist in the cross-reference matrix, or the Bill Determinant names reference business names that do not exist in the BPM Configuration Guide. This presents challenges for Market Participants to confirm the final calculation logic for those settlement charge codes. (A rough estimate of the "Clean" calculation formulas is about 70%) Some examples of this are:

1. **RTM Net Amount Pre-Calc**
   The pre-calc formula still references a tolerance band flag (UIETolBandEligibilityFlag) which has become obsolete after the September 21, 2006 FERC Order. The calculation of the 15-min real-time AS costs and revenues for bid cost recovery are inconsistent. On the cost side, the 10-min AS costs is derived by taking 2/3 of the 15-min AS awarded qty times the AS bid price while the AS revenue is calculated by summing up four 15-min AS award revenues then divide it by 6. This formula will not result in comparable comparisons of AS costs versus revenues for each 10-min interval of the hour if the 15-min AS awards exist for only part of the hour.
2. IFM Net Amount Pre-calculation
   IFMEnergyBidCostAmount is not found in the SaMC Bill Determinant Matrix. A similar bill determinant is listed in the Matrix, but its corresponding business name does not exist in the BPM Configuration Guide (BAResourceSettlementIntervalDAEnergyBidCostAmount). Need to confirm the bill determinant used in the equation follow the same calculation logic as shown in the BPM.

3. CC 6798 CRR Auction Transaction Settlement
   This charge does not publish the CRR auction transaction quantity or the unit price, only the transaction settlement amount.
   Both quantity and unit price are important in ensuring the accuracy of this charge and they should be published on the settlement statement.

4. CC 4511 Forward Scheduling GMC Charge
   For each hourly IFM schedule, the formula indicates that it is counting twelve 5-min DA Energy quantities. Please clarify if each hourly IFM schedule is charged once or 12 times of the GMC scheduling fee.

5. CC 6788 Real Time Market Congestion Credit Settlement
   The CAISO Formula has added new output variables. These variables cannot be mapped to corresponding bill determinants in SaMC.

6. CC 6486 Real Time Excess Cost for Instructed Energy Allocation
   The formula for Net Negative UIE has an error; it sums up all NEGATIVE UIE quantity in each 10-min interval, as opposed to netting all UIE quantity (positive and negative) and then charge the scheduling coordinator only when the result is negative. This has significant impact on the sharing of this market uplift charge.

C. Shadow Prices On Day 1 of MRTU
   At the technical conference, WPTF requested the CAISO to post shadow prices for all constraints, not just interties. The CAISO indicated that it believed its systems could only support posting intertie shadow prices Day 1, even though it would be calculating shadow prices for all constraints. In their BPM-Tariff filing, the CAISO now states that it will have the ability to post all shadow prices. However, the CAISO doesn’t specifically say if it can post all shadow prices Day 1 of MRTU. The CAISO should clarify by when it will be able to post all intertie prices.
D. **Voltage Support**

It is inappropriate to revise section 11.10.7 to charge voltage support costs to PTOs. The CAISO is proposing deleting all of the language in section 11.10.7 that currently assesses such costs to Scheduling Coordinators (as they should be and always have been), and replacing it with one sentence allocating these costs to PTOs. The CAISO states that this proposed change was a response to a WPTF comment:

“As to WPTF’s assertion that Section 2.1 of Configuration Guide CC 302 (regarding Voltage Support) conflicts with Section 11.10.7 of the MRTU Tariff, the CAISO agrees with WPTF. Configuration Guide CC 302 accurately reflects that the allocation of costs related to Voltage Support has been programmed in the CAISO's MRTU systems to be charged to the Participating TO in whose PTO Service Territory the resource providing the Voltage Support is located. To provide consistency with this Configuration Guide, the CAISO proposes to revise both Section 11.10.7 of the MRTU Tariff and the related Configuration Guides CC 1302, 1303, and 3303 to reflect this change.”

A configuration guide should not provide the rationale for changing the Tariff. Rather, the configuration guide should be written to be consistent with the Tariff. Further, by CAISO’s own admission, this filing is not intended to change policy: "The Commission should also preclude parties from rehashing, under the guise of comments on the BPMs, issues that the Commission has previously resolved." The change being proposed by the CAISO to accommodate WPTF represents a change to a previously resolved matter. These voltage support costs have always been charged to Scheduling Coordinators in accordance to the method that was stated in section 11.10.7 of the tariff (but which is now proposed to be deleted and replaced by that one sentence billing the charges to PTOs).

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5 CAISO’s Response, p. 7.
II. CONCLUSION

SCE appreciates the opportunity to provide its input to FERC on this matter and looks forward to working with the CAISO on these unresolved issues to ensure we arrive at a reasonable outcome that does not create excessive and unnecessary costs to our customers.

Respectfully submitted,

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Dated: November 30, 2007
CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing PROTEST OF SOUTHERN CALIFORNIA EDISON COMPANY TO THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION'S RESPONSE TO POST TECHNICAL CONFERENCE upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Rosemead, California, this 30th day of November, 2007.

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