Subject: CAISO Track 1B Straw Proposal

Comments of Calpine Energy Solutions, LLC ("Calpine Solutions") on Congestion Revenue Rights Auction Efficiency *Track 1B Straw Proposal*

Submitted by	Company	Date Submitted
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General Comments

Calpine Energy Solutions, LLC, ("Calpine Solutions") is a nonutility load-serving entity operating in seventeen states, including California. As a load-serving entity participating in the CAISO markets, Calpine Solutions receives an allocation of annual and monthly CRRs from the CAISO, and also participates in the annual and monthly CRR auctions in order to secure the additional CRRs necessary to mitigate the financial risks Calpine Solutions and its customers would otherwise face if its portfolio of supply and transmission rights were exposed to unhedged locational congestion risks. Before addressing the proposals in the *Track 1B Straw Proposal*, Calpine Solutions reiterates the overarching principles by which it is evaluating the concerns and proposals raised by the CAISO in the CRR Auction Initiative.

First, revenue adequacy in the CRR process is not the sole, or even most important, criterion by which the value of CRR process should be evaluated. Load-serving entities, without captive ratepayers, rely on CRR auctions to provide consumers with the lowest possible cost to meet their energy requirements. The CRR auction process provides non-utility load-serving entities with the means by which they can hedge the costs of congestion between specific receipt and delivery points – the breadth and frequency of CRR auctions is critical to providing the liquidity and transparency of the financial instruments by which this hedging is accomplished. The CRR process provides enormous benefits to consumers and none of the analyses presented by the CAISO in the CRR Initiative to date make any attempt to estimate the dollar value of those benefits. Based on its operational experience, Calpine Solutions submits that those benefits are greater than the multi-year CRR revenue deficiencies the CAISO is addressing by several orders of magnitude. Thus, the CAISO should take care not to reconfigure the CRR process in a way that would impair these benefits.

Second, Calpine Solutions believes the sophisticated end consumer who chooses to use CRR's to hedge its delivery risk, would instead choose to pay the revenue inadequacy currently being experienced rather than be subject to an adjustment to its CRR payout. The end consumer's goal is to both (i) ensure that that its delivery risk is protected from payment shortfalls and then hopefully (ii) achieve revenue adequacy. Unfortunately, the CAISO's proposal does not adequately protect the individual consumer whose cost of energy tracks market clearing prices. *The CAISO's proposal also contradicts its own stated purpose of CRR's, to appropriately hedge delivery risk.* The consumer is buying insurance without confidence that it will be fully insured consequently increasing its energy costs. Given this outcome, the consumer is better off experiencing revenue inadequacy uplift costs. The CAISO's proposal may well address revenue adequacy but it will reduce the demand for hedging thereby resulting in low bid prices relative to CRR payouts and cause revenue shortfalls. Therefore, Calpine Solutions strongly recommends that the CAISO abandon its current proposal and adopt an approach that spreads the shortfall across all CRR holders at an aggregate level as described below. This approach will enhance the CRR's intended purpose as a hedge and reduce the burden of revenue inadequacy currently placed upon measured demand.

The Phase 1b Proposals

A. Summary

The CAISO has proposed a substantial leap in market design in its Phase 1b proposal. In fact, the partial funding proposal ("PFP") is a sweeping change that in our view may be unnecessary and as reflected in our comments in Docket ER18-1344, is redundant to Phase 1a and possibly, Phase 2 proposals. As such, while it is easy to see that this PFP is "belts and suspenders" when combined with Phase 1a, it is very difficult to evaluate the efficacy of the overall market design as it emerges, and may continue to emerge, over time and on a piecemeal basis.

Moreover, the partial funding proposal of the ISO reduces CRR payments to CRR holders when they need them the most – in the face of specific constraint-based congestion or transmission limitations. In fact, while apparently dismissed (at least for now), Calpine Energy Solutions would prefer limits on the percentage of capacity being auctioned in forward markets as a substitute for this Phase 1b PFP.

Nonetheless, if the CAISO moves forward with PFP, Calpine Energy Solutions offers the following comments for a properly designed partial funding CRR market design.

B. Allocation of Shortfalls by Constraint

Calpine Energy Solutions does not support an allocation of shortfalls by only the shift factors effective on a given individual constraint. As highlighted above, Calpine Energy Solutions obtains CRRs in order to hedge congestion – which in turn allows for confident negotiation of concurrent or long-dated end-user contracts. The CAISO proposal frustrates that objective and places significant congestion risk on the LSE/supplier – and does so even though the LSE/supplier has virtually no control over the conditions that give rise to revenue inadequacies, as demonstrated by the ISO's own studies.

Also, the value of this "dirty hedge" (that is, a hedge that does not cover the targeted risk) will be far lower and will be very difficult to estimate. The buyer would have to estimate the magnitude of the potential CRR short-pay (e.g., the lower prevailing flow in the day-ahead market compared to CRR auction), and the outcome of the day-ahead market congestion itself. Estimating the potential CRR de-rate would involve a complex analysis of the transmission system and shift factors. These complex assessments only add risk to the product, and importantly, yield a lower willingness to pay. This risk therefore would clearly reduce CRR bids possibly causing exactly the shortfalls which the CAISO fears and attempts to avoid with the PFP.

Rather, Calpine Energy Solutions proposes, that if the ISO moves forward with PFP, that it adopt a proposal that spreads the shortfall across all CRR holders (allocated and auctioned) at an aggregate level. Effectively, the CRR's become an insurance program with the risk of "disaster" being taken by all those participate in the insurance pool, allocation and auction holders alike. While hedges will still be "dirty," the risk that any particular CRR will be made ineffective in hedging congestion is lessened by a broader allocation. The broad allocation removes the "high impact" risk of the table. However while lessened, the CAISO should still expect that the relative levels of auction bids will be lower with the increased risk associated with *any* implementation of PFP.

C. Allocation of Excess Revenues

Calpine Energy Solutions supports the same principle of a broad allocation of CRR surpluses to all holders. We anticipate that CRR reforms, if implemented properly, will more occasionally result in revenue surpluses – that is, when congestion revenues exceed CRR payments. Calpine Energy Solutions support a broad assignment of surpluses, one which would have the effect of offsetting the CRR short-pay that may also occur. Further, aggregate surpluses (that is net surplus over a settlement or auction period) should be retained in a reserve account for offsetting future shortages.

D. Participation in Shortfall or Surplus Allocations by all CRR Holders

For the absence of doubt, Calpine Energy Solutions believes that the distribution of either shortfalls or surpluses of CRR revenues should be spread to all holders – both those that receive allocations and auction awards. The CAISO CRR analysis clearly demonstrates that revenue inadequacy is generally not the result of the auction participants alone. There is no reasonable principle to limit the allocation of excess revenues to one group of participants.

Long-Term Reforms

For the longer term and as a means of improving auction revenues, Calpine reiterates its previous proposals to improve the CRR process and the hedging value of CRR instruments.

First, the CAISO should explore expanding the nature of the financial transmission rights it makes available for allocation and auction so as to increase the demand for financial transmission rights. As noted above, load-serving entities serving price-sensitive customers under agreements tracing market prices differentiate themselves from one another by providing products hedging and locking in the cost of expected congestion. By expanding the range of instruments that are available to effect these strategies, the CAISO will facilitate a more robust retail market, with the further potential to improve the costs of energy to all consumers by improving the economic efficiency of the overall energy market. As these effects are experienced, Calpine Solutions would expect the participation of all load-serving entities in the CRR auctions to increase. At present, the CAISO markets provide for ten-year CRRs, instruments that are so long in tenor that they have little practical value. The CAISO offers only one instrument, a one-year CRR, by which a load-serving entity can hedge congestion risks across a meaningful tenor. Noteworthy in this regard, the PJM Interconnection offers a four-year instrument, which generally matches the supply book of most retail providers operating in the PJM region. The CAISO should consider likewise offering more instruments of varying tenor to meet the needs of the load-serving entities operating in its service territory.

Additionally, the CAISO should consider increasing the frequency of its auctions. In PJM, the frequency of auctions for financial transmission rights allows for many hedging opportunities throughout the year. PJM runs an annual auction in April and a number of monthly, quarterly and balance-of-year auctions throughout the planning year in order to improve market efficiency and enhance the liquidity of the market for these rights. In addition, PJM runs three long-term auctions during the year, for terms beyond the planning year.

(Currently, these would cover PY2019, PY2019 and PY2021). The transparency and resolution of the balance-of-planning-year auctions also allows load-serving entities to shape, by period (balance of planning year, quarterly, and/or monthly) and by block (peak and off-peak), the congestion risk in their books, well in advance of the day-ahead market. Calpine Solutions believes that implementing similar processes in California will improve the demand for CRRs in the auctions and could cure a substantial portion of the auction revenue deficiencies under study.

The CAISO should consider the dynamics of the basis bilateral trading markets in the eastern markets.

Calpine Solutions hopes the CAISO will look to expand and improve the CRR auction process in ways beyond those proposed in the *Track 1B Straw proposal.*