Comments on the Temporary Shutdown of Resource Operations Draft Final Proposal

Department of Market Monitoring October 5, 2017

Summary

The Department of Market Monitoring ("DMM") appreciates the opportunity to review and comment on the ISO's Temporary Shutdown of Resource Operations ("TSRO") Draft Final Proposal (the "Proposal").¹

As stated in previous comments, DMM supports the ISO's efforts in identifying and implementing an approach to allow resources without a must-offer obligation to apply for non-physical Outages. In general, it is reasonable for the ISO to allow a resource without a must-offer obligation to request an Outage for a non-physical reason and to compensate the resource if the ISO denies the Outage request. Allowing resources to temporarily shut down can be more economically efficient and equitable for generators.

The Proposal represents a step forward dealing with this difficult issue by establishing a process to allow resources to temporarily shut down and compensating resources that are denied the opportunity to shut down for reliability reasons. However, there are three aspects of this issue that warrant consideration and could be addressed through future modifications.

First and foremost, the ISO proposes to limit TSRO outages to 1 month in the summer. The ISO indicates that it needs non-RA resources to be available within 1 month in order to protect system reliability. This need highlights the discrepancy between RA requirements and the ISO's determination of the grid's actual reliability requirements. Whereas RA requirements are based on a 1-in-2 year load forecast, denial of TSRO outage requests will be based on up to a 1-in-10 year load forecast. This discrepancy may sometimes result in the ISO denying TSRO outage requests in order to make up for structural deficiencies in RA requirements that are known to be reliability deficiencies at the time the RA requirements are finalized.

Furthermore, according to some resource owners, if resources cannot plan to be shut down for more than one month at a time, they will be unable to avoid much of the fixed costs associated with being available. Therefore, by limiting outages to one month due to reliability reasons, the ISO may in some cases continue to procure a form of capacity without compensating that capacity for its incurred costs. DMM continues to strongly recommend that the ISO prioritize working with the CPUC on RA reform that can align RA requirements with the grid's actual reliability needs.

The second potentially problematic issue is related to the proposal to not allow resources to return early from approved TSRO outages. This is intended to discourage resources that would not benefit from TSRO outages from requesting outages. However, preventing resources from returning early from outages could artificially suppress spot market supply. This would reduce spot market efficiency and could adversely impact reliability. In the next paragraph and in the

¹ Temporary Shutdown of Resource Operations, CAISO Draft Final Proposal, September 6, 2017: http://www.caiso.com/Documents/DraftFinalProposal-TemporaryShutdownofResourceOperations.pdf.

main body of these comments we describe some alternative incentives that would better discourage spurious outage requests while avoiding these adverse impacts on spot market efficiency.

The final potential issue involves the ISO's proposal to pay resources their CPM offer for denied TSRO outages. This is a significant departure from the ISO's reasonable proposal in the CPM-ROR initiative to compensate resources based on their costs plus a rate-of-return when they are denied a retirement request. The ISO's TSRO proposal to potentially pay resources with denied TSRO outages significantly above costs could have negative impacts on market efficiency.

The rest of these comments provide more detail on the issues described above.

I. Non-physical outages can allow resources to efficiently avoid costs

It is inefficient to incur costs for an action when those costs are greater than the benefits of the action. A TSRO outage's main benefit is allowing a resource to shut down and avoid fixed costs when the costs of participating in the ISO spot markets outweigh the benefits of participating. A well-designed TSRO outage policy can increase efficiency by allowing resources to avoid incurring the costs of being ready to respond to ISO dispatches (both in-market and out-of-market) when those costs are greater than the benefits of being available. If a resource requesting an outage is needed for reliability then it is worth incurring costs to make the resource available, and the resource should be compensated.

II. TSRO outage duration limits may prevent a resource from avoiding costs

The Proposal introduces a one month limit on Outages taken from May to October² and a four month limit on Outages taken from November to April. Based on feedback from some resource owners all cost savings may not be able to be realized if non-physical Outage durations are limited to one month or even four months. Resources would continue incurring costs to maintain operational readiness. The inability to avoid incurring the costs may undermine the main efficiency benefits of the proposal.

The ISO's reason for a one month limit on TSRO Outages during peak months is "[...] due to the highly variable nature of operations in the peak demand months and the volatility of factors such as the load forecast." Thus, from the ISO's perspective, limiting a resource's TSRO Outages to one month provides a reliability benefit. A resource may still have to incur costs in order to be available within one month. The TSRO outage duration limits therefore obligate a Resource owner to provide a form of capacity readiness and potentially incur costs without compensation. The limits on outage durations highlight a reliability need that is not met by the current RA requirements.

III. Proposal may create incentives for inefficient TSRO outages

TSRO outage policy should not induce outage requests from a resource whose benefits of participating in the ISO spot markets are higher than the costs of being available. The ISO proposes paying resources their CPM offer, up to the soft offer cap, for the entire output of the

² *Id.* at 13.

³ *Id.* at 9.

resource for the entire requested outage period. As a result, it is possible that resources may routinely submit requests for inefficient outages to receive potential capacity payments priced at the soft offer cap.

A TSRO eligible resource would face two choices. One, the resource could participate in the spot market to earn market profits. Two, the resource could apply for a TSRO outage with some probability of receiving a CPM payment. If the expected spot market profits are less than the expected CPM payment, the resource would apply for the TSRO outage even when the spot profits are greater than the resource's costs to be available.

Thus, the CPM payment creates a potential incentive for a resource to request a TSRO outage even if that resource would otherwise choose to participate in the ISO spot markets. If the outage request is accepted then the resource will be inefficiently shut down. If the outage request is denied the resource will receive payments that were not necessary for the resource to be available.

The ISO also proposes to not allow a resource with an approved TSRO Outage to return early to the spot markets. The reason for not allowing an early return is "[...] to mitigate the potential for "discovery" and the abuse of the temporary shutdown outage provisions." Not allowing early returns does make applying for TSRO less attractive. However, such a provision is not guaranteed to mitigate inefficient outage requests and may not significantly alter the tradeoffs compared to the proposed CPM payments.

Not allowing early returns from a TSRO outage can also create inefficient outcomes. When actual conditions differ from a resource's expectations, it may be profitable for the resource to enter the spot market even though it was on a TSRO outage. Not allowing a resource to return in these circumstances would be inefficient. Further, not allowing early returns from outage reduces flexibility and potentially affects reliability.

IV. The policy should induce efficient TSRO outage requests

Due to the relatively short timeframe of the proposed outage duration limit, a TSRO outage may not create significant benefits for resources whose costs of participating in the ISO spot markets outweigh the benefits of participating. Instead the Proposal could create incentives for some resources that would otherwise participate in ISO energy markets to apply for TSRO outages to attempt to receive capacity payments. Future modifications to the TSRO policy could both make the TSRO outage more useful to a resource seeking an efficient outage and less attractive for a resource to submit an inefficient outage in an attempt to receive large capacity payments.

The ISO can make several changes to reduce the incentive for a resource to submit an inefficient outage. First the capacity payment could be based on cost-of-service (including a rate-of-return). Relative to a payment at the CPM offer cap, a cost-of-service payment would reduce the potential rents from, and incentives to submit, an inefficient TSRO outage. As DMM

⁴ *Id.* at 6.

⁵ Without such a provision the remaining Proposal all but ensures that eligible resources will always apply for a TSRO outage.

previously suggested further possible incentives to discourage submission of inefficient outages could include: ⁶

- Not allowing a resource to submit requests covering the same dates as another active, withdrawn or approved non-physical Outage request;
- Require a resource that cancels an approved non-physical Outage to have a must offer obligation for the remainder of the originally approved Outage;
- If a resource cancels an approved non-physical Outage that resource should not be awarded an Exceptional Dispatch CPM if it is exceptionally dispatched during the remainder of the period for which its non-physical Outage would have been in effect; and
- Other incentives the ISO or stakeholders may develop during this policy initiative.

Capacity procurement through denied TSRO outages is not a backstop used to cure shortfalls in meeting the current RA requirements and does not undermine the RA process. Such capacity procurement would be used to fill deficiencies in the RA requirements themselves. Load serving entities could not use the TSRO process to avoid procuring capacity to meet RA requirements because the TSRO capacity would be in addition to the RA requirements. The ISO would use existing CPM mechanisms to cure shortfalls in meeting the RA requirements.

V. TSRO issues highlight need to reform RA requirements and process

Multiple elements of the TSRO Proposal highlight the need to reform the state's RA rules and program. The ISO's use of different reliability requirements in the TSRO studies (for example, using up to a 1-in-10 year load forecast rather than the 1-in-2 year RA load forecast), points to the need to update the RA requirements. The limits on outage duration also point to the value of an RA product with a term longer than one month. When performing reliability studies for long-term outages, the ISO has to make assumptions about resource availability. This points to the value of changing the RA process timelines so the ISO can know what the RA procurement is further in advance. Reforming the RA rules and processes is challenging, but as the TSRO initiative and events of this summer both highlight, RA reform is an extremely important issue. ⁷

⁶ Department of Market Monitoring *Comments on the Temporary Shutdown of Resource Operations Straw Proposal*: http://www.caiso.com/Documents/DMMComments- TemporaryShutdownofResourceOperations-StrawProposal.pdf.

⁷ For example, "...both resource adequacy capacity showings and availability in the day-ahead market fell below peak day-ahead load forecasts and actual load between June 19 and June 21." Department of Market Monitoring *Q2 2017 Report on Market Issues and Performance* September 25, 2017 pp.19: http://www.caiso.com/Documents/2017SecondQuarterReport-MarketIssuesandPerformance-September2017.pdf.