



Stakeholder Comments Template

System Market Power Mitigation

This template has been created for submission of stakeholder comments on the Revised Straw Proposal for the System Market Power Mitigation. The paper, stakeholder meeting presentation, and all information related to this initiative is located on the [initiative webpage](#).

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business **May 4, 2020**.

Submitted by	Organization	Date Submitted
<i>Kallie Wells</i> kwells@gridwell.com	<i>Gridwell Consulting for the Western Power Trading Forum</i>	<i>May 4, 2020</i>

Please provide your organization's general comments on the following issues and answers to specific requests.

The Western Power Trading Forum (WPTF) is a California nonprofit, public benefit corporation. It is a broad-based membership organization dedicated to enhancing competition in Western electric markets while maintaining the current high level of system reliability. WPTF encourages and supports competitive markets and, with that, believes in protecting the market against artificially increased prices due to the exercise of market power, *when market power being exerted*. We understand that perfectly predicting when market power will be exercised is challenging and is even more so in the context of system market power. However, for the reasons discussed below, WPTF cannot support the system market power mitigation proposal as currently structured. The proposal brings with it significant detrimental impacts on not only the CAISO energy market, but the broader western energy market, that undermine a competitive market structure.

The CAISO and stakeholders should explore a conduct and impact test structure. The long-term implications of the current proposal should not be ignored due to a looming concern that market power may be exercised in the coming years. The CAISO has clearly communicated that the concern of system market power being prevalent in the coming years stems from the tightening of supply within the CAISO market. However, the CAISO and stakeholders should take the necessary time to truly vet and develop an effective and appropriate mitigation mechanism in the event it is needed.

The comments provided below are in the context of if the CAISO adamantly believes that some form of market power mitigation mechanism is necessary, which at this time, WPTF is still not convinced that is the case.

1. Pivotal Supplier Test Trigger

Please provide your organization's specific feedback on the ISO's proposal to perform the Pivotal Supplier Test when its Balancing Authority Area (BAA) is in the highest priced import-constrained region in the energy imbalance market.

While WPTF appreciates the CAISO going back to the drawing board on what to use as a trigger for performing the RSI calculation, we have significant concerns with the currently proposed trigger. As discussed in more detail below, the CAISO is now proposing a trigger that (1) is not based on true physical limitations of the grid and (2) significantly increases instances of over-mitigation which will have the impact of driving away much needed import supply.

Physical Limitation

Any trigger used to determine when the RSI calculation is performed should be structured in a way that identifies conditions during which the CAISO BAA is *physically constrained* from having access to competitive supply from outside the BAA. The CAISO's previous proposal, while based on physical limits of the CAISO grid, would trigger the RSI calculation even when there was still significant access to competitive supply via other unconstrained interties. While we appreciate the CAISO's willingness to rethink the trigger, using the EIM transfer limits furthers WPTF's previous concerns.

It is WPTF's understanding that the RSI calculation will be triggered when there are EIM transfer limits binding and the CAISO BAA is within the highest priced constrained area. As discussed during the stakeholder call, the EIM transfer limits only represent a portion of the overall ability for the CAISO to import supply. For example, the EIM transfer limit between the CAISO BAA and Pacific Northwest may only be 500 MWs but yet there may be significant unused capacity on the COI. Triggering the RSI formulation off of the EIM transfer limits is analogous to triggering the calculation when only a fraction of the total capacity from the Northwest to the CAISO BAA is being utilized. In other words, the CAISO will trigger the RSI and potentially mitigate for system market power when from a physical importing perspective there is no physical limitation.

Additionally, it's important to remember that the EIM is a voluntary market. As such, the amount of transfer capability represented in the EIM transfer limits is also voluntary and can be modified by EIM participants. Therefore, the EIM transfer limits do not represent a physical limitation of the grid in the same manner as a transmission line with a thermal limitation is used to trigger RSI for local market power mitigation. WPTF is concerned that the CAISO is now basing the trigger for the RSI calculation on a market design element that is (1) not truly representative of physical limited access to outside competitive supply and (2) can be modified by participants.

Lastly, as WPTF has commented in the past, the RSI is prone to false positives and can result in mitigation being applied under tight supply conditions that are not truly uncompetitive conditions. Thus, ensuring the trigger is based on physically limiting conditions is an important prerequisite for limiting instances of over-mitigation based on the RSI formulation. There are significant detrimental impacts to the CAISO and western energy markets as a result of over-mitigation (or false positives), as discussed in more detail below. Thus, the CAISO should ensure that every element of its design reduces the likelihood of over-mitigating, suppressing market prices, and diluting the appropriate price signals.

Over-mitigation

The CAISO's latest proposal seems to further our concerns related to over-mitigation as it will significantly increase the number of false positives. In the proposal, the CAISO notes that the new trigger would have resulted in the RSI calculation being conducted in 28% of the FMM intervals in 2019 – that's nearly 1/3 of all FMM intervals and a jaw dropping increase from what would have

been triggered under the previous proposal! Throughout this entire stakeholder process there has been an acknowledgement that based on historical data there is no evidence to show that system market power has been exercised, but yet the CAISO feels it would have been appropriate to trigger the RSI calculation in nearly 1/3 of all FMM intervals. This misalignment of observations is alarming to WPTF especially as it speaks to the magnitude of potential over-mitigation.

Over-mitigation, or the instances of false positives, has implications throughout not only the CAISO energy markets but the broader western energy markets as well. The context throughout this entire stakeholder process has been concern with regards to supply. However, the current proposal will hinder the CAISO's ability to attract much needed import supply. If a supplier has the option of either selling energy across the interties to the CAISO, and risk being paid a lower price as a result of the CAISO mitigating offers absent market power, or selling elsewhere where mitigation is not a factor, the risk introduced by the CAISO over-mitigating will likely chase away much needed supply.

Furthermore, mitigating and suppressing prices when market power does not exist will fundamentally dilute the CAISO's price signals. The CAISO spent years on end designing a nodal energy market recognizing the benefit of having more transparent price signals at each pricing node compared to its previous zonal market structure. WPTF strongly agrees that there are significant benefits to transparent and granular nodal prices when those prices are allowed to be formed under competitive market forces such that they represent the marginal cost of energy. Mitigating offer prices when market power does not exist will reduce the quality of price signals – something the CAISO is aiming to improve. It should also be noted that the energy LMPs are used not only to send out hourly, 15-minute, and 5-minute price signals to the immediate market to inform daily and hourly participation, but are also used to make longer term investment and contracting decisions. These longer-term decisions are also key to continuing a competitive market structure as it incents new entry and informs the exit of uneconomic supply. The implications of over-mitigation, as would be the case with the current proposal, are far-reaching and long-term, and thus should not be simply brushed off.

Regarding the 28% of FMM intervals in 2019 that the CAISO would have triggered the RSI calculation, WPTF would appreciate if the CAISO provided more information on the system conditions during those intervals. Specifically, it would be interesting to see during those intervals the (1) load and net load levels, (2) the EIM binding transfer limits both in terms of which and how many limits as well as total capacity, (3) the flows on the CAISO interties and its ability to still access import supply during those intervals, and (4) bid in and cleared supply within the CAISO BAA. With this additional information the CAISO and stakeholders can get a better sense of under what conditions the RSI would potentially be triggered to determine if it is triggering the RSI under appropriate system conditions.

Ideally, the additional analysis can be provided along with the formulations for the RSI calculation (discussed below) via a technical document well in advance of the draft final proposal. It will be important for stakeholders to have an opportunity to vet those details and provide comments that can still be incorporated into the next iteration.

2. Pivotal Supplier Test Design

Please provide your organization's specific feedback on the ISO's proposal to consider suppliers with resources within the CAISO BAA as potentially pivotal, treat economic import offers and offers from participating resources within the energy imbalance market as fringe supply, and account for net seller load-serving obligations.

As noted in previous comments, the RSI formulation should be constructed in a manner that minimizes the instances of false positives, i.e., mitigating when uncompetitive conditions do not exist. WPTF asks that the CAISO carry out the RSI calculation as currently formulated for the 28% of intervals during which it would have been triggered and report on the intervals that would have resulted in mitigation being applied. Here again, WPTF believes it would also be useful to characterize the supply and demand conditions during the mitigated intervals as well as the unused import capacity and conditions of the transfer limits that triggered the RSI in the first place.

In general, WPTF would need more information before we can formalize an opinion on the design of the RSI formulation. It appears the CAISO's design does improve some elements over the previous formulation but without the specific formulas it is challenging to provide useful feedback. In design elements such as this, the devils are often in the details. Thus, WPTF asks that the CAISO issue a technical document and allow for enough time to accept comments such that they can be incorporated into the next iteration. We envision this can be the same technical document that is issued with the two other analysis requests.

3. Determining competitive LMP

Please provide your organization's feedback on the proposal to determine the competitive Locational Marginal Price (LMP) when the ISO mitigates bids for resources located within its BAA.

It is WPTF's understanding that the SMPM will be run in conjunction with the existing LMPM. However, WPTF is unclear how the competitive LMP will be set for a resource that is subject to both the SMPM and LMPM. For example, if under the LMPM the competitive LMP is higher than the SMPM due to, for example, high congestion costs on competitive transmission lines, will the competitive LMP for that resource be set based on the LMPM or the SMPM?

Additionally, during the stakeholder call the CAISO discussed that the competitive LMP will be based on the shadow price of the next highest EIM BAA. In providing clarification to a stakeholder question, the CAISO further noted that if another EIM BAA outside the constrained area had the same shadow price as the constrained area, it would then fall to the second highest shadow price outside the constrained area. WPTF questions why that would be the case. If there is an EIM BAA outside the highest priced constrained area, with the same price as the constrained area, then it appears that the CAISO is assuming the other EIM BAA also represents a price inflated due to market power; but the CAISO has not conducted any sort of structural competitive test on that area. This exact scenario may be indicative of when the RSI would result in a false positive. Therefore, it would be extremely prudent to ensure prices are not artificially suppressed because the design is such that it skips the next highest priced area outside the constrained area because it just so happens to be reflecting the same price signal as the constrained area. Furthermore, there are ample reasons as to why the CAISO market price should reflect higher prices even absent market power. For example, the cost of greenhouse gas is embedded in the CAISO's energy prices and thus one would expect a certain level of price differentiation.

4. Applying mitigation to internal supply offers

Please provide your organization's feedback on the proposal to mitigate pivotal supplier resource offers within the ISO's BAA.

WPTF appreciates the CAISO limiting mitigation to only the pivotal suppliers as suggested by MSC. We see this as an improvement over the previous design, though still question the conditions during which mitigation would be applied appropriately vs instances it would result in false positives.

5. Additional comments

Please offer any other feedback your organization would like to provide on the revised straw proposal and topics discussed during the web meeting.

As noted previously, WPTF continues to encourage the CAISO to take a monitor and wait approach. The adverse impacts on the market that may be caused due to inappropriately applying mitigation can be significant. Given that there is no evidence market power has been exercised to date the CAISO and stakeholders should continue to monitor the situation. In the event uncompetitive conditions do increase and market power is becoming evident, at that point the CAISO could implement a mitigation mechanism. In the interim, the CAISO and stakeholders can continue to engage in discussions to thoroughly vet and develop an appropriate mitigation design in the event it is needed at some point in the future.

In the event the CAISO does move forward with system market power mitigation, we offer the following additional comments.

Conduct and Impact Test

We commend the CAISO for the time and effort put into this stakeholder process already – system market power mitigation is not a trivial concept. As communicated throughout this process, the CAISO has made it clear that while there is no evidence system market power has been exercised to date, this effort is to ensure the CAISO has a mitigation mechanism in place in the event uncompetitive conditions arise in the future. While WPTF can appreciate that perspective, we also believe this then allows the CAISO and stakeholders time to ensure the design that is implemented is effective in protecting against system market power without introducing adverse impacts that could ultimately cause the supply conditions to worsen. Thus, WPTF continues to strongly encourage the CAISO to consider other mitigation constructs such as a conduct and impact test. The discussions to date have clearly indicated that there are significant complexities with simply expanding the LMPM design to a system level check and test. Furthermore, a conduct and impact test will likely be more scalable to a day-ahead design if the CAISO opts to move forward with that effort at some point. While we understand that the conduct and impact test will also have some issues to work through, they at least deserve some attention and consideration by stakeholders rather than just simply passing them off and moving forward with the SMPM design just because there seems to be some artificially imposed sense of urgency.

Scarcity Pricing

Regardless of if the CAISO moves forward with a RSI or conduct and impact test construct, the mitigation mechanism absolutely needs to be paired with scarcity pricing improvements. WPTF supports protecting the market against market power when its being exercised. WPTF also supports and believes in a market that allows prices to rise during tight supply conditions. The two are not mutually exclusive; you can have a market design that protects against the exercise of market power while still facilitating appropriate price formation under tight supply conditions. Appropriate price signals, especially during tight supply conditions, are key to any well-functioning market. However, under this design, prices will not be able to rise and reflect tight supply conditions when the RSI results in a false positive – which is more likely to occur during tight supply conditions. During the stakeholder call, the CAISO stated that they don't see this market design being linked with scarcity pricing and thus will not address scarcity pricing in this effort.

While WPTF agrees that up to this point, scarcity pricing and mitigation have not been linked, this proposal creates the linkage. System market power mitigation can and will mitigate offer prices and suppress market prices during tight supply conditions and this absolutely needs to be addressed in this stakeholder effort.

WPTF recognizes that the CAISO does have other “scarcity pricing” mechanisms in place, but they still leave a gap when it comes to allowing energy prices to rise during tight or near scarce conditions. The current scarcity pricing for ancillary services is insufficient. It’s only triggered when there is not enough A/S capacity available in the day-ahead or FMM market; it does not impact the 5-minute market. Additionally, the A/S procurement in the FMM is minimal since the CAISO procures 100% of its requirement in the day-ahead market and thus less likely to trigger scarcity. It could also be the case that the A/S market may have plenty of capacity available, and thus scarcity pricing not triggered, while the amount of energy offered into the market is tight. This is best illustrated with the amount to batteries operating under NGR-REM today. The NGR-REM capacity is only offered to provide regulation and not accessible for energy. By construct, the market is less likely to see A/S scarcity and its impact on energy prices when supply for energy is tight.

WPTF appreciates the recently proposed changes in the FRP Enhancements initiative but, in practice, triggering scarcity pricing off ramping requirements may not always align with the need to reflect tight supply conditions. WPTF agrees that theoretically the construct may increase energy prices, but questions if it will occur in practice when the price signals are most needed. Take for example when the CAISO is coming off peak load. Supply is still tight but there is not the need for a lot of upward ramping movement at this point in the day. The FRP design will not reflect high energy prices because it can still meet the minimal ramping needs but yet the supply conditions are extremely tight such that one would expect prices to reflect those conditions. Under this scenario, the FRP scarcity pricing mechanism may not increase energy prices appropriately.

Again, for these reasons, WPTF believes the CAISO should be pairing any system market power mitigation design with a robust scarcity pricing mechanism to ensure appropriate price formation while still protecting the market from the exercise of market power.

WPTF thanks the CAISO for consideration of these comments and looks forward to continued discussions.