

Docket No. R.20-11-003

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**Witnesses: Catherine Yap
Paul Nelson**

**REPLY TESTIMONY OF
CATHERINE YAP AND PAUL NELSON
ON BEHALF OF THE
CALIFORNIA LARGE ENERGY CONSUMERS ASSOCIATION**

September 10, 2021

Table of Contents

I.	Introduction.....	1
II.	Proposal to Address Increasing Forced Outages of Gas-Fired Generation During Severe Heat Events	2
	A. The Commission Should Address the Appropriate Means for Encouraging Natural Gas-Fired Generators to Remain Available During the Transition to Renewable Resources.	2
	B. A Procurement Bidding Process to Promote Resource Reliability Combined with Three-to-Five-Year Contracts May Be Necessary to Maintain Adequate Capacity Levels.....	4
III.	Reply to Opening Testimony Regarding Demand Response Programs	5
	A. Reliability Demand Response Resources Should be Used as Load Modifying Resources	5
	B. The Event Parameters and Triggers Should be Consistent for All Reliability Demand Response Resources.....	7
	C. Changes are Needed to Allow the Base Interruptible Program to Participate in the Emergency Load Reduction Program.....	8
IV.	Response to SDG&E’s Proposal for Inappropriate Use of the Cost Allocation Mechanism	8
V.	Conclusion	10

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6

I. Introduction

7 This reply testimony is presented by Catherine E. Yap and Paul D. Nelson on behalf of
8 the California Large Energy Consumers Association (CLECA). Ms. Yap has four decades of
9 experience preparing and delivering testimony regarding utility ratemaking before this
10 Commission as well as in other jurisdictions. Mr. Nelson has nearly three decades of experience
11 in utility ratemaking. Ms. Yap’s statement of qualifications is included as Attachment A to their
12 opening Phase 2 testimony. Mr. Nelson’s statement of qualifications is included as Attachment
13 B to their opening Phase 2 testimony. The material included in this reply testimony was
14 prepared by Ms. Yap and Mr. Nelson or under their supervision. The information contained
15 herein is factually correct and represents the witnesses’ best judgment. Ms. Yap and Mr. Nelson
16 adopt this reply testimony along with their opening testimony as their sworn testimony in Phase
17 2 of this proceeding.

18 This reply testimony responds to opening testimony served on September 1, 2021, by a
19 subset of the numerous parties who served such testimony pursuant to the August 10, 2021,
20 Assigned Commissioner’s Amended Scoping Memo and Ruling for Phase 2. It also elaborates
21 on CLECA’s opening testimony at pages 5-7 addressing potential solutions to the increase in
22 forced outages among gas-fired generating facilities in the years 2020 and 2021.

1 **II. Proposal to Address Increasing Forced Outages of Gas-Fired**
2 **Generation During Severe Heat Events**

3 In our opening testimony we noted that while the Commission has decided not to
4 authorize any new gas-fired generation, existing gas-fired generation has been relied upon during
5 the severe heat events in 2020 and 2021. Furthermore, there has been an increase in forced
6 outages during 2020-2021 compared to 2019, with 2020 having 2500 MW of forced outages due
7 to plant maintenance issues or equipment failures and 5300 MW of forced outages for other
8 reasons.¹ These increased forced outages could be an indication that there is a problem that the
9 Commission needs to address.

10 **A. The Commission Should Address the Appropriate Means for**
11 **Encouraging Natural Gas-Fired Generators to Remain Available**
12 **During the Transition to Renewable Resources.**

13 It is critical to maintain the current fleet of gas-fired generation if it is to remain available
14 to provide reliability during severe heat events and to integrate renewables; however, it is not
15 clear that generators are earning sufficient revenues through market mechanisms and one-year
16 resource adequacy contracts to underwrite expanded maintenance activities. Middle River
17 Power’s (MRP’s) opening testimony notes that a multi-year forward procurement of existing
18 gas-fired generation would allow the spreading of maintenance costs over multiple years,
19 smoothing the recovery of such costs.² Some of the same issues may exist for biomass and wind
20 generators that are facing the end of their existing contracts as observed by the California
21 Biomass Energy Alliance/the California Wind Energy Alliance (CBEA/CalWEA); while these

¹ Department of Market Monitoring Annual Report on Market Issues and Performance for 2020 at 55-58.

² MRP Phase 2 Opening Testimony at 9.

1 resources are expected to remain within the resource stack, without sufficient contracts going
2 forward they may not continue to operate.³

3 MRP makes the point that existing resources should not be assumed to continue to
4 operate without contracts. MRP notes that while the forecasts in the California Energy
5 Commission’s Preliminary Stack Analysis, which was used to support the procurement called for
6 in the Staff Proposal for this proceeding, seem to contain the assumption that all current
7 resources will continue to operate within the CAISO market, this is not a good assumption.⁴
8 Apparently, MRP has received solicitations from out-of-state load serving entities who are
9 interested in entering into multi-year contracts for MRP’s resources.⁵ Given the current state of
10 resource constraints, the Commission should be concerned about the possibility that generators
11 like MRP may simply exit the California market.

12 The Independent Energy Producers (IEP) supports re-contracting with existing resources
13 whose contracts will expire during the 2022-2023 window and cites the benefits of three-to-five-
14 year contracts to allow plant operators to make investments necessary to keep plants running
15 reliably.⁶ Calpine also points to the option for pursuing long-term contracts with gas generators
16 presented in the Staff Guidance Paper and agrees that longer-term contracts would be very
17 helpful in addressing near-term reliability to secure existing capacity to allow for “upgrades”
18 because the cost of those upgrades could be amortized over several years.⁷ While Calpine does
19 not clearly define “upgrades”, to the extent these upgrades would improve reliability, they may
20 be very beneficial.

³ CBEA/CalWEA Phase 2 Opening Testimony at 1-3.

⁴ MRP Phase 2 Opening Testimony at 5-6.

⁵ Id. at 6.

⁶ IEP Phase 2 Opening Testimony at 8.

⁷ Calpine Phase 2 Opening Testimony at 4.

1 **B. A Procurement Bidding Process to Promote Resource Reliability**
2 **Combined with Three-to-Five-Year Contracts May Be Necessary to**
3 **Maintain Adequate Capacity Levels**

4 These proposals are consistent with our opening testimony, which stated there may be
5 augmented maintenance or repair activities that could be conducted at existing sites that would
6 ensure the reliable provision of capacity and, possibly, the restoration of capacity lost due to
7 equipment failure or damage, if additional funds were provided. We noted that there also might
8 be opportunities to provide some augmentation to capacity through the addition of equipment
9 such as chillers that might make the existing turbines work more efficiently during high
10 temperature weather events. San Diego Gas and Electric Company (SDG&E) also proposes
11 adding chillers to existing combined cycle plants along with addition of energy storage to
12 existing sites.⁸ MRP also mentions adding storage to existing sites.⁹ These types of
13 opportunities should be considered if the cost is cheaper than a contract for a new non-gas-fired
14 facility under a long-term contract and if they also serve to retain existing gas-fired generation
15 that will be needed for flexibility and renewable integration for decades.¹⁰

16 We recommend that the Commission direct the utilities to conduct a procurement bidding
17 process that seeks bids for existing resources (which would include gas-fired, biomass and,
18 possibly, wind generation) that reasonably cover maintenance and repair activities that could be
19 conducted in the short-term that would provide cost-effective support for more reliable
20 operations at these existing generation sites. A commitment would have to be made by the
21 project owner to make all needed repairs and to assure a given level of reliability under the term
22 of the contract. For gas-fired generation, we recommend contracts of no longer than three to five

⁸ SDG&E Phase 2 Opening Supply side at 2.

⁹ MRP Phase 2 Opening Testimony at 17-18.

¹⁰ Id. at 12-15.

1 years. For other resources like biomass and wind, the terms could be longer if the contracts are
2 reasonably cost-competitive compared to other available alternatives in determining the best
3 overall portfolio for improving the availability of resources during the summers of 2022 and
4 2023.

5 As we noted in our opening testimony, and as seconded in Calpine’s testimony¹¹,
6 providing capacity restoration and augmentation for high temperature events could provide cost-
7 effective means for minimizing reliance on capacity additions made through temporary reliance
8 on diesel-fired backup generators.¹²

9 **III. Reply to Opening Testimony Regarding Demand Response** 10 **Programs**

11 **A. Reliability Demand Response Resources Should be Used as Load** 12 **Modifying Resources**

13 Southern California Edison Company’s (SCE) Opening Testimony raises several issues
14 to which we would like to respond. First, SCE points out that recent CAISO market changes
15 referred to as Reliability Demand Response Resource (RDRR)-related market enhancements for
16 summer 2021 are extremely problematic because they could result in “multiple on/off dispatches
17 and scattered and overlapping resource dispatch instructions during CAISO System
18 Emergencies.”¹³ This would be highly problematic for the Base Interruptible Program (BIP)
19 because it involves discrete dispatch, i.e., dispatch down to a fixed Firm Service Level (FSL) for
20 each participant. Even if the change in dispatch correlated exactly with the size of an individual
21 BIP resource within a Resource ID, so that it could be turned off or on, BIP only allows one

¹¹ Calpine Phase 2 Opening Testimony at 8.

¹² CLECA Phase 2 Opening Testimony at 7.

¹³ SCE Phase 2 Opening Testimony (SCE-4) at 49-50.

1 event per day, so once turned off it cannot be turned on again. Furthermore, it appears that the
2 CAISO proposal would lead to fragmentation of RDRR resources like BIP, whereas it is highly
3 challenging to schedule and dispatch lots of small demand response (DR) resources. Given that
4 RDRR is called after a Warning or Stage Emergency and is rarely dispatched at a more granular
5 level than the sub-load aggregation point (SLAP) or system-side, there is no upside to such
6 fragmentation. We concur with SCE that the RDRR fleet should be called:

7 in the largest MW blocks possible (either all at once, or by SLAP as SLAP is the largest
8 single unit of MW per CAISO market integration rules). Keeping the fleet together from
9 a CAISO-integration perspective makes it possible for SCE to monitor and manage
10 program constraints, manage and direct rotating outage blocks, issue DR/outage
11 notifications through SCE channels (e.g. SCE.com and SCE DR Alerts App) and ensure
12 our Customer Call Center as well as our Business Customer Division have consistent
13 information to manage customer interactions and inquiries. At present, CAISO's
14 enhancement project poses multiple risks including SCE-violation of DR program tariff
15 rules as well as introducing the risk that SCE is not able to properly administer RDRR
16 events and meet the real-time objective to minimize or avoid rotating outages.¹⁴
17

18 SCE's concerns here are very disturbing. CAISO tariff changes should not disrupt the
19 ability to dispatch utility DR programs consistent with clear tariff rules. For many years, the
20 issue of how to adapt the CAISO market rules to allow DR dispatch consistent with the tariffs
21 has been discussed without any proper resolution. The recent changes apparently fail to provide
22 the needed improvement and are even making things worse.

23 SCE proposes to remove only the Summer Discount Plan (SDP)¹⁵ as a supply-side
24 resource due to the above concerns, but SCE does not offer an explanation why its concerns
25 apply only to SDP.¹⁶ SCE's concerns are also applicable to BIP, which represents the majority
26 of RDRR, and to SCE's Agricultural Pumping – Interruptible (AP-I), so it is logical to remove
27 all RDRR from treatment as supply-side market integrated resources.

¹⁴ Id. at 50.

¹⁵ The Summer Discount Plan is an air-conditioning cycling program.

¹⁶ SCE Phase 2 Opening Testimony (SCE-4) at 15 and 17.

1 The CAISO's proposed market changes are supposedly designed to allow RDRR to be
2 dispatched in the market and help set market prices,¹⁷ which, to the best of our knowledge has
3 never occurred. (Instead, these programs have generally been exceptionally dispatched. For
4 example, during the August and September 2020 heat waves, RDRR was exceptionally
5 dispatch.¹⁸) However, we conclude that the proposed CAISO market changes will still not allow
6 for BIP's tariff conditions to be met in a reasonable way; therefore, it is imperative that the
7 Commission remove all RDRR including all utilities' BIP and SCE's AP-I from the CAISO's
8 markets, not just SDP, so these programs can be dispatched consistent with the tariffs.¹⁹ As
9 reliability programs are intended to be used when grid conditions are in a Warning or Stage
10 Emergency, it is not clear a market dispatch is required to maintain grid reliability as the
11 resource can always be exceptionally dispatched.

12 **B. The Event Parameters and Triggers Should be Consistent for All** 13 **Reliability Demand Response Resources**

14 We do not object to SCE's proposal to modify Reliability Program Event Parameters
15 such that BIP and AP-I parameters match and SDP and SEP parameters match. We also have no
16 objection to SCE's decision to better coordinate and simplify its residential DR programs by
17 allowing dual participation for Smart Energy Program (SEP) and SDP customers.²⁰ However,
18 we are very concerned that SCE's proposal would only trigger SDP in the case of a Stage 1-3
19 Emergencies,²¹ whereas it can now be triggered at a Warning, like BIP and AP-I. SDP as a

¹⁷ California ISO Market Enhancements for Summer 2021 Readiness: Revised Final Proposal at 34.

¹⁸ CAISO Department of Market Monitoring, Feb 2021, *Q3 2020 Report on Market Issues and Performance*, at 122, states: "The majority of CPUC-jurisdictional utility demand response dispatches were due to the ISO issuing manual dispatches to reliability demand response resources (RDRR) on August 14-18 and September 5-6."

¹⁹ SCE Phase 2 Opening Testimony (SCE-4) at 50-51.

²⁰ *Id.* at 17.

²¹ *Id.* at 18.

1 RDDR should be eligible to be triggered at the same time as BIP and AP-I, not afterward. It is
2 not appropriate to trigger DR programs that affect the ability of manufacturers to provide goods
3 and services and employ workers ahead of reducing air conditioning use. Therefore, either all
4 RDDR programs should be eligible to be triggered during CAISO Stage Emergencies (which do
5 not include a Warning) or SCE’s proposal to remove a CAISO Warning as a trigger for only
6 SDP should be rejected.

7 **C. Changes are Needed to Allow the Base Interruptible Program to**
8 **Participate in the Emergency Load Reduction Program**

9 We also support Pacific Gas and Electric Company’s (PG&E’s) proposal to eliminate the
10 special conditions limiting dual participation in BIP and the Emergency Load Reduction
11 Program (ELRP).²² PG&E states: “Parts (a) and (b) of the provision diminishes the ability for
12 dual enrolled BIP and ELRP participants to be compensated for ELRP during *non*-overlapping
13 events. PG&E has observed that less than 1 percent of all Group A enrolled service agreements
14 were from BIP customers as of mid-August 2021.”²³ BIP participants should be eligible for
15 ELRP incentives for periods when no BIP event is called and represent a significant amount of
16 load that could be shed when supply is tight.

17 **IV. Response to SDG&E’s Proposal for Inappropriate Use of the Cost**
18 **Allocation Mechanism**

19 SDG&E proposes that the Commission “clarify that the Cost Allocation Mechanism
20 (“CAM”) established under Public Utilities Code Section 365.1 allows recovery of costs for
21 resources procured in response to direction provided in this proceeding that provide additional

²² PG&E Phase 2 Opening Testimony at 2-4 and 2-5.

²³ Id. at 2-5.

1 capacity but are not RA-eligible.”²⁴ SDG&E appears to believe that this is permitted based on its
2 interpretation of D. 21-03-056 that “suggests that a resource offering capacity that can help to
3 provide system reliability but is not eligible for RA compliance is nonetheless eligible for CAM
4 treatment.”²⁵ The Commission should not do this because traditionally the CAM has,
5 appropriately, only been used for RA resources, whose net capacity benefits and net capacity
6 costs are readily allocable to benefitting customers. When the Legislature expanded retail choice
7 and authorized the CAM, it set forth specific requirements built around the RA framework.

8 Notably, P. U. Code Section 365.1(c)(1) requires procurement to be obtained “under any
9 programs or rules adopted by the Commission ***to implement the resource adequacy provisions***
10 ***of Section 380***”. Moreover, P.U. Code Section 365.1(c)(2)(A) restricts the spreading net
11 capacity costs to “generation resources that the Commission determines are needed ***to meet***
12 ***system or local area reliability needs*** for the benefit of all customers”; further, P.U. Code
13 Section 365.1(c)(2)(B) requires that the generation resources “***meet a system or local reliability***
14 ***need in a manner that benefits all customers of the electrical corporation***” and that the cost
15 allocation is “***fair and equitable to all customers***, whether they receive electric service from the
16 electrical corporation, a community choice aggregator, or an electric service provider.” Most
17 importantly, P.U. Code Section 365.1(c)(2)(C) explicitly references the “***resource adequacy***
18 ***benefits*** of generation resources acquired by electrical corporations pursuant to subparagraph
19 (A)” and details the calculation of the net capacity costs. Finally, P.U. Code Section
20 365.1(c)(2)(D) explains the Legislature’s intent that these provisions “provide additional

²⁴ SDG&E Phase 2 Opening Testimony at 2-4.

²⁵ Id. at 4.

1 guidance to the commission with respect to the implementation of” the statutory sections on RA
2 in Section 380.

3 **V. Conclusion**

4 This concludes our reply testimony.