UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**)** **)**	**Docket No. ER18-1169-000**

ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO COMMENTS AND PROTESTS

The California Independent System Operator Corporation (CAISO)[1] answers the comments and protests filed in the above-captioned proceeding[2] in response to the CAISO's March 23, 2018 tariff amendment (March 23 Tariff Amendment).[3] The March 23 Tariff Amendment implements the CAISO's commitment cost enhancements phase 3 (CCE3) initiative, which allows use-limited resources to reflect their opportunity costs in bids and provides additional flexibility to market participants to register alternative resource characteristics to manage contract limits.

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[1] Capitalized terms not otherwise defined herein have the meanings set forth in appendix A to the CAISO tariff.

[2] The following entities filed motions to intervene in the proceeding: the California Public Utilities Commission (CPUC); California Department of Water Resources State Water Project; Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (collectively, Six Cities); Department of Market Monitoring of the CAISO (DMM); Modesto Irrigation District; Nevada Power Company and Sierra Pacific Power Company (together, NV Energy); Northern California Power Agency; NRG Power Marketing LLC and GenOn Energy Management, LLC (together, NRG); Pacific Gas and Electric Company (PG&E); San Diego Gas & Electric Company (SDG&E); and Southern California Edison Company. In addition, NV Energy and PG&E filed comments, DMM, NRG, and SDG&E filed protests, and the Six Cities filed a limited protest.

[3] The CAISO files this answer pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R., §§ 385.212, 385.213. The CAISO requests waiver of Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2), to permit it to answer the protests filed in the proceeding. Good cause for this waiver exists here because the answer will aid the Commission in understanding the issues in the proceeding, provide additional information to assist the Commission in the decision-making process, and help to ensure a complete and accurate record in the case. *See, e.g.*, *Equitrans, L.P.*, 134 FERC ¶ 61,250, at P 6 (2011); *Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,023, at P 16 (2010); *Xcel Energy Servs., Inc.*, 124 FERC ¶ 61,011, at P 20 (2008).

None of the entities that submitted comments and protests request that the Commission reject the March 23 Tariff Amendment. Instead, each entity supports most of the CAISO's proposals while raising a few specific issues.[4] For the reasons set forth below, the Commission should accept the March 23 Tariff Amendment as filed.

I. Background and Executive Summary

In the March 23 Tariff Amendment the CAISO proposed, *inter alia*, to implement a process for developing opportunity costs that uses a formulaic calculator as the preferred approach for establishing opportunity costs for resources with use limits that can be readily translated into start-up, run-hour, or megawatt-hour limitations. NRG erroneously argues that the process for calculating opportunity costs is flawed because the calculations purportedly will not include both historical costs and forward price information. To the contrary, the materials provided in the stakeholder process on the details of the calculation show that the formula will include both types of information. NRG also incorrectly asserts that the tariff revisions do not provide sufficient information regarding the opportunity cost calculation. The CAISO has provided sufficient information in the tariff, the technical appendix to the draft final proposal, and the business requirements specification. The CAISO will include the information in the

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[4] DMM at 2-3 ("DMM was supportive of the CAISO's overall effort as a step forward toward addressing several important issues. However, DMM expressed concern about several changes the CAISO made to the final proposal to accommodate some stakeholder groups."); NRG at 1 ("While NRG supports the CAISO providing generators with a way to incorporate opportunity costs into their bids, NRG has concerns with some elements of the Amendment."); NV Energy at 1 ("NV Energy objects to one aspect of the CAISO's proposal"); PG&E at 3 ("PG&E opposes one element of the CAISO's requested Tariff Amendments"); SDG&E ("While SDG&E supports most of CAISO's CCE3 proposals, SDG&E protests CAISO's filing in three respects."); Six Cities at 1 ("The Six Cities support most elements of the CAISO's Filing.")

technical appendix and the business requirements specification in the business practice manual consistent with the approaches the Commission approved for the opportunity cost mechanics used by PJM Interconnection, L.L.C. (PJM) and Southwest Power Pool, Inc. (SPP).

SDG&E expresses concern that the CAISO may set the allowed maximum opportunity cost adder for a resource at too low a level, thus exposing the resource's scheduling coordinator to resource adequacy availability incentive mechanism penalties. This concern is unfounded because the opportunity cost calculation will take into account a margin that the CAISO may adjust based on experience gained with calculating opportunity costs. Moreover, the scheduling coordinator can utilize two nature-of-work outage categories to exempt use-limited resources from such penalties if their use limits are reached.

NRG argues that the CAISO's standard alternative dispute resolution provisions to resolve disputes over opportunity cost calculations are too restrictive and that the CAISO should instead adopt a special dispute resolution process for those calculations. The CAISO will calculate opportunity costs based on a formula of general application, which will be set forth in the tariff and business practice manual. As such, there is no need for a special dispute resolution process for calculated opportunity costs. The only flexibility relates to establishing limitation margins and the purpose of the margins is to provide sufficient headroom to prevent resource limitations from being prematurely reached. The CAISO will adjust these limitation margins based on experience and apply them at the same level to all resources with calculated opportunity costs. Adjustments to the limits will be based on the most recent market data that would indicate whether the limits are too high or too low. That is, the process is iterative and the limits will be fine-tuned based on the most recent data. There is simply no need for a special dispute resolution process.[5]

As anticipated, some parties opposed the CAISO's proposal to allow a three-year transition period to include economic contractual limitations as eligible use limits if contained in long-term contracts that were approved or were pending approval by a local regulatory authority on or before January 1, 2015 (*i.e.*, before the CCE3 stakeholder process began). As they did in the stakeholder process, some parties had divergent views: DMM, on the one hand, argues there should be no eligible contractual limitations. On the other hand, PG&E and SDG&E argue that the qualifying contractual limitations should apply for the duration of existing long-term contracts, and NRG argues that all contractual limitations should be eligible. The CAISO has proposed a practical path for transitioning to its policy of not recognizing contract limits and agrees with DMM that this is the appropriate long-term policy. A three-year transition period for a limited set of contracts represents a narrow and temporary exception. Further, the three-year cutoff period will provide sufficient time either for resources and load-serving entities to renegotiate their long-term contracts or for resources to work with DMM to obtain more accurate major maintenance adders for use in the CAISO

5 As a reminder, the CAISO will be including opportunity cost adders – both the calculated and the negotiated – in the monthly informational filings it makes pursuant to existing tariff section 39.7.1.3.2. Because the CAISO is proposing to have flexibility to adjust the monthly limits to help ensure the limits are neither too high nor too low pursuant to a process that will be in the business practice manual, the CAISO is also proposing to include all opportunity cost adders in the monthly informational filings. Transmittal letter for March 23 Tariff Amendment at 20 & n.64.

market. The CAISO will also take the prudent step of evaluating, near the end of the cutoff period, whether there is any basis to file with the Commission to extend that three-year period.

The March 23 Tariff Amendment also proposes to give scheduling coordinators additional flexibility to register a market value in the Master File for maximum daily start-ups, maximum daily number of multi-stage generating (MSG) resource transitions, operational ramp rate values, operating reserve ramp rate values, and regulation ramp rate values. The CAISO will use these market values in parallel with the current Master File values that, under the tariff, must reflect a resource's physical characteristics or, using the proposed new term, design capability. The design capability values would only be used under exceptional dispatch to address stressed grid conditions. PG&E and SDG&E do not recognize the benefits this option will provide or the reasons the CAISO has required that the market value for maximum daily start-ups (and maximum daily number of MSG resource transitions) must be at least two.

There is no basis for NV Energy's concern that the two-starts-per-day requirement will detrimentally affect the Energy Imbalance Market and no merit to NRG's argument that the CAISO should narrow the circumstances in which it may issue exceptional dispatch instructions based on a resource's design capability. The existing CAISO tariff requires resource characteristics to be based on physical capabilities, and the CAISO's exceptional dispatch authority is defined in the tariff. The result of this tariff change would be to provide additional flexibility to market participants to register market values for preferred use of the resources in the CAISO markets.

Finally, the Six Cities argue that the CAISO should further clarify the generated bid insertion rules it clarified in the March 23 Tariff Amendment. The CAISO has complex software infrastructure bidding rules (SIBR) that generally apply to all bids. These rules are set forth in section 30 of the CAISO tariff, in contrast to the resource adequacy must-offer bid generation rules in section 40 of the tariff that apply only to resource adequacy capacity. The proposed clarification cross-references the generally applicable bidding rules as specifically as practicable given their general applicability.

II. Answer

A. The Tariff Revisions for Calculating Opportunity Costs Are Just and Reasonable

1. The CAISO Opportunity Cost Calculation Methodology is Sound

NRG argues that the CAISO's proposed process for calculating opportunity costs is flawed because the calculations purportedly will be based solely on historical 15-minute locational marginal prices (LMPs) that will be used to establish forecasted hourly LMPs. NRG asserts that the CAISO should instead use both historical costs and forward price information in the opportunity cost calculation. NRG also contends that the tariff revisions do not describe the CAISO's forecasting methodology in sufficient detail.[6]

[6] NRG at 4-5.

NRG's arguments are without merit. First, NRG's assertion that the CAISO will only rely on historical costs in calculating opportunity costs is simply wrong. In calculating opportunity costs, the CAISO will utilize both historical data and forecasts of future conditions. The historical LMPs the CAISO will use in the calculation are for the same time period from the previous year, which will provide a reasonable basis for the CAISO's forecast of the LMPs for that time period in the current year. However, *this only serves as a foundation for calculating the opportunity costs*. In addition, the CAISO plans to update its opportunity cost calculations once a month with the most recent LMP pricing data and may update them more frequently if circumstances provide a basis for doing so.[7]

Further, the CAISO explained in the CCE3 draft final proposal attached to the March 23 Tariff Amendment (Draft Final Proposal) that "[i]n order for the [opportunity cost] model to calculate the profit, [the CAISO] will use historical implied heat rates, natural gas future prices, recent gas transportation and greenhouse gas prices, and an inflator based on future power prices to simulate a distribution of the node-specific LMPs for the resource."[8]

Specifically, as detailed in the business requirements specification (BRS) regarding the CCE3 changes that has been posted on the CAISO website since 2017 and that the CAISO brought to market participants' attention by market

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7 New tariff section 30.4.1.1.6.2.1. For the sake of clarity, this answer distinguishes between existing tariff provisions (*i.e.*, provisions in the current CAISO tariff), new tariff provisions (*i.e.*, new provisions that the CAISO proposes to add to the tariff in the March 23 Tariff Amendment), and revised tariff provisions (*i.e.*, existing tariff provisions that the CAISO proposes to revise in the March 23 Tariff Amendment).

8 Draft Final Proposal, attachment C to March 23 Tariff Amendment, at 28.

notice, the CAISO will estimate the LMPs by executing the following equations in the order shown below:

(1) Calculate a 15-minute implied marginal heat rate for the use-limited resource based on 15-minute LMPs from the same time period the previous year.

(2) Calculate an hourly implied marginal heat rate for the use-limited resource for the same time period the previous year as the simple average of the four resource-specific 15-minute heat rates corresponding to the same hour the previous year.

(3) Calculate a power price conversion factor based on the ratio of an implied heat rate of future power prices to an implied heat rate of historical power prices.

(4) Scale the hourly implied marginal heat rate calculated under equation (2) by the power price conversion factor calculated under equation (3).

(5) Estimate the hourly LMPs by applying natural gas future prices, gas transportation costs, and greenhouse gas costs to the scaled implied heat rates calculated under equation (4).[9]

NRG ignores that equations (3) through (5) take forward price information into account, not just historical price information. The CAISO fully vetted this approach to calculating the LMPs in the stakeholder process that resulted in the March 23 Tariff Amendment. Further, the Commission has authorized other Independent System Operators and Regional Transmission Organizations to

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[9] BRS for CCE3 at 118-21 (Version 1.9), available at http://www.caiso.com/Documents/BusinessRequirementsSpecification-CommitmentCostPhase3.pdf. The market notice announcing issuance of this BRS is available at http://www.caiso.com/Documents/CommitmentCostEnhancementPhase3UpdatedBusinessRequirementsSpecificationsPosted.html. A link to the BRS is also provided on the CAISO website page regarding the CCE3 initiative, http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancements.aspx.

calculate opportunity costs using forecasts that consider both historical and future cost data.[10] The Commission should do the same in this proceeding.

If NRG is suggesting that the CAISO adopt an alternative approach to calculating opportunity costs, the Commission should reject that suggestion. The matter before the Commission is to determine if the CAISO's proposal – and not any alternative proposal suggested in comments filed with the Commission – is just and reasonable. "Pursuant to section 205 of the FPA, the Commission limits its evaluation of a utility's proposed tariff revisions to an inquiry into 'whether the rates proposed by a utility are reasonable – and not to extend to determining whether a proposed rate schedule is more or less reasonable to alternative rate designs.'"[11] Therefore, "[u]pon finding that CAISO's proposal is just and reasonable, [the Commission] need not consider the merits of alternative proposals."[12] That is the case here.

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[10] *See* PJM Operating Agreement, schedule 2, at section 1.1(a) ("Such unit-specific Energy Market Opportunity Costs are calculated by forecasting Locational Marginal Prices based on future contract prices for electricity using PJM Western Hub forward prices, taking into account historical variability and basis differentials for the bus at which the generating unit is located for the prior three-year period immediately preceding the relevant compliance period."); SPP OATT, attachment AF, at section 3.2(D) ("Resource specific opportunity costs are calculated by forecasting Locational Marginal Prices based on future contract prices for natural gas and the historical relationship between the SPP system marginal Energy component of LMP and the price of natural gas, as determined by the SPP Market Monitoring Unit.").

[11] *Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,135, at P 44 n.43 (2012), quoting *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984). *See also Louisville Gas & Elec. Co.*, 114 FERC ¶ 61,282, at P 29 (2006) (finding that "the just and reasonable standard under the FPA is not so rigid as to limit rates to a 'best rate' or 'most efficient rate' standard. Rather, a range of alternative approaches often may be just and reasonable"); *Entergy Servs., Inc.*, 116 FERC ¶ 61,275, at P 32 (2006) (finding that a "proposal does not need to be perfect, or the most desirable way of doing things, it need only be just and reasonable").

[12] *Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,135, at P 44.

The tariff revisions provide sufficient information regarding the opportunity cost calculation, and the CAISO will include the equations and other implementation details in a business practice manual. The CAISO has already provided these equations and implementation details to market participants through the technical appendix to the draft final proposal or the business requirements specification documentation.[13] Including these implementation details in a business practice manual is consistent with the Commission's expressed policy that "relying on Manuals to develop implementation details and mechanics of implementation may be acceptable" for opportunity cost calculations.[14] Consistent with that direction, PJM and SPP include methodologies in their tariffs to determine opportunity costs for eligible resources and have manuals containing the calculation details to implement the methodologies.[15] The PJM and SPP tariffs both refer the reader to the relevant manual for such detail, and the SPP tariff states that "[t]he formulas and instructions in the price forecast model shall be determined by the SPP Market Monitoring Unit and published in the Market Protocols as part of the Mitigated Offer Development Guidelines, updated, as needed, by the SPP Market

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13 The technical appendix is available on the CAISO website page regarding the CCE3 initiative, at http://www.caiso.com/Documents/TechnicalAppendix-CommitmentCostEnhancementsPhase3-OpportunityCostMethodology.pdf.

14 *PJM Interconnection, L.L.C.*, 130 FERC ¶ 61,230, at P 17 (2010).

15 *See* PJM Operating Agreement, schedule 2, at section 1.1(a); PJM Manual 15: Cost Development Guidelines, at section 12 (May 15, 2017); SPP OATT, attachment F, at section 3.2(D); SPP Market Protocols, appendix G, at section G.11.

Monitoring Unit."[16] Thus, NRG is incorrect about the level of detail needed in the CAISO tariff revisions.

2. The Combination of the Opportunity Cost Adder and the Use Limit Reached Outage Cards Provides the Tools to Manage Exposure to RAAIM Penalties

SDG&E argues that if the CAISO sets the allowed maximum opportunity cost adder for a resource at too low a level, such that the resource reaches its use limitation before the end of the year, its scheduling coordinator could be subject to resource adequacy availability incentive mechanism (RAAIM) penalties. SDG&E asserts that scheduling coordinators should not be penalized for such CAISO mistakes and that, alternatively, the CAISO should exempt scheduling coordinators from RAAIM penalties for resources that always use the maximum opportunity cost adder permitted by the CAISO.[17]

The CAISO has built features into its proposal to address SDG&E's concerns. First, the opportunity cost calculation will reflect a reduction in the number of starts, run-hours, and megawatt-hours modeled by the CAISO. The reduction or margin, which will be set forth in a business practice manual, will provide headroom to reduce the risk that use limits will be reached during the applicable period.[18] The CAISO will initially set the margin at ten percent, and it will be subject to adjustment (higher or lower) based on monitoring the

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16 PJM Operating Agreement, schedule 2, at section 1.1(a); SPP OATT, attachment F, at section 3.2(D).

17 SDG&E at 6-7.

18 New tariff section 30.4.1.1.6.2.2; transmittal letter for March 23 Tariff Amendment at 19.

performance of the opportunity cost calculator to make sure it is neither too high nor too low.[19]

Second, the resulting opportunity cost adder is intended to allow a resource adequacy resource to participate in the market 24 hours a day, seven days a week, and to bid accordingly. As such, implementation of the opportunity cost adder does not increase the risk of incurring RAAIM penalties. There will still be a risk of incurring RAAIM penalties if a scheduling coordinator is not bidding the resource consistent with its use plan. However, this is the case currently and it will remain appropriate to impose RAAIM penalties under such circumstances. The purpose of the opportunity cost adder is to allow the resource to be bid in the market 24 hours a day, seven days a week, rather than to withhold the resource from the market to manage use limits.

In addition, SDG&E ignores that the business practice manual includes two nature-of-work outage categories that can be used to exempt use-limited resources from RAAIM penalties if their use limits are reached or are expected to be prematurely reached.[20] This means that if the scheduling coordinator is

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[19] Transmittal letter for March 23 Tariff Amendment at 19-20. As the CAISO has explained, each calculation of opportunity costs will be based on the difference in estimated profits if the use-limited resource had one less unit of starts, run-hours, or energy output, whichever is applicable, in the future time period of the validated limitation, taking the margin into account. For example, if a resource is limited to 100 starts per year and the margin is ten percent, the CAISO would model the resource has having 90 starts per year as the base case and then compare to an 89 starts per year case, calculating the resource's profits as the difference in overall profits between the two cases. Ninety starts reflects the 10 percent margin, and 89 starts reflects one less unit of starts. Transmittal letter for March 23 Tariff Amendment at 19.

[20] *Id.* at 13 n.42 ("The [CCE3] stakeholder initiative also addressed changes to the current treatment of outage cards, which in specified circumstances may exempt use-limited resources from the CAISO's resource adequacy availability incentive mechanism as set forth in the business practice manual."). Implementing these outage categories did not require any tariff revisions. *See* transmittal letter for the tariff amendment to implement phase 1A of the CAISO's reliability services initiative, Docket No. ER15-1825-000, at 45-46 (May 29, 2015).

bidding its resource but does hit a limit, an outage card can be used that would exempt the resource from RAAIM penalties. The first outage category is "use limit reached". Once a use-limited, resource adequacy resource reaches its use limitation, the resource may stop bidding into the market, submit a use limit reached outage card to the CAISO, and then be exempt from the RAAIM until capacity becomes available again. For example, if a resource is a resource adequacy resource for June and July and has a use limit of 20 starts per month, it will be modeled as having 18 starts for each month (*i.e.*, 20 starts reduced by two starts to reflect a ten percent margin), which will create headroom in the opportunity cost calculation. Once the resource expends all 20 starts for June, it will be exempt from the RAAIM until July 1, when the 20-start-per-month count will begin all over again.[21]

The second outage category is "short-term use limit reached". For example, if the CAISO is dispatching a resource heavily in early May and warmer weather is forecast for the following week, and if the resource's scheduling coordinator believes the CAISO will use up the resource's starts before then, it may submit a short-term use limit reached outage card to the CAISO and resume bidding later in warmer weather.

The CAISO explained in the Draft Final Proposal that it originally intended to eliminate the short-term use limit reached outage card upon implementation of the opportunity cost methodology, but later decided to retain that outage card to allow time for the CAISO and scheduling coordinators to gain experience with the

[21] Draft Final Proposal at 42-43.

use of the opportunity cost methodology and to address any potential unforeseen issues that may arise.[22] The CAISO recognizes that excessive use of the outage card would inhibit the ability of the CAISO and market participants to ensure that the opportunity cost methodology is an effective management tool. For this reason, the CAISO stated that reasonable use of the outage card should primarily be limited to cases where the opportunity cost has been reflected in bids but proven not to be fully effective, and the resource is at risk of reaching its limitation prematurely even with bids reflecting the opportunity cost.[23]

NV Energy requests that the CAISO and the Commission confirm that it is appropriate to use the short-term use limit reached outage card to limit resource use if the CAISO opportunity cost proves to be too low to prevent overuse of the resource.[24] Because of the adjustable margin and the use limit reached outage card, the CAISO does not believe that such overuse will occur, but if it does a market participant will be able to employ the short-term use limit reached outage card in the circumstances described in the Draft Final Proposal, which will be reflected in the business practice manual.[25]

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22 *Id.* at 41. The CAISO plans to retire the short-term use limit reached outage card after the CAISO and market participants have gained such experience, unless the CAISO later determines that it should be retained. *Id.* at 42.

23 *Id.* at 41-42.

24 NV Energy at 7.

25 All of the detail concerning the outage cards is and historically always has been reflected in the Business Practice Manual for Outage Management.

3. It Is Appropriate to Require Use of the CAISO's Standard Alternative Dispute Resolution

NRG argues that the tariff revisions requiring use of the standard, Commission-approved alternative dispute resolution (ADR) provisions under the tariff do not enable a generating unit owner to timely resolve a dispute as to the CAISO-calculated opportunity cost. NRG requests that the Commission require the CAISO to rule on any disputes related to opportunity cost calculations no more than ten business days following submission.[26]

The Commission should accept the tariff revisions as filed. This use of ADR solely concerns opportunity costs calculated using the formula to be set forth in the tariff and the business practice manual.[27] This formula will apply to all resources capable of being modelled by the opportunity cost calculator, which is designed to model resources with start-up, run-hour, or megawatt-hour limits using natural gas-fired resources as the model. As such, there can be no issue of discriminatory application or, indeed, anything else to dispute except whether the CAISO correctly followed the provisions specifying the formula. The only flexibility in the formula relates to establishment of the margin described above,[28] which will provide sufficient headroom to prevent resource limitations from being prematurely reached. The CAISO will adjust the margin based on experience and will apply the same margin (*e.g.*, ten percent upon the initial use of opportunity cost adders) to all resources with calculated opportunity costs. Thus,

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[26] NRG at 5-6.

[27] New tariff section 30.4.1.1.6.2.2.

[28] *See supra* section II.A(2) of this answer.

the only possible dispute would be whether the CAISO applied the margin at the correct level.

For these reasons, there is no need for a dispute resolution process different from the ADR process the CAISO regularly uses.[29] Pursuant to the tariff, the CAISO ADR procedures "apply to all disputes between parties which arise under the CAISO Documents" except in special circumstances not relevant here.[30] NRG provides no explanation as to what types of disputes could arise regarding execution of the opportunity cost calculation methodology, other than a vague reference to "very different expectations with regards to forward prices."[31] However, the rules regarding the opportunity cost calculation process, including the inputs thereto, will be set forth clearly in the tariff and business practice manual and, as noted above, are formulaic.

In contrast, for resources eligible for the negotiated opportunity costs,[32] the CAISO and the scheduling coordinator will negotiate under a process similar to the existing tariff processes for negotiating major maintenance expense adders and negotiated default energy bids for resources. However, such a process should not apply to disputes regarding opportunity cost calculations made using the formulaic opportunity cost calculator *because there is essentially*

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29 *See, e.g.*, existing tariff sections 11.18.7, 11.29.8.4.2 – 11.29.8.4.6, 11.29.8.4.8, 11.29.8.6, 22.11.3, 27.5.3.3, 27.5.3.6, and 36.8.5.7.

30 Existing tariff section 13.1.1. The CAISO ADR procedures do not apply to disputes arising under contracts which predate the CAISO operations date (except as the disputing parties may otherwise agree), to disputes as to whether rates and charges set forth in the tariff are just and reasonable under the Federal Power Act, or where otherwise limited by law. *Id.*

31 NRG at 5.

32 New tariff section 30.4.1.1.6.2.3.

nothing to negotiate when utilizing the calculator. Nor does NRG provide any persuasive explanation as to why it should apply. In contrast, the negotiated opportunity cost is available for resources with limits that cannot be translated into limits that feed into the opportunity cost calculator. The negotiation timeline is similar to the process used for negotiated default energy bids and other negotiated values, and is based on a 60-day process which in practice can take longer.[33] In brief summary, if there is something to be negotiated, it can be expected to require a period of negotiation well beyond the ten-day period that NRG argues for, which is what the negotiated option provides. Regardless, the calculated opportunity cost adder is formulaic and does not require any negotiation, but the generally applicable dispute resolution process will apply in case any dispute arises.

B. The Commission Should Accept the CAISO's Proposal for Transitional Qualifying Contractual Limitations to Be Eligible Use Limits

As the CAISO anticipated, some stakeholders object to the CAISO's proposed tariff revisions to permit a finite set of resources with economic contract limits – those associated with resources with local regulatory authority-approved

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[33] *See* existing tariff section 30.4.1.1.4 ("In the event of a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO or Independent Entity and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began."); existing tariff section 39.7.1.3.1 ("If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Default Energy Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Default Energy Bid by a Scheduling Coordinator."); proposed tariff section 30.4.1.1.6.3 ("If the CAISO and the Scheduling Coordinator enter into good-faith negotiations, the negotiation period will be a minimum of sixty (60) days following the provision of all required documentation by the Scheduling Coordinator.").

contracts – to count as eligible for use-limited status and opportunity cost adders[34] for a three-year transitional period.[35] DMM, on the one hand, argues that contractual limitations should be ineligible for use limited status and ineligible for an opportunity costs adders.[36] PG&E and SDG&E, on the other hand, argue that the CAISO should permit this set of resources to remain eligible for the entire duration of the terms of the contracts.[37] NRG goes a step further contending that all economic contractual limitations, not just ones that meet the qualification criteria set forth in the tariff revisions, should be treated as eligible limits for purposes of use-limited status and eligible for opportunity cost adders.[38]

The Commission should accept the CAISO's proposed tariff revisions to implement a three-year transitional period regarding the specific set of local regulatory authority-approved contracts as just and reasonable, and reject these

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34 Eligible use-limits are not guaranteed an opportunity costs. They are simply eligible for consideration of whether an opportunity cost is needed to allow their resource to be available at all hours.

35 Under new tariff section 30.4.1.1.6.1.1, qualifying contractual limitations are those contained in long-term contracts that: (i) were reviewed and approved by a local regulatory authority on or before January 1, 2015, or were pending approval by a local regulatory authority on or before January 1, 2015 and were later approved; and (ii) were evaluated by the local regulatory authority for the overall cost-benefit of those contracts taking into consideration the overall benefits and burdens, including the limitations on such resources' number of starts, number of run-hours, or energy output. Contract limits that provide for higher payments when start-up, run-hour, or energy output thresholds are exceeded are not qualifying contractual limitations. The tariff revisions state that, effective as of a cutoff period occurring three years after the tariff revisions are implemented (*i.e.*, November 1, 2021), no contractual limitations will constitute qualifying contractual limitations. However, the CAISO has committed to evaluate, before the end of this transitional three-year cutoff period, whether it would be appropriate to extend the tariff revisions for some time. Transmittal letter for March 23 Tariff Amendment at 26-27.

36 DMM at 3-16.

37 PG&E at 3-9; SDG&E at 2-6.

38 NRG at 6-7.

entities' alternative suggestions.[39] The proposal to establish qualifying contractual limitations with a defined transitional period represents a practical path to realizing the CAISO's policy of not recognizing contract limits. The proposal also strikes a reasonable balance among the diverse viewpoints of the entities.[40]

The transitional period will provide parties to qualifying contracts time to align their contracts with the CAISO's commitment cost market design. The CAISO market is designed to allow market participants to include major maintenance costs in their commitment cost bids. However, some market participants have instead entered into contractual restrictions on starts and/or run-hours to address maintenance costs, which is inconsistent with the CAISO market design. The CAISO's commitment cost market design is structured to ensure that resources are efficiently committed and dispatched based on marginal costs. As a matter of principle, the CAISO agrees with DMM's position, insofar as it has been the CAISO's general and longstanding policy, as reflected in the current tariff, that economic limitations do not convey use-limited resource

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39 As explained above in section II.A(1) of this answer, the matter before the Commission is to determine if the CAISO's proposal – and not any alternative proposal suggested in comments filed with the Commission – is just and reasonable.

40 *See, e.g.*, *Cal. Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,082, at P 23 (2013) (finding that CAISO tariff revisions strike "a reasonable balance between preventing the exercise of market power and enabling the recovery of costs"); *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,178, at P 27 (2009) (explaining that CAISO tariff revisions "strike a reasonable balance that addresses the barriers to development of location-constrained resources, while providing appropriate ratepayer protections to ensure that rates remain just and reasonable"); *ISO New Eng. Inc. and New Eng. Power Pool Participants Comm.*, 155 FERC ¶ 61,023, at P 36 (2016) (find that tariff revisions "struck an appropriate balance of competing interests").

status.[41] However, given the diversity and polarization of stakeholder views on this issue, the CAISO believes it is appropriate to implement the transitional approach reflected in the tariff revisions.[42]

1. Permitting a Narrow Transition Period During Which Certain Contractual Limitations Will Be Treated as Qualifying Use Limitations Is Appropriate

DMM argues that it is inefficient and inequitable to allow contractual limits to be eligible for opportunity costs.[43] The CAISO agrees with this position as a matter of principle. However, the CAISO's proposal to allow economic limits associated with a limited set of contracts previously approved by the CPUC (or other local regulatory authority) to be eligible for opportunity costs for a three-year period represents a narrow and transitional exception to the CAISO's longstanding policy of not allowing economic limitations to make a resource eligible for use-limited status. Specifically, under the proposed tariff revisions, only resources with long-term contracts approved through a robust regulatory process that occurred before the policy initiative regarding opportunity costs in

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[41] The existing definition in tariff appendix A of a use-limited resource, which the CAISO proposes to clarify in the March 23 Tariff Amendment, is "[a] resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, is unable to operate continuously." Thus, the definition does not contemplate economic limitations.

[42] DMM and PG&E are alike in noting caveats that the CAISO's Market Surveillance Committee (MSC) has regarding the CAISO's proposal to implement qualifying contractual limitations subject to a three-year cutoff date. DMM at 7, 9-10, 12-14; PG&E at 9. Despite these caveats, however, the MSC stated that it "support[s] the CAISO's recent relaxation of its position on contractual limitations" and that implementing a three-year cutoff period "is a positive step," though the MSC also stated that it "would not be opposed to a longer transition period for existing contracts." Final opinion of the MSC, attachment D to March 23 Tariff Amendment, at 10. Thus, the MSC reached conclusions not inconsistent with the CAISO's proposal.

[43] DMM at 3.

the underlying stakeholder process even commenced will be eligible for use-limited status based on those limits and eligible for an opportunity cost adder.[44]

DMM alone argues that the proposed eligibility criteria for qualifying contractual limitations are not sufficiently clear.[45] The CAISO disagrees with this claim. New section 30.4.1.1.6.1.1 of the tariff clearly sets forth the eligibility criteria. It also requires the scheduling coordinator to "provide sufficient documentation demonstrating the resource meets all of the [applicable] criteria," and states that, pursuant to a process set forth in the business practice manual, "the CAISO will review the limits and the supporting documentation provided by the Scheduling Coordinator . . . to determine whether the Scheduling Coordinator has made the required showing under this Section."[46] Thus, any uncertainty regarding the meaning of the tariff language can be resolved in the documentation and review process.

DMM notes that the transmittal letter for the March 23 Tariff Amendment states that the exception for qualifying contractual limitations involves a small set of existing contracts and that there is uncertainty regarding the quantity of capacity that will be covered by the tariff revisions.[47] Both statements in the

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[44] DMM states that market participants have been on notice that contractual limitations representing economic limitations or tradeoffs should not be eligible for opportunity cost adders since August 2015, when the CAISO issued its straw proposal in the CCE3 stakeholder process. DMM at 4-6. However, the proposed exception for qualifying contractual limitations will only apply to long-term contracts that were either approved or were pending approval by a local regulatory authority on or before January 1, 2015. Thus, such contracts predate the straw proposal.

[45] *Id.* at 14-16.

[46] New tariff section 30.4.1.1.6.1.1.

[47] DMM at 8 (citing transmittal letter for March 23 Tariff Amendment at 4 n.5 and 26).

transmittal letter are accurate. The CAISO intends that this exception apply to a specific set of resources with existing contracts that were reviewed and approved by the CPUC, plus any qualifying existing contracts that were reviewed and approved by other local regulatory authorities (an unknown but certainly small number of contracts). However, as DMM correctly states, "the actual amount and location of capacity eligible for the proposed exemption – and the actual contractual limitations of these resources – will only be known with certainty after approval and implementation of the CAISO's proposal."[48] DMM cites a figure of 5,000 to 10,000 megawatts (MW) of recently built gas-fired capacity that may be eligible for the exception.[49] The CAISO believes that approximately 6,000 MW of such capacity may be eligible, but again the exact figure cannot be known with certainty at this time. In any event, the effect of the exception is uncertain at this time and will not be known until the CAISO has actual experience with opportunity costs in general and recognizing contracts with these limits as eligible. Moreover, the effect of the exception will be limited because it will only apply for three years (unless the CAISO determines that it is necessary to extend it, in which case the CAISO would need to file with the Commission to amend the tariff).

NRG argues that *all* contractual limitations should be eligible for an opportunity cost and expresses alarm that the CAISO "is now proposing to discard those use limits that were carefully negotiated as part of an arms-length

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[48] DMM at 8.

[49] *Id.* at 8-9.

transaction between counterparties with diverging interests to protect simply because they are contractual."[50] NRG's argument is flawed in two respects. First, the CAISO's proposal does not exclude limitations "simply because they are contractual." The relevant distinction is between limitations based on environmental restrictions or design considerations, and limitations that are purely economic in nature. The CAISO's policy has always been to exclude economic limitations as the basis for a resource to be considered use-limited. The definition of a use-limited resource that the CAISO now proposes to clarify stated that a resource can be use-limited only due to "non-economic reasons" that render it "unable to operate continuously".[51] The CAISO now proposes a very limited exception for resources with certain contractual limitations, but otherwise retains the same general approach of excluding resources with only economic limitations from use-limited status. Even if it were appropriate to revisit this longstanding policy in the context of this filing, which it is not, NRG fails to show such policy unjust or unreasonable.

2. The Transitional Three-Year Cutoff Period Is Appropriate

PG&E and SDG&E argue that although the CAISO cites market power concerns as a reason for not generally allowing economic contractual limitations to qualify a resource for use-limited status and be eligible for opportunity costs, the CAISO also states that long-term contracts approved by the CPUC and other local regulatory authorities before the discussion regarding this issue

50 NRG at 6-7.

51 Tariff appendix A, definition of "Use-Limited Resource".

commenced (*i.e.*, qualifying contractual limitations) would not reflect attempts to exercise market power. PG&E and SDG&E assert that if the latter is true, it will continue to be true after three years, and as such, there is no reason for the CAISO revoke eligibility for use-limited status with respect to economic contract limits after three years.[52]

PG&E and SDG&E misunderstand the reasons for the three-year cutoff period.[53] Although the CAISO recognizes that qualifying long-term contracts approved by local regulatory authorities may not reflect attempts to exercise market power, the hard-use limitations reflected in the long-term contracts make some of the capabilities of these resources unavailable in the CAISO market and is inconsistent with the CAISO market design.[54] These long-term contracts limit the CAISO market's ability to efficiently balance the need to use the resources and the cost of using the resources. Parties are concerned about exceeding the use limitations under the long-term contracts because the changing needs of the CAISO grid means that the flexibility provided by the resources' capabilities is in fact needed by the CAISO market.

The CAISO understands that most of these long-term contracts' use limits are based on the goal of reducing maintenance expense. However, this manner of limiting maintenance expense through hard limits on using the resource conflicts with the design of the CAISO market. The CAISO market includes

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[52] PG&E at 4-5, 7; SDG&E at 3-4.

[53] DMM evidences a similar misunderstanding. *See* DMM at 10-11.

[54] However, the CAISO would continue to have the right to issue exceptional dispatches based on physical/design capability.

provisions for market participants to include maintenance expenses in their start-up, minimum load, and/or energy bids, as appropriate. The long-term contracts should include maintenance expenses in place of hard use limits, and the resource owners should include the maintenance expenses as part of their major maintenance adders in the CAISO market rather than attempting to manage maintenance expenses outside the markets through negotiated use limits that essentially result in limiting the resource's availability to the market. In this way, the market can consider the maintenance expense in determining whether to dispatch a resource, thus achieving an overall efficient use of the resource and minimizing costs for all market participants, while making the resource's full capabilities available to the CAISO markets. This cannot be accomplished through hard use limits reflected in negotiated contracts that cannot reflect actual market conditions.

The CAISO provided a brief rationale for the three-year cutoff period in the March 23 Tariff Amendment. The proposed three-year cutoff period will provide sufficient time for the CAISO and applicable local regulatory authorities to consider the implications of the change, in particular its implications for the resource adequacy program, and provide time for market participants either to renegotiate their contracts or work with DMM to obtain a more appropriate major maintenance adder if applicable.[55] Also, as the percentage of variable energy resources in the generating fleet continues to grow, the CAISO will require additional flexibility to maintain system reliability. If the CAISO can efficiently

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[55] Transmittal letter for March 23 Tariff Amendment at 26.

utilize more flexibility from resources currently constrained by contractual limitations, it could reduce the need for new resources to be built, resulting in far greater cost savings than the cost associated with existing resources making their full capability available.[56] The CAISO provided the same explanation for stakeholders in the Draft Final Proposal.[57]

The three-year period preceding the planned cutoff, which the CPUC originally proposed and the CAISO adopted after considering stakeholders' competing views,[58] will also allow sufficient time for resources with qualifying contractual limitations to gain experience in the market with opportunity costs. Further, due to delays in implementing the CCE3 changes, load-serving entities have had more time than expected to prepare for the tariff revisions to go into effect, and they will now have the same three-year period preceding the planned cutoff to renegotiate the long-term contracts with their resource counterparties.[59]

The CAISO has indicated its willingness to evaluate the three-year cutoff date and to extend it if necessary. However, without setting some cutoff date, there will be no way to manage market participants' expectations or incentivize

56 *Id.*

57 Draft Final Proposal at 18.

58 *Id.* The CPUC later changed its position to supporting the qualifying contractual limitation for the duration of the contract. See page 3 of attachment A (summary of submitted comments) to March 17, 2016 memorandum to the CAISO Governing Board (Board) (stating that the CPUC "supports the exception but now requests it be extended for the life of the contract"), available at http://www.caiso.com/Documents/DecisionCommitmentCostBiddingImprovementsProposal-StakeholderMatrix-Mar2016.pdf.

59 DMM describes how delays in implementing opportunity cost adders have kept extending the proposed exemption for contractual use limitations. DMM at 6. However, with the implementation of the tariff revisions, the delays will end.

them to undertake the necessary actions to revisit the contracts. The three-year cutoff date is reasonable given all of these considerations.

PG&E argues that it is unrealistic to assume that the long-term contracts can be renegotiated in three years' time given their high level of scrutiny and complexity, nor is there any guarantee that the CPUC would approve such modifications.[60] However, PG&E also acknowledges the CPUC's statement that there is only "a very limited quantity" of long-term contracts that may be subject to renegotiation and CPUC approval.[61] Therefore, it seems that the burden of renegotiation and subsequent approval, such as it is, would be manageable within a three-year time period.

SDG&E claims that the cost to its ratepayers regarding its five contracts that will be subject to the three-year cutoff period is likely to be substantial, either due to the cost to renegotiate them or to RAAIM penalties if resources are not bidding or costs due to CAISO forcing SDG&E to incur starts in excess of its contractual rights.[62] As to renegotiation, SDG&E asserts that the three-year cutoff period will give resource owners bargaining power. However, SDG&E does not provide any support for that assertion and, as explained above, establishing a cutoff period is just and reasonable in order to establish market participant expectations. Further, the potential that the CAISO could seek to

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[60] PG&E at 6-8.

[61] *Id.* at 5, 8. As explained above, the CAISO agrees with the CPUC that the quantity of affected contracts is very limited.

[62] SDG&E at 4-5. SDG&E explains how historically it has managed its resources' operations to prevent overuse. *Id.* at 5. One of the primary reasons the CAISO filed the March 23 Tariff Amendment was to establish provisions to avoid the market inefficiencies resulting from such management of resources' use limitations by scheduling coordinators. *See* transmittal letter for March 23 Tariff Amendment at 3-4, 14.

extend the cutoff period beyond three years if needed, should temper any undue bargaining power that resource owners may have. As to RAAIM penalties, SDG&E would only incur such penalties when resource adequacy capacity is not bidding and only if the resource is required to bid pursuant to its use plan. The CAISO is providing a three-year period for the parties to negotiate a solution.

DMM opposes the CAISO's willingness to consider the possibility of extending the three-year cutoff period.[63] PG&E, on the other hand, claims that the CAISO's willingness to consider an extension evidences a lack of enthusiasm about the three-year cutoff period and contends that the CAISO should have performed the evaluation prior to receiving Board approval for CCE3.[64]

Both DMM and PG&E are taking unreasonable positions. The CAISO always has the ability to consider the need for and appropriateness of amending its tariff, and the CAISO cannot perform this review without actual experience under CCE3. Moreover, the CAISO's willingness to consider and analyze market impacts during the next three years has nothing to do with a lack of enthusiasm for its proposal. Rather, it is a pragmatic measure to establish expectations and promote flexibility, but also to be willing to look at the situation again with the benefit of three years of experience with the tariff revisions.

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[63] DMM at 7.

[64] PG&E at 9.

C. The Commission Should Accept the Enhanced Tariff Provisions on Resource Characteristics Registered in the Master File

1. The Market Value Requirement to Register at Least Two Starts Per Day Is Appropriate

PG&E argues that the proposed ability of a scheduling coordinator to register market values for a resource in the Master File has limited use for managing contract limitations because of the purportedly strict limitations imposed by the CAISO, such as the requirement to register at least two start-ups per day.[65]

In making this argument, PG&E fails to recognize the benefits that scheduling coordinators will gain by being able to register market values. Under the existing tariff, a scheduling coordinator must register values in the Master File that are based on the resource's physical characteristics.[66] For example, if the resource is physically capable of starting five times per day, the scheduling coordinator must register five start-ups per day in the Master File to comply with the tariff. Introducing market values, however, will give the scheduling coordinator the flexibility – if it decides to exercise that flexibility – to register Master File values of its own choosing for use during market operations, subject to the requirement to register at least two market value start-ups per day.[67]

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65 *Id.* at 8.

66 Existing tariff section 4.6.4.

67 New tariff section 4.6.4.2. The scheduling coordinator will be allowed to register just one market value start-up per day due to the design capabilities or degradation in performance of a resource nearing the end of or operating beyond its useful life. *Id.* The CAISO will have the authority to reject a market value that is infeasible given the design capabilities of the resource or is inconsistent with a resource's commitment to provide resource adequacy capacity. *Id.*

Thus, the scheduling coordinator in the example above could also choose to register a market value of two, three, or four start-ups per day, instead of just being obligated by the tariff to register what the CAISO now proposes to call the design capability value of five start-ups per day for the resource.[68] This flexibility will be especially valuable to scheduling coordinators to the extent their resources' contractual limitations either (1) do not meet the criteria to qualify as use-limited resources and possibly receive opportunity costs, or (2) meet the criteria, but the resources no longer qualify as use-limited resources because the three-year cutoff period has expired.[69] Thus, the requirement for scheduling coordinators to register a minimum market value of two for maximum daily start-ups and maximum daily number of MSG transitions will provide flexibility, not operate as a strict limitation as PG&E claims.

SDG&E asserts that the proposed requirement of at least two market-based starts per day is unnecessary because even if a scheduling coordinator sets its market value to one start per day, that would not deprive the CAISO of the ability to call on the resource for a second start during the day if it is capable of performing.[70] Although the CAISO agrees that it has the right to issue exceptional dispatches based on the physical design capability of the resource, these assertions ignore the explanation provided in the March 23 Tariff Amendment that requiring at least two market value starts per day is necessary to avoid potential gaming behavior and reliability concerns associated with

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68 *See* revised tariff section 4.6.4.1.

69 Transmittal letter for March 23 Tariff Amendment at 30-31.

70 SDG&E at 7.

physical withholding. The purpose of the requirement is to not require the CAISO to exceptionally dispatch the resource out-of-market for a second start during the day, but to keep the resource in the CAISO market so that the market is not adversely affected by the resource's absence and can operate efficiently.[71] Again, scheduling coordinators will benefit from having the flexibility of the market value registration option over and above the tariff obligation to register design capability values for resources.

NV Energy argues that the market value requirement of at least two start-ups per day should not apply to participants in the Energy Imbalance Market (EIM). NV Energy asserts that the requirement could undermine the ability of EIM participating resources to meet native load and system reliability requirements and could harm resource participation within the EIM. At a minimum, NV Energy requests that the CAISO confirm that the requirement is not a means to impose a must-offer requirement on EIM participating resources and that the EIM entities may continue to self-manage the voluntary participation of their resources.[72]

NV Energy has no reason for concern. Like PG&E and SDG&E, NV Energy appears to overlook that the current tariff already requires resource owners, including those participating in the EIM, to register values in the Master File based on a resource's actual physical capabilities. As such, the CAISO's proposal to allow a set of market values with a minimum of two starts per day

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[71] Transmittal letter for March 23 Tariff Amendment at 31-32.

[72] NV Energy at 2, 4-7.

(unless a resource's design characteristics dictate otherwise) represents an increase in flexibility, rather than a more onerous restriction, as NV Energy appears to believe. This benefit will be the same for EIM resources participating in the real-time imbalance energy market as for non-EIM resources, which is why the CAISO made no distinction in the Draft Final Proposal between those two types of resources.[73]

Moreover, the EIM resource sufficiency test does not consider resource starts.[74] Therefore, if a scheduling coordinator were allowed to register just one start-up per day for a resource, it could still pass the resource sufficiency test after being started once, when in fact the market could not start it again. The requirement of at least two start-ups per day addresses the concern that such a scenario could occur, because there is much less chance that the market will need to start a resource more than twice per day. Further, EIM participating resources can preserve starts in order to meet native load and system reliability requirements by no longer bidding after being started once. The CAISO confirms that the requirement of at least two start-ups per day does not impose a must-offer requirement on EIM participating resources; the CAISO also confirms that the EIM entities may continue to self-manage the voluntary participation of their resources.

DMM argues that the CAISO should not exempt a resource from the requirement of at least two market-based starts per day where the basis of the

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73 "EIM resources will also be subject to the following criteria set forth for market based and design capability values." Draft Final Proposal at 45.

74 *See* existing tariff sections 29.34(l)-(m).

scheduling coordinator's request is that starting a resource up to twice a day may increase maintenance costs. DMM asserts that the CAISO market rules are instead designed so that any incremental maintenance costs can be reflected in major maintenance adders included in commitment cost bids.[75] The CAISO agrees with DMM's reasoning and does not intend exempt resources from the requirement to avoid increased maintenance costs. Rather, any exemptions will be based upon consideration of all of the facts, which might include avoiding major maintenance costs if the resource is, for example, planning on retiring by its once-through-cooling (OTC) phase-out date, and thus major maintenance prior to retirement would not be justified.[76]

2. The CAISO Is Maintaining its Existing Exceptional Dispatch Authority for Reliability in Stressed Conditions

The tariff revisions on market values include language stating that the CAISO may issue exceptional dispatch instructions pursuant to existing tariff section 34.11 based on the design capability of a generating unit, regardless of whether the resource also provides a market value for use in the CAISO market.[77] This merely states the CAISO's existing tariff authority, and the CAISO is just emphasizing that the additional flexibility to add market characteristics does not limit the CAISO's existing exceptional dispatch authority pursuant to section 34.11. NRG contends that materials issued in the CCE3 stakeholder

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75 DMM at 16-17.

76 Information on California's OTC phase-out program is available at http://www.energy.ca.gov/renewables/tracking_progress/documents/once_through_cooling.pdf.

77 New tariff section 4.6.4.2.

process suggest that the CAISO should instead be permitted to issue exceptional dispatch instructions based on design capability values only under stressed system conditions.[78]

The CAISO's use of the phrase "stressed system conditions" in the stakeholder process refers to the CAISO's exceptional dispatch authority in section34.11.[79] The tariff reference to section 34.11 in section 4.6.4.2 is intended to make clear that the CAISO is not narrowing its existing exceptional dispatch authority for reliability under section 34.11 based on the physical capabilities of resources. The CAISO intends to honor market values in the market and generally for exceptional dispatch purposes unless the CAISO's reliability needs dictate otherwise.

D. The Commission Should Accept the CAISO's Clarification of the Generated Bid Insertion Rules

The Six Cities argue that the CAISO's proposal to add the clause "unless the generally applicable bidding rules in Section 30 apply" to the provision in existing tariff section 40.6.8(e) regarding exemptions from generated bid insertions is overly broad and is unclear as to when exemptions apply and when they do not. The Six Cities request that the CAISO either delete the quoted clause or revise it to include specific cross-references to subsections of section 30.[80]

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[78] NRG at 7-8.

[79] The vast majority of exceptional dispatches are for reliability. *See* existing tariff sections 34.11.1 (system reliability) and 34.11.3 (modelling and non-transmission modeling exceptional dispatches needed for reliability).

[80] Six Cities at 2-3.

The Commission should accept the added clause as filed by the CAISO. The CAISO has complex software infrastructure bidding rules (SIBR) that are generally applicable to all bids and are set forth in section 30, in contrast to the resource adequacy must-offer bid generation rules that apply only to resource adequacy capacity and are set forth generally in section 40. The added clause is intended solely to provide clarification by referring to those generally applicable bidding rules; it is not intended to substantively change the tariff provisions governing when the generally applicable bidding rules apply instead of an exemption from generated bid insertion. As such, the clause enhances section 40.6.8(e), which currently does not include any such cross-reference. It is not practical for the CAISO to phrase the clause any more specifically by attempting to capture every situation in which the generally applicable bidding rules in section 30, rather than exemptions under section 40.6.8(e), apply.

III. Conclusion

For the foregoing reasons, the Commission should accept the tariff revisions contained in the March 23 Tariff Amendment as filed.

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Dated: April 26, 2018

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, pursuant to the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, DC this 26th day of April, 2018.

/s/ Bradley R. Miliauskas
Bradley R. Miliauskas