Submitted by	Company	Date Submitted
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The CAISO's Track 1 proposal consists of the following things:

- 1. Restrict the allowable source and sink pairs.
- 2. Eliminate disclosure of certain model information.
- 3. Release less system capacity.
- 4. Increase the amount of outage information that can be incorporated into the network model.

NRG comments on each of the items below. In sum, NRG respectfully urges the CAISO to move forward with the obvious, "high value" improvement (better reflecting outages in the CRR network model) first, and evaluating the impact that change has, before applying any or all of the other proposed modifications.

1. Restrict the allowable source and sink pairs.

Market participants cannot always obtain a "clean hedge" of their congestion delivery risk, and may have to resort to hedging their congestion delivery risk through "dirty hedges" that involve non-delivery node pairs. Restricting the allowable source and sink pairs to those pairs needed for physical delivery of power will make it more difficult for market participants to hedge their congestion delivery risk through the auction, especially as the amount of available network capacity that is released is reduced.

Restricting node pairs will also make it more difficult to hedge the congestion risk associated with a specific constraint.

Other ISOs have made more focused reductions to CRR node pairs – for example, eliminating CRRs between electrically equivalent node pairs. The CAISO should explore similar more focused reductions to node pairs before implementing its proposed reductions to node pairs.

2. Eliminate disclosure of certain model information.

The CAISO's position is that by restricting information provided about how the CAISO incorporates transmission outages into the network model, it will force market participants to value CRRs on their expectation of congestion instead of on how outages are treated in the model. In NRG's experience, the CAISO's CRR auction is already the least transparent auction among the ISOs. NRG does not believe that reducing the amount of information available to market participants will improve auction efficiency.

3. Release less system capacity

As noted above, releasing less network capacity, in conjunction with limiting the node pairs, will make it more difficult for market participants to hedge congestion delivery risk.

The CAISO offers in the February 13 presentation (slide 17) that reducing the amount of network released will "[a]lign [the] percentage of system capacity released with our confidence in the topology as of the time we run the market." As NRG notes below, incorporating more and better outage information into the CRR network model is likely to have the greatest impact on improving the ISO's confidence in the network topology. For this reason, NRG respectfully urges the CAISO to improve the modeling of outages in the network model prior to reducing the amount of network capacity released in the auction.

4. Increase the amount of information that can be incorporated into the network model

Among the four proposals advanced by the CAISO, this proposal has the greatest likelihood of addressing revenue insufficiency without making the auction unworkably illiquid or limited. NRG respectfully urges the CAISO to move forward with this aspect of its proposal before moving forward with any of the other more drastic aspects of the CAISO's proposal.

The CAISO's November 21 CRR Auction observed that 57 percent of the transmission outages deemed to have an impact on the CRR auction and are subject to the 30-day reporting requirement were not submitted in time to be factored into the CRR monthly auctions.

Moreover, the CAISO models outages that are more than ten days in duration in the CRR model as outages but models shorter duration outages as de-rates. This practice can also make the network appear more available than it really is, and should be re-evaluated.

The CAISO has offered a package of four proposed changes to its CRR auction process. Rather than implementing all four simultaneously, the CAISO should first improve how outages are modeled in the CRR network model. The CAISO should then evaluate how that change affected auction efficiency, and, as needed, implement additional modifications.