Comments of Pacific Gas and Electric Company On the CAISO Congestion Revenue Rights (CRR) Issues Paper

PG&E provides these comments and recommendations in response to the CAISO's February 27, 2007 request for market participant input on the 'CRR Issues Paper' dated February 21, 2007.

As background, the basic process for the release of annual and monthly CRRs have been established and provisionally approved by FERC (9/21/06). However, based on some concerns revealed through the CRR Dry Run and issues linked to long-term CRRs, the CAISO has identified a number of design revisions or rule changes that are intended to improve the CRR process. The CRR Issues Paper highlights these potential changes and in addition, identifies issues that will require further development, and also provides a brief summary of results for the CRR Dry Run. Outlined below are PG&E's comments in each of these areas, with emphasis on potential design and rule changes.

1. Potential CRR Rule Changes

a. Source Nominations at Trading Hubs / PNodes

The CAISO has stated that "one clear observation from the CRR Dry Run is that a significant amount of nominations in Tiers 2 and 3 did not clear the Simultaneous Feasibility Test (SFT)". Due to the process modeling of Hubs and the interplay of CRR nominations, the availability of CRRs from either Trading Hubs or individual generators can be significantly and adversely impacted.

Through the CRR Issues Paper and discussions at the February 27, 2007 CRR stakeholder meeting, the CAISO has requested input on possible revisions intended to improve one or more aspects of the CRR release process: 1) limit the transmission capacity in Tier 1, 2) limit the Pmax in Tier 1, 3) issue a feasible basket of individual CRRs in-lieu of Trading Hub CRRs or 4) redefine the Trading Hubs both for CRRs and MRTU Markets. While not explicitly stated by the CAISO, as always, one alternative is 5) to retain the current procedures with the known limitations. Each alternative represents a trade-off.

PG&E recommends that further development and consideration be given to the 'basket of individual CRRs' approach (alternative 3). This alternative, first advanced Jim Bushnell (Market Surveillance Committee), provides market participants with the most benefits and least draw-backs. The 'basket' approach allows CRR Hub nominations to compete on equal-footing with CRR PNode nominations and significantly, also resolves the concern (and CAISO prohibition) of LT-CRR nominations from Hubs since LSEs could nominate all of the

individual CRRs from the awarded 'basket' for conversion into LT-CRRs. While the 'basket' of awarded CRRs may depart from providing a perfectly matched hedge for Hub transactions; this departure would be expected to be small. PG&E requests that the CAISO analyze the CRR Dry Run results for insights of this impact and in addition, to confirm that CRR software and systems can accommodate CRRs with values less than 0.1MW (current tariff) since a 'basket' approach would likely require lower limits.

PG&E does not support the alternatives to lower the transmission capacity or Pmax in Tier 1 (alternatives 1 and 2). Both these alternatives create an undue preference for Hub nominations at the expense of PNode nominations; such treatments, while expedient to implement, are not based on firm design principles, are unfair to those LSEs reliant on source specific nominations, and do not solve the problems and inability of LSEs to secure LT-CRRs from Hubs.

Redefinition of Hubs under MRTU (alternative 4) should no longer be considered an appropriate option. While this approach may have the potential to resolve both the CRR and LT-CRR issues, there have been numerous legal and commercial agreements already predicated on the current Trading Hub definition. Revising the Hub definition at this point may create extended legal disputes including those with DWR Seller's Choice contracts.

While PG&E supports the 'basket' approach (alternative 3), retaining the status quo (alternative 5) while others options are explored may represent a viable approach. With current awareness of the Hub/PNode nomination process limitations, LSEs may be now be in better informed positions to nominate Hub/PNode CRRs than during the CRR Dry Run. The status quo would be favored over the alternatives to limit capacities in Tier 1 (alternative 1 and 2) and over Hub redefinition (alternative 4).

b. CRR Source Verification Rules

In finalizing the rules regarding which CRR sources qualify for LSE nominations in Tiers 1 and 2, the CAISO requested input on the following: 1) Should the CAISO utilize RA showings or LT procurement plans, in addition to the historical period energy contracts, 2) should the CAISO eliminate source verification in Tier 1 of the monthly allocation process, and 3) should the CAISO retain the provisional Dry Run rules where contracts as short as one day can count.

1) PG&E recommends that verification should be expanded to include RA showings and LT procurement plans. A key objective of CRRs is to provide LSEs the ability to hedge congestion exposure under MRTU; CRR should reflect expected transactions and not necessarily usage during the 2006 historic period. PG&E understands and appreciates the concerns about limiting distortions to going-forward contracting process

in a CRR allocation environment, however supply arrangements from RA and LTPP showings that were established during 2006 are appropriate as verified sources since these represent only after-the-fact inclusions.

- 2) Source verification should be retained in Tier 1 of the monthly allocation process. CRRs should provide LSEs with the ability to hedge their congestion risk under MRTU; source verification limits the ability of market participants to speculate and possibly game the CRR allocation process to the detriment of LSEs with verifiable hedging requirements. There has been no demonstration that relaxing the verification process would improve the overall effectiveness of the CRR process.
- 3) 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.

c. Set-Aside for Import Capacity for InterTie CRR Auction

PG&E does not object to the InterTie capacity set-aside for annual and monthly auction process as currently planned by the CAISO. However, as detailed in recent comments to the CAISO and FERC on LT-CRRs, PG&E continues to believe that a certain percentage of all available transmission capacity (not limited to only InterTies) should be dedicated to LT-CRR, annual and monthly CRR auctions. PG&E looks forward to progress on commitments made by the CAISO to further explore and develop this possibility.

d. 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 unplanned outages in the monthly CRR modeling. 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.

e. Frequency of Monthly Allocation and Auction Process

The monthly allocations and auctions should occur monthly as is currently planned; PG&E does not support a semi-monthly or other less frequent process alternatives. While this represents extra effort on the part of LSEs and CAISO staff, the use of a true monthly process will

result in better CRR results through improved load, resource and outage information.

f. Use of Common Forecast for Monthly RA and Monthly CRRs

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.

2. Outstanding CRR Process Issues

The CAISO CRR Issues Paper includes three significant CRR-related issues that according to the CAISO "need more detailed business processes to be defined in the near future": 1) CRR Transfers due to Load Migration, 2) Methodology for Determining CRRs for Merchant Transmission Upgrades and 3) CRR Credit Requirements. expects that each of the issues will be the topic for future stakeholder meetings and for CAISO Whitepapers. PG&E will provide comments and recommendations on these issues as additional details emerge. Please note however that previous comments and recommendations have been provided by PG&E with respect to CRR transfers due to load migration (issue 1). PG&E continues to object to the automatic pro-rata re-allocation of all CRRs (and LT-CRRs) with the loss of load. Migrating load will ultimately be served by some mix of supply resources, but clearly not by those resources or supply arrangements that continue to be under the control of the existing LSE. The available use of sub-LAPs further highlights the need for appropriate re-allocations methods. For example, if load in San Francisco migrates to another LSE, the CRRs used to serve load in central California should not be re-assigned to the LSE assuming responsibility for the migrating San Francisco load. The CAISO should consider alternatives so that CRRs that are reassigned as a result of load migration better correspond to the CRRs used and required by the migrating load.

3. Dry Run Results

On March 30, 2007 the CAISO plans to file a Report on the CRR Dry Run Process with FERC, this report is a conditional step in the implementation of MRTU. PG&E has received some PG&E specific data from the Dry Run and in addition, the CRR Issues Paper provided a brief summary of the collective LSE Dry Run results.

Some valuable information and insights have been provided by the Dry Run; many of the design changes indicated above are in response to issues revealed through the Dry Run. However a number of open questions remain for PG&E and possibly other LSEs, most significantly, will the CRR process provide sufficient hedges needed to address

congestion risks under LMP? The CAISO Dry Run has not provided clear answers here. A further and significant issue is the extent to which PG&E can expect to obtain enough LT-CRRs with sufficient term durability that are necessary to support the development of new resources.

With the Dry Run, PG&E was generally awarded a significant portion of our requested CRR nominations; however this was not the case for all time periods. Preliminary financial evaluations provided by the CAISO suggest significant variations in the un-hedged congestion costs estimates (across time periods, and using various estimating methods). From what is known to-date, PG&E is not certain what hedges and financial coverage will result from our participation in the real MRTU CRR allocation and auction process scheduled to begin July 2007.

Further complicating this Dry Run assessment are the number of study limitations including: a) LT-CRRs were not included as part of the Dry Run, b) a number of significant CRR design details may be revised from those used in the Dry Run (e.g. treatment of Hubs, annual and monthly source verification rules), and c) the CASIO CRR modeling may be revised (e.g. the treatment of planned and un-planned outages, and any changes to address the open-loop "unrealistic constraints" problem). While another Dry Run may be appropriate, PG&E is aware and appreciates that this would not be possible and still achieve the January 31, 2008 start of MRTU.

To better help address LSEs concerns, PG&E urges the CAISO to provide a Dry Run Report to FERC and to stakeholders that includes comprehensive financial assessments, objective standards for hedging adequacy, and all know study limitations with their likely impacts on the future CRR process and binding MRTU CRR obligations.

PG&E looks forward to working with the CAISO and other stakeholders in finalizing the design and implementation of CRRs. For follow-up or questions, please contact Brian Hitson (415-973-7720) or Glenn Goldbeck (415-973-3235).