# **Comments on 2011 Market Design Initiative Catalog**

Submitted By	Company or Entity	Date Submitted
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Powerex appreciates the opportunity to provide these comments on the 2011 Market Design Initiative Catalog and, for simplicity, has used the headings in the October 14, 2011 Table of Contents to organize our comments.

- 2. Day Ahead Market Design
- 2.1 Two-Tier rather than single-tier Real Time Bid Cost Recovery (BCR) Allocation (F)

## No comments at this time.

2.2 Bid Cost Recovery (BCR) for Units Running over Multiple Operating Days (F)

Powerex supports the CAISO's extension, but believes bid cost recovery issues should be amalgamated into a holistic review with a corresponding stakeholder process on all bid cost recovery elements in CAISO markets for both internal generation and interties.

2.3 Marginal Loss Surplus Allocation (N)

*Powerex believes more information on the estimated potential dollar impact of this initiative would be helpful.* 

2.4 Multi-Day Unit Commitment in the IFM (D)

See Powerex comments on 72-hour RUC. Powerex also believes a broader, holistic review and corresponding stakeholder process on residual unit commitment within CAISO markets, with additional focus on a) cost allocation and b) intertie participation, is necessary.

2.5 Pricing of Minimum Online Constraints (D)

## No comments at this time.

2.6 Load Aggregation Point (LAP) Granularity (F, I)

## No comments at this time.

2.7 Start-up, Minimum Load and Transition Cost Enhancements (D)

## No comments at this time.

2.8 Unit Commitment and Price Formation Improvements (D)

## No comments at this time.

2.9 Uplift Treatment to Accommodate GHG (D)

Powerex supports addressing any GHG-related initiatives or market design changes in the very near term, given the potential Jan. 1, 2013 commencement date, and the need for extensive stakeholder discussion.

2.10 DLAP Level Proxy Demand Response (D)

## No comments at this time.

2.11 Reliability Must-Run Pump Load (D)

## No comments at this time.

2.12 Enhancements to Start-Up Bids to Recognize Fixed per Start Costs (D)

## No comments at this time.

- 3. Real-Time Market Design
- 3.1 Real-Time Imbalance Energy Offset (I)

Powerex believes the CAISO should address this issue in 2 parts:

Short-term: Address underlying causes of price divergence within the existing realtime market design including a) energy product definition clarity and enforcement, particularly for imports that fail to deliver, and b) prevention and discouragement of implicit virtual bidding activities

*Mid-term: Powerex supports further seeking to minimize real-time imbalance energy offset as an objective within the intertie pricing initiative.* 

## CAISO should address the short-term items described above as soon as possible.

3.2 Consideration of Unaccounted For Energy (UFE) as part of Metered Demand for Cost Allocation (D)

## No comments at this time.

3.3 Directional Bidding in Real Time Market (D)

## Powerex requires additional clarification on this initiative.

3.4 Extend Look Ahead for Real Time Optimization (D)

Powerex believes CAISO should consider an intra-day RUC process. Powerex also believes a broader, holistic review and corresponding stakeholder process on unit commitment within CAISO markets, with additional focus on a) cost allocation and b) intertie participation, is necessary.

3.5 Reduce the Energy Bid Floor (I)

Powerex strongly supports, see Powerex comments in RIMPR phase 1.

3.6 Flexi-ramp Product (N)

See Powerex comments in RIMPR phase 2. Powerex supports the CAISO in its efforts to appropriately procure additional balancing reserves but believes much more discussion beyond the Flexi-ramp product is necessary, including: a) energy product definition clarity and enforcement, particularly for imports that fail to deliver; b) holistic discussion on unit commitment, balancing reserves and contingency reserves; c) differentiation of internal generation and fully dynamically transferred imports versus hourly and sub-hourly imports; and d) cost allocation. Powerex believes all of the above are a high priority item.

3.7 Flex-ramp Product Cost Allocation Methodology (N)

## See comments in 3.6 above.

3.8 Decremental bidding from PIRP Resources (N)

*Powerex generally supports in concept, see Powerex comments in RIMPR phase 1.* 

3.9 Ramp Rate Enhancements (D)

## This initiative needs clarification; see Powerex comments in RIMPR phase 2.

3.10 Sub-Hourly Scheduling (D)

*Powerex supports sub-hourly scheduling but believes this initiative should be discussed as part of 9.5 Intertie Pricing initiative.* 

4. Residual Unit Commitment (RUC)

Powerex believes a broader, holistic review and corresponding stakeholder process on residual unit commitment within CAISO markets, with additional focus on a) cost allocation and b) intertie participation, is necessary.

## 4.1 Simultaneous Residual Unit Commitment (RUC) and IFM (D)

Powerex supports co-optimization of energy awards, unit commitment, and both contingency and balancing reserves in the IFM. See Powerex comments in RIMPR phase 2.

4.2 Consideration of Non-RA Import Energy in the RUC Process (D)

Powerex strongly supports RUC participation on the interties. Powerex believes this will also require addressing energy product definitions and enforcement measures for imports.

4.3 RUC Self-Provision (D, F)

Generally support, see Powerex comments in RIMPR phase 2.

4.4 Multi-Hour Block Constraints in RUC (F)

Generally support, should be included in holistic RUC review.

5. Ancillary Services

Powerex believes a much more holistic discussion on unit commitment, balancing reserves and contingency reserves is necessary including: a) energy product definition clarity and enforcement, particularly for imports that fail to deliver; b) differentiation of internal generation and fully dynamically transferred imports versus hourly and sub-hourly imports; c) cost allocation; and d) pay for performance measures, particularly for regulation.

5.1 Ancillary Services Substitution (F)

No comments at this time.

5.2 A/S Maximum Capability Operating Limits for Spin and Non Spin (D)

## No comments at this time.

5.3 Voltage Support Procurement (D)

## No comments at this time.

5.4 Black Start Procurement (D)

## No comments at this time.

5.5 Fractional MW Regulation Awards (D)

## No comments at this time.

5.6 Pay for Performance Regulation (N)

## Generally support, see Powerex comments in RIMPR phase 2 and at FERC.

5.7 Multi-Settlement System for Ancillary Services (D)

## Generally support, see Powerex comments in RIMPR phase 2.

5.8 Multi-Segment Ancillary Service Bidding (D, F)

## Powerex continues to support multi-segment ancillary service bidding.

## 5.9 Frequency/Inertia Procurement (D)

## Generally support, see Powerex comments in RIMPR phase 2.

5.10 Exports of Ancillary Services (F)

Powerex supports the export of ancillary services, including providing the ability for entities with import schedule awards to purchase ancillary services / contingency reserves / balancing reserves with dispatch/deployment via real-time import schedule reductions.

6. Congestion Revenue Rights

6.1 Economic Methodology to Determine if a Transmission Outage Needs to be Scheduled 30-Days Prior to the Outage Month (D)

## Powerex requires further clarity on this issue.

6.2 Long Term CRR Auction (F)

Powerex strongly supports a long-term CRR auction. FERC Order 890 has led to a significant increase in the duration of transmission contracts on OATT transmission providers connecting to the CAISO grid. Powerex believes it is essential for importers to be able to acquire CRRs for similar durations on the CAISO system to encourage transmission investment from external generation to CAISO load. Powerex believes this initiative should not be dropped and should be pursued as a high priority, mid-term item.

## 6.2.1 Flexible Term Lengths of Long Term CRRs (D)

Powerex strongly supports multi-year CRRs and alignment with the OATT framework outside CAISO. FERC Order 890 has led to a significant increase in the duration of transmission contracts on OATT transmission providers connecting to the CAISO grid. Powerex believes it is essential for importers to be able to acquire CRRs for similar durations on the CAISO system to encourage transmission investment from external generation to CAISO load. Powerex believes this initiative should not be dropped and should be pursued as a high priority, mid-term item.

## 6.2.2 Multi-period Optimization Algorithm for Long Term CRRs (D)

## Powerex supports including this item in the discussion on long-term and flexible term CRRs.

## 6.3 Release of CRR Options (D)

## Powerex supports continued evaluation and discussion of CRR options.

7. Convergence Bidding Enhancements

Powerex strongly recommends a new initiative to review the design and effectiveness of the CRR clawback rule. Powerex believes the CAISO's unique CRR clawback rule is materially deficient in its design leading to

a) the ability of participants to submit small volumes of convergence bids which inappropriately inflate the value of CRR holdings while crowding out physical supply and distorting efficient market outcomes; and

*b) undesirable discouragement of physical decremental bids in circumstance where no inappropriate CRR benefit could be gained.* 

At a minimum, Powerex requests CAISO stakeholder discussions on this topic.

7.1 Allowing Convergence Bidding at CRR Sub-LAPs (D)

No comments at this time.

7.2 Additional Bid Cost Recovery for Convergence Bidding (D)

Powerex does not understand the benefits of this item. Nonetheless, Powerex supports a more holistic review of bid cost recovery which may include discussions on this item.

7.3 Allow Virtual Bids on the Interties (D)

While Powerex has long supported convergence bidding on the interties in concept, Powerex does not believe that convergence bidding on the interties should be re-instituted until:

a) After the re-design and successful implementation of the real-time market / intertie pricing initiative; and unless

b) An Intertie convergence bidding design is proposed which can be reasonably expected to increase the efficient dispatch of physical resource commitment and energy while being symmetric in convergence bidding impact on physical congestion on the intertie.

It should be recognized that intertie convergence bidding on the interties should not be an objective in itself, but rather a potential tool to increase <u>physical market efficiency</u>.

Powerex is not optimistic that such an appropriate solution can be found given the extensive stakeholder discussion on this topic. This should be a low priority item and/or removed from the catalogue.

- 8. Resource/Supply Adequacy Initiatives
- 8.1 Standard Capacity Product Planned Outage Availability Incentive Review (D)

## No comments at this time.

8.2 Standard RA Capacity Product for Demand Response (F)

## No comments at this time.

8.3 Seasonal Local RA Requirements (I)

## No comments at this time.

8.4 Replacement Requirement for Scheduled Generation Outages (D)

## No comments at this time.

- 9. Seams and Regional Issues
- 9.1 Interchange Transactions after the Real Time Market (D)

Powerex is supportive of the CAISO aligning its scheduling practices with adjacent markets. However, Powerex believes this initiative should be a mid-term initiative given the slow progress in the remainder of WECC. Moreover, Powerex believes the CAISO needs to address unit commitment and balancing reserve issues ahead of rushing forward with intra-hour scheduling of interties.

9.2 Allocation of Intertie Capacity (D)

Powerex strongly opposes any initiative to "allocate" physical transmission rights on the interties. This would exacerbate seams issues with adjacent transmission providers and decrease economic efficiency. This would be a major step backwards in the CAISO's market design while creating unnecessary differences between how intertie supply/transmission and internal generators/transmission are treated, which is well documented as one of the causes of CAISO market inefficiency and large uplift costs.

Powerex recommends that this initiative be removed from the catalogue.

9.3 Import or Export Bid Submissions from Multiple Scheduling Points (D)

Powerex requires further clarification on this topic.

9.4 Allocation of Dynamic Ancillary Service Costs (D)

Strongly support, see Powerex comments from Dynamic Scheduling Initiative.

9.5 Intertie pricing (N)

Powerex strongly supports a thorough stakeholder process on this issue. However, the CAISO should not prematurely limit its approach to the two potential designs discussed. This stakeholder process should begin with identification of all of the challenges/shortcomings of the existing market design as it relates to intertie pricing, followed by a review of other approaches such as the NYISO, culminating in a broader list of potential solutions.

9.6 Circular scheduling (I)

## Strongly support, see Powerex comments from Circular Scheduling stakeholder process.

10. Other

10.1 PIRP Cost Allocation (I)

## No comments at this time.

10.2 Change the Bid Cost Recovery Netting Methodology (I)

## No comments at this time.

10.3 Generation Interconnection Procedures Phase II (I)

## No comments at this time.

10.4 Storage Generation Plant Modeling (D)

## No comments at this time.

10.5 Aggregated Pumps and Pump Storage (D)

## No comments at this time.

10.6 Lossy vs Lossless Shift Factors (N, I)

## No comments at this time.

10.7 Multi-Stage Generator Enhancements (I)

## No comments at this time.

10.8 Demand Response Net Benefits Test (F, I)

## No comments at this time.

10.9 Regulatory Must-Take Generation (D)

## No comments at this time.

10.10 Enabling "Bilateral Energy Excluded from Settlements (BEEFS) (D)

## Powerex would like further information on this issue.

10.11 Multi-year forward CAISO New Generation Procurement Mechanism (D)

## Powerex would like further information on this issue.

10.12 Multiple Scheduling Coordinators (SCs) at a Single Meter (D)

## No comments at this time.

10.13 Flexible Capacity Forward Procurement (N)

## See Powerex comments in RIMPR phase 2.

10.14 Forward Energy Products (D)

## Powerex would like further information on this issue.

10.15 Creation of a Full Hour-Ahead Settlement Market (D)

Powerex supports exploration of this initiative as part of 9.5 Intertie pricing.