Stakeholder Comments on

CRR Issues

Submitted by (name and phone number):	Company or entity:	Date Submitted:
Kirsten Peck, Director, Risk Management, 604.891.5047 *Bernice Crick, Credit Risk Manager, 604.895.7093* *Gifford Jung, Trade Policy 604.891.6040*	*Powerex Corp.*	*April 8, 2008*

The CAISO is requesting initial written comments on the various CRR-related issues discussed at the April 1, 2008 stakeholder meeting. This template is offered as an easy guide for entities to submit comments; however, any participant should feel free to submit comments in any format. Submitted comments will be posted on the CAISO website unless participants expressly ask that their comments not be posted.

The Issues Papers and presentations discussed at the April 1 CRR Stakeholder meeting are posted at: http://www.caiso.com/1b8c/1b8cdf25138a0.html

Stakeholder comments should be submitted by close of business on Tuesday, April 8, 2008 to: CRRComments@caiso.com

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The CAISO offers the following questions as a structure for stakeholder comments:

A. CRR Year 2 Release Process

1. Does your company or entity have comments or suggestions on the historical reference period for verifying Season 1 source nominations in the next annual CRR release process?

Powerex has no comment at this time but notes that to avoid over allocating CRR's the historical reference period should be coordinated with Question 7.

2. Does your company or entity have comments or suggestions on whether CRR Seasons 2 and 3 should be treated as "Year 1" or "Year 2" seasons?

Powerex suggests CRR Seasons 2 and 3 should be treated as Year 1 seasons.

3. Does your company or entity have any comments about the treatment of LT-CRRs?

Treatment of LT-CRRs should be the same as Question 2.

B. CRR MW Granularity

4. Please indicate the MW granularity that your company or entity prefers for 2009 CRRs:

a. 0.1 MW granularity
b. 0.001 MW granularity
c. 0.001 MW granularity

If possible, please explain the business reasons for your preference.

Powerex prefers a granularity of 0.01 MW.

Granularity of 0.001 would be an administrative burden to Powerex. A trading hub CRR disaggregated into hundreds of individual source-sink CRRs, with most less than 5 kW, would be problematic.

C. 30-Day Rule on Outage Scheduling

5. Does your company or entity have comments or concerns about changing the 30-Day Rule to allow exemptions within a 24-hour period?

Powerex has no comments at this time.

6. Does your company or entity have any further comments about exemptions to the 30-Day Rule?

Powerex has no comments at this time.

D. Monthly CRR Eligibility for LSEs Without Verifiable Load Forecasts

7. Please indicate and explain any preference how the CAISO should determine monthly CRR eligibility for an LSE in the absence of load forecasts:

a) Use load data from the last five relevant months
b) Use load data from the immediate previous month
c) Use load data from the same month of the previous year
d) Other suggestions?

See response to Question 1. Powerex would prefer the same historical reference period as used for Season 1.

E. CRR Credit Policy Enhancements

All of Powerex Corp.'s ("Powerex") are predicated on the following principles.

Principle 1: Appropriate time and scenario analysis must be taken to consider the unintentional impacts that may arise as a result of change to the CRR Credit Policies. In particular, the CAISO must be careful not to place additional credit risk on the CAISO 'creditors' who, given the current default sharing mechanism of the ISO, bear the entire burden of a credit default(s).

Principle 2: Liquidity and market transparency should not be reduced for the sake of managing credit risk.

Principle 3: Proposed solutions regarding the management of credit risk should be as industry standard as possible. Introduction of unique, complex, non-standard practices poses operational risk and makes risk exposure estimation more challenging for participants and the CAISO.

Principle 4: With respect to the CRR lifecycle, the 'riskiest' period is likely the first year or two of implementation given that it will be difficult to predict all of the possible market scenarios, operational challenges, or participant actions that may negatively impact those that share accountability for losses associated with a participant default.

8. What is your entity's view on the proposed options to mitigate the credit risk of CRR transfers associated with load migration as discussed in the CRR Credit Issue Paper?

Powerex assumes the following:

Allocated CRR's: CRR's allocated free of charge to the LSE's in order to mitigate some of the uncertainty associated with serving their existing load obligations in a LMP market structure. This includes counterflow CRR's that are allocated to LSE's upon load loss.

Auctioned CRR's: CRR's acquired in a competitive auction process facilitate the bilateral marketplace within the LMP market structure and allow LSE's to re-balance their load serving needs. CRR's may be used solely for financial gain based on the characteristics of a particular transmission path, or may be used to hedge delivery costs associated with physical delivery or load obligations. All of the market, credit, regulatory, etc. risk is borne by the successful entities that bid in the auction.

Option 1(i) Netting between Allocated and Auctioned CRRs: Given the above definitions, the credit exposures of Allocated CRR's should not be netted with the credit exposures of the Auctioned CRR's.

Powerex supports this recommendation.

Option 2 a/b Discussion: If an LSE sells their Allocated CRR's for speculative purposes or in advance of a proposed load loss/migration, they should face the same collateral requirements that participants restricted to the Auctioned CRR market face. In other words, upon their sale, the Allocated CRR's sold should then be considered Auctioned CRR's, netted with other Auctioned CRR's (if any) held by that participant, and collateral provisions applied to the portfolio of Auctioned CRR's.

If the LSE needs to rebalance their existing portfolio of Allocated CRR's resulting from load/resource changes, Powerex assumes that the LSE would most likely 'sell' all or a portion of the CRR's associated with a particular path in the Auction CRR market and 'buy' CRR's associated with the more desirable path in the Auction CRR. In this example, the credit requirements of each transaction should partially offset each other, mitigating the risk of large collateral requirements for portfolio rebalancing.

Powerex supports Option 2b.

Powerex has the following question for the CAISO: Does the CAISO credit management system have the capability to support this proposal?

9. What is your entity's view regarding enhancing the credit requirement calculation for holding Short-Term CRRs?

The Auctioned CRR's are a new product in a new market structure. It is prudent to err on the conservative side in terms of valuation for collateralization purposes initially. The proposed Credit Requirement calculation is conservative in that the exposure calculation deviates from a true mark-to-market exposure (the Historical Expected Value) by incorporating the minimum of the Auction Price or the Historical Expected Value and the addition of a Credit Margin. In Powerex's opinion this conservative approach is likely appropriate for the first year or two but should be revisited once the market matures and more transactional and operational experience is gained.

Powerex is supportive of using a probabilistic forward-looking or historical-looking methodology to estimate the credit exposure associated with Auctioned CRR's. In addition, Powerex would suggest that a scalar multiple be incorporated into the exposure calculation to represent the model risk, product risk, outage risk, and the liquidity risk (see response to Question 12).

The Historical Expected Value (HEV) approach seems appropriate to determine the expected value of the CRRs, although Powerex would like some more detail as to the granularity of the calculation. For example, is each transmission path being assessed for its HEV, or is a more broad formula being applied?

In addition, what approach will be used in the interim until there is enough historical data accumulated? Powerex believes that the first year or two of the CRR lifespan is the most risky, with respect to valuation and credit collateralization, and a conservative transparent interim method that estimates the value must be recommended by the CAISO for use prior to the availability of historical data.

10. Please comment on the CAISO's intent to re-file the full-term credit coverage for LT-CRRs with the proposed modified credit requirement calculation formula.

Powerex is very supportive of capturing the credit risk exposure of a LT-CRR in the collateralization formula. It is industry best practice in the energy trading industry to try and collateralize as much exposure as possible, certainly out five years in the future. This restricts less creditworthy counterparties from participating in the long term marketplace. The valuation of LT-CRR's is very challenging and Powerex does not have a recommended methodology, but certainly encourages continued discussion amongst the CAISO stakeholders to determine the most appropriate methodology.

11. What is your entity's view on whether to enhance the bidding requirement for auction participation? Should the full Credit Margin, or a portion of the Credit Margin by included in the bidding requirements? If a portion of the Credit Margin is preferred, what is your entity's suggestion on the appropriate percentage?

Pre-bid Collateralization: It is not necessarily industry standard practice that auction participants (or RFP respondents) provide collateral prior to bid submission although Powerex provides pre-bid collateral when bidding on CAISO FTR's as well as for gas storage auctions and transmission contracts. It is a common risk shared amongst all industry participants that a transaction is executed, or bid awarded, and the participant or counterparty does not then provide the required collateral.

The CRR Credit Policy Enhancement states (section 4.3.1) that, 'While the CAISO has the ability to 'repossess' CRRs and resell them in a subsequent auction if a participant does not meet a collateral call, this is an imperfect solution, as prices of other CRRs may have been affected by the bids of the defaulting party'. This risk also seems to be a risk that is faced by industry participants in their day-to-day operations and in managing credit risk. The distinction between the exposure associated with CRR's is that the

CAISO appears to be restricted to selling the CRR's that were defaulted upon in an upcoming monthly auction and the nascent CRR market may be very illiquid.

If the CAISO were able to immediately sell the CRR's that were defaulted upon, Powerex suggests that there may be no need for the posting of credit support prior to CRR bid submission. One thought for consideration might be that if collateral was not posted by the successful CRR bidder within 2 business days, an additional auction be held the following day for the CRR's defaulted upon. To the extent the additional auction does not clear the defaulted CRR's, part or all of the posted credit would be forfeit by the defaulting party.

However, if the CAISO is restricted from selling the CRR's that were defaulted upon and the auction schedule is fixed in time, Powerex agrees that there may be a need for the CAISO to require credit support prior to CRR bid submission.

12. Please comment on the proposed Tariff clarification to increase credit requirements for CRRs due to extraordinary circumstances such as extended outage or other circumstances that could dramatically change the risk profile of a CRR.

To the extent the CAISO's modeling process to ensure CRR's are deliverable does not include stress tests, Powerex recommends that a detailed set of stress tests be developed in order to estimate exposure associated with expected and unexpected outages. Stress tests should be run regularly and incorporated into the credit collateralization requirements. The stress test scenarios should perhaps include a model risk and liquidity risk component.

13. Does your company or entity have comments on the concept for requiring corporate parent credit backing of affiliated market participants' Estimated Aggregated Liability? Is there merit in this potential change? Should this concept apply to other forms of collateral, or just guarantees? Would this concept present regulatory difficulties for affected entities?

We have no issue with the proposal to have a 'blanket' or group guarantee provided in the case where multiple guarantees are currently being provided to affiliates. However, we do question how effective this proposal would be. It would seem that the application of this is limited to instances where guarantees are requested (ie., it won't cover the PJM instance where the participant was required to fully collateralize all exposure and had no unsecured credit limit) and is still limited by the overall size of the parental guarantee provided at the group level. If the total EAL of the guaranteed participants in total exceeded the amount of the 'blanket' guarantee and a higher guarantee or other collateral was not provided, would all participants covered by the guarantee, be in default? In addition, it would seem that to make this guarantee most effective, the ISO (as opposed to the guarantor) would need to allocate the guarantee amount between the affiliates. In this manner the ISO would be free to re-allocate the guarantee on an as needed basis between the guaranteed parties.

Has the ISO considered implementing a requirement along the lines that the EAL must be within say 80% of the guarantee/collateral provided and that if it exceeds this amount, then a higher guarantee and/or additional collateral needs to be provided. This then provides a cushion for the ISO and various levels of action can be triggered at different points beyond the 80%. NGX has something similar for their margin and collateral requirements, with stepped up levels of action required based on the level of collateral provided versus the level of collateral required.

F. Other CRR Issues

14. Does your company or entity have further comments or suggestions on these various CRR issues?

Powerex has no additional comments at this time.