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

Order Instituting Rulemaking to Develop an
Electricity Integrated Resource Planning
Framework and to Coordinate and Refine Long-
Term Procurement Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

**REPLY COMMENTS OF UNION OF CONCERNED SCIENTISTS AND NATURAL
RESOURCES DEFENSE COUNCIL ON 2019-2020 ELECTRIC RESOURCE
PORTFOLIOS TO INFORM INTEGRATED RESOURCE PLANS AND TRANSMISSION
PLANNING**

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I. Introduction

Union of Concerned Scientists (UCS) and Natural Resources Defense Council (NRDC), the “Joint Environmental Parties,” respectfully submit these reply comments on Administrative Law Judge’s proposed decision, filed February 21, *2019-20 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (“Proposed Decision” or “PD”). UCS is a non-profit membership organization with over 21,000 California members who support UCS’s mission to advance science-based solutions to our planet’s most pressing problems. NRDC is a non-profit membership organization with more than 95,000 California members who have an interest in receiving affordable energy services while reducing the environmental impact of California’s energy consumption.

Upon carefully reviewing comments to the Proposed Decision, the Joint Environmental Parties conclude that:

- Parties’ opening comments on the Proposed Decision clearly illustrate that the Commission should select the 30 Million Metric Tons (MMT) emissions scenario as the Reference System Plan (RSP) because the proposed RSP in the Proposed Decision does not comply with California Air Resources Board’s (CARB) Scoping Plan and it also fails to put California’s load serving entities (LSE) on the best path towards Senate Bill 100 (SB100) compliance.

- The Proposed RSP fails to reduce electric sector criteria pollutants; going forward, the Commission should internalize health impacts from criteria pollutants within RESOLVE

II. Discussion

A. Parties' Opening Comments on the Proposed Decision Clearly Illustrate that the Commission Should Select the 30 MMT Emissions Scenario as the Reference System Plan (RSP) To Comply with CARB's Scoping Plan and to Put California's LSEs on the Best Path Towards SB100 Compliance

Sixteen sets of opening comments to the Proposed Decision recommend the Commission adopt an RSP with a lower 2030 emissions target than the one proposed by Staff. Of these sixteen, twelve explicitly support a 30 MMT greenhouse gas (GHG) emissions target in 2030. One party, Southern California Edison (SCE), recommends a 38 MMT target, and three parties recommend against adopting the Staff proposed RSP because its 2030 emissions are too high. The Joint Environmental Parties summarize and present these data in Appendix A to these reply comments. In aggregate, parties recommend a lower emissions target for the following two reasons:

- The Staff proposed RSP would not reduce enough emissions, a lower 2030 emissions target is required to comply with the California Air Resource Board's (CARB) Scoping Plan
- A lower 2030 emissions target sets the electric sector on the best path to comply with SB100's objective of getting to a zero-carbon electric sector by 2045.

Only four parties¹ actively recommend the adoption of Staff's proposed high emissions scenario as the RSP. Pacific Gas & Electric (PG&E)² simply endorses the rationale Staff provide through the Proposed Decision, Calpine³ cites feasibility concerns, the cost of getting to a lower emissions target, and that the 46 MMT target would provide the industry with more time to develop other feasible carbon reducing technology such as carbon capture, sequestration, and storage (CC&S).

¹ These four parties are: Pacific Gas & Electric Company (PG&E), Calpine Corporation, California Public Advocates Office, and Middle River Power.

² Pacific Gas & Electric Company, *Opening Comments of Pacific Gas and Electric Company (U 39E) to the February 21, 2020 Proposed Decision Adopting 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 2020), at 1, 2.

³ Calpine Corporation, *Comments of Calpine Corporation on Proposed Decision Adopting 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 2020), at 1,

Staff rationale to adopt the 46 MMT target are that (1) the additional cost and feasibility of the resource procurement required to meet the 30 MMT target is prohibitive, and (2) as more loads electrify there will be additional need for procurement that this RSP does not account for.⁴ These reasons are inadequate as demonstrated by Staff’s own analysis.

The incremental cost of procuring for a low emissions, 30 MMT by 2030 target, is only 2.8% more than the proposed RSP⁵ and thus the incremental cost of this RSP should not drive the Commission to adopt an RSP that is non-compliant with the CARB Scoping Plan Update.⁶ Moreover, this target is attainable as illustrated by the fact that both load serving entities (LSE) and renewable energy developers are willing to act now to get to 30 MMT GHG emissions by 2030 (as demonstrated in Appendix A). Finally, the California Energy Commission’s electric demand forecast that the Commission uses in this resource procurement analysis already contains the best available forecast of transportation electrification,⁷ thus fears of additional electric load that may overwhelm the resources in the RSP are unfounded. In fact, the Commission has the unique opportunity through this IRP to best manage this new load to be able to use our electric resources most efficiently.

Calpine’s rationale that a higher emissions scenario would better enable the development of other viable carbon reducing technology is incorrect. Firstly, the promise of possible future technological development is not a good reason to be in non-compliance with California’s law – to reduce emissions in accordance with CARB’s Scoping Plan - that correctly recognizes the need to reduce emissions now to fight climate change. Secondly, as Staff’s Ruling leading up to this Proposed Decision clarifies,⁸ the proposed RSP is a business as usual scenario – i.e., the renewable

⁴ Proposed Decision at 24.

⁵ CPUC, *Attachment A. 2019-20 IRP: Proposed Reference System Plan* (November 2019), at 91. Calculation, levelized total resource cost (TRC) of the 30 MMT case divided by the levelized TRC of the 46 MMT case: $46.7/45.4 = 1.028$

⁶ NRDC, Comments of Natural Resources Defense Council on *Proposed Decision Adopting 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 2020), at 2.

UCS, Opening Comments of the Union of Concerned Scientists *Proposed Decision Adopting 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 2020) at 2.

Sierra Club and California Environmental Justice Alliance, *Sierra Club and California Environmental Justice Alliance Opening Comments on Proposed Decision Adopting 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 2020), at 1,2.

⁷ California Energy Commission, *2018 IEPR Update Volume II*, at 237.

California Energy Commission, *FINAL CEDU 2018 Baseline Statewide Mid Demand Case.xlsx*, at tab ‘Form 1.1’

⁸ California Public Utilities Commission, *Administrative Law Judge’s Ruling Seeking Comment on*

buildout required by that scenario is in line with past renewable build outs. Thus, this scenario does not provide the necessary impetus and market signal for the development of new carbon-free technology. The low emissions scenario, as recommended by the Joint Environmental Parties, would better signal the need for additional carbon free technologies and accelerate their development and deployment.

B. The Proposed RSP Fails to Reduce Electric Sector Criteria Pollutants; Going Forward, the Commission Should Internalize Health Impacts from Criteria Pollutants Within RESOLVE

The RSP put forth in the Proposed Decision should also not be adopted due to the projected increase in criteria pollutant emissions.⁹ The Joint Environmental Parties agree with parties who raised this important concern in their opening comments. Sierra Club and California Environmental Justice Alliance ("CEJA") argue that, "The Commission did not conduct an in-depth analysis to determine the best portfolio for minimizing emissions with a priority in disadvantaged communities. Rather, the PD only examines its preferred portfolio, failing to conduct a real analysis to 'minimize' air pollution as required by the statute."¹⁰ The Joint Environmental Parties agree that the Commission has made no meaningful effort to minimize criteria pollutant emissions in the RSP; instead, the Commission first chose an RSP then quantified the criteria pollution emissions after the fact. Because the Commission did not meaningfully minimize criteria pollution emissions while developing the RSP, the Commission is now considering an RSP that includes an increase in in-state electric sector emissions.¹¹ Due to this projected increase in criteria pollution emissions that clearly contravenes the intent of statute,¹² this RSP should not be adopted.

In order to develop future IRP portfolios that more directly minimize criteria pollution emissions, the Joint Environmental Parties agree with the suggestions offered in opening

Proposed Reference System Portfolio and Related Policy Actions (November 2019), at 19

⁹ Proposed Decision, p. 39. "In general, because of both the retention of more natural gas, as well as the identification of additional capacity, there were small increases (under 8 percent) in the amount of criteria pollutants emitted by the portfolio by 2030."

¹⁰ Sierra Club and CEJA, *Sierra Club and California Environmental Justice Alliance Opening Comments on Proposed Decision on 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 12, 2020) p. 5.

¹¹ California Public Utilities Commission, *Criteria Pollutants Analysis* (February 20, 2020) slide 16. Available at: ftp://ftp.cpuc.ca.gov/energy/modeling/CriteriaPollutantAnalysisUpdate_20200221.pdf

¹² Public Utilities Code section 454.52(a)(1)(I)

comments by 350 Bay Area, Sierra Club and CEJA to begin modeling the negative externalities associated with natural gas electricity generation. For example, 350 Bay Area suggests that the Commission begin quantifying the health impacts associated with air pollution from natural gas electricity generation by utilizing the "Air Quality Adder Value" adopted in D.19-05-019.¹³ The Joint Environmental Parties believe that quantifying the negative externalities, such as the health impacts from diminished air quality, associated with gas generation will allow the Commission to more meaningfully minimize criteria air pollutants in future cycles of the IRP.

III. Conclusion

UCS and NRDC commend Staff for continuing to constructively manage this complex proceeding and appreciate the opportunity to provide these reply comments.

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Respectfully submitted,

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¹³ 350 Bay Area, *Comments of 350 Bay Area on Proposed Decision on 2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (March 12, 2020) pp. 4-5.