

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the
Resource Adequacy Program, Consider
Program Refinements, and Establish Forward
Resource Adequacy Procurement Obligations

Rulemaking 19-11-009
(Filed November 7, 2019)

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
COMMENTS ON TRACK 3B.1 PROPOSALS**

Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Jordan Pinjuv
Senior Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom California 95630
Tel.: (916) 351-4429
jpinjuv@caiso.com

Date: March 12, 2021

Table of Contents

I.	Introduction.....	1
II.	Discussion.....	1
	A. The CAISO Supports PG&E’s Proposal to Not Apply the PRM Adder and Re-examine the Transmission and Distribution Line Loss Factors to Demand Response Resources.	2
	B. The CAISO Supports PG&E’s Proposal to Establish a Working Group to Implement the CAISO’s Requirement to Show All Resource Adequacy Resources on the Supply Plans.....	2
	1. 2022 Resource Adequacy Compliance Year	2
	2. 2023 Resource Adequacy Compliance Year	3
	C. The CAISO Supports Powerex’s Proposal to Modify the Resource Adequacy Program to Require Seasonal Procurement.	3
	D. The Commission Should Reject CESA’s Proposal to Link Resource Must-Offer Obligations with Specific MCC Category Showings.	4
	E. The Commission Should Reject CalWEA’s Proposal to Maintain Static Qualifying Capacity Values for Existing Wind and Solar Resources.....	6
	F. The Commission Should Reject the Solar Parties’ Proposal to Modify Hybrid and Storage Resource Qualifying Capacity Counting Rules.....	6
	G. Clarifications on the CAISO’s Proposals	7
	1. Resource Adequacy Imports Requirements.....	7
	2. Increased Planning Reserve Margin for 2022.....	13
III.	Conclusion	14

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the
Resource Adequacy Program, Consider
Program Refinements, and Establish Forward
Resource Adequacy Procurement Obligations

Rulemaking 19-11-009
(Filed November 7, 2019)

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
COMMENTS ON TRACK 3B.1 PROPOSALS**

I. Introduction

Pursuant to the December 11, 2020 *Assigned Commissioner's Amended Track 3.B and Track 4 Scoping Memo and Ruling* (Amended Scoping Memo), the California Independent System Operator Corporation (CAISO) hereby provides its comments on the final Track 3B.1 proposals submitted on January 28, 2021.

II. Discussion

The CAISO's comments address several Track 3B.1 proposals. The CAISO urges the Commission to adopt Pacific Gas & Electric Company's (PG&E's) proposals to (1) discontinue applying the planning reserve margin (PRM) adder and the transmission and distribution loss factors for counting demand response qualifying capacity, and (3) require demand response be shown on supply plans. The CAISO supports Powerex Corp.'s (Powerex's) proposal to require seasonal system resource adequacy procurement. The CAISO opposes, or has concerns with, proposals by the California Energy Storage Alliance (CESA), California Wind Energy Association (CalWEA), and Solar Parties regarding the storage counting rules.¹ Finally, the CAISO clarifies its proposals to adopt revised requirements for resource adequacy imports and increase the planning reserve margin to 17.5% for 2022.

¹ The "Solar Parties" refers to Solar Energy Industries Association (SEIA), the Large-Scale Solar Association (LSA), and Vote Solar.

A. The CAISO Supports PG&E’s Proposal to Not Apply the PRM Adder and Re-examine the Transmission and Distribution Line Loss Factors to Demand Response Resources.

The CAISO supports PG&E’s proposal to discontinue applying the planning reserve margin to demand response capacity values and re-examine the transmission and distribution line loss factor for demand response resources. For supporting details, see the CAISO’s concurrently filed response to Energy Division Staff’s Proposal C Track 4 of this proceeding.

B. The CAISO Supports PG&E’s Proposal to Establish a Working Group to Implement the CAISO’s Requirement to Show All Resource Adequacy Resources on the Supply Plans.

PG&E proposes the Commission establish a working group to develop an interim mechanism, beginning in resource adequacy compliance year 2022, to comply with the CAISO’s requirement to show all resource adequacy resources on supply plans. PG&E also proposes to update the current allocation and counting methodology for demand response beginning in resource adequacy year 2023.

The CAISO remains committed to requiring supply plan showings for all resource adequacy resources by resource adequacy year 2022, at the latest, but recognizes a transition mechanism may be required to facilitate this change. The CAISO supports establishing a working group to address parties’ concerns with putting resource adequacy resources on supply plans. In the longer term, the Commission should adopt an alternative counting methodology for demand response accounting for its variable and energy limited nature and its interactions with other resources with similar limitations.

1. 2022 Resource Adequacy Compliance Year

PG&E proposes the Commission establish a working group within 15 days after the Commission’s issues the Track 3B.1 final decision to address potential challenges with all resource adequacy resources on supply plans and to develop an interim mechanism to show demand response on supply plans for the 2022 resource adequacy year. PG&E suggests the working group could address modifications to IOU demand response tariffs, misalignment between program enrollment timelines and resource adequacy compliance filings, and changes to demand response resource adequacy value that could occur during the compliance year. The

CAISO supports convening a working group to address these and other questions. This facilitates showing IOU demand response programs on supply plans in resource adequacy year 2022.

2. 2023 Resource Adequacy Compliance Year

PG&E also proposes a longer-term solution to (1) allocate demand response credits similar to cost allocation mechanism (CAM) eligible resources, (2) update the load impact protocols to assess load impacts during the net load peak, and (3) work with the CAISO to exempt demand response from RAIM. Assessing load impacts at net peak to establish the qualifying capacity may be an improvement from the existing construct, but it does not justify a RAIM exemption because it does not account demand response's variable and use-limited nature, nor does it assess the interactive effects of demand response with other similarly situated resources. To justify a RAIM exemption for demand response, the Commission must adopt a qualifying capacity valuation methodology that accounts for demand response's variability. Otherwise, demand response resources would count for more capacity than they can provide under their must offer obligation. The Commission should adopt an effective load carrying capability (ELCC) counting methodology for resource adequacy year 2023 to account for the variability and use-limited nature of demand response.² The Commission uses an ELCC counting methodology for wind and solar resources, which justifies their RAIM exemption.

C. The CAISO Supports Powerex's Proposal to Modify the Resource Adequacy Program to Require Seasonal Procurement.

The CAISO supports Powerex's³ proposal to transition the system resource adequacy program from monthly to seasonal procurement requirements. The current monthly construct does not allow sufficient time to ensure needed resources can be procured. Under the existing framework, load serving entities do not show 100 percent of their resource adequacy procurement to the CAISO until 45 days prior to the resource adequacy month. After allowing a

² See CAISO's Resource Adequacy Track 3B.1 proposal.

³ See Powerex's Comments on Assigned Commissioner's Amended Track 3B.2 and Track 4 Scoping Memo and Ruling. Available here: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M356/K253/356253460.PDF>

cure period, the CAISO has only 30 days before the operating month to undertake backstop procurement if there is a deficiency.⁴ Given tightening supply conditions in the rest of the west, there is significant uncertainty whether sufficient uncontracted resources will be available in this short timeframe. Instead, adopting seasonal requirements could allow Commission-jurisdictional load serving entities to compete on a more level playing field with other western load serving entities to secure resource adequacy contracts. Should there be any deficiencies, a seasonal construct could allow the CAISO more time to backstop. Lastly, the seasons should align with the peak and off-peak seasons proposed in the CAISO's UCAP proposal in Track 3B.2.

Regardless of whether the resource adequacy program is monthly or seasonal, the Commission should ensure the resource adequacy requirements maintain a 0.1 loss of load expectation (LOLE) over the entire year based only on resource adequacy showings. The CAISO understands seasonal resource adequacy requirements would be a significant paradigm shift and is fully committed to support efforts to develop further implementation details.

D. The Commission Should Reject CESA's Proposal to Link Resource Must-Offer Obligations with Specific MCC Category Showings.

CESA recommends the Commission limit resource must offer obligations to the hours defined by the MCC category in which they are shown.⁵ The CAISO opposes this change because the must offer obligation is a CAISO tariff-defined concept requiring shown resource adequacy capacity to offer into the CAISO market. On the other hand, the MCC buckets ensure no single load serving entity over-relies on use- or energy-limited resources to meet their resource adequacy requirements. In D.20.06-031, the Commission required resources to be available and physically capable of dispatch for the entirety of the days and hours specified in the MCC category for which they are shown. These MCC category qualification requirements are not the same as the CAISO tariff must offer obligation.

The CAISO tariff specifies resource adequacy resources' must offer obligations, and they generally require resources to bid into the market seven days a week, 24 hours a day (24x7), with

⁴ CAISO Tariff Section 40.2.2.4

⁵ CESA, p. 4.

some exceptions and unless the resource is unavailable due to a planned or forced outage. The CAISO allows resources to submit opportunity costs and outage cards to manage and communicate use-limitations and unavailability. Requiring resources to bid in all hours they are available allows the CAISO to schedule and dispatch resources optimally and economically when needed to meet system and local operational needs, which may or may not always align with the MCC buckets. Importantly, there is a clear distinction between the Commission's MCC buckets, which ensure there is no over-reliance on use- or energy-limited resources, and the CAISO's must offer obligation, which ensures resource adequacy resources are offered into the market all hours they are available so the CAISO can reliably operate the system with the resource adequacy fleet. CESA's proposal inappropriately blurs this important distinction.

CESA states, “[w]ith the [RAAIM] soon becoming obsolete with the implementation of the [UCAP] framework in the CAISO's Resource Adequacy Enhancements Initiative, a shift to focus on MOOs in specified periods is appropriate and lines up with other longer-term reform proposals.”⁶ Although the CAISO is proposing to move away from RAAIM, and thus the availability assessment hours, in favor of a UCAP paradigm, this change does not justify moving away from a 24x7 must offer obligation. As the CAISO has previously explained, tight system conditions can occur at any time within the resource adequacy month based on the balance between load and resource adequacy resource availability.⁷ The CAISO cannot perfectly anticipate tight system or local conditions. Thus, even under its proposed UCAP regime, the CAISO proposes to maintain its 24x7 must offer obligation. Furthermore, storage resources are rapidly increasing on the system and will become a larger share of the total fleet, likely replacing existing generation. The Commission should reject CESA's proposal to align must offer obligations with the MCC buckets requirements to ensure resources offer their capacity to the CAISO when available to ensure reliable and economic grid operations.

⁶ CESA, p. 4.

⁷ Sixth Revised Draft Final Proposal, section 6.1.1 – CAISO Resource Adequacy Enhancements Initiative, available at: <http://www.aiso.com/InitiativeDocuments/DraftFinalProposal-SixthRevisedStrawProposal-ResourceAdequacyEnhancements.pdf>

E. The Commission Should Reject CalWEA’s Proposal to Maintain Static Qualifying Capacity Values for Existing Wind and Solar Resources.

CalWEA proposes to allow wind and solar resources operational as of January 1, 2021 to retain their existing resource adequacy value while simultaneously adopting a marginal effective load carrying capacity (ELCC) value for resources operational after January 1, 2021.⁸ The CAISO opposes retaining static capacity values that do not reflect changing system conditions and actual individual resource performance from year-to-year. CalWEA’s proposal could allow a resource to retain an arbitrarily high resource adequacy capacity value even if its performance degrades. CalWEA’s proposal also unduly discriminates among vintages of wind and solar resources. Because both vintages are providing the same product—resource adequacy capacity—they should be subject to similar counting rules. From a reliability perspective, they are indistinguishable. Although the CAISO is not opposed to establishing a marginal ELCC value for a portion of the fleet, the CAISO will continue assess resource adequacy showings based on the average ELCC value per resource type. Marginal ELCC values, as CalWEA explains in its proposal, are best used to send long-term planning signals to load serving entities such as the case under the integrated resource plan proceeding.⁹

F. The Commission Should Reject the Solar Parties’ Proposal to Modify Hybrid and Storage Resource Qualifying Capacity Counting Rules.

The CAISO opposes the Solar Parties’ proposal to modify the counting rules for hybrid and storage resources.¹⁰ Specifically, the Solar Parties suggest the Commission fix counting rules for hybrid resources for ten years, even if the Commission modifies the resource adequacy capacity definition for hybrid and storage resources is modified during the time period.

For the same reasons the Commission should reject CalWEA’s vintaging proposal, the Commission should reject the Solar Parties’ counting proposal. Fixed capacity values do not reflect the changing characteristics of the fleet or individual resource performance over time.

⁸ CalWEA, p. 2.

⁹ *Id.*

¹⁰ See Solar Parties’ Revised Track 3B.1 Proposals.

Ultimately, a fixed capacity value may mask the true reliability contribution of resource types within the fleet and individual resources. For example, the ELCC value of short-duration storage may decline over time as more of the same resource saturates the CAISO system, as was the experience with solar resources. Similarly, a fixed capacity value does not reflect the individual resource performance. Rather than moving forward with fixed counting rules, the Commission should consider the CAISO's UCAP proposal¹¹ to define unit-specific net qualifying capacity (NQC) values for hybrids and storage. This proposal will account for weighted average historical availability to establish final net qualifying capacity values, which will capture any changing availability trend of a resource.

G. Clarifications on the CAISO's Proposals

1. Resource Adequacy Imports Requirements

The Commission can and should adopt the CAISO's proposed resource adequacy import rules for the 2022 resource adequacy year. In particular, it is critical for the Commission to require firm transmission for non-resource specific imports starting in 2022. The CAISO recognizes that a transition period to implement some aspects of the CAISO's proposal, including the attestation and source specification requirements, may be appropriate. If necessary, the Commission should use 2022 as a transition year to implement attestation and source specification requirements. By 2023, all resource adequacy imports should be supported by firm transmission, source specification, and appropriate attestations. The CAISO also takes this opportunity to amend its resource adequacy imports proposal to require, at minimum, a seven days per week, 16 hours per day must offer obligation, during the heavy load hour period.

As California continues to be increasingly import-dependent, and capacity in the Western interconnection becomes more limited, it is critical load serving entities in the CAISO footprint secure the same quality of resource adequacy imports as other load serving entities in the West. If CAISO load serving entities lag too far behind in procuring imports supported by high priority transmission and physical capacity, the CAISO's ability to rely on imports will be compromised, as both transmission and supply is committed to serve other load in the West. Regrettably, the lack of firm transmission can severely compromise CAISO's ability to secure sufficient reliable

¹¹ See CAISO's Unforced Capacity Proposal, Resource Adequacy Enhancements.

import capacity, as witnessed last summer when the CAISO was relying on import capacity to serve load during the most critical times.

a. 2022 Minimum Transmission Requirements

The Commission should adopt the CAISO's proposal to require minimum transmission service requirements for all resource adequacy imports for the 2022 resource adequacy year. Specifically, the Commission should require resource adequacy imports to acquire firm point-to-point transmission service on the last transmission leg to the CAISO (intertie) and a minimum Monthly Non-Firm point-to-point transmission service on all intervening transmission legs, secured by the time of the submission of monthly supply plan showings. Resource adequacy contracts should specify NERC Transmission Service Reservation Priority 7-F on the last transmission leg to the CAISO and a Transmission Service Reservation Priority 5-NM or higher priority for all intervening transmission legs.

This recommendation is consistent with the CAISO's original Track 3B proposal, filed December 18, 2020. Developments in the Western Interconnection since then reinforce the need for the Commission to implement these minimum transmission service requirements for the 2022 resource adequacy year.

b. Change in Must Offer Obligation

The CAISO's prior proposal¹² required all resource adequacy imports be available 7 days a week, 24 hours a day (24x7), consistent with the current CAISO tariff must offer obligation requirements. Some parties expressed concern a 24x7 resource adequacy import product is not readily available and would unduly limit liquidity and reduce load serving entities' ability to procure resource adequacy imports. Today, load serving entities typically procure resource adequacy imports with 6 days a week, 16 hours a day (16x6) contractual availability, or lesser availability, consistent with the Commission's MCC categories.

¹² Track 3B.1 Proposals of the California Independent System Operator Corporation (January 28, 2021) - http://www.caiso.com/Documents/Jan28-2021-Track-3B1_Proposals-ResourceAdequacyProgram-R19-11-009.pdf

Although the CAISO tariff generally imposes a 24x7 must offer obligation for resource adequacy resources, it also recognizes different requirements for differently situated resources to the extent appropriate.¹³ In the context of resource adequacy imports, the CAISO tariff has historically recognized that a subset of resource adequacy imports—currently known as non-resource specific imports—are differently situated compared to other resources and consequently have a different must offer obligation.¹⁴ Unlike resources located within the CAISO balancing authority area, non-dynamic/non-pseudo resource adequacy imports (currently known as non-resource specific) are not modeled in the full network model, and the underlying resources are not required to provide operating characteristics or limitations, nor do they have a contractual relationship with the CAISO. These types of imports can be sourced from different types of resources and contractual arrangements—ranging from individual resources to more complex arrangements not present with internal resources such as system sales and slice-of system sales. Moreover, under CAISO’s proposal the “non-dynamic resource specific resource adequacy imports,” which effectively replace the non-resource specific imports, will have increased requirements compared to internal resources since these will have to secure high priority transmission across multiple transmission provider systems or multiple transmission legs for delivery to CAISO system. Imposing a stringent 24x7 availability requirement for non-dynamic resource specific resource adequacy imports is likely to limit the amount of resource adequacy imports available to the CAISO.

The CAISO proposes to modify this availability element recognizing the need to balance dependence on reliable resource adequacy imports with the ability to actually procure such resources and the need to ensure reasonable liquidity. The CAISO proposes the Commission

¹³ For example, Conditionally Available Resources (CAR) and run-of-river hydro resources have a must offer obligation based on an “expected energy” framework. Similarly, resource adequacy Eligible Intermittent Resources (EIR) are encouraged but not required to offer in the DA market, but in real-time have a must offer obligation consistent with their forecasts.

¹⁴ Currently, non-resource specific imports have a 24x7 must offer obligation in the DA market, but are only required to offer into the RT market to the extent they were awarded in DA and only for the hours in which these were awarded, if any. This recognizes the limitation that without modeling the import and knowing its characteristics, requiring a must offer obligation in RT market could lead to awards of resources that may not be capable of physically performing if awarded in real-time.

require seven days a week, 16 hours per day minimum availability from non-dynamic resource specific resource adequacy imports.¹⁵

Rationale for Seven Days a Week Requirement

As the Final Root Cause Analysis described, the summer 2020 heat waves impacted weekend days where rotating outages occurred on a Saturday in August and the highest forecasted and actual load during the Labor Day weekend was on a Sunday.¹⁶ Under the Commission's current MCC categories, resource adequacy imports procured under Categories 1 and 2 are not required to be contractually available on weekends and Category 3 is not available on Sundays.¹⁷ These availability limitations reduce the CAISO's ability to manage the grid reliably. Requiring 16x7 minimum availability would help ensure resource adequacy imports are contractually available and required to offer the energy into the market during critical periods of the day, seven days a week.

Rationale for 16 Hour Window

The Commission should define the hourly availability window to include the heavy load period of 0600 hours to 2200 hours (HE7 to HE22). The CAISO would seek to modify its tariff accordingly such that the must offer obligation would be aligned with this 16 hour window, both in the Day Ahead Market and Real-Time Market. By making the 16x7 availability a minimum requirement, the Commission would retain discretion regarding whether, or to what extent, to require greater availability for these types of imports such as 24x7 availability.

¹⁵ In its proposal, the CAISO has described three types of imports eligible for resource adequacy purposes: (1) pseudo-tied resources, (2) dynamically scheduled resource-specific system resources, and (3) non-dynamic resource-specific resource adequacy imports which can consist of: a single resource, a specified portfolio or aggregation of resources within a single balancing authority area, or a balancing authority area's pool of resources.

¹⁶ Final Root Cause Analysis, Table 5.1: Day-Ahead Peak Forecast vs. Actual Peak During Heat Event (Updated), p. 66.

¹⁷ Current MCC categories reflect the following availability: Category 1 permits procurement of resources with a Monday-Friday availability, 4 consecutive hours between 4-9pm; Category 2 permits procurement with a Monday-Friday availability, 8 consecutive hours to including 4-9pm; and Category 3 permits procurement with a Monday-Saturday availability, 16 consecutive hours that include 4-9pm.

Shifting to a minimum 16x7 availability requirement for non-dynamic resource specific resource adequacy imports helps ensure that the imports procured are of a quality that can perform at a minimum during the heavy load hours, and consequently during the gross load and net load peak timeframes, and in practice increases the availability requirement compared to the imports that the Commission permits load serving entities to procure today¹⁸ thus further ensuring reliable and dependable import supply.

Availability of 16x7 Contracts

Based on the CAISO's research and discussions with active resource adequacy import suppliers, a 16x7 import product is commonly available in the west and is comparable with the 16x6 product the Commission allows under MCC Category 3. The primary products traded in the western interconnection are on-peak and off-peak products. Load serving entities can seek to acquire these products through broker markets (generally through execution of a standard WSPP Schedule C agreement) or through requests for proposals identifying specific product characteristics.

Implementation of Must Offer Obligation

The Commission should decide how to implement the proposed minimum 16x7 availability requirement. One potential method is for the Commission to expand MCC Category 3 availability (currently at 6 by 16) to require 16x7 availability from 0600 hours to 2200 hours and require load serving entities to procure only non-dynamic resource specific resource adequacy imports (or currently non-resource specific imports) under MCC Categories 3 (modified as proposed) and 4. This would effectively impose a 16x7 minimum availability requirement for resource adequacy imports during specifically identified hours.

¹⁸ Under the Commission's Maximum Cumulative Capacity (MCC) categories, load serving entities are permitted to procure resource adequacy imports with lesser than a 24x7 availability in categories 1 through 3. Category 1 permits procurement of resources with a Monday-Friday availability, 4 consecutive hours between 4-9pm; Category 2 permits procurement with a Monday-Friday availability, 8 consecutive hours to including 4-9pm; and Category 3 permits procurement with a Monday-Saturday availability, 16 consecutive hours that include 4-9pm.

c. 2022 Transition Period for Source Specification & Attestation Requirements

The CAISO proposes the requirements of its resource adequacy import proposal be effective for resource adequacy year 2022. However, if the Commission finds it necessary to provide a transition period, the CAISO proposes to use 2022 as a transition year for the source specification and attestation portions of the CAISO's proposal. In any case, the Commission should not delay implementing the CAISO's proposed minimum transmission service requirements discussed above. If the Commission elects to use 2022 as a transition year for the source specification and attestation elements, the Commission's current resource adequacy import requirements should continue to apply concurrent with the new requirements proposed by the CAISO.

This transition period recognizes load serving entities procuring imports to meet resource adequacy obligations have largely relied on a firm energy product delivered at a particular intertie point (generally through a standard WSPP Schedule C agreement). These products may not specify the source(s) or balancing authority area of the generation or impose transmission requirements. The standard WSPP Schedule C agreement does not require the supplier to attest the firm energy has not been committed to other parties or uses. However, whether imports are procured through WSPP Schedule C agreements or traditional bilateral agreements, the Commission should ensure that the import being procured has not been committed to other parties or uses whether that is through an explicit attestation or a different method. Load serving entities should use the 2022 transition period to update procurement practices and provide source specification and the CAISO proposed attestation beginning in 2023.

It is critical these proposed changes not be delayed beyond 2023 to ensure that Commission-jurisdictional load serving entities are competitively positioned to procure reliable and dependable resource adequacy imports, providing the CAISO with the quality of resources needed to manage ever more challenging grid conditions. To the extent that the Commission wishes to evaluate the feasibility of these requirements and their commercial viability, it could

do so as early as this summer under the recently proposed expedited procurement to address reliability needs for summer 2021¹⁹ and for resource adequacy year 2022.

As part of the transition, the Commission could instruct procurement for some portion of resource adequacy imports under the CAISO's proposed rules, including firm transmission, source specification, and ensuring the import energy/capacity is not committed to other parties or uses, and the revised must offer obligations proposed herein. For summer 2021, the Commission's proposed decision requires additional non-resource adequacy procurement by the investor owned utilities, a portion of which could be 16x7 import contracts. After this summer, Energy Division staff can assess these imports, their bids and performance. The CAISO is committed to supporting the Commission through this transition to the new proposed framework, working with Commission staff on implementation, and is prepared to make commensurate tariff changes for a transitional 2022 year.

2. Increased Planning Reserve Margin for 2022

In the Commission's proceeding addressing electric reliability for summer 2021, the CAISO recommended the Commission adopt a 17.5% PRM that considers resource needs during the 8:00 p.m. hour for the months of June through October 2021.²⁰ The CAISO recommends the Commission also adopt this same approach for summer 2022. The CAISO can implement a validation process for an 8 p.m. resource adequacy showing before summer 2022.

Increasing the PRM and applying it to a later hour after sunset is critical to ensuring the CAISO can: (1) use its monthly capacity procurement mechanism (CPM) to backstop for resource adequacy deficiencies arising from the incremental procurement obligations; and (2) apply CAISO resource adequacy tariff requirements, such as the must offer obligation and the resource availability incentive mechanism (RAAIM). These CAISO resource adequacy tariff requirements ensure resource bidding (through generated bids, if necessary) and incentivize performance. Furthermore, in the Market Enhancements for Summer 2021 Readiness initiative,

¹⁹ Commission Proposed Decision, R.20-11-003, March 5, 2021.

²⁰ CAISO, Legal and Policy Brief of the California Independent System Operator Corporation, February 5, 2021.

the CAISO is proposing market improvements to limit exporting resource adequacy capacity. If a resource's capacity is not resource adequacy capacity under the CAISO tariff, these additional protections would not apply.²¹

The increased PRM should serve as an interim measure to maintain reliability prior to implementing other more permanent proposals, particularly the UCAP proposal, which is targeted for 2023 implementation. Once UCAP is implemented, the PRM could be adjusted downward, as described in the CAISO's UCAP proposal. Until then, the CAISO strongly urges the Commission to adopt a 17.5% PRM and apply it both to the peak hour and a critical hour after the peak when loads remain high but solar generation has significantly decreased or ceased.²² If the Commission prefers to maintain a single PRM validation, it should prioritize adopting the validation at the critical hour after peak

III. Conclusion

The CAISO appreciates this opportunity to comment on the Track 3B.1 proposals and looks forward to working with the Commission implement resource adequacy program improvements to ensure reliability.

Respectfully submitted,

By: /s/ Jordan Pinjuv

Roger E. Collanton

General Counsel

Anthony Ivancovich

Deputy General Counsel

Jordan Pinjuv

Senior Counsel

California Independent System

Operator Corporation

250 Outcropping Way

Folsom California 95630

Tel.: (916) 351-4429

jpinjuv@caiso.com

Date: March 12, 2021

²² The CAISO would need to adopt appropriate tariff changes to support conducting these two separate validations.