

PREPARED REPLY TESTIMONY OF BRIAN D. THEAKER

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Witness: Brian D. Theaker

Administrative Law Judges: Brian Stevens, Sarah R. Thomas

**PREPARED REPLY TESTIMONY OF
BRIAN D. THEAKER
ON BEHALF OF
MIDDLE RIVER POWER LLC**

September 10, 2021

Table of Contents

Introduction 1

Topic 1 – A Separate Net Load Peak Resource Adequacy Requirement.....2

Topic 2 – Increasing the PRM.....3

Topic 3 – Current requirements intended to maintain reliability should not be relaxed4

Topic 4 – Using the Preliminary Stack Analysis to Direct New Procurement7

Topic 5 – SDG&E Proposals.....8

Topic 6 – Allowing the Central Procurement Entities to Secure Additional Capacity to Meet
Emergency Procurement Needs for 2022-20239

Topic 7 – Cost Considerations10

Conclusion 11

1 **Introduction**

2 My reply testimony is organized as follows:

3 *First*, I will support opening testimony establishing and enforcing a separate
4 Resource Adequacy (“RA”) requirement that applies to the net load peak demand. I
5 proposed such a requirement in opening testimony.

6 *Second*, after discussing increasing the Planning Reserve Margin (“PRM”), I will
7 offer that, while such proposals share the good intention of retaining needed resources or
8 providing greater room for demand forecast variation, the most straightforward way to
9 retain needed resources is to set a net load peak requirement.

10 *Third*, I will discuss proposals by several parties to relax current RA requirements
11 and respectfully urge the Commission to not relax long-standing reliability-focused
12 requirements simply to try to secure additional emergency procurement.

13 *Fourth*, I offer support for two San Diego Gas & Electric Company (“SDG&E”)
14 procurement proposals.

15 *Fifth*, I will support calls to not direct *additional* procurement based on the
16 California Energy Commission’s (“CEC’s”) Preliminary Stack Analysis (“PSA”).

17 *Sixth*, I will provide conditional support for Pacific Gas and Electric Company’s
18 (“PG&E’s”) proposal to authorize the Central Procurement Entities (“CPEs”) to engage
19 in bilateral contracts outside of all-source solicitations.

20 *Finally*, I will support opening testimony regarding the need to not lose sight of
21 procurement costs.

1 **Topic 1 – A Separate Net Load Peak Resource Adequacy Requirement**

2 Two parties – the California Independent System Operator Corporation
3 (“CAISO”) and the Public Advocates Office (“PAO”) independently proposed that the
4 Commission implement a new net load peak demand RA requirement. This requirement
5 would apply in addition to the current gross peak demand-focused RA requirement.

6 Specifically, the CAISO testified the Commission should:

- 7 • Set the net load peak requirement for the 8 p.m. hour, which the CAISO asserts is
8 a “proxy” for the net peak demand period.¹
- 9 • Apply the new net load peak requirement to the months June through October.²
- 10 • Adopt a Planning Reserve Margin (“PRM”) of 17.5% for the new net load peak
11 requirement.³
- 12 • Disqualify all solar not paired with storage from counting towards the net load
13 peak requirement.⁴

14 Middle River Power LLC (“MRP”) agrees with CAISO’s proposal, which is
15 supported by both the CEC’s PSA and its Mid-Term Reliability Analysis (“MTRA”).
16 The PSA shows the highest deficiency at HE 20 for every month studied. While MRP
17 does not agree with the amount of the deficiency projected in the PSA, nearly 5,200
18 MWs, we believe that the analysis clearly shows the need to establish a net load peak
19 requirement, which is currently not part of the RA program.

¹ *Opening Testimony of the California Independent System Operator Corporation* at p. 2, lines 8-16.

² *Id.* at p. 2, lines 8-9. The CAISO later clarified that it recommends an 8:00 p.m. requirement only for the months June – September in 2022. *Id.* at p. 6, lines 4-7.

³ *Id.* at p. 10, lines 15-17.

⁴ *Id.* at p. 11, lines 1-11.

1 PAO similarly testifies that the Commission should adopt a 15% PRM during the
2 net load peak hours.⁵

3 PAO’s proposal slightly differs from the CAISO’s proposal to focus the
4 requirement on hour 20. Instead, PAO asserts that the Commission should examine what
5 the net load peak period is in the RA proceeding.⁶ MRP does not object to the
6 Commission examining which net load peak demand hour to use for the net load peak
7 requirement, but respectfully urges the Commission to do so quickly to establish such a
8 requirement without undue delay. Given that the net load peak requirement is intended to
9 provide for sufficient resources without any solar, MRP offers that the Commission
10 should determine the time of the net load peak requirement to be the time of day that has
11 the highest load after solar has stopped producing, which will be sometime from HE 19
12 through HE 22.

13 ***Topic 2 – Increasing the PRM***

14 PAO recommends increasing the gross load peak PRM to help ensure that
15 resources are “...available to meet additional load about the 1-in-2 forecast...”⁷ MRP
16 agrees that while increasing the gross peak PRM to better account for increasing demand
17 variability is appropriate and necessary, there are better ways to try to meet *net load peak*
18 needs than grossing up the *gross load peak* demand-focused PRM.

⁵ *Public Advocates Office California Public Utilities Commission Prepared Testimony 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 R.20-11-003* (“PAO”) at p. 2, lines 14-15; *id.* at pp. 1-5, lines 13-14.

⁶ *Id.* at pp. 1-5, lines 16-25.

⁷ *Id.* at pp. 1-2, lines 17-18.

1 PAO offers that the Commission should increase the RA program PRM to ensure
2 that the new Integrated Resource Planning (“IRP”) proceeding-directed procurement does
3 not displace contracts with existing RA resources needed for reliability.⁸ MRP strongly
4 agrees. As MRP noted in its opening testimony, without simultaneously applying a net-
5 load peak requirement, net load peak-focused procurement has the potential to displace
6 needed resources because that procurement, along with solar resources, will also count
7 towards gross load peak requirements, creating a perception under the current RA
8 program rules that there is more than an adequate amount of capacity.⁹ While there are
9 many steps the Commission could take to ensure this does not happen – such as
10 increasing the gross load peak PRM – setting a separate net load peak requirement
11 towards which solar not paired with storage would not count is the most straightforward
12 way to ensure that new procurement closes the net load peak deficiency gap but does not
13 displace needed generation.

14 ***Topic 3 – Current requirements intended to maintain reliability should not be relaxed***

15 Several parties propose that the Commission relax current RA program rules to
16 allow certain resources to count towards meeting the emergency procurement
17 requirements.

18 As examples:

- 19 • California Community Choice Association (“CalCCA”) proposes that the
20 Commission not apply the requirement for RA imports to bid \$0 or below for
21 years 2022 and 2023, and allow load-serving entities to contract with imports

⁸ *Id.* at pp. 1-3, lines 10-12.

⁹ *Prepared Testimony of Brian D. Theaker on Behalf of Middle River Power LLC* (“MRP Opening Testimony”) at 15:17 – 16:11.

1 after the RA showings deadline up to the available Maximum Import Capability
2 (“MIC”).¹⁰

- 3 • Southern California Edison Company (“SCE”) suggests that the Commission
4 work with the CAISO to explore ways to put non-RA imports on supply plans so
5 the resources are treated as RA for CAISO market mechanisms.¹¹
- 6 • LS Power Development, LLC (“LS Power”) recommends the Commission allows
7 LSEs to contract with energy-only or partial capacity deliverability status
8 resources if these resources can respond to CAISO dispatch instructions at all
9 times, including the evening peak hours. LS Power asserts that such resources
10 would effectively be “...as valuable for reliability as RA resources” if they
11 comply with the RA must-offer obligation and are able to provide energy during
12 the net peak demand period.¹²

13 In each case, these parties advocate for the Commission to relax current RA
14 requirements with the hope of securing additional supply. And in each case, these parties
15 omit any discussion of why the Commission imposed those rules or conditions on RA
16 supply in the first place.

17 With regards to CalCCA’s first proposal, the Commission imposed the “must-
18 flow” requirement on RA import supply in D.20-06-028 to “...ensure that resource-
19 specific and non-resource imports that choose to participate in the RA program supply
20 electricity when needed to ensure the reliability of California’s electric grid.”¹³

¹⁰ *Direct Testimony of Lauren Carr, Fred Taylor-Hochberg and Marie Y. Fontenot on behalf of California Community Choice Association* at 5:15-18.

¹¹ *Direct Testimony of Southern California Edison Company (“SCE”)* at 54:9-11.

¹² *Prepared Opening Testimony of Sandeep Aurora on Behalf of LS Power Development, LLC (“LS Power”)* at pp. 5-6.

¹³ D.20-06-028 at p. 47.

1 With regards to CalCCA’s second proposal, nothing prevents LSEs from
2 bilaterally contracting with imports in the period between the RA showing and real-time
3 delivery. Such spot market transactions are not prohibited. The question is – should such
4 spot-market purchases count as “emergency procurement” akin to RA capacity? The RA
5 program requires that LSEs secure resources intended to reliably service load and
6 demonstrate those resources have been procured in advance of the time they are needed.
7 Allowing resources secured after RA showings to qualify as “procurement” effectively
8 allows LSEs to secure reliability resources up through the CAISO’s spot markets – an
9 outcome that the RA program was intended to avoid.

10 Similarly, SCE’s proposal would allow imports that meet none of the
11 requirements imposed on RA resources to effectively become RA resources simply by
12 appearing on supply plans.

13 Finally, LS Power’s proposal strips any deliverability requirement from resources
14 that are intended to maintain reliability. This is completely out of keeping with a
15 fundamental tenet of the RA program, which affords NQC only to capacity from
16 resources within the CAISO Balancing Authority Area that the CAISO deems to be fully
17 deliverable, or to imports that can be delivered over MIC assigned to the LSE.

18 While the urgency of the current supply-demand conditions may warrant unusual
19 and urgent action, the Commission should not take actions that degrade or bypass long-
20 standing rules intended to maintain reliability. Procuring resources that do not abide by
21 these rules may help solidify the perception that California is taking any and all actions in
22 response to the current adequacy crisis, but if those actions result in the procurement of

1 resources that come with costs but without the needed reliability – an additional wrong
2 cannot, and will not, make things right.

3 ***Topic 4 – Using the Preliminary Stack Analysis to Direct New Procurement***

4 In its opening testimony, the Union of Concerned Scientists (“UCS”) urged the
5 Commission to not direct additional procurement based on the PSA. Instead, UCS urged
6 the Commission to conduct additional probabilistic analysis to assess grid reliability in
7 2022. MRP concurs; the Commission should not direct any additional procurement on
8 the basis of the CEC’s PSA, but should conduct additional stochastic analysis before
9 directing additional incremental procurement.

10 MRP notes that the California Energy Commission’s MTRA, presented at an
11 August 30, 2021 workshop, projects deficiencies for 2022 but projects no deficiencies for
12 2023 through 2026.¹⁴ The MTRA evaluated procurement as directed in the
13 Commission’s Preferred System Plan,¹⁵ and found that the Loss of Load Expectations
14 (LOLEs) were well below the 0.1 for the years 2023-2026. Since the MTRA was
15 presented, the Commission has revised the stack analysis; the deficits projected in the
16 revised stack analysis are lower than those projected in the PSA.¹⁶ While MRP
17 appreciates Energy Commission staff’s efforts to solicit and consider stakeholder

¹⁴ See, e.g., California Energy Commission August 30, 2021 *Presentation for the Lead Commissioner Workshop on Midterm Reliability Analysis & Incremental Efficiency Improvements to Natural Gas Power Plants* at slide 26. This presentation is available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=239554&DocumentContentId=72991>.

¹⁵ The Preferred System Plan, as set forth in Administrative Law Judge Julie Fitch’s August 17, 2021 *Administrative Law Judge’s Ruling Seeking Comment on Preferred System Plan* (“ALJ PSP Ruling”), issued August 17, 2021 in Rulemaking R.20-05-003, includes procurement in the LSE integrated resource plans plus the 11.5 GW of procurement directed in D.21-06-035. See ALJ PSP Ruling at p. 14.

¹⁶ See *September 2021 California Energy Commission Staff Paper 2022 Summer Stack Analysis, CEC-200-2021-006*, at pp. 11-13. This paper is available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=239635&DocumentContentId=73053>.

1 feedback and to refine the stack analysis, the refined analysis does not change the
2 conclusion that this analysis, intended to provide snapshots of worst-case scenarios to
3 inform the need to prepare for adequate contingencies, should not be used to direct new
4 procurement.

5 In my opening testimony, I recommended that the Commission not direct any new
6 procurement based on the PSA, but instead seek to accelerate the D.21-06-035
7 procurement to close any projected 2022 deficiency.¹⁷ For all these reasons, MRP agrees
8 with UCS that the Commission should not direct any new procurement based on the PSA.

9 ***Topic 5 – SDG&E Proposals***

10 SDG&E recommends that the Commission consider enabling cost recovery for “low
11 hanging fruit” that includes:

- 12 • Adding energy storage to existing resources, which may not increase resource
13 capacity but could help units run longer and provide more market products such
14 as ancillary services. MRP proposed the Commission direct hybridization of gas
15 peaking plants in its opening testimony and strongly supports this proposal. MRP
16 believes that hybridization of the existing gas peaking plants can not only help
17 support reliability by ensuring that the baseline gas resources remain in operation
18 online while the grid transitions to a greener future, but it will also help reduce the
19 emissions of such resources on the grid at a more cost-effective manner than
20 simply procuring more expensive duration-limited resources.
- 21 • Addition of chillers to a combined cycle plant that would reduce the ambient
22 temperature derate during summer months. MRP also supports this proposal,

¹⁷ MRP Opening Testimony at 20:18 – 21:4.

1 which would provide incremental capacity during the summer peak months, with
2 a caveat. While it would seem unlikely that restoring the MW lost to ambient
3 derates would push a resource’s maximum output beyond its interconnection
4 capacity, any modification that would cause a resource’s output to exceed its
5 interconnection may jeopardize its ability to be expeditiously deployed.
6 Consequently, any upgrades that restore MW lost to ambient derates should be
7 limited to those that can be made while keeping the resource’s maximum output
8 within the resource’s current interconnection capacity.

9 ***Topic 6 – Allowing the Central Procurement Entities to Secure Additional Capacity to Meet***
10 ***Emergency Procurement Needs for 2022-2023***

11 PG&E proposes that the Commission authorize PG&E, as the Central Procurement
12 Entity (“CPE”), to bilaterally negotiate, in addition to using an all-source solicitation,
13 contracts with counterparties that can both (1) provide incremental local RA and (2) meet
14 the near-term emergency-based procurement needs for summer 2022 and 2023.¹⁸ PG&E
15 also proposes that this authority be limited to situations in which:

- 16 • The CPE procures preferred and/or energy storage resources that can come online
17 by the summers of 2022 or 2023.
- 18 • The procured local RA resource is located within the CPE’s respective
19 distribution service area.
- 20 • The procured local RA resource is located within a CAISO-designated local area
21 (such as Humboldt, North Coast/North Bay, Sierra, Greater Bay Area, Stockton,
22 Fresno, or Kern for PG&E as the CPE).

¹⁸ *Pacific Gas and Electric Company Emergency Reliability Order Instituting Rulemaking Opening Testimony* at 9-6:25.

1 In MRP’s opening testimony, MRP proposed that the Commission direct the
2 hybridization of existing gas peaking units with short-duration battery storage. Such
3 hybridization, MRP reasoned, would provide significant emissions reductions benefits
4 while preserving the long-duration capabilities for thermal resources that several
5 reliability analyses indicated were going to be needed for the foreseeable future
6 anyway.¹⁹

7 In this light, MRP supports PG&E’s proposal to be granted authority to negotiate
8 bilateral contracts as PG&E proposes *if* that authority is also extended to include
9 negotiating bilateral contracts for hybridizing gas peaking resources and retaining the gas
10 peaking resources within the local capacity areas and sub-areas with PG&E’s service
11 area.

12 ***Topic 7 – Cost Considerations***

13 In its opening testimony, the California Large Energy Consumers Association
14 (“CLECA”) expressed concern about the lack of any discussion in the Staff Concept
15 Paper regarding cost-effectiveness, except for the discussion on smart thermostats.²⁰
16 While MRP expects the Commission is already well aware of its simultaneous
17 responsibilities with regards to achieving state decarbonization goals, maintaining
18 reliability, and maintaining affordability, MRP wants to highlight CLECA’s cost
19 concerns. The Commission’s focus on addressing near-term resource deficiencies should
20 not trigger procurement that fails to respect the need to continue to balance cost,
21 reliability and decarbonization.

¹⁹ MRP Opening Testimony at pp. 17-19.

²⁰ *Testimony of Catherina Yap and Paul Nelson on Behalf of the California Large Energy Consumers Association* (“CLECA”) at p. 2, lines 16-20.

1 **Conclusion**

2 In summary, MRP respectfully urges the Commission to:

- 3 • Adopt a net load peak requirement with an appropriate PRM instead of obliquely
- 4 addressing emerging needs by increasing the gross load peak PRM;
- 5 • Resist proposed near-term changes that degrade requirements intended to support
- 6 reliability;
- 7 • Refrain from directing new procurement on the basis of the PSA;
- 8 • Adopt the SDG&E and PG&E proposals discussed herein; and
- 9 • Keep the Commission’s obligation to maintain affordability in view in this
- 10 rulemaking.

11 MRP appreciates the opportunity to submit this reply testimony.

VERIFICATION

I, Brian D. Theaker, state that I am authorized to make this verification on behalf of Middle River Power LLC. I declare under penalty of perjury that the statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, I believe them to be true.

Executed on September 10, 2021, at Placerville, California.

/s/ Brian D. Theaker

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