

Rulemaking No.: 20-11-003
Exhibit No.: _____
Witness: _____
ALJ: Stevens
Commissioner: Batjer

Order Instituting Rulemaking to Establish
Policies, Processes, and Rules to Ensure
Reliable Electric Service in California in the
Event of an Extreme Weather Event in 2021

Rulemaking 20-11-003

**OPENING TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION**

January 11, 2021

Table of Contents

I.	INTRODUCTION	1
II.	THE NEED TO CHANGE THE PLANNING RESERVE MARGIN	2
III.	FLEX ALERT PAID MEDIA CAMPAIGN	7
IV.	DEMAND RESPONSE AND LOAD REDUCTION ISSUES.....	9
	Critical Pricing Program (CPP) Design	9
	CPP Expansion to Non-IOU load serving entities	10
	Base Interruptible Program (BIP) and Agricultural & Pumping Interruptible (API)	13
	Capacity Bidding Program (CBP)	14
V.	CONCLUSION.....	15

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

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I. INTRODUCTION

Q1. What is your name and by whom are you employed?

A1. My name is Dr. Karl Meeusen. I am employed by the California Independent System Operator Corporation (CAISO), 250 Outcropping Way, Folsom, California. I have been at the CAISO since 2011. I currently work in the CAISO’s Markets and Infrastructure Policy group as the Senior Advisor – Infrastructure and Regulatory Policy. I have held this position since 2016. Among other things, I am responsible for evaluating and developing new wholesale electricity market designs related to the CAISO’s ongoing efforts to integrate renewable resources into the CAISO electricity market and electric grid. I have assessed changing resource adequacy needs resulting from the increased presence of renewable resources and the need to maintain sufficient flexible capacity resources for renewable resource integration.

Q2. Please describe your educational and professional background.

A2. Prior to joining the CAISO, I served as Energy Advisor to Commission President Michael Peevey, advising on issues such as resource adequacy, long-term resource procurement, demand response, and FERC-related issues. While at the Commission, I also worked in the Energy Division on Demand Response, FERC proceedings, and Resource Adequacy. My experience prior to joining the Commission included research positions at the National Regulatory Research Institute, the U.S Department of Justice, Antitrust Division, and independent consulting. I hold a Ph.D. in Agricultural, Environmental, and Development Economics from The Ohio State University and a Bachelor’s of Science in Philosophy and Economics from the State University of New York, College at Brockport.

Q3. What is the purpose of your testimony?

A3. My testimony supplements the testimony of Mr. Jeff Billinton by clarifying the need for Commission action to increase the existing planning reserve margin and that it apply to the net peak period to ensure adequate resources are procured for the summer of 2021.

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 Specifically, I (1) provide additional support for increasing the Commission’s planning
2 reserve margin to ensure adequate capacity is made available to the CAISO, (2) describe
3 the need for incremental capacity to be provided through the resource adequacy program
4 and (3) discuss the critical relationship between the planning reserve margin and the
5 CAISO’s backstop procurement authority.

6
7 I will also offer responses to questions posed in Administrative Law Judge Stevens’
8 December 18, 2020 Ruling.

9
10 **Q4. What are your recommendations in this proceeding?**

11 **A4.** I recommend the Commission require additional resource adequacy procurement for
12 summer 2021. Importantly, the Commission should require incremental procurement by
13 increasing the planning reserve margin from 15% to 17.5%. Mr. Billinton’s concurrently
14 filed testimony explains why the CAISO reduced its recommended planning reserve
15 margin from 20% to 17.5%. The increased planning reserve margin is critical for four
16 reasons. First, it places a regulatory requirement on load serving entities to procure
17 additional capacity to help maintain reliability, which will better ensure such
18 procurement. Second, it will ensure incremental resources do not simply substitute for
19 existing capacity, which would otherwise produce little or no net increase in the resource
20 adequacy resource fleet. Third, it will provide that incremental resources are subject to
21 the CAISO resource adequacy must-offer obligation. Finally, increasing the planning
22 reserve margin will allow the CAISO to conduct any necessary backstop procurement
23 under its capacity procurement mechanism (CPM) prior to the operating month, instead
24 of waiting for real-time emergencies, when capacity may not be available.

25
26
27 **II. THE NEED TO CHANGE THE PLANNING RESERVE MARGIN**

28 **Q5. What is the role of a higher planning reserve margin in assuring higher resource**
29 **availability?**
30

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 **A5.** As set out in Mr. Billinton’s testimony, the CAISO recommends the Commission
2 increase the planning reserve margin to 17.5% for the months of June through October
3 2021 and apply this planning reserve margin to both the gross peak and the most critical
4 hour after peak when solar production is at or near zero.

5
6 The CAISO agrees with Southern California Edison Company (SCE) that additional
7 procurement is prudent given the effects of climate change and the need to address the
8 net demand period after sunset.¹ Temporarily increasing the planning reserve margin will
9 require load serving entities to both procure additional resources under the resource
10 adequacy program and make those resources available to the CAISO and subject to must-
11 offer obligations and other CAISO resource adequacy tariff provisions. As noted in Mr.
12 Billinton’s testimony, the current 15% planning reserve margin is insufficient to ensure
13 system reliability.

14
15 **Q6. Why is the Commission’s incremental capacity authorization from D.19-11-016**
16 **insufficient to ensure the CAISO has access to adequate system resources?**
17

18 **A6.** In Decision (D.) 19-11-016, the Commission ordered expedited incremental capacity
19 procurement. It is critical these resources be incremental to the existing fleet and not
20 merely substitute for or replace existing capacity under contract. If the Commission does
21 not increase the planning reserve margin, the new capacity additions required by D.19-
22 11-016 will simply push some other capacity off of resource adequacy showings, leaving
23 the system no more resource adequate than it was before the procurement authorization.
24 Temporarily increasing the planning reserve margin ensures this capacity is incremental
25 to existing procurement and provides the additional system reliability the Commission
26 sought in D.19-11-016. Both the incremental capacity and the existing capacity under
27 contract are necessary to meet gross demand peak.
28

¹ SCE opening comments, p. 17.

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 Increasing the planning reserve margin will also enable load serving entities to procure
2 resources that may otherwise be at risk of retirement and will reduce the need for CAISO
3 backstop procurement to secure those resources and facilitate the contractual
4 arrangements necessary to reasonably assure existing resources can recover capital
5 investment costs necessary to produce additional capability. For example, incremental
6 procurement directed by the Commission would enable investments necessary to harness
7 additional capacity from the existing gas fleet.
8

9 **Q7. Why does incremental capacity need to be procured as resource adequacy capacity?**
10

11 **A7.** Any incremental procurement required in this proceeding should be part of the
12 Commission’s resource adequacy program and be included in resource adequacy
13 requirements and showings for 2021. Requiring the incremental capacity to be resource
14 adequacy capacity will subject those resources to the CAISO’s resource adequacy tariff
15 provisions and associated processes, including the must-offer obligation. In addition, it
16 will enable the CAISO to backstop for any procurement deficiencies under the CPM, as
17 discussed in greater detail in response to Q&A 9. Increasing the Commission’s resource
18 adequacy requirements will enable the CAISO to (1) validate jurisdictional load serving
19 entities’ compliance with the Commission’s requirements via the resource adequacy
20 showings process and (2) use its CPM backstop authority to address any deficiencies.
21

22 **Q8. Should the Commission impose penalties or other consequences on load serving**
23 **entities that fail to procure resources sufficient to meet the increased planning**
24 **reserve margin?**
25

26 **A8.** The CAISO understands it may be difficult for load serving entities to conduct additional
27 procurement to meet an increased planning reserve margin for summer 2021. Given the
28 late notice and the limited resource availability, penalizing individual load serving
29 entities likely would be ineffective or unfair. Therefore, the CAISO recommends
30 waiving Commission-applied penalties for failing to meet any increased 2021 planning
31 reserve margin, as long as load serving entities demonstrate good faith efforts to procure

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 capacity. Increasing the planning reserve margin and providing for appropriate cost
2 recovery measures will promote procuring the incremental resources needed to meet
3 summer 2021 needs and will allow the CAISO to use its CPM authority most effectively.
4

5 **Q9. How does increasing the planning reserve margin and applying it to the critical**
6 **peak hour interact with the CAISO’s CPM backstop processes?**
7

8 **A9.** The CPM is the CAISO’s primary backstop mechanism to meet system resource needs
9 and the mechanism used to backstop deficiencies in resource adequacy showings. The
10 CAISO can use CPM to procure capacity to (1) backstop monthly or annual load serving
11 entity resource adequacy showing deficiencies, or (2) respond to a significant event.
12 Also, where the CAISO must exceptionally dispatch non-resource adequacy resources to
13 meet a real-time reliability need, the capacity is entitled to a CPM designation.² Each of
14 these backstop procurement options can play a role in meeting summer 2021 needs.
15 However, the backstop for annual or monthly resource adequacy deficiencies most
16 effectively—and timely—allows the CAISO to meet these needs.
17

18 To meet summer 2021 resource needs most effectively, the Commission should increase
19 its resource adequacy requirements. This will allow the CAISO to use its monthly CPM
20 process to remedy any resource adequacy deficiencies by procuring backstop capacity
21 before the applicable resource adequacy month. Such advance procurement for needed
22 resources maximizes the pool of resources available to address shortfalls, allowing the
23 CAISO to avoid a “last minute scramble” to find needed resources. If the CAISO must
24 wait until the last minute to fulfill these needs, necessary capacity may no longer be
25 available because it will be committed elsewhere, particularly if conditions are tight
26 elsewhere in the west.
27

28 Compared to the CPM procurement for monthly resource adequacy deficiencies, the
29 CAISO’s exceptional dispatch and significant event CPM authority are much less

² See CAISO Tariff Sections 43A.2.3 through 43A.2.5.

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 effective in addressing capacity needs in advance. The CAISO’s exceptional dispatch
2 CPM is limited to remedying market issues identified post-day-ahead market and in real-
3 time, which greatly limits advance procurement.
4

5 The CAISO can make significant event CPM designations when an event causes a
6 material difference from resource adequacy program assumptions or a material change in
7 system conditions that threatens a failure to meet reliability criteria.³ For example,
8 during the summer 2020 extreme heat events, the CAISO called a CPM significant event,
9 but could only procure very limited capacity from resources not committed elsewhere,
10 given the late notice and stressed grid conditions throughout the west. Having to wait
11 until extreme heat wave conditions actually emerge, or heat wave forecasts become
12 sufficiently firm to justify procuring backstop capacity, is suboptimal and risks capacity
13 being unavailable when needed.
14

15 Rather than relying on the CAISO’s exceptional dispatch and significant event CPM
16 authority, the Commission should modify the resource adequacy program to increase the
17 planning reserve margin as the CAISO proposes. This will allow the CAISO to use CPM
18 to backstop to the updated resource adequacy requirements, thus allowing effective
19 advance procurement if necessary. Without changes to the resource adequacy program,
20 the CAISO will be hamstrung in preparing to meet summer 2021 system resource needs.
21 Backstopping resource adequacy program requirements will enable the CAISO to avoid
22 last minute procurement and the risk accompanying it.
23

³ In opening comments, several parties noted the CAISO can use its significant event CPM authority to backstop to meet changes in the load forecast. *See* CAISO Tariff Appendix A, definition of CPM Significant Event (“A substantial event, or a combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the resource adequacy program for purposes of determining the Resource Adequacy Capacity requirements, or produce a material change in system conditions or in CAISO Controlled Grid operations, that causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-Resource Adequacy Resource(s) on a prospective basis.”)

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

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III. FLEX ALERT PAID MEDIA CAMPAIGN

Q10. Should the CPUC direct an IOU to develop a new contract with the existing time-of-use Statewide Marketing, Education and Outreach vendor, or direct an IOU to develop a solicitation to competitively source a new vendor?

A10. It is prudent to fund and promote the Flex Alert Media Campaign. The program has historically delivered noticeable and helpful load conservation when exercised during critical and highly stressed system conditions. This load conservation tool will be useful as the state develops additional resource capacity and capabilities on the system over the next few years.

Q11. Should the contract be for at least two summers (2021 and 2022) or should it be longer?

A11. The Flex Alert is an important grid management tool, and the CAISO supports its continued funding beyond 2022. The program will educate consumers regarding the positive impacts of conservation, help them understand grid conditions and inform consumers when conservation is needed because electricity supplies are short. Long-term support and funding of the program can establish and sustain a trusted brand and consumer tool that is essential to overall grid reliability. An ongoing consumer awareness and participation program that reaches millions of California consumers each year is an essential part of reaching our collective clean energy goals.

Q12. What should be the campaign priorities and strategies for the new Flex Alert program, and what budget estimates seem reasonable to address those priorities?

A12. The Flex Alert program should be multi-lingual, and involve a paid advertising and non-paid media campaign that considers all communications channels, including, but not limited to television, newspaper, radio, internet, social media, websites, and a mobile application. The campaign should be both educational and a call for action for consumers to actively participate in the program and conserve energy when called upon.

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 The campaign should start prior to summer and increase consumer understanding on the
2 need to conserve, how to conserve energy effectively, and what to do before, during and
3 after a Flex Alert is called. For example, this may include cooling down living spaces or
4 charging vehicles or electronic equipment before conservation is needed. The campaign
5 should consider effective communications to large energy users, electric car owners, and
6 smart-home device producers to better help consumers automate conservation measures
7 and increase participation in energy conservation. The Flex Alert program should also
8 utilize existing state emergency communications measures, including text alerts and
9 highway message signage. State agencies—especially those with high levels of
10 population interactions such as the Department of Motor Vehicles—should have
11 educational materials and/or signage to share with consumers. The CAISO does not have
12 an opinion on funding levels due to lack of expertise and/or direct experience with
13 current advertising costs in California. Although the CAISO does not have direct
14 expertise with current advertising costs in California, we are ready to partner with the
15 CPUC to assess appropriate funding levels that meet a modernized and ongoing Flex
16 Alert campaign.

17
18 **Q13. How could the Flex Alert campaign be integrated with DR programs and smart**
19 **thermostats?**

20
21 **A13.** The Flex Alert program should, at minimum, serve as an eligible trigger for all demand
22 response programs, including “emergency response” demand response programs that
23 qualify as resource adequacy resources.

24
25 **Q14. If the CPUC authorizes a new emergency load reduction program (ELRP) how**
26 **would the Flex Alert paid media campaign interface with it?**

27
28 **A14.** The Flex Alert could be one of the program triggers for the ELRP. However, because the
29 ELRP is not a resource adequacy program and ELRP resources are not resource adequacy
30 resources, it should be exercised only after other available demand response programs
31 that count as resource adequacy capacity have been released for dispatch or called upon.
32 This “sequencing” may require re-evaluating existing demand response program

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 availability and triggers to ensure all resource adequacy eligible demand response
2 programs are called, or eligible to be called, at a Flex Alert or sooner and before
3 exercising the ELRP, which would not receive a resource adequacy capacity payment or
4 have a must-offer obligation. The ELRP should be viewed as “insurance,” *i.e.*, extra
5 capacity that may be available beyond what is provided by resource adequacy resources.
6

7 **IV. DEMAND RESPONSE AND LOAD REDUCTION ISSUES**

8 **Q15. What principles should the Commission consider in expanding or modifying**
9 **demand response programs to meet summer 2021 resource needs?**

10
11 **A15.** The Commission should consider the follow principles if it considers expanding or
12 modifying any demand response programs to meet summer 2021 needs:

- 13 • **Cost-effectiveness:** Demand response program cost-effectiveness and resource adequacy
14 capacity value should consider that demand response is a variable-output resource whose
15 capability and capacity value varies, among other things, by hour, day, day-type, weather,
16 temperature, occupancy, and production. It should also consider when these resources
17 are dispatched relative to other demand response programs (*i.e.* are RA resources
18 dispatchable before, after, or at the same time as non-RA resources).
- 19 • **Contribution to reliability:** Demand response’s variability and limited energy and
20 availability can impact its contribution to system reliability. This must be considered
21 when evaluating and approving any program expansion or modification.
- 22 • **Use and availability:** At minimum, demand response programs should be available for
23 dispatch during both high load and net load peak hours on a daily basis, including
24 weekends, from 2 PM to 9 PM between May and October.

25
26
27 **Critical Pricing Program (CPP) Design**

28 **Q16. Several parties raised concerns that some CPP rate schedules have event windows**
29 **that are not aligned with the net peak period. Should CPP rate schedules be**
30 **adjusted such that their event windows be aligned with the net peak period? Please**
31 **specify the rate schedules and the specific time frame of the adjusted event window**
32 **(for example, 4pm – 9pm).**

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

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A16. Yes, CPP should be aligned with the net load peak period of 4 p.m. to 9 p.m., and CPP should be available on weekends during the critical and net load peak hours.

Q17. Should CPP have a maximum number of events? Provide the pros and cons of removing the current maximum.

A17. The CPP program should not have a minimum or maximum number of events, but should instead be called based on a hard load forecast trigger, *e.g.*, CPP will be triggered if the system coincident day-ahead load is forecast to be above, for example, 43,000 MW in the summer months. This megawatt hard trigger value would be determined, set, and communicated in advance by the Commission, in consultation with the CAISO, based on forecast system conditions for that season. A hard trigger may also enable the CEC to better forecast CPP load impacts. The hard trigger could be assessed periodically to ensure it remains relevant based on system conditions, needs, expected load reductions, and the resource mix.

CPP Expansion to Non-IOU load serving entities

Q18. Are there benefits that could motivate non-IOU load serving entities to develop rate offerings that are similar to CPP, and how can the non-IOU load serving entities achieve these benefits?

A18. Non-IOU load serving entities can benefit from offering their customers more time-variant and dynamic rate options that are grid informed, and, in so doing, avoid and reduce their resource adequacy capacity requirements by “bending the curve” on their peak demand forecast. However, such opportunities should ensure that a given customer is not enrolled in overlapping programs between the IOU and non-IOU demand response programs.

Q19. What actions are necessary to coordinate non-IOU load serving entities potential CPP programs with CAISO to ensure those CPP programs are effective in addressing summer reliability conditions? Are there existing non-IOU load serving entities CPP (or similar) programs that currently coordinate with CAISO?

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1
2 **A19.** The CAISO is not aware of any non-IOU load serving entity CPP (or similar) programs.
3 CPP programs for non-IOU load serving entities, like the CPP programs for IOU load
4 serving entities, would be load modifying tariff-based mechanisms whose load impacts
5 are incorporated into the CEC’s load forecast. These programs are not directly visible or
6 dispatchable by the CAISO. Nonetheless, the CAISO welcomes coordination regarding
7 program activation and forecasting of load modifying capabilities from these tariff-based
8 programs. The CAISO encourages other load-serving entities that adopt their own CPP
9 rate to adopt the same hard triggers that the Commission sets should the CPUC, in
10 collaboration with the CAISO, adopt a hard trigger for IOU approved CPP rates.
11

12
13 **Emergency Load Reduction Program (ELRP)**

14 **Q20. Program Trigger. CAISO suggests “the dispatch trigger [for ELRP] could be a**
15 **Warning or Stage 1 emergency or its equivalent.” What is the case for or against**
16 **limiting the trigger to CAISO-declared Warning/Emergency stage vs. extending the**
17 **trigger discretion to Alerts or day-ahead?**
18 **a. Should the ELRP be allowed or required to dispatch before the Base**
19 **Interruptible Program (BIP) is triggered? If yes, under what**
20 **circumstances should this be allowed? Are there any other conditions**
21 **that should be met before ELRP could be dispatched?**
22 **b. Should the IOUs be allowed to trigger ELRP for localized transmission**
23 **and distribution emergencies? Why or why not?**
24

25 **A20.** The resource adequacy program is designed to ensure sufficient resources are available
26 and offered to the CAISO to maintain system reliability even under stressed system
27 conditions. ELRP would not be a resource adequacy eligible program and not paid to be
28 available to the CAISO under a must-offer obligation. As the name implies, it is an
29 “emergency” load response program. As such, an ELRP is principally an “insurance
30 policy” that is eligible to be called during emergency conditions to supplement the
31 reliability provided by the resource adequacy program when resource adequacy resources
32 are fully dispatched yet still unable to maintain system reliability under normal operating
33 conditions. As such, the ELRP should be exercised, at best simultaneously, or only after
34 other resource adequacy resources have been called first, including the BIP. Meeting a

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 “resource adequacy first” principle, if the Commission desires ELRP to be eligible to be
2 called during Flex Alerts, then the Commission should require all resource adequacy
3 eligible demand response programs to have a Flex Alert trigger, including BIP.

4
5 In addition, the Commission should consider the following program characteristics for
6 what constitutes an ELRP, among others:

- 7 • Voluntary participation – No offer obligation or capacity payment; compensation based
8 on participation, and could be based on actual load curtailment provided during event;
- 9 • Load modifying – ELRP is not a supply-side, CAISO-market integrated resource. It is a
10 load conservation program analogous to CPP; its load impacts are considered in the load
11 forecast;
- 12 • Insurance value – Value assessment based on ability to supply a minimum load reduction
13 amount for a set duration during emergency and scarcity conditions;
- 14 • Eligibility – Load reduction must be incremental to any existing demand response
15 capability that is not already subscribed under another demand response program;
- 16 • Trigger – Simultaneous with, or immediately following, any resource adequacy eligible
17 demand response program trigger. ELRP should not be called before calling paid
18 demand response resource adequacy capacity;
- 19 • Forecast – Utility/operator will forecast aggregate ELRP capability when requested by
20 the CAISO.

21
22 **Q21. Eligibility**

- 23
24 i. **Should customers who are already enrolled in IOU (directly or via**
25 **aggregators) or third-party demand response programs or critical peak**
26 **pricing be permitted to participate in the ELRP? If so, what specific**
27 **program rules will be needed to ensure that dual participants are not**
28 **compensated twice for the same load reductions? If there are distinctions**
29 **in the rules depending on the DR program or rate, please describe.**

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 **Please provide an estimate of potential MWs available for each dual**
2 **participation permutation.**
3

4 **A21.** No. ELRP load reduction must be incremental to any existing demand response
5 capability that is not already subscribed under another demand response program. As
6 noted above, ELRPs should only be called was all available resource adequacy resources,
7 including other resource adequacy demand response resource are depleted. Allowing
8 dual participation creates potential double counting and double compensation concerns.
9 Further, dual participation affects the forecast used to establish resource adequacy
10 requirements because the same load reduction would be treated as a load modifier in the
11 CEC load forecast. It should not then also be utilized as a supply-side resource eligible
12 as resource adequacy capacity under a demand response program. This must be avoided
13 because it would inflate our load reduction capabilities and undermine reliability goals.

14
15
16 **ii. What rules and processes need to be in place to ensure that the load**
17 **reductions expected from dual participants are appropriately accounted**
18 **for and communicated to CAISO for grid operations?**
19

20 *See above.* Dual participation should not be allowed because it inappropriately mixes the
21 same megawatts as both load modifying resources and supply-side resources. ELRP
22 participation must be from load reduction that is wholly incremental to, and not
23 encumbered under, another demand response program.
24

25 **Base Interruptible Program (BIP) and Agricultural & Pumping Interruptible (API)**

26 **Q22.** **Should the CPUC consider a temporary expansion of the 2 percent cap limited to a**
27 **specified number of years (such as 5 years)? If the cap is increased, are there other**
28 **changes to the BIP design that should be considered to forestall any potential**
29 **unintended consequences?**
30

31 **A22.** The Commission should not expand the 2% cap on BIP resources if the program
32 continues to count as resource adequacy capacity *and* maintains an emergency-only
33 trigger. This is true even if the Commission adjusts the trigger to allow BIP to be
34 dispatched prior to a Warning notice. The CAISO understands the immediate needs and

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 deficiencies of the system, but it would be imprudent to expand and deepen the resource
2 adequacy program’s reliance on resources that are dispatchable only during emergency
3 events. The evolving needs of the grid require resources that are more flexible and
4 available for dispatch to support the system day-to-day, during both the net load ramp
5 and peak. Also, as California strives to decarbonize its grid, it must target and incentivize
6 investment in resource adequacy resources that can reliably displace gas-fired resources
7 and the significant energy these resources have historically provided the system.
8 Investing in resource adequacy resources that are only available during emergency
9 conditions and run very few hours—if any—per year could impede California’s ability to
10 achieve its clean energy goals, especially if these resources displace other resource
11 adequacy resources that are more flexible and available.

12
13 The Commission struck the appropriate balance when it approved the 2% cap, allowing
14 certain emergency-only constrained demand response capability to participate in resource
15 adequacy program while not further eroding the integrity of the resource adequacy
16 program.

17
18 **Q23. What would be the most effective way to retain as well as attract participants to**
19 **BIP, while preserving or improving the program’s contribution to grid reliability?**
20 **Increase capacity incentive level, add an energy payment component (with existing**
21 **or modified capacity payment), reduced penalties for under performance, allow**
22 **additional enrollment opportunities, reduce the availability requirement to specific**
23 **hours of the day (instead of 24 x 7), or limit the number of allowed events in a year?**
24 **For your proposals, please be specific in describing the proposed program**
25 **modifications, including quantifying parameters where appropriate, and provide**
26 **the rationale. Please provide an estimate for additional MWs that could result from**
27 **the changes.**

28
29 **A23.** The Commission should not expand the BIP program or make it even more restrictive for
30 the reasons outlined in Q&A22, above.

31 **Capacity Bidding Program (CBP)**

32 **Q24. What would be the most effective way to attract and retain CBP participants, while**
33 **preserving or improving the program’s contribution to grid reliability? Potential**

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 **actions include increasing capacity incentives, reducing penalties for under-**
2 **performance, or limiting the number of allowed events per a month or year.**

3
4 **A24.** Reducing under-performance penalties and limiting use and availability requirements
5 would make CBP programs more used but less useful. Such changes would reduce the
6 effectiveness of these programs' ability to address system needs and help maintain
7 reliability by opening the door to more customers that are either not willing or not able to
8 drop load as needed. If the Commission wishes to increase compensation to increase
9 customer enrollment, then it should also increase non-performance penalties for the same
10 reason. It is critical that the customer's penalty for non-performance at least equal the
11 compensation for participating. This ensures customers are signing up with the
12 understanding that non-performance means they will not receive any benefits from
13 enrollment. This also ensures that the customers that enroll are reliable and dependable
14 providers of resource adequacy capacity. Customers that want to help and receive some
15 compensation, but seek lower standards than what is appropriate to maintain the integrity
16 of the resource adequacy program, should have the opportunity, and be counseled, to
17 enroll in a program like the ELRP, if the Commission implements such a program.

18
19
20 **V. CONCLUSION**

21 **Q25. Please summarize your recommendations.**

22 **A25.** The Commission should temporarily increase the planning reserve margin from 15% to
23 17.5% and apply this to both the gross and net load peak. This increase provides a
24 regulatory requirement to procure additional capacity needed to maintain reliability with
25 least regrets. This temporary increase will also provide the CAISO with critical access to
26 additional backstop procurement authority that will maximize the solutions available
27 should a resource adequacy deficiency arise.

28
29 The Commission should continue to support the Flex Alert program and help increase
30 customer response to callsfor emergency energy conservation. However, to the extent

**TESTIMONY OF DR. KARL MEEUSEN
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION
R.20-11-003**

1 ELRPs are not part of the resource adequacy program, they should be viewed as
2 insurance policies and relied upon only as a last resort. The Commission should ensure
3 that the resource adequacy demand response resources that are paid to provide load
4 reductions are fully utilized before relying on this insurance policy.

5
6 **Q26. Does this conclude your testimony?**

7 **A26.** Yes, it does.