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December 29, 2017

Gabriel Petlin, Supervisor Rachel McMahon, Public Utilities Regulatory Analyst Energy Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Re: Western Power Trading Forum Comments on Draft Resolution E-4909

Dear Mr. Petlin and Ms. McMahon:

The Western Power Trading Forum ("WPTF")¹ offers these comments in opposition to draft Resolution E-4909 ("Resolution") issued by the Energy Division on December 8, 2017. The Resolution directs Pacific Gas & Electric Company ("PG&E") to procure energy storage or preferred resources to address local deficiencies and ensure local reliability, and to avoid current and/or future use of certain Reliability Must Run ("RMR") contracts. WPTF is concerned that the Resolution may not "ensure local reliability" at all. Moreover, while the Resolution approach purports to better preserve competitive procurement, it's *ad hoc* approach is no more consistent with competitive procurement than is the issuance of RMR contracts, and instead sets poor precedent that undercuts the Commission's efforts to have a comprehensive approach to procurement, resource adequacy and system reliability. In our comments, WPTF addresses concerns about the current resource adequacy ("RA") program; the lack of any substantive analysis to support the draft Resolution's directives; the unrealistic timeline; the inconsistency with the Integrated Resource Planning ("IRP") process; and the inappropriate and unlawful proposed use of the Cost Allocation Mechanism ("CAM").

¹ WPTF is a California non-profit, mutual benefit corporation dedicated to enhancing competition in Western electric markets in order to reduce the cost of electricity to consumers throughout the region while maintaining the current high level of system reliability. WPTF actions are focused on supporting development of competitive electricity markets throughout the region and developing uniform operating rules to facilitate transactions among market participants.

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A. The Resource Adequacy Program is the Issue.

First and foremost, the draft Resolution does not address the market design issue that is at the core of this matter. The problem is neither Calpine's RMR request nor the California Independent System Operator ("CAISO") approval of that request. RMR contracts are only necessary because the RA program overseen by the Commission and the CAISO does not ensure the viability of resources that are critical to maintaining reliability because the RA process neither provides sufficient forward certainty for suppliers, nor does it offer sufficient risk management hedging tools for non-utility load-serving entities ("LSEs").

For example, the year-ahead RA process, including the CAISO's Capacity Procurement Mechanism ("CPM") backstop procurement and RMR processes, do not conclude until the December before each compliance year.² Resources facing significant maintenance costs need far more advance notice so that they can engage in informed decisionmaking about their investments. Instead, under the current program, suppliers do not know whether sufficient RA compensation will be available to cover costs until well after commitments must be made. Furthermore, LSEs that must buy RA and the resource suppliers that would sell it have neither adequately transparent price signals nor transactional platforms that facilitate the buying and selling of capacity resources.

WPTF notes other concerns. First, the Commission does not enforce sub-area requirements in its RA procurement requirements, so critical resources have no assurance of being procured through the bilateral RA market or through the CAISO CPM process for a sufficient term and capacity to recover their costs. Second, the RA program includes other things that compromise the appropriate pricing of needed capacity, such as the aggregation of the PG&E local capacity areas (a feature intended to address PG&E's ability to exercise market power), that inhibit the RA program from ensuring there will be adequate procurement of local capacity in the areas and sub-areas in which those resources are needed. The Commission decision not to enforce the sub-area and aggregation of the local RA areas has undercut the market signals that would encourage that very resources it seeks via the Resolution. The lack of market signals in these areas explains why there are few, if any, interconnection requests in these reliability areas.

Without a centralized clearing mechanism, eliminating the aggregation of the subzones will be very problematic for non-IOU LSEs. And third, the lack of multi-year forward procurement requirements and centralized clearing market mechanisms means that most resources are wholly reliant on very short-term RA and energy and ancillary services markets for their viability. Resources that face significant capital investments in future years have no certainty with regard to recovering the costs of those investments. In conclusion, WPTF believes that the draft

² An RMR can be issued at any time; however, practically the CAISO wants to wait until December to issue an RMR in order to give LSEs a chance to procure the resource within the RA process.

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Resolution's concern that that the "normal regulatory process was not followed" reflects problems with the "normal" process more than it does any inappropriate behavior by Calpine or CAISO. And as such, the Resolution's proposed remedy is flawed and ill-advised.

B. The Lack of Analyses Underlying the Proposed Procurement is Troubling.

The draft Resolution also is flawed because there has been no meaningful analysis or operational grid analytics that give guidance to prospective respondents to the planned solicitation. It assumes that energy storage and preferred resources can and should replace the Calpine RMR resources – both the peakers and Metcalf - without any analysis of the underlying reliability needs and without indicating the preferred resource or energy storage attributes needed to displace the Calpine RMR units. As the Energy Division is aware, the CAISO has been considering the potential for preferred resources and storage to meet the local reliability needs currently met by conventional generation. The CAISO has prepared a detailed analysis of preferred resources' ability to displace a gas-fired generation project in the Moorpark sub-area, but there has been no such detailed analysis done regarding the local capacity sub-areas in which the Calpine RMR units are located. WPTF firmly believes that the Commission, the CAISO and all interested parties, including respondents to the proposed solicitation, need to see the results of a study to understand what combination of resources would best address reliability needs in the relevant areas.

This is true because the mix of preferred resources and energy storage that can meet local reliability requirements depends on the load shape and portfolio of resources within a specific local area. A storage resource must provide four hours of deliveries to obtain RA qualification. But it is currently unknown whether four hours' duration is enough to replace conventional generation in this instance. It may in fact not be possible to meet local reliability requirements with heavy reliance on energy-limited resources such as storage with a four-hour duration. The proposed PG&E solicitation will undoubtedly garner many four-hour products, as they are the least expensive storage resource that qualify for RA, but it is unknown whether will that solve the problem because no study has been done. For example, the study the CAISO did with regards to NRG's Puente project in CEC Docket 15-AFC-01 showed that battery storage of up to ten-hour duration was required to displace gas-fired generation in this sub-area. Moreover, the storage commercial structures are governed not only by how much storage must be installed but also by how it will be used operationally. For all these reasons lack of an operational study to guide a solicitation is a fundamental flaw in the approach.

³ See https://www.caiso.com/Documents/Aug16_2017_MoorparkSub-AreaLocalCapacityRequirementStudy-PuentePowerProject_15-AFC-01.pdf ("CAISO Moorpark Alternatives Analysis")

⁴ See CAISO Moorpark Alternatives Analysis at 20-23, 25.

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If the results of a new study of the Bogue, Pease and South Bay-Moss Landing sub-areas currently served by the Calpine RMR units ⁵ show the need for additional procurement, the precise form that the solicitation should take can then be determined, consistent with competitive procurement principles that seek the resources that are consistent with reliability and environmental requirements, which are best achieved through all-source solicitations rather than through a solicitation that is restricted as to technology types

Finally, the type of analysis that would be required to determine what mix of storage and preferred resources meets the same reliability needs as the Calpine RMR units is fundamentally different than the CAISO's annual LCR study, which focuses on system peak conditions. It would require looking at whether in the hours, days, and weeks following a contingency, such as an outage of a major transmission line, storage could be used to shave peaks while still recharging from other internal resources or any remaining import capability. The CAISO Puente study⁶ and the PG&E study of the Dynegy peakers in Oakland⁷ are examples of this other kind of study.

Absent some analysis that (1) better defines the nature of the need beyond a mere MW amount; and (2) provides some indication of how preferred resources can meet this need, the proposed solicitation amounts to a "bring us a rock" exercise without any idea of what kind of, or how many, rocks are needed, and will unnecessarily preclude viable resources from participating in the competitive solicitation.

C. The Proposed Timeline is Flawed.

The draft Resolution requires that resources procured pursuant to the proposed PG&E solicitation must be on-line and operational by a date sufficient to ensure that the RMR contracts for the three plants – Metcalf Energy Center, Feather River Energy Center, and Yuba City Energy

⁵ As noted in the draft Resolution, in March 2017, the CAISO determined that two of the four Calpine peaking units, Yuba City and Feather River Energy Centers, are needed to meet a local capacity need in the Pease sub-area and to continue to mitigate a voltage issue in the Bogue sub-area, respectively, both of which are located in the Sierra local capacity area (LCA). The CAISO designated both plants as RMR resources under tariff section 41. The Yuba City Energy Center is a 47.6 MW facility that has been designated to fulfill an identified capacity shortfall of 18 MW in the Pease sub-area and the Feather River Energy Center is a 47.6 MW facility that has been designated to alleviate a high voltage issue in the Bogue sub-area and not a capacity shortfall. In November 2017, the CAISO determined that the entire 580 MW Metcalf Energy Center is needed for local reliability needs in the South Bay-Moss Landing sub-area of the Bay Area LCA, and designated the unit as RMR.

⁶ See, Moorpark Alternatives Analysis at 15-20.

⁷ See, the section beginning at slide 23 of: https://www.caiso.com/Documents/Day2_PG_E-
Presentation 2017-2018TransmissionPlanningProcess PreliminaryReliabilityResults.pdf.

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Center – will not be renewed for 2019. This is an unrealistic schedule. Inter-connect applications cannot be submitted until March and generally take 18 months for approval. Furthermore, if a new interconnection was filed in March 2018, the CAISO's normal new interconnection process could not be complete until late 2019. Finally, the likelihood that, once a Resolution was approved, PG&E would be able to release a solicitation, accept bids, make awards, execute contracts for resources that would be operational by January 1, 2019, and considered by the CAISO in its annual evaluation of local area needs for the following year, is slim to non-existent. A more realistic timeline, given the interconnection study for capacity resources, would be 2020 or 2021.

D. <u>Ad Hoc Procurement Directives Conflict with the Processes Contemplated in the Integrated Resource Planning Proceeding, R.16-02-007.</u>

The IRP rulemaking is designed to implement Senate Bill 350 (Stats. 2015, Ch. 547), which mandated that the Commission adopt a process for integrated resource planning, rather than relying on *ad hoc* directives. It states that, "This rulemaking will be the Commission's <u>primary venue</u> for implementation of the SB 350 requirements related to integrated resource planning (IRP), contained in Sections 26 and 27 of the bill, and codified as Public Utilities Code Sections 454.51 and 454.52." Adding this new venue through the draft Resolution is both inappropriate and inconsistent with the Commission's IRP directives.

The primary focus of the IRP is GHG reduction. The IRP Reference System Plan shows that California can achieve aggressive GHG reduction goals with 32.5 GW of gas-fired generation remaining in service in 2030. While it is unlikely that the existing market structures could sustain the continued operation of that much gas-fired generation – and the failure of the RA program underlying this misplaced draft Resolution is evidence of the market's inability to sustain needed generation - the continued operation of that much gas-fired generation in no way threatens California's GHG reduction goals.

Further, there is no assurance that replacing gas-fired generation with storage (which must charge from some source) to meet a particular local reliability need will actually reduce GHG emissions.

⁸ February 19, 2016, Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements, at p. 2 (emphasis added).

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In fact, the Energy Division's own analysis as well as similar analysis by UCS⁹ and Calpine¹⁰ suggests that the retention of efficient combined cycle gas turbines ("CCGTs") such as Metcalf is fully consistent with the state's GHG goals. For example, Energy Division's Staff Proposal¹¹ in the IRP discusses the need to make, "cost-effective investment decisions across a broad range of LSEs with different resource portfolios" and makes two related observations. First, that "different LSEs will naturally have different starting emission intensities and different opportunities, some more costly than others, to reduce emissions." Second, "allowing one LSE to have a higher ratio of gas-fired generation or energy storage in its portfolio may be desirable because of local reliability needs within that LSE."¹² If the Commission wishes to be consistent in its approach to GHG emissions reductions and associated procurement planning, then *ad hoc* procurement directives such as here should be rejected.

E. CAM Treatment is Unlawful and Burdens Ratepayers with Excessive Costs.

The draft Resolution authorizes PG&E to "request recording of costs of any contracts resulting from this solicitation in its Cost Allocation Mechanism, for recovery from all benefitting ratepayers." In doing so, the draft Resolution cites as authority Public Utilities Code § 365.1(c)(2)(A) and (B). However, the proposed procurement does not comply with the statutory language because Staff's contention that the CAM can be used as a mechanism to replace the CAISO RMR authority is not consistent with the legislation that created CAM. Section 365.1(2)(B) states in part that, "If the commission authorizes or orders an electrical corporation to obtain generation resources pursuant to subparagraph (A), the commission shall ensure that those resources meet a system or local reliability need in a manner that benefits all customers of the electrical corporation." However, as noted above in Section B, no studies or analyses have yet been done to "ensure that those resources meet a system or local reliability need in a manner that benefits all customers of the electrical corporation." Without such studies, the Commission is merely jumping to an unsupported conclusion and then directing that all customers pay for its rush to judgment.

⁹ "It appears that the most efficient CCGTs ("CCGT_1") are the most valuable to a future grid that optimizes resources to reduce GHG emissions at lowest cost," Opening Comments of The Union of Concerned Scientists on the Administrative Law Judge's Ruling Seeking Comment on Proposed Reference System Plan and Related Policy Actions, at p. 8.

¹⁰ "Based on the results of this sensitivity described above, it is likely cost-effective to retain a significant portion of the existing natural gas fleet." October 26, 2017, Comments of Calpine Corporation on Proposed Reference System Plan and Related Commission Policy Actions, at p. 5.

¹¹ May 17, 2017, Proposal for Implementing Integrated Resource Planning at the CPUC - An Energy Division Staff Proposal ("Staff Proposal").

¹² Staff Proposal, at p. 32.

¹³ Draft Resolution, at p. 7.

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Furthermore, exchanging one-year RMR cost allocation for a 10 or 20-year CAM is inappropriate from the standpoint of the level of costs that would be imposed on customers no longer served by the utilities. A customer electing to take service in 2019 from a new community choice aggregator or direct access provider would be bound to ten or twenty years of CAM under the draft Resolution, depending on the term of the preferred resources contracts. However, that same customer would face a significantly shorter (and lower) cost obligation if RMR costs were shared by benefitting customers. The CAM statute requires CAM procurement to pertain to resources that benefit all customers; allowing CAM to be used for the procurement proposed in the Resolution simply cannot meet this requirement when there is a must lower cost alternative that leaves the suppliers of retail choice customers free to make their own long-term procurement decisions, especially as the existing RA program undergoes further re-evaluation and modifications. Moreover, ongoing PCIA examination and the comprehensive look at cost allocation, the Commission should not be directing the assumption of new long-term burdens to address short-term problems.

F. Conclusion

In conclusion, for the several reasons discussed above, WPTF believes that the Resolution is completely misguided and should be rejected in its entirety. Directing PG&E to engage in an ill-designed solicitation solely because the RA program is broken (i.e., it does not look forward enough to allow a generator deemed essential for reliability to recover the costs of capital maintenance necessary to remain in reliable operation) ignores the proper and obvious solution: the Commission should fix the manifest flaws in the current RA program.

Very truly yours,

Daniel W. Douglass

Counsel for the

Western Power Trading Forum

DWD: md Enclosures: Certificate of Service Service Lists R.15-03-011, and R.17-09-020



CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the *Western Power Trading Forum Comments on Draft Resolution E-4909* on all parties or their attorneys as shown on the attached service lists.

Executed on December 29, 2017, at Calabasas, California.

Michelle Dangott

SERVICE LISTS

Service Lists: R.15-03-011, and R.17-09-020.

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