

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

California Independent System)
Operator Corporation) Docket No. ER20-____-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

On April 26, 2019, the CAISO requested a waiver of these requirements through December 31, 2019. The Commission granted that request through an order issued on May 31, 2019. As explained in the April 26 filing, the CAISO identified a gap in its tariff implementation whereby it was calculating PDR EFC values using the general formula in section 40.10.4.1(a) rather than through the random tests described in section 40.10.4.1(c). The CAISO explained that it was developing testing procedures but they were not yet finalized. The waiver was necessary to provide the CAISO with time to finalize and implement the procedures.

The CAISO has used the waiver period to consider this matter further. The

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.

procedures the CAISO would need to use for test-based PDR EFCs cannot reasonably be implemented without costly system enhancements. Further, those costs are not justified based on the rationale for imposing the unique testing requirement for PDRs. The CAISO has concluded that the best course is to amend section 40.10.4.1 to create administrable rules for setting PDR EFC values. Accordingly, the CAISO requests an additional waiver to afford the time necessary to confer with stakeholders on the appropriate tariff amendments and present them to the Commission for approval.

Good cause exists to grant this limited, one-time waiver. Without the additional requested waiver, the CAISO could not calculate new EFC values consistent with its regulatory requirements. This would be disruptive for PDRs that already have contracted to provide flexible capacity to load serving entities. This waiver also would afford the CAISO and its stakeholders the time needed to consider a longer-term approach for setting PDR EFC values.

The CAISO requests this waiver extend through August 1, 2020. The CAISO further requests that the Commission issue an order granting this waiver request by February 15, 2020. An order by this date is important to providing short-term certainty to new PDRs while the CAISO considers the needed tariff amendments.

I. BACKGROUND

A. The Resource Adequacy Program

California's resource adequacy (RA) 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 . . .

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).

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, 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. This is because the definition of a 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

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.

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.

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

In 2019 the CAISO 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). The CAISO explained in its April 26 filing that the impact of the gap was limited. That was because: (a) little of the EFC from PDRs actually has been used to provide flexible RA capacity; and (b) the flexible RA capacity that was provided from PDRs made a very small contribution towards meeting the overall flexible capacity requirements. As an example, in the 16-month period running from January 2018 through April 2019, April 2019 was the month with the highest amount of flexible RA capacity shown from PDRs. The 35.5 MW of flexible capacity from PDRs represented less than 3 percent of the approximately 1,300 MW of flexible capacity from PDRs that was eligible to be shown through the RA process. Further, that 35.5 MW was a fraction of a percent of the total flexible capacity requirement of approximately 12,600 MW.

D. Complications with Immediate Compliance

Upon identifying this implementation gap in March 2019, the CAISO considered 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 To become compliant with section 40.10.4.1(c), the CAISO planned to amend this operating procedure with the appropriate PDR EFC test procedures. Several practical considerations made immediate compliance infeasible. Some of these considerations included the rapidly approaching annual EFC process, the time lag in receiving meter data needed to validate test performance, and the manual nature of administering the tests. The CAISO submitted the April 26 waiver request to provide it a needed transitional period while it developed and implemented a testing program that addressed these challenges.

During the waiver period the CAISO considered potential amendments to Operating Procedure 5330. The CAISO uses its exceptional dispatch authority to issue unit tests. One challenge the CAISO has to manage is that it does not have a tool to issue exceptional dispatches in bulk to multiple PDRs simultaneously. Instead, CAISO operations personnel need to issue the test instructions and enter them into the system serially. The distraction from more pressing operational matters this testing would represent led the CAISO to conclude that it would need to limit itself to conducting only a handful of tests per day. Given the number of distinct PDRs, limiting the number of

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

daily tests imposed its own challenge because then issuing PDRs tests would be a daily recurring task for operations personnel. The CAISO was also mindful of the option to “use any actual demand response dispatch as a measurement of the demand response resource’s effective flexible capacity.”⁵ However, the actual PDR dispatches were not significant enough to appreciably reduce the testing load.

The CAISO concluded that the testing procedures were not reasonably implementable without system enhancements. Those system changes would not be ready by the expiration of the current waiver period (*i.e.*, January 1, 2020). Regardless of timing, the CAISO has also considered whether the cost of those enhancements is justified in light of the rationale for setting test-based EFC values for PDRs. Although not discussed at length in the FRACMOO initiative, the rationale for test-based EFC values for PDRs was that they were a new resource type whose performance capabilities were uncertain. That concern, however, does not align neatly with how NQC for these same resources is established. A PDR essentially is created through programs administered under the auspices of the California Public Utilities Commission and other local regulatory authorities. As with all resource types, the CAISO defers to these local regulatory authorities in setting the QC value, which is the starting point of the NQC value. This includes the QC values for PDRs. This raises the question about why the flex capacity values for PDR should be set in such a drastically different way from their NQC values. The CAISO has not found an answer to that question, which suggests that the costs to comply with the current tariff are not justified.

This has led the CAISO to conclude that it is necessary to explore potential

⁵ FRACMOO Filing, at 41.

alternatives with stakeholders. An additional waiver will provide it the time needed to do that. If the stakeholder process validates that new rules are necessary, then, no later than June 1, 2020, the CAISO expects to submit a tariff amendment with the alternative rules.⁶ Assuming the CAISO makes such a filing, an additional 60-day period beyond that filing would be necessary for the Commission to consider the filing. The CAISO's schedule is to post the draft annual EFC list for the 2021 RA year in August 2020, with the final list published in September. Having longer-term certainty on the PDR EFC rules by August 1, 2020, would be beneficial because then the CAISO could post the draft 2021 RA year annual EFC list with certainty as to the PDR EFC methodology to use.

The CAISO believes that the impact of an additional waiver will be minimal for the CAISO's flexible capacity needs. This extension only would affect new PDRs that come online during the waiver period. Because of their unique nature, the CAISO does not have a definitive account of what new PDRs may register with the CAISO (and thus seek an EFC value) in the first six months of 2020.⁷ However, the flexible RA capacity showings from the latter part of 2019 are reflected in Table 1, below.

Table 1

RA Month	Flex RA from PDRs (MW)	EFC from PDRs (MW)	Percent of PDR EFC Shown	Total Flex RA Requirement	Percent of Flex RA from PDRs
May-19	35.50	1,323.58	2.68%	12,983.55	0.27%
Jun-19	35.00	1,968.29	1.78%	11,391.90	0.31%
Jul-19	35.00	1,984.51	1.76%	10,614.09	0.33%
Aug-19	5.00	1,986.46	0.25%	11,180.30	0.04%
Sep-19	5.00	1,986.46	0.25%	14,272.75	0.04%
Oct-19	5.00	1,986.35	0.25%	13,912.77	0.04%
Nov-19	5.00	1,986.55	0.25%	14,361.57	0.03%
Dec-19	5.00	1,986.55	0.25%	15,372.96	0.03%

⁶ On the other hand, if the stakeholder process concludes that it is appropriate to expend the additional costs to implement the existing tariff requirements, the CAISO will submit an appropriate filing to the Commission explaining how it plans to implement the existing requirements.

⁷ The most current EFC list for 2020 reflects a drop in overall PDR EFC as compared to 2019, with most months in 2020 at around 1,000 MWs of PDR EFC.

Table 1 indicates that during the current waiver period PDRs have continued to contribute a very small amount to the CAISO's overall flexible capacity needs. The CAISO has no reason to believe that trend would be interrupted in the next six months. At the same time, for any new PDRs that are contracted to provide flexible RA capacity, a waiver will allow them and their load serving entity counterparties to meet their obligations with minimal disruption. Finally, the California Public Utilities Commission recently released a decision refining its demand response auction mechanism (DRAM), which is the program through which much of the PDR resource adequacy capacity is procured.⁸ That decision created new minimum performance requirements backed by a penalty structure⁹ and expanded exposure to tests to demonstrate a resource's ability to provide its qualifying capacity.¹⁰ These new rules on DRAM resources suggest that even if the CAISO does not set EFC for new PDRs through a test during the requested waiver period, there would be other measures in place to help ensure that a PDR's NQC, and in turn its EFC, reasonably reflect the PDR's capabilities.

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

⁸ *Decision Refining the Demand Response Auction Mechanism*, Cal. Pub. Util. Comm'n, D.19-12-040 (Dec. 19, 2019).

⁹ *Id.* at §3.2.3 ("an Auction Mechanism resource must deliver at least 30 MWh per MW of average Qualifying Capacity" and "[i]f the energy delivery requirement is not met by the end of the contract term, Sellers will be assessed a penalty").

¹⁰ *Id.* at §3.9 (where a utility believes a demand response resource's qualifying capacity should be reduced "the Seller and Utility may proceed one of two ways: 1) reach an agreement on de-rating the Qualifying Capacity for the month disputed by the Utility or 2) accept the estimated Qualifying Capacity as reported by the Seller for the disputed month, but the Seller shall perform a test or market dispatch in each and every month in which a monthly Supply Plan Qualifying Capacity dispute arises to demonstrate its capability of delivering the Qualifying Capacity.")

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 through August 1, 2020.

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 addressed a concrete problem; and (4) the waiver did not have undesirable consequences, such as harming third parties.¹¹ 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 feasible once it determined that implementing test-based PDR EFC values within the term of the existing waiver was not practical without system enhancements, the implementation costs of which do not seem justified.

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 period that extends, at most, through August. The CAISO expects this will provide it sufficient time to consult with stakeholders, develop new tariff rules on setting PDR EFC values, and

¹¹ 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).

present those new rules for Commission approval. Based on the information in Table 1, above, the CAISO expects that the waiver would also affect a relatively small amount of capacity. 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 new PDRs that come online in the first part of 2020 face the risk of being ineligible to provide flexible RA capacity because the CAISO cannot create EFC values for those resources. Such an invalidation of flexible resource adequacy capacity would cause disruption for the demand response providers and the load serving entities with which they contracted for flexible capacity.

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 through part of 2020. The waiver would grant the CAISO permission to maintain its PDR EFC approach for a relatively brief transitional 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. Also new rules under the CPUC's DRAM program partially address some concerns that motivated creation of the PDR EFC testing requirement.

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

The CAISO requests that the Commission issue an order approving this request by February 15, 2020. An order by this date is important to providing short-term certainty to new PDRs while the CAISO considers the needed tariff amendments.

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,¹² 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:

David Zlotlow
Senior Counsel
The California Independent
System Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 351-4400
Fax: (916) 608-7222
E-mail: dzlotlow@caiso.com

¹² 18 CFR § 385.203(b).

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

Respectfully submitted,

/s/ David S. Zlotlow

Roger E. Collanton

General Counsel

Anna A. McKenna

Assistant General Counsel

David S. Zlotlow

Senior Counsel

Counsel for the California Independent System Operator
Corporation

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