UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	))	Docket No. ER19-___-000

PETITION FOR LIMITED TARIFF WAIVER

The California Independent System Operator Corporation (CAISO) respectfully requests that the Commission grant a limited waiver of section 40.10.4.1 of the CAISO tariff to permit the CAISO to calculate effective flexible capacity (EFC) values for proxy demand resources (PDRs) based on the general formula described in section 40.10.4.1(a) rather than the testing-based approach for PDRs described in section 40.10.4.1(c).[1]

The CAISO recently identified a gap in how it implemented section 40.10.4.1 regarding PDRs. Since the first PDRs sought an EFC value the CAISO has calculated that value using the general formula in section 40.10.4.1(a). Section 40.10.4.1(c), however, requires the CAISO to set PDR EFCs based on the resource's performance during a random CAISO-administered test. Upon identifying this gap, the CAISO began developing testing procedures. Those procedures have not been finalized and the CAISO is still determining how best to implement them once they are finalized.

Good cause exists to grant this limited, one-time waiver. Without the requested waiver, the CAISO would be unable to calculate any new EFC values until it develops

[1] The CAISO submits this petition for limited waiver pursuant to Rule 207 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.207. The capitalized terms not otherwise defined have the meanings in the CAISO tariff, and references to specific sections, articles, and appendices are references to sections, articles, and appendices in the current CAISO tariff and revised or proposed in this filing, unless otherwise indicated.

and implements the needed test procedures. Such inability would disrupt the CAISO flexible resource adequacy process and prevent PDRs from providing flexible resource adequacy capacity already contracted by load serving entities. This waiver would create a needed transitionary period during which the CAISO could complete developing and implementing the test program without imposing adverse outcomes on affected market participants.

The CAISO requests this waiver extend until the earlier of: (1) successful development and implementation of the needed test procedures; or (2) December 31, 2019. The CAISO further requests that the Commission issue an order granting this waiver request by May 28, 2019. An order by this date is critical because there are 86 new PDRs coming online for the June 2019 resource adequacy month that have requested approximately 860 MW of EFC. Without a waiver by that date, the CAISO will need to remove their eligibility to count as flexible resource adequacy capacity for June 2019.

I. BACKGROUND

A. The Resource Adequacy Program

California's resource adequacy program, which the CAISO administers jointly with the California Public Utilities Commission and other local regulatory authorities in the CAISO balancing authority area, seeks to secure sufficient capacity when and where needed to support the safe and reliable operation of the CAISO grid. Under the resource adequacy program, load serving entities must secure enough system, local, and flexible resource adequacy capacity to meet their individual capacity requirements. Load serving entities procure the needed capacity through bilateral contracts with

generating resources. Resources' net qualifying capacity (NQC) and EFC values establish how much system/local and flexible RA capacity, respectively, resources can provide.

Flexible resource adequacy requirements were not originally part of the resource adequacy program when the overall program first went into effect in 2006. Section 40.10, which includes the CAISO tariff provisions covering flexible resource adequacy capacity, became effective in November 2014 as part of the CAISO's Flexible Resource Adequacy Criteria and Must Offer Obligations (FRACMOO) initiative.[2]

B. Calculating Effective Flexible Capacity Values.

Section 40.10.4.1(a) provides a general formula for setting EFC values. The formula accounts for a resource's start-up time, ramp rate, and NQC. Subsections (b) through (f) of section 40.10.4.1 provide technology-specific EFC methodologies for hydroelectric, PDRs, energy storage, multi-stage generators, and combined heat and power, respectively, that the CAISO must use in place of the general formula. For PDRs, section 40.10.4.1(c) provides that the EFC is "based on the resource's actual MWs of load modification in response to a dispatch by the CAISO during a test event." The CAISO must "conduct the test at a random time during the flexible capacity must-offer obligation period for the resource" and "use the applicable baseline load data . . . to measure the load modification of the Proxy Demand Resource being tested. . . ."

The timeline for establishing EFC applies to all resources equally regardless of the generation technology or the EFC calculation methodology. Per section 40.10.4,

[2] *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,042 (2014); *Cal. Indep. Sys. Operator Corp.*, Transmittal Letter, FERC Docket No. ER14-2574 (Aug. 1, 2014) (FRACMOO Filing).

the CAISO publishes the draft and final annual EFC lists on the same schedule as it publishes the draft and final NQC lists. The CAISO posts the draft annual lists in mid-August. Participants then have several weeks to provide suggested corrections before the CAISO publishes the final list in September or October.[3] Section 40.10.4.2(b) provides that, with two exceptions, once the final list is posted, those values must be used for the entire resource adequacy year covered by the list. The first exception is when the resource's NQC or maximum generating capability (*i.e.*, PMax) increases after the list is posted. In that scenario the resource may request that the CAISO recalculate the EFC. The second exception is when a new resource achieves commercial operation after the final annual list is posted.

The second exception is particularly relevant to PDRs because new resource identification numbers are more likely to be created mid-year for PDRs than most other resource types. The definition of a given PDR is more fluid than that of a physical resource. The creation of a new resource identification number for a PDR often is driven by a new contract coming into effect between a load serving entity and the demand response provider. The resource identification number can still be used once the initial contract expires but often it can be simpler to create a new resource identification number to cover any new contracts. As a result, PDRs are especially likely to come online mid-year and not have an EFC assigned through the annual process.

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[3] Exhibit A-1 to the CAISO's Business Practice Manual for Reliability Requirements calls for draft posting in the second week of August. Scheduling coordinators have 3 weeks to provide corrections to the NQC list, while EFC list corrections must be submitted by September 1. The exhibit lists the final posting as "TBD," because posting the final list will depend on the volume of suggested corrections. The posting, however, typically happens by the end of September.

C. Implementation Gap for Setting Testing-Based EFC Values for PDRs

The CAISO recently identified a gap in how it implemented section 40.10.4.1 regarding PDRs. When the CAISO implemented the FRACMOO initiative there were no PDRs registered with the CAISO. Because of the absence of any PDRs the CAISO did not develop the test procedures called for under section 40.10.4.1(c). When the first PDRs came into the CAISO system the CAISO still had not developed the test procedures. Without consideration of section 40.10.4.1(c), the CAISO erroneously established a practice of calculating PDR EFCs using the general formula in section 40.10.4.1(a).

Upon identifying this gap in March 2019, the CAISO began considering what testing procedures it could develop. CAISO Operating Procedure No. 5330 (Resource Testing Guidelines) covers resource testing procedures for issues such as minimum operating levels, maximum operating levels, and ancillary services qualification.[4] The CAISO plans to revise this operating procedure to reflect the PDR EFC testing procedures once they have been developed. The CAISO has not yet finalized the testing procedures and is still determining how best to implement them once they are finalized.

The impact of this gap is limited. The CAISO's posted 2019 EFC list shows total PDR EFC of 1,986 MW by the end of 2019.[5] It is inaccurate, however, to state the CAISO's error created 1,986 MW of phantom EFC. The CAISO tariff is clear that PDRs

[4] The operating procedure is available at: http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=3C4B799A-BB0A-4348-ABD0-EA4E21F346B8.

[5] The CAISO's annual EFC and NQC lists are available at: http://www.caiso.com/Pages/DocumentsByGroup.aspx?GroupID=9a94e71f-5542-49e8-bfbf-b9e00a2ec11b

may have EFC values established. The question is over what process to use in establishing those values. The direct impact of this gap would be captured by comparing the difference between the current EFC values and the testing-based values.

Moving more broadly to the overall resource adequacy process, the impact of the gap is even more limited. The EFC value only establishes how much flexible resource adequacy capacity a resource may sell. For there to be an impact on the greater process, that EFC would have to be procured in the bilateral resource adequacy market and shown through the resource adequacy showings process. Over the past 16 months very little of the PDR EFC has been shown on resource adequacy plans. Table 1, below, reflects (for the January 2018 through April 2019 period) the flexible resource adequacy capacity from PDRs actually shown on monthly resource adequacy plans as compared to the PDR EFC calculated for that month. The table shows that in many months no flexible capacity was shown from PDR. March 2019 and April 2019 show the highest utilization, with slightly less than 3% of the PDR EFC actually being used as flexible resource adequacy capacity. This data suggests that even if the CAISO significantly overstated PDR EFC, there may have been no impact to the overall resource adequacy process.

Table 1

RA Month	Flex RA from PDRs (MWs)	EFC from PDRs (MWs)	Percent of PDR EFC Shown
January-2018	0.00	117.42	0.00%
February-2018	0.00	119.02	0.00%
March-2018	0.00	120.07	0.00%
April-2018	0.00	121.37	0.00%
May-2018	0.00	121.77	0.00%
June-2018	0.00	123.27	0.00%
July-2018	0.30	123.77	0.24%
August-2018	0.30	125.22	0.24%
September-2018	0.30	125.22	0.24%
October-2018	0.00	124.02	0.00%
November-2018	0.00	124.02	0.00%
December-2018	0.00	123.00	0.00%
January-2019	0.00	967.72	0.00%
February-2019	15.00	1,070.90	1.40%
March-2019	30.50	1,072.25	2.84%
April-2019	35.50	1,303.42	2.72%

D. Complications with Immediate Implementation

Until the testing procedures are finalized, the CAISO cannot calculate any new PDR EFCs consistent with section 40.10.4.1 (c). PDRs that already have an EFC value for 2019 are not immediately affected by this issue because section 40.10.4.2(b) generally forbids changes to the final EFC list once it is posted. The immediate concern, instead, is that 86 new PDRs have requested approximately 860 MWs of EFC starting with the June resource adequacy month. Of that 860 MWs, approximately 10 MWs is under contract to provide flexible resource adequacy capacity starting in June. Without an EFC value, that 10 MWs of flexible resource adequacy capacity cannot be provided and the scheduling coordinator will be unable to meet their bilateral capacity contract obligations. The balance of the requested EFC also would be zeroed out and

would not be available to be sold for later months. Along with hardship to the suppliers, the load serving entities that contracted with these PDRs will also be affected because they will need to make last-minute arrangements to secure alternative capacity to ensure they meet their own capacity obligations.

Looking past the June monthly resource adequacy process, the situation also poses risks for the 2020 annual EFC list, a draft of which must be posted in August 2019. Although the CAISO is still developing test procedures, there are several elements of the process it knows will be necessary. Any test will require the CAISO to receive meter data from the investor owned utility in whose service territory the PDR exists. That meter data is reported to the CAISO on a forty-eight business day lag, which is over two calendar months.[6] After waiting over two months for the required data for a tested PDR, CAISO staff then must review the data manually to compare the PDR's actual performance relative to the test dispatch.

The draft EFC list is scheduled for publication in the second week of August. August 16 is the last business day of that week. Working backwards from August 16, it is likely to be infeasible to calculate test-based EFC values for the approximately 730 unique PDRs the CAISO has in its system. Assuming CAISO staff could manually review meter data the day it is submitted, the CAISO would have to complete all tests by no later than June 11, 2019. This is the forty-eighth business day before August 16. To build in time for final review and potential delays in meter data submission, the CAISO realistically would need to complete the tests several days before that. Assuming the CAISO finalized its new test procedures by May 1, 2019, it would have at

[6] CAISO Tariff, Section 10.3.6.3.

most 42 calendar days to complete all needed tests. These timing constraints mean that the CAISO would have to conduct and process the results of approximately 17 tests per day.

The FRACMOO Filing clarified that the CAISO could "use any actual demand response dispatch as a measurement of the demand response resource's effective flexible capacity."[7] For the 2021 annual EFC list and subsequent years the CAISO will only need to conduct specific tests for resources that did not otherwise have an actual recent demand response dispatch. The CAISO also could spread any needed tests across multiple months. Assuming the existing mid-August draft posting deadline remains, any tests would still need to be completed by mid-June. The tests, however, could begin in January, leaving six months instead of the potential one month of testing time the CAISO faces for the 2020 annual EFC process.

II. REQUEST FOR LIMITED WAIVER

To address the circumstances described above, the CAISO requests that the Commission grant a limited waiver of tariff section 40.10.4.1 to permit the CAISO to calculate PDR EFCs based on section 40.10.4.1(a) rather than section 40.10.4.1(c). The CAISO requests this waiver extend until the earlier of: (1) the CAISO's successful development and implementation of the test procedures called for under section 40.10.4.1(c); or (2) December 31, 2019.

The Commission previously has granted requests for tariff waivers where: (1) the applicant acted in good faith; (2) the waiver was of limited scope; (3) the waiver

[7] FRACMOO Filing, at 41.

addressed a concrete problem; and (4) the waiver did not have undesirable consequences, such as harming third parties.[8] This request satisfies all four elements. Therefore, good cause exists to grant the CAISO's waiver request.

A. The CAISO Has Acted in Good Faith

The CAISO has acted in good faith because it submitted this waiver request as soon as practical once it determined that it had a gap in implementation of its tariff and eliminating the gap quickly would pose significant collateral impacts on market participants.

The CAISO also believes that the parties covered by this waiver request acted in good faith. Given the CAISO's past practices, it is reasonable to conclude that the scheduling coordinators for the affected PDRs and the load serving entities that contracted with those resources relied in good faith on the CAISO's prior establishment of PDR EFCs without imposing a test.

B. The Requested Waiver is of Limited Scope

The waiver is of limited scope because it applies for a limited time not to exceed the balance of 2019. The CAISO expects that it can implement the testing-based approach before the end of the year. The waiver would also affect a relatively small amount of capacity. Although the waiver covers over 700 resource identification numbers and approximately 1,800 MWs, that MW figure overstates the impact of the tariff because the true impact is captured by the difference between the EFC as calculated under 40.10.4.1(a) compared to the testing-based EFC value under

[8] *See, e.g.*, *Cal. Indep. Sys. Operator Corp.*, 158 FERC ¶ 61,072, P 5 (2017); *N.Y. Indep. Sys. Operator, Inc.*, 146 FERC ¶ 61,061, P 19 (2014); *PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,041, P 5 (2014); *ISO New England, Inc.*, 134 FERC ¶ 61,182, P 8 (2011).

40.10.4.1(c). Also, as shown above in Table 1, very little of the total PDR EFC historically has been shown on resource adequacy plans. If a PDR has its EFC calculated under this waiver but is never shown on a resource adequacy plan, then arguably the waiver has had no impact and therefore for practical purposes, the scope of the waiver is non-existent. Finally, the waiver applies only to flexible capacity and does not impact other aspects of the resource adequacy program.

C. The Requested Waiver Will Remediate a Concrete Problem

The waiver addresses the concrete problem that scheduling coordinators for PDRs and the load serving entities that have contracted with those PDRs for flexible resource adequacy capacity face the risk of that capacity being invalidated if the CAISO cannot create EFC values for those resources. Such an invalidation of flexible resource adequacy capacity would cause serious disruption for the CAISO, its market participants, and the resource adequacy program more generally.

D. The Requested Waiver Would Not Pose Undesirable Consequences

There will be no undesirable consequences, such as harming third parties, if the Commission grants the waiver because the waiver merely maintains the status quo. The waiver would grant the CAISO permission to maintain its PDR EFC approach for a relatively brief transitionary period. Notably, the current approach applied to PDRs is the approach contemplated under the tariff for nearly all other resource types. Without this waiver the resources covered by the waiver risk the threat of being unable to meet their contractual obligations and their contractual counterparties will have to make alternative arrangements with other capacity suppliers.

III. REQUEST FOR EFFECTIVE DATE, COMMISSION ORDER, AND SHORTENED COMMENT PERIOD

The CAISO requests that the Commission issue an order approving this request by May 28, 2019. An order by this date is critical because it will avoid disruption for the June 2019 resource adequacy month and provide certainty for the 86 new PDRs coming into existence on June 1, 2019.

IV. SERVICE

The CAISO has served copies of this filing upon the California Public Utilities Commission and all parties with effective scheduling coordinator service agreements under the CAISO tariff. In addition, the CAISO has posted this filing on its website.

V. COMMUNICATIONS

Under the Commission's regulations,[9] communications regarding this filing should be addressed to these individuals, whose names should be placed on the official service list established by the Commission regarding this submittal:

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VI. CONCLUSION

The Commission should find that good cause exists to grant a limited waiver of tariff section 40.10.4.1 to permit the CAISO to calculate PDR EFCs based on section

[9] 18 CFR § 385.203(b).

40.10.4.1(a) rather than section 40.10.4.1(c).

Respectfully submitted,

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