

**Stakeholder Comments**  
**System Market Power Mitigation – Straw Proposal**

| Submitted by                | Company                          | Date Submitted   |
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SCE offers the following comments on the CAISO System Market Power Mitigation Straw Proposal<sup>1</sup>.

**1. Day-Ahead Market (DAM) mitigation must be included in the scope of Phase 1 of this initiative. Alternatively, Phase 2 that includes DAM mitigation in the scope should be initiated in parallel.**

The proposal of only addressing the Real-Time Market (RTM) and conditioning mitigation on the three-largest interties simultaneously binding is very problematic. The DAM and RTM transact at different time frames and there is no evidence that the two markets would converge<sup>2</sup>. The Market Surveillance Committee (MSC) also raised the concern that an RTM mitigation (even if very effective in mitigating real-time market power) cannot fully mitigate day-ahead market power<sup>3</sup>. When a mitigation measure designed for the RTM itself is not fully effective to mitigate real-time market power, it is also unlikely to mitigate day-ahead market power.

When the DAM is not appropriately mitigated, there can be significant market efficiency issues and financial risks to consumers<sup>4</sup>. The CAISO is obligated to ensure its rates are just and reasonable. It follows that a more comprehensive solution must be developed and both the DAM and RTM must be appropriately mitigated when conditions warrant.

SCE requests that the CAISO include discussion of potential DAM mitigation measures in the scope of the current phase of the initiative. Alternatively, Phase 2 that includes DAM mitigation in its scope must be initiated in parallel with the proposed phase 1. As recognized by the CAISO, it is likely to take longer to develop DAM mitigation measures. Therefore, the CAISO should start a stakeholder process on DAM mitigation now to allow sufficient time for stakeholders’ input. Even if some elements of potential DAM mitigation measures could be impacted by the Day-Ahead Market Enhancements (DAME) and Extended Day-Ahead Market (EDAM) Initiatives, the CAISO should develop the main elements of the DAM mitigation first and evaluate necessary changes due to

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<sup>1</sup> System Market Power Mitigation Straw Proposal & Presentation, December 11, 2019, available at

<http://www.caiso.com/InitiativeDocuments/StrawProposal-SystemMarketPowerMitigation.pdf> and <http://www.caiso.com/InitiativeDocuments/Presentation-SystemMarketPowerMitigation-StrawProposal.pdf>

<sup>2</sup> DA-RT convergence is one of many other issues. For example, SCE has provided a list of issues in its Oct 9, 2019 comments on the Conceptual Design Proposal at <http://www.caiso.com/Documents/SCEComments-SystemMarketPowerMitigation-Sept20-2019.pdf>, at 4.

<sup>3</sup> MSC Presentation, “Can RT Market Power Mitigation Also Mitigate DA Market Power? Some Theory”, Ben Hobbs, Oct 11, 2019, at <http://www.caiso.com/Documents/SystemMarketPowerDiscussionHobbs-Presentation-Oct11-2019.pdf>.

<sup>4</sup> See, for example, SCE Comments on July 15, 2019 Workshop, at 1-2, available at <http://www.caiso.com/Documents/SCEComments-SystemMarketPower-Jul152019.pdf>; PG&E Comments on System Market Analysis Report, at 1-2, available at <http://www.caiso.com/Documents/PG&EComments-SystemMarketPowerAnalysis.pdf>; CPUC August 14, 2019 Comments, available at <http://www.caiso.com/Documents/CPUCComments-SystemMarketPower-July15-2019.pdf>.

DAME/EDAM *after or during* the time when the main elements are developed, rather than wait for the DAME/EDAM initiatives to conclude, at which point, likely the CAISO and stakeholders would have wasted valuable time and opportunity to develop those measures.

**2. The proposed screen criteria, i.e. three-largest intertie simultaneously binding, is extremely unlikely to be successful in detecting market power at the system level. CAISO should evaluate alternative screen criteria.**

As supply conditions are anticipated to become tighter both in California and in other western states, mitigation measures should directly examine the competitiveness at the system level and the examination should be based on supply offers, both internal and external, rather than on binding interties. Further, transmission capacity being available on interties does not represent competitive external supply availability<sup>5</sup>. In fact, the ties are unlikely to bind if there is a lack of competitive external supply, and when this occurs, if there is a potential market power issue, this scenario should be subject to market power screening but would not be evaluated under the CAISO proposal. Similarly, the CAISO proposal would not be able to capture scenarios where imports may be constrained and cannot serve the CAISO BAA due to congestion on interties other than the three largest interties, or congestion on downstream transmission paths within the CAISO BAA<sup>6</sup>.

In the Straw Proposal, the CAISO seems to suggest that, as long as there is capacity available on one of the three largest interties (i.e., not simultaneously binding), it should not be a concern that California pivotal suppliers could withhold their capacity and thus exercise market power. The rationales behind this seem to be: 1) such withholding would be a western interconnection-wide market power issue and 2) such withholding has not been observed<sup>7</sup>. However, this does not address the possibility that internal pivotal suppliers could exercise market power in CAISO BA when imports are tight, for example, by withholding an amount exceeding the amount supported by available competitive external supply. This is illustrated in a simplified example below.

Consider the energy market only. California load is at 40,000 MW. Total supply amount is 41,000MW. Total internal supply amount is 40,000MW, of which 20,000MW is held by internal pivotal suppliers. Total available import amount is 1,000MW (as offered on interties, or an amount that is feasible given network topology). The three largest interties are not simultaneously binding. There is no scarcity. Under this example, by withholding any amount above 1,000MW, the internal pivotal suppliers will be able to influence the market clearing price for CAISO BA. This scenario holds regardless whether the western interconnection-wide market is competitive or not as long as the amount of capacity supported by imports is relatively low.

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<sup>5</sup> This is different for a local area where available transmission capacity generally means available supply (external to the area) that can compete with the supply located in the area.

<sup>6</sup> SCE has documented this issue, which is a power engineering phenomenon, in its prior comments. See SCE Oct 9, 2019 Comments at 3.

<sup>7</sup> The Straw Proposal, at 21, “CAISO understands that hypothetically, suppliers located within the CAISO balancing area may control enough supply to exercise western interconnection-wide market power by withholding their supply even if CAISO is not import constrained. ... However, ... In the absence of such evidence, the CAISO does not see a need to consider mitigation to address the potential for the exercise of western interconnection-wide market power”.

More generally, Suppose demand is  $D$ , total internal supply is  $Z$ , net import is  $I$ , and the withholding amount is  $W$ . Suppose no scarcity, i.e.,  $Z+I \geq D$ . Internal pivotal suppliers would be able to influence prices as long as the withholding amount is greater than the difference of total supply and the demand, i.e.,  $W > (Z+I) - D$ .

The proposed criteria of conditioning on the three-largest interties simultaneously binding will not address these issues described above. This is further demonstrated by the following fact previously presented by the CAISO (emphasis added):

It is extremely unlikely that all CAISO import limits will simultaneously bind. ... Based on a preliminary review of data, in 2018, the CAISO **never** had more than three import limits simultaneously binding in the real-time market. ... [an] approach is for the CAISO to consider itself import constrained if its three major interties (Malin, NOB, Palo Verde) are constrained. This only occurred in **one interval** in the real-time market in 2018<sup>8</sup>.

## 2.1 The CAISO should evaluate alternative screen criteria.

To overcome the drawbacks of the proposed screen criteria as described above, the CAISO and stakeholders should evaluate an alternative screen criterion, i.e.,

- The approach of evaluating Residual Supply Index (RSI-3) based on internal and external offers, as used in the CAISO and DMM market power analysis reports

While this approach has its own limitation, for example, this approach does not consider whether submitted offers would be power-flow feasible to serve the CAISO load because the approach does not evaluate congestion on interties (or any downstream congestion)<sup>9</sup>, this approach provides several advantages compared to the approach of conditioning on the three largest interties simultaneously binding. These advantages include:

- It evaluates structural competitiveness, which is greatly influenced by available supply offers. Since the market runs at every interval and supply offers can vary by interval, this approach provides more accurate evaluation when it considers available supply for each interval.
- It covers scenarios where the market may not be competitive at the CAISO BA due to lack of competitive supply on interties.
- It is more closely aligned with the market power studies conducted by the CAISO and the DMM. It addresses the non-competitive hours that were previously found in these studies.

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<sup>8</sup> CAISO System-level Market Power Mitigation Conceptual Design Proposal, Sept 19, 2019, at 9, available at <http://www.caiso.com/Documents/WhitePaper-SystemMarketPowerMitigation-Sep20-2019.pdf>.

<sup>9</sup>This limitation can be overcome to a large extent by excluding infeasible import offers behind congested interties, e.g., the RSI-3 test only includes actual available import offers for binding interties, which would be at the amount of the intertie capacity when the intertie is binding. More generally, feasible import offers would be capped at the transmission capacity at each intertie.

- It provides a meaningful mitigation measure as compared to the criteria of conditioning on the three largest interties simultaneously binding, which almost never occurred in 2018.

Under the alternative screen criterion, a question arises regarding whether import offers should be subject to mitigation when the CAISO BA is found uncompetitive based on available supply offers. This is a legitimate question, which is also relevant under the CAISO's proposed approach (i.e., conditioning on binding intertie constraints). The only difference is that this needs to be addressed explicitly under the alternative approach. In contrast, the CAISO's proposed approach would not mitigate any import, thereby *implicitly* assuming that imports are competitive (or imports should not be mitigated even if they are uncompetitive). Simply, under the CAISO's proposed approach, *none* of the import offers would be mitigated, including an offer submitted on non-binding interties and from a non-competitive external area. That is, the CAISO's proposal allows such non-competitive offers to set the market clearing price for the CAISO BAA.

### 3. Discussion on import offer mitigation

As mentioned above in Section 2.1, the question of whether (and if so, how) import offers should be subject to mitigation are relevant under any proposed screen criteria.

In the Straw Proposal, the CAISO seems to propose: 1) mitigating import offers is inappropriate, and 2) RA import resources should be treated the same as non-RA import resources, i.e., both resource types should not be subject to mitigation. As discussed during December 16, 2019 stakeholder meeting, this proposal is problematic because it ignores key differences between RA imports and non-RA imports. RA imports have to offer and are subject to must-offer obligation (MOO) rules. RA resources receive potentially an additional revenue stream, i.e., RA revenue, compared to non-RA resources. This provides RA resources additional opportunity to cover their costs (fixed, variable, or both). Since RA resources are procured with the intent to meet the CAISO load when needed, the proposal to not subject RA resources to mitigation when necessary appears contradictory with the intention, as RA resources could then bid at a level to not clear (e.g., economic withholding). It is also inconsistent with the notion that RA resources are generally expected to perform when needed based on grid conditions in an efficient and economic fashion.

While it may be difficult to develop a default energy bid (DEB) for RA import resources, this is not a new topic and parties have produced preliminary work in this area<sup>10</sup>. In addition, other requirements (e.g., firm energy delivery and documentation requirements), as well as potential new

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<sup>10</sup> System Market Power Workshop Presentations, July 15, 2019: CAISO Presentation, at 23-24, available at <http://www.aiso.com/Documents/Presentation-SystemLevelMarketPowerWorkingGroup-Jul15-2019.pdf>; PG&E Presentation, at 7-9, available at <http://www.aiso.com/Documents/PG-EPresentation-System-LevelMarketPowerWorkingGroup-Jul15-2019.pdf>; SCE workshop comments, August 5, 2019, at 6-8, available at <http://www.aiso.com/Documents/SCEComments-SystemMarketPower-Jul152019.pdf>.

requirements (e.g., bid cap in the RA space)<sup>11</sup>, likely further alleviate concerns around mitigating RA imports.

#### 4. On scarcity and fast start pricing

The CAISO has shown 201 structurally uncompetitive hours in 2018, during which scarcity did not occur despite tight supply conditions. Those hours, and the anticipated tighter supply conditions, speak for the need for market power mitigation. Even if scarcity were to exist, scarcity does not obviate the need for appropriate market power mitigation. Further, the market clears at the marginal cost of the highest cost resource used to meet demand and the marginal cost includes appropriate opportunity costs. When there is a supply shortage, i.e., a power balancing violation, the market will clear based on the penalty pricing mechanism which is set at the \$1,000/MWh bid cap.

During the December 16, 2019 stakeholder meeting, the topic of fast start pricing was brought up occasionally. While SCE appreciates the dialogue, SCE opposes the idea of implementing fast-start pricing in the CAISO markets. The topic of fast start pricing has been thoroughly discussed and carefully considered before. In particular, while fast start pricing, or some flavor of it, is implemented in other RTOs/ISOs, it should be recognized that regional differences exist across RTOs/ISOs and unique situations at the CAISO must be considered. SCE agrees with the CAISO, the DMM, the MSC and other parties on many concerns around inclusion of commitment costs into locational *marginal* prices (LMP) of the CAISO markets<sup>12</sup>. Not only is fast start pricing out of scope under this initiative, fast start pricing does not help with over generation conditions and is unnecessary with the development and continuous refinement of the flexible ramping product.

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<sup>11</sup> CPUC Decision D. 19-10-021, October 10, 2019.

<sup>12</sup> See, for example, CAISO Comments (RM17-3), available at <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14662208> and <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14504228>; SCE Comments (RM17-3), February 28, 2017, available at <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14503622>; DMM Comments (RM17-3), February 28, 2017, available at <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14503778>; the ISO/RTO Council February 28, 2017, comments, available at <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14503650>; MSC presentation, April 22, 2014, at 9, available at [http://www.caiso.com/Documents/2\\_Pricing-PriceSignals.pdf](http://www.caiso.com/Documents/2_Pricing-PriceSignals.pdf).