

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket No. RM19-2-000
Operator Corporation)**

**COMMENTS OF THE DEPARTMENT OF MARKET MONITORING FOR THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The Department of Market Monitoring (DMM) for the California Independent System Operator (CAISO) files comments in the above-captioned proceeding. In this Notice of Proposed Rulemaking (NOPR), the Commission proposes limited modifications to its regulations regarding horizontal market power analysis screens required for market-based rate sellers in certain Regional Transmission Organization (RTO) or Independent System Operator (ISO) markets.

DMM does not oppose the limited modifications proposed by the Commission and supports the important other principles and clarifications included in the NOPR. The NOPR reaffirms the Commission’s commitment and statutory obligation to ensure that potential market power is effectively mitigated in any organized RTO/ISO in which entities are granted market based rate authority. DMM agrees that the most effective way of mitigating market power in RTO/ISO-administered energy and capacity markets is through strong market power mitigation mechanisms and procedures incorporated directly into the ISO market design. As summarized in these comments, the strength of CAISO’s existing market power mitigation provisions need to be maintained and enhanced as needed in response to changing market conditions to ensure effective mitigation of market power in the CAISO markets.

BACKGROUND

The NOPR provides that “in lieu of submitting the indicative market power screens, Sellers studying regional transmission organization (RTO) or independent system operator (ISO) markets that operate RTO/ISO-administered energy, ancillary services, and capacity markets may state that they are relying on *Commission-approved market monitoring and mitigation* to address potential horizontal market power Sellers may have in those markets (emphasis added).¹

The proposed modifications relieving sellers of the requirements to submit indicative screens under certain conditions is explicitly based on the Commission’s presumption that Commission-approved market monitoring and mitigation will effectively mitigate the sellers’ market power.² The Commission will still require RTO/ISO sellers to submit all other currently required information and report any change in status that would reflect a departure from the characteristics that the Commission relied upon in granting it market-based rates.³ Sellers will need to explicitly affirm that they are relying on Commission-approved market monitoring and mitigation to mitigate any horizontal market power.⁴ The Commission will also retain its ability to require a market power analysis, including indicative screens, from any market-based rate seller at any time.⁵

¹ 165 FERC ¶ 61,268, *Notice of Proposed Rulemaking: Refinements to Horizontal Market Power Analysis for Sellers in Certain Regional Transmission Organization and Independent System Operator Markets*, Docket No. RM19-2-000, December 20, 2018, ¶ 43, p. 29.

² NOPR, ¶ 43, p. 29.

³ NOPR, ¶47, pp. 32-33 and ¶61-64, pp. 39-43.

⁴ NOPR, ¶ 9, p. 8 and ¶ 46, pp. 31-32.

⁵ NOPR, ¶9, p. 8 and ¶62, p. 41.

In addition, the NOPR indicates that the Commission would continue to require sellers to submit indicative screens for authorization to make capacity sales at market-based rates in any RTO/ISO that lacks an RTO/ISO administered capacity market subject to Commission-approved monitoring and mitigation. The NOPR also eliminates the rebuttable presumption that Commission-approved market monitoring and mitigation is sufficient to address any horizontal market power concerns regarding sales of capacity in RTOs/ISOs that do not have an RTO-administered capacity market.⁶ The NOPR clarifies that these provisions are applicable to capacity sales in the CAISO.⁷

COMMENTS

I. Market Power Mitigation in CAISO's Energy Markets

The proposed rulemaking presents clear and compelling logic to justify eliminating the requirement for indicative market power screens for markets which are subject to monitoring by an ISO as well as effective Commission-approved market power mitigation rules. In such markets, the combination of automated mitigation procedures and ongoing monitoring of the effectiveness of these rules can be relied upon to protect against the type of market power specifically targeted by Commission-approved market power mitigation rules. Indicative screens can provide limited incremental value in such markets as long as an ISO has monitoring and rules in place that effectively mitigate market power. In the NOPR, the Commission notes that it has found that such screens

⁶ NOPR, ¶2, p. 2 and ¶24, p. 19.

⁷ NOPR, ¶41, p. 28.

place a significant burden on sellers, and that the proposal would reduce these burdens without compromising the Commission's ability to prevent the potential exercise of market power in RTO/ISO markets.⁸

CAISO's local market power mitigation is effective, but must be maintained and modified as needed to ensure continued effectiveness.

In CAISO, energy sales are only subject to market power mitigation when the sales are from particular resource types⁹ which can provide counterflow to a binding "transmission constraint deemed by CAISO to be non-competitive."¹⁰ CAISO therefore has automated *local* energy market power mitigation. DMM believes that CAISO's current rules provide effective mitigation of the exercise of local market power for energy from resources subject to the automated mitigation.

However, the continued effectiveness of the monitoring and mitigation procedures for mitigating the exercise of local market power relies upon the continued vigilance of the Commission in approving changes in the mitigation design that address gaps and in rejecting proposed changes that may undermine the effectiveness of the design. For example, resources such as demand response and energy storage are not currently subject to bid mitigation when the CAISO's local market power mitigation procedures are triggered. As dependence on demand response and energy storage resources within transmission constrained load areas increases, it is likely that the local market

⁸ NOPR, ¶1, p. 2, ¶8, p. 7 and ¶62, p. 41.

⁹ Resource types such as imports, battery storage, and demand response are not currently subject to market power mitigation procedures.

¹⁰ NOPR, ¶ 30, p. 22.

power rules will need to be modified to include these resources in local market power mitigation procedures.

CAISO does not have strong system market power mitigation -- and system market power mitigation rules may need to be added as market conditions change.

The CAISO's local market power mitigation procedures are not designed to mitigate *system-wide* energy market power. These procedures do not prevent resources that are outside of transmission constrained areas within the CAISO from participating in the exercise of market power in the CAISO's system-wide market for energy. Aside from the \$1,000/MWh offer cap, CAISO does not have *system* energy market power mitigation. In time periods in which there are a limited number of suppliers whose energy is pivotal for meeting CAISO's system-wide demand, those entities can set system-wide energy prices at any price up to the offer cap.

The local market power mitigation procedures may mitigate resources that are downstream from a binding non-competitive constraint. However local market power mitigation cannot effectively mitigate system-level market power. This is because the floor on resources' mitigated bids is set by an important feature of CAISO's local market power mitigation called the *competitive LMP*.

The competitive LMP is the resource's LMP after subtracting out the amount that the LMP is increased by binding constraints deemed structurally non-competitive. Therefore, if suppliers are exercising system-level market power, pivotal resources upstream from binding constraints offering at very high prices would result in high system marginal energy prices, but a low shadow

price on the non-competitive binding constraint. This would result in the bid floor for resources subject to local market power mitigation effectively being determined by the bids of upstream resources that are not subject to local market power mitigation or by resources such as imports that are not ever subject to local market power mitigation. As a result, as long as the pool of pivotal resources for meeting system demand includes resources that are upstream from binding constraints or resources that are not ever subject to mitigation, local market power mitigation will be ineffective in mitigating the exercise of system market power.

The NOPR justifies not requiring indicative screens for energy sales in part because Commission-approved market monitoring and mitigation is designed to “prevent the exercise of market power before it happens.”¹¹ Since CAISO does not mitigate system market power, current CAISO rules cannot prevent the exercise of system market power before it happens. Monitoring for the exercise of system energy market power can help identify the potential for market power before it happens and can help with the expeditious implementation of ISO-administered automated mitigation procedures when the CAISO and Commission determine this is warranted. However, monitoring alone cannot prevent the exercise of market power before it happens.

The NOPR also explains that part of the justification for relying on mitigation and monitoring in lieu of indicative screens is that the Commission “retains RTO/ISO market oversight through proceedings under Federal Power

¹¹ NOPR, ¶ 66, p. 44.

Act section 206.”¹² In practice, DMM and the CAISO have a history of working together through its stakeholder process to enhance market power mitigation rules as needed through section 205 filings to prevent potential market power before it occurs. To date, DMM has not determined that the exercise or potential for system energy market power has reached the degree that would warrant a 206 proceeding.

However, as noted in recent DMM reports, DMM’s analysis indicates that the CAISO system is showing signs of becoming less competitive. In a growing number of hours, the day-ahead market has not been structurally competitive.¹³ DMM expects these conditions may be exacerbated by generation retirements, decreasing willingness of load serving entities to procure dispatch rights to flexible resources, increasing energy offer caps under FERC Order 831, and other ISO proposals to increase offer caps used in mitigation. As a result, DMM has recommended that the CAISO assess the potential for increasing system market power and options that might be implemented to proactively mitigate system market power.¹⁴

In order for the CAISO’s mitigation rules to effectively “prevent the exercise of market power before it happens,” the Commission may need to approve enhancements of the mitigation procedures based on a demonstration

¹² NOPR, ¶ 70, p. 46.

¹³ *2017 Annual Report on Market Issues and Performance*, Department of Market Monitoring, June 2018, pp.153 and 251.
<http://www.caiso.com/Documents/2017AnnualReportonMarketIssuesandPerformance.pdf>

¹⁴ *2017 Annual Report*, p. 251.

of the potential for market power, rather than requiring a demonstration that market power has already been exercised.

Automated bid mitigation procedures applied in the energy imbalance market provide effective market power mitigation across each balancing area.

The NOPR is not entirely clear on whether the proposed changes to the requirement for indicative screens will apply to the energy imbalance market (EIM) administered by the CAISO. The EIM is part of the CAISO's real-time energy imbalance market, which is subject to Commission-approved market monitoring and mitigation.

The bid mitigation that is applied to EIM balancing areas is based closely on the ISO's local market power mitigation procedures, but is applied more broadly when congestion occurs *between* different EIM balancing areas and the rest of the EIM and CAISO footprint. When congestion occurs on constraints within each EIM area, mitigation is applied in the same manner as the local market power mitigation procedures that are applied within the CAISO.

In addition, energy bid mitigation is applied to all resources within an EIM area whenever that EIM area is separated by congestion in the import direction from the rest of the EIM and CAISO footprint. In contrast, when the CAISO system is separated from other balancing areas by import congestion, bid mitigation is not triggered for any units within the CAISO. Thus, unlike the local market power mitigation procedures applied within the CAISO, the automated market power mitigation procedures applied to each EIM balancing area provide

effective market power mitigation on a system-wide level across each individual EIM balancing area.

DMM closely monitors the performance of the EIM and effectiveness of the automated market power mitigation procedures applied when congestion occurs within and into EIM areas. In 2016 and 2017, enhancements to these mitigation procedures recommended by DMM were implemented by the CAISO. Following implementation of these enhancements, DMM has verified that the CAISO's automated mitigation procedures effectively mitigate market power in the EIM.¹⁵

For these reasons, DMM believes that the EIM should be treated as an energy market that is subject to Commission-approved market monitoring and mitigation. As explained in the NOPR, while this would relieve sellers in the EIM of the obligation to submit indicative screens, the Commission retains its ability to require a market power analysis, including indicative screens, from any market-based rate seller at any time.¹⁶

I. Sales of Capacity in the CAISO

For ISOs that do not have ISO-administered capacity markets (such as the CAISO), the proposed rulemaking presents clear and compelling logic why sellers should be required to "submit indicative market power screens if they wish to obtain market-based rate authority for wholesale sales of capacity in these

¹⁵ *2017 Annual Report*, pp.157-158.

¹⁶ NOPR, ¶9, p. 8 and ¶62, p. 41.

markets.”¹⁷ For such markets, which do not have Commission-approved monitoring or mitigation, the information gleaned with respect to a specific seller’s market power from indicative screens, and mitigation imposed directly by the Commission due to failure of those indicative screens, may provide substantial incremental value. The NOPR also eliminates the rebuttable presumption that Commission-approved market monitoring and mitigation is sufficient to address any horizontal market power concerns regarding sales of capacity in RTOs/ISOs that do not have an RTO-administered capacity market.¹⁸

DMM strongly supports the NOPR’s provisions relating to capacity market sales in the CAISO. In the CAISO, the bilateral capacity sales market that supports resource adequacy is overseen by the California Public Utilities Commission (CPUC), but it is not directly subject to Commission-approved RTO/ISO monitoring. Furthermore, as the proposed rulemaking points out, “CAISO and SPP do not operate centralized capacity markets currently; thus they do not have mitigation in place for capacity sales.”¹⁹

CAISO does have two backstop procurement processes that enable the CAISO to procure and compensate resources if CAISO determines that the resources procured and shown to CAISO through the CPUC-administered resource adequacy process are not sufficient to meet CAISO’s reliability needs.

¹⁷ NOPR, ¶ 44, p. 30.

¹⁸ NOPR, ¶2, p. 2 and ¶24, p. 19.

¹⁹ NOPR, ¶ 41, p. 28.

These backstop procurement processes include the Capacity Procurement Mechanism (CPM) and Reliability Must Run (RMR) designations.

These backstop procurement processes can help to set a ceiling on the capacity compensation that a resource with market power can demand from bilateral capacity contracts. If a load serving entity demonstrates that it offered to pay a sufficiently high price for resource adequacy capacity but no resources would accept that offer, the CPUC can choose to reduce the amount of capacity that the CPUC would otherwise require the load serving entity to procure through bilateral contracts. Resources that did not accept the load serving entity's offer could still receive capacity compensation through one of CAISO's backstop procurement processes. Thus, these processes can help to set a ceiling on bilateral capacity contract compensation, since the load serving entities and the CPUC may not approve bilateral contracts that would pay a resource with market power more than that resource would be paid through CAISO's backstop procurement processes.

CAISO's backstop procurement processes help to set a ceiling on resources' bilateral capacity contract compensation, similar to the way system-wide offer caps set ceilings in ISO-administered capacity markets. However, these backstop procurement processes do not mitigate market power like the Commission-approved market power mitigation in those capacity markets. As the NOPR explains, resources with market power in ISO-administered capacity markets are mitigated down to "reference levels set according to going-forward

costs” that are generator specific.²⁰ Compensation in CAISO’s backstop procurement processes is not based on resource specific going forward costs.

Instead, when CAISO determines that uncontracted resources are required in order to maintain reliability, CAISO can attempt to procure them through the CPM or through an RMR designation. Resources seeking CPM compensation can offer their capacity at any price up to the non-resource specific soft offer cap (currently \$76/kw-year). RMR designation compensation includes full cost recovery and a return on sunk fixed costs. Both these forms of compensation can be significantly greater than the compensation based on the marginal resource’s going forward costs in ISO-administered capacity markets.

CAISO is proposing to make changes to CPM and RMR design through an active stakeholder initiative. However, CAISO is not proposing mitigation based on going forward costs, and is not proposing to reduce the CPM soft offer cap or change RMR compensation. DMM and other stakeholders have repeatedly expressed concerns in comments in CAISO’s initiative that the backstop procurement compensation may be significantly in excess of a resource’s going forward fixed costs plus a reasonable return.²¹

Analysis by DMM suggests that market power mitigation for capacity sales in CAISO may be warranted. In September and October 2018, CAISO solicited

²⁰ NOPR, footnote 75, p. 27.

²¹ *DMM comments on reliability must run and capacity procurement mechanism enhancements draft final proposal*, Department of Market Monitoring, February 25, 2019, p. 1: <http://www.caiso.com/Documents/DMMComments-ReliabilityMust-RunandCapacityProcurementMechanismEnhancements-DraftFinalProposal.pdf>

CPM offers for system-wide capacity, including imports, to meet deficiencies in system resource adequacy. DMM calculated residual supply indices for these auctions that indicated significant market power in capacity sales at the system level. DMM also publishes residual supply indices for major local capacity areas in CAISO. This analysis indicates that many local areas are not structurally competitive because there is one supplier that is pivotal and controls a significant portion of capacity needed to meet local requirements.²²

In conclusion, while there is evidence of substantial market power in bilateral capacity markets, the CAISO's current rules do not mitigate resources with market power that receive backstop procurement compensation based on generator specific going-forward costs, as in other ISOs with Commission-approved capacity markets. Therefore, DMM supports the Commission's proposal to require sellers to submit indicative market power screens in order to obtain market-based rate authority for wholesale sales of capacity in the CAISO.

CONCLUSION

DMM does not oppose the limited modifications proposed by the Commission to eliminate the requirement to submit indicative screens in markets with effective Commission-approved market monitoring and mitigation. DMM believes that the most effective way of mitigating market power in RTO/ISO-administered energy and capacity markets is through strong market power mitigation mechanisms and procedures which are incorporated directly into the

²² *2017 Annual report*, p. 154.

ISO market design. As summarized in these comments, the CAISO's existing market power mitigation provisions need to be maintained and enhanced as needed in response to changing market conditions to ensure effective mitigation of market power in the CAISO markets. Thus, it is important that the Commission maintain its commitment to fulfilling its statutory obligation to ensure that potential market power is effectively mitigated in any organized RTO/ISO in which entities are granted market based rate authority.

Respectfully submitted,

/s/ Eric Hildebrandt

Eric Hildebrandt, Ph.D.
Executive Director, Market Monitoring
Ryan Kurlinski
Manager, Analysis & Mitigation Group
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: 916-608-7123
ehildebrandt@caiso.com

Independent Market Monitor for the
California Independent System
Operator

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CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 18th day of March, 2019.

1st Anna Pascuzzo
Anna Pascuzzo