Comments of Pacific Gas and Electric Company
On the 'Potential Changes to CRR Rules' and
'Outstanding CRR Process Issues'

PG&E provides these comments in response to a request by the CAISO for market participant input and direction on the following CAISO whitepapers - Updated CRR Issues Paper (3/19/07), CRR Credit Policy Initial Draft (3/20/07) and Methodology for Determining CRRs for Merchant Transmission Upgrades (3/23/07 and 4/6/07) and requests for input from the CAISO stakeholder meeting of April 3, 2007.

As background, the basic process for the release of annual and monthly CRRs has been established and provisionally approved by FERC (Order of 9/21/06). In February 2007, the CAISO posted a CRR Issues Paper highlighting a number of open design issues that needed to be resolved prior to start of the CRR production process (July 2007); PG&E provided comments and recommendations to the CAISO on these open issues on March 9, 2007.

Subsequently, the CAISO issued an Updated CRR Issues Paper (3/19/07) that expands upon the earlier paper with focus on those issues that require earliest resolution and that these will be included in the CAISO's May 2, 2007 FERC filing. In addition, the CRR Issues Paper was supplemented by two break-out whitepapers on that address the basic methodologies for CRR Credit Policies and CRRs for Merchant Transmission (also for filing on May 2, 2007).

To support this upcoming filing, the CASIO has specifically requested stakeholder comments and guidance on the following issues:

<u>Changes to CRR Allocation Rules</u>

1. Renewals of Expiring LT-CRRs
2. Reserving InterTie and Gird Capacity for Auctions
3. Trading Hubs as Sources for Allocated CRRs
4. Source Verification Rules

<u>Outstanding CRR Process Issues</u>

5. Methodologies for CRR Credit Policies
6. Methodologies for CRR for Merchant Transmission
7. System Modeling
8. Additional PG&E Comments

PG&E appreciates the on-going efforts and consideration of the CAISO staff in refining the CRR process to best accommodate the needs of stakeholders. Outlined below are PG&E's recommendations in each of these areas.

1. **Renewals of LT-CRRs**

   The latest CRR Issues Paper highlights a problem with the proposed LT-CRR renewal process that has the potential to significantly limit the ability of LSEs to renew expiring ten-year LT-CRRs.

   As PG&E continues to advocate with both the CAISO and FERC*, it is critically important that LT-CRR term lengths (or guaranteed renewals) are sufficient to support the long term supply arrangements required by PG&E and other LSEs*. LT-CRR term lengths directly impact the ability of market participants to develop new resources; any uncertainties with respect to future transmission congestion costs can result in either unacceptable risks (that preclude project development) or can result in unnecessary and costly risk premiums. In order to develop new renewable and non-renewable facilities, both developers and LSEs need some certainty as to the transmission costs and risks; certainty for the life of the facility, not just ten years.

   In late 2006, the CAISO took a step in the right direction and supplemented the proposed ten-year LT-CRRs with a renewal process, at the time the CAISO indicated that "although this process would not guarantee LT-CRR renewal, LSEs would be *highly likely* to be able to maintain the quality of LT-CRR coverage beyond ten-years". While the expectation of a 'highly likely' renewal did not provide the certainty that PG&E requires, based on the problems outlined in the Updated CRR Issues paper, it now appears that renewals may not be highly likely at all, and in fact may be quite uncertain. There may be other similar unforeseen issues that will further limit a LSEs ability to renew LT-CRRs.

   At the April 3 Stakeholder meeting the CAISO proposed a "Renewal of Expiring LT-CRRs and ETC/CVR". The concept would be that LSE that had a LT-CRR would be allowed to nominate its expiring LT-CRRs in the 2016 Tier LT covering years 2018-2026. Thus LT-CRR nominations would be allowable even though the CRRs did not go through the 2016 PNT first. And it would provide a 9-year renewable not 10-year.

   PG&E continues to support the CAISO proposal for ten-year LT-CRRs; however PG&E strongly recommends that LSEs should have an *automatic right to renew* their LT-CRRs. Reliance on an increasingly uncertain renewal process is a serious design limitation; in contrast, providing the right to automatically renew expiring LT-CRRs will provide the suppliers and LSEs with the certainty necessary to develop new resources.

   Short of this automatic renewal, PG&E would support the proposed "fix" related to the renewal of expiring LT-CRRs and ETC/CVR with one additional modification. The fix removes a potential renewal flaw and but provides only for a 9-year renewal rather than a 10-year renewal. The 10 year renewal becomes 9 years, but it could be an 11 year renewal that becomes 10 years. There appears to be no reason why the renewal period should not cover 10-years consistent with the original LT-CRR term lengths.

2. **Reserving InterTie and Grid Capacity for Auctions**
As detailed in recent comments to the CAISO and FERC on LT-CRRs, PG&E continues to believe that a modest percentage of *all* available transmission capacity (not limited to only InterTies) should be dedicated to LT-CRR, annual and monthly CRR auctions. PG&E is very pleased to see this alternative given consideration in the April 3, 2007 CASIO presentation materials.

While PG&E strongly supports this general approach, a number of CAISO implementation details and process are significant. It is important that dedicated capacity should be made available not only for the annual and monthly CRR auctions, but that some auction process and capacity should be extended to LT-CRRs; specifically, the CAISO alternative should be modified to provide for LT-CRR auctions along with the allowance for some dedicated capacity. The specific percentages of grid capacity set-aside for annual and monthly auctions as proposed by the CAISO (10% each) would require additional consideration in-light of the change to provide the modest capacity for LT-CRR auctions. Further, the CAISO capacity set-aside proposal comes fairly late in the CRR design process; with the aggressive schedule for a FERC filing and commencement of the CRR nomination and allocation process, the CAISO should assure that sufficient time exists to adequately finalize the CRR allocation and auction process necessary to support a July 2007 CRR implementation date. With these issues addressed, PG&E would be supportive and optimistic about implementing modifications to the 2008 CRR and LT-CRR process; however changes to the 2009 process may be more realistic as this point in the development process.

As part of the set-aside alternative, the CAISO has proposed to reduce the total available grid capacity in the annual CRR process from 75% to 70% in order to preserve additional capacity for the monthly process. While PG&E appreciates the CAISO's concerns and motivations, this aspect of the proposal is not supported. A key objective of the CRR hedging process is to minimize congestion cost uncertainty and risk; annual CRRs provide greater certainty for most types of supply arrangements and are preferable over monthly CRRs, as such PG&E does not support the proposal to reduce annual CRRs in order to provide more monthly CRRs.

3. **Trading Hubs / PNodes as Sources for Allocated CRRs**
The CAISO has indicated that a significant amount of nominations in Tiers 2 and 3 of the CRR Dry Run did not clear the Simultaneous Feasibility Test (SFT) due to features of the CAISO model which limit awards in circumstances where

binding constraints are identified, irrespective of the quantity and significance of the constraints, and due to the inter-play of PNode and Hub nominations. These limitations and the underlying problems subsequently caused the CAISO to include tariff provisions that will disallow Hub nominations for LT-CRRs.

As possible solutions, the Updated CRR Issues Paper presents three options that represent refinements to the four alternatives outlined in the earlier CRR Issues Paper - 1) limit the verified source nominations Tier 1, 2) issue a feasible basket of individual CRRs in-lieu of Trading Hub CRRs and 3) create Alternative-Hubs that closely correspond to EZGen Hubs.

PG&E continues to recommend that consideration should be given to the 'basket of individual CRRs' approach (option 2); this alternative represents the best available solution at this time. A basket of individual CRRs would be utilized in-lieu of Hub CRRs (i.e. no Hub CRRs would be issued, feasible or not). The 'basket' approach allows CRR Hub nominations to compete on an equal-footing with CRR PNode nominations and resolves the concerns of LT-CRR nominations from Hubs. While the 'basket' of awarded CRRs may depart somewhat from providing a perfect hedge for Hub transactions, any departure should be relatively small.

PG&E opposes the alternative to lower the source nomination limits in Tier 1 (option 1). This approach does not solve the underlying problems, may unfairly favor Hub nominations over PNode nominations and, undermines a key design premise behind the use of sequential Tiers. Placing source nomination limits in Tier 1 fails to address the twin issues of superior Hub effectiveness and Hub dependence on the availability of every constituent PNode; at best, the problems of impacted Hub and PNode nominations will likely just reappear in Tier 2. This alternative, in turn, would require further rules and restrictions to address LT-CRRs.

As a result of the experiences of the Dry Run, LSEs may likely nominate more Hubs in the earliest Tiers, the source nomination limit option proposed by the CAISO would do nothing to moderate the superior priority inherently associated with Hubs and as a result, would likely set the stage for preferential CRR awards to those LSEs favoring Hubs over those favoring PNodes.

Finally, a decrease of source nomination limits reduces the benefit a Tiered approach to CRR allocation. As the CAISO stated to FERC[1] 'By running separate, sequential SFTs for each tier, the tier structure enables LSEs to maximize their chances of receiving the CRRs they value most.' Option 1 would force LSEs to spread the most desired source nominations across Tiers and as a result, the ability for LSEs to nominate their 'priority' sources in Tier 1

[1] CAISO MRTU Filing Cover Letter 2/9/06 page 29

(the 'Priority Nomination Tier') as originally envisioned would be largely compromised.

The development of Alt-Hubs (option 3) that co-exist with and closely correspond to EZGen Hubs may represent a possible solution, however PG&E is concerned that insufficient information is known about this approach to adequately comment and that it is uncertain if these added details could be developed and vetted in time to support the 5/2/07 FERC filing. Further, while this proposal may mitigate the limitations on EZGen Hub or PNode nominations, it does not address the superior Hub priorities or LT-CRR concerns that could be accommodated with the 'basket of individual CRRs' approach (alternative 2). For a reasonable evaluation, the CAISO would need to provide details on if and how such Alt-Hubs could be adequately defined to adequately track EZ Gen Hubs, how these Alt-Hubs would be modeled and how these might impact the CRR nomination process and CRR revenue adequacy.

4. CRR Source Verification Rules

In finalizing the rules regarding which CRR sources qualify for LSE nominations in Tiers 1 and 2, the CAISO has proposed to expand the current rules to include not only those supply arrangements with deliveries during 2006, but also supply arrangements that were *signed* during or prior to 2006 that reflect future years deliveries. PG&E supports this expanded approach; future supply arrangements established by 12/31/06 should be eligible for use as verified resources. While supporting the basic (expanded) approach, PG&E does not support Variants 1-3, however recommends consideration of the following 'tie-breaker' enhancement.

The expansion of eligible verified resources, while not increasing the total CRR nominations limits, does create the possibility of multiple counting for some supply sources. In such cases, the CAISO has proposed to assign pro rata shares of the generator to each of the LSEs to use as verified sources. A simple pro rata approach is reasonable, however it may create inequities in a limited set of circumstances.

A key objective of CRRs is to provide LSEs the ability to hedge congestion exposure under MRTU; CRRs should reflect expected transactions and not necessarily usage during the 2006 historic period. The basic pro rata approach could be enhanced with the addition of a tie-breaker rule; specifically in the rare event that two LSEs nominate the same verified source, preference should be afforded those LSEs with supply arrangements with planned deliveries under MRTU. For example, if LSE A had a contract for deliveries during 2006 and LSE B signed a contract with the same resource during 2006 but with deliveries during 2008, the objective of providing adequate congestion hedging may be best achieved by allowing LSE B to use this supply arrangement in the source verified tiers rather than LSE A.

5. CRR Credit Policies

Adequate credit requirements must be a key element of any CRR design; defaults must not be allowed to create financial burdens on non-defaulting LSEs. The CAISO has not provided the design details of their credit requirements; however an overview of the methodology has been presented in the CRR Credit Policy Initial Draft (3/20/07) and then discussed at the stakeholder meeting of April. In general, the CAISO has proposed to require sufficient credit to cover both the 'expected value' of the CRR as well as an additional 'credit reserve' to account for the possibilities that the 'expected values' can be volatile and difficult to accurately predict. The basic methodology outlined by the CAISO is supported by PG&E.

With respect to credit requirements for LT-CRRs, the same concern outlined above must be met; that is, a default by one LSE should not result in added cost allocations to others. PG&E does not support the one year only credit requirement for LT-CRRs (option 3) since this would clearly result in insufficient credit coverage.

However, PG&E, and other stakeholders, expressed concern about possible "gaming" opportunities at the stakeholder meeting of April 3. The staff at the meeting indicated they would consider the concerns. PG&E encourages the CAISO to consider gaming opportunities, and include in the credit requirements mechanisms to avoid gaming.

6. CRR for Merchant Transmission

In conjunction with the development of the design process for LT-CRRs, the CAISO recently issued a paper on "Methodology for Determining CRRs for Merchant Transmission Upgrades" (3/23/07 and 4/06/07). Similar to the CRR Credit Policies paper, only the basic proposed methodologies were initially provided. The CAISO proposal of April 6, 2007 provided additional detail and PG&E appreciates the CAISO efforts in this regard.

The methodologies, process and ultimate tariffs to allow for the allocation of LT-CRRs for Merchant Transmission (MT) upgrades must be carefully developed to assure equitable treatment for MT providers, for Transmission Access Charge (TAC) paying grid users and, for LSEs that impacted by MT CRR awards. The playing field must be level such that the allocation rules are not unduly biased in favor of either TAC or CRR cost recovery, or unduly biased in favor either MTs or LSEs in the allocation of LT-CRRs.

The CAISO should clarify that the opportunity to obtain CRRs for MT upgrades is applicable for new transmission projects only, those that have not been energized. PG&E supports the CAISO proposal to limit eligibility for Merchant

CRRs to entities which do not recover transmission investment costs through the CAISO's transmission access charges or other regulated return mechanisms.

PG&E is generally supportive of a two step process for assessing the appropriate quantity of Merchant CRRs to be allocated subject to certain modifications described below. In the first step, the CAISO assesses the capability of the grid, without the proposed merchant upgrade, to serve existing transmission encumbrances, including previously released short-term and long term CRRs. In step two, the CAISO then adds the proposed merchant upgrade in order to assess in quantity of incremental CRRs available to the Merchant Sponsor.

The CAISO proposal to allocate a quantity and source and sink pattern of Merchant CRRs commensurate with the net incremental transfer capability appears to be reasonable. Step 1A is an important aspect of the proposal because it ensures that any negative congestion impacts are assessed and netted against the CRRs allocated to the merchant transmission developer. However, PG&E believes the CAISO proposal of April 6, 2007 may be flawed in that it would have the merchant sponsor hold a set of counter flow CRRs for only "the remainder of the current CRR year." This aspect of the CAISO proposal is based on a presumption that the CAISO's grid planning process will ensure the merchant transmission upgrade does not degrade transfer capability. Looking to the grid planning process as a means of mitigating any adverse consequences of a merchant transmission project is inappropriate if would it cause PTOs to invest in transmission which, but for the merchant transmission project, would not be needed. Any negative consequences of a merchant transmission project on other parts of the grid, including a degradation of CRR awards, must be factored into the initial allocation of Merchant CRRs for the expected life of the project. At a minimum, the Merchant Sponsor should be responsible to hold a set of counter-flow obligations for the period of time necessary to correct for any detrimental impacts of the project through the transmission planning process. This could take several years and would depend on the nature and extent of any transmission upgrades required.

7. **System Modeling**
   PG&E requests that the CAISO provide confirmation and additional details on how the CRR SFT will utilize and accurately reflect the nomograms and operating procedures that the CAISO operators will use in the MRTU day ahead market and day ahead RUC. If these are not accurately reflected in the SFT, it may result in revenue inadequacy and unnecessary reductions in allocated CRRs.

8. **Additional PG&E Comments**
   <u>Use of Common Forecast for Monthly RA and Monthly CRRs</u>

PG&E supports the development of protocols that might align and simplify the current LSE filings of load forecast for monthly RA demonstration and monthly CRR nomination purposes. The CAISO and stakeholders should confirm this approach in a future stakeholder process that includes both interested RA and CRR parties.

Modeling of Transmission Outages

The CAISO has begun to develop with the Transmission Maintenance Coordination Committee (TMCC) the specific procedures on how outages should be modeled and incorporated into the annual and monthly CRR process. PG&E requests that the CAISO include a stakeholder process in the development and finalization of these procedures; of particular concern for PG&E will be the treatment of un-planned outages in the monthly CRR modeling. Another concern is that outages in the current year do not adversely impact long term CRRs. The CAISO has suggested that a statistical analysis would be used to derate (all) transmission capacity; however it is important that actual monthly network derates for 'unplanned outages' should not otherwise be used to address unrelated problems or as a catch-all for the CAISO to assure CRR revenue adequacy. Additional information and transparency is needed here by stakeholders.

Minimum Contract Length for Verification

PG&E supports retaining the provisional CRR Dry Run rules that allow verification and pro-rata treatment of contracts as short as 1 day. However if the CAISO believes that this process creates an excessive burden, then PG&E would be willing to consider alternatives such as one week or one month limitations.

As the CAISO is aware, these issues must be resolved very quickly in order to support a July 2007 CRR production start. PG&E looks forward to working with the CAISO and other stakeholders in completing the required rule changes and in developing the additional design details for the CRR Credit Requirements and MT Upgrades. For follow-up or questions, please contact Brian Hitson (415-973-7720) or Glenn Goldbeck (415-973-3235).