BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005

REPLY COMMENTS OF THE PUBLIC ADVOCATES OFFICE ON ADMINISTRATIVE LAW JUDGE'S RULING INVITING COMMENTS ON DRAFT POTENTIAL AND GOALS STUDY

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I. INTRODUCTION

Pursuant to the *Administrative Law Judge's Ruling Inviting Comment on Draft Potential and Goals Study* (ALJ Ruling) issued on May 1, 2019, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these reply comments on the ALJ Ruling.

In these reply comments, the Public Advocates Office makes the following comments:

- The Natural Resources Defense Council's (NRDC) comments raise serious doubts about the validity and reliability of the draft 2019 Energy Efficiency Potential and Goals Study[1] (Draft Study).
- The California Efficiency and Demand Management Council (CEDMC) misinterprets the legal requirements of SB 350 and the purpose of the potential and goals study.
- The California Public Utilities Commission (Commission) should not grant Pacific Gas and Electric Company (PG&E) additional time to submit an annual budget advice letter unless the Commission also sets a deadline for PG&E to file a new business plan application.
- The penetration rates for Home Energy Reports assumed in the Draft Study are realistic.

The Commission should direct the Energy Division to revise the Draft Study to address the issues discussed in these reply comments.

II. DISCUSSION

A. NRDC's comments raise serious doubts about the validity and reliability of the Draft Study's results.

In opening comments, NRDC identifies unexplained discrepancies in the Draft Study that raise serious doubts about the validity of the findings. The Draft Study's methodological flaws and illogical outputs are troubling.

[1] 2019 Energy Efficiency Potential and Goals Study: Public Draft Report, prepared for the California Public Utilities Commission by Navigant Consulting, April 30, 2019 (Draft Study).

First, NRDC shows that market potential estimates for the industrial sector have fluctuated dramatically across recent energy efficiency (EE) potential and goals studies.[2] These large fluctuations are unexplained and call into doubt whether the Draft Study provides a reliable estimate of market potential in the industrial sector.

Second, NRDC reveals inexplicable discrepancies between the Draft Study's estimates of technical potential and economic potential.[3] For any given measure within a given utility service territory, economic potential is a binary matter: the measure either passes or fails the cost-effectiveness screen. Economic potential should be equal to technical potential if the measure is cost-effective and it should be zero otherwise. However, the Draft Study does not consistently follow this logic. NRDC documents several examples of economic potential forecasts that do not make sense, including a measure with negative economic potential.[4]

Third, the Public Advocates Office agrees with NRDC that the Draft Study incorrectly models the potential benefits of climate-sensitive (or weather-sensitive) efficiency measures[5] and that a market-adoption model of technology selection is irrelevant to low-income programs.[6] The Commission should not adopt goals in this proceeding that include market potential for the low-income sector. Instead, the Commission should focus on the technical potential estimates for the low-income sector. In the upcoming applications for the Energy Savings Assistance program, the Commission should consider setting goals based on technical potential.[7]

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[2] *Comments of the Natural Resources Defense Council (NRDC) on Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study,* May 21, 2019 (NRDC Opening Comments on Draft Study), pp. 4-5.

[3] NRDC Opening Comments on Draft Study, pp. 6-7.

[4] NRDC Opening Comments on Draft Study, pp. 6-7.

[5] NRDC Opening Comments on Draft Study, p. 5.

[6] NRDC Opening Comments on Draft Study, pp. 3-4.

[7] *Comments of the Public Advocates Office on Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study,* May 21, 2019 (Public Advocates Office Opening Comments on Draft Study), pp. 25-26.

The Commission should direct the Energy Division to investigate the source of the problems identified by NRDC and correct the apparent errors in the Draft Study. Given the substantial flaws in the Draft Study, the Commission should direct the Energy Division to justify whether or not the Draft Study provides a valid basis to set goals.

The Commission should also take immediate steps to ensure that problems in the Draft Study like those identified by NRDC do not recur in future potential and goals studies. A likely contributing factor to the reliability and validity issues raised by NRDC was the very accelerated timeline for completion of the Draft Study. The Commission should direct the Energy Division to begin the 2021 study no later than March 2020. Starting the study at this time would allow more time for meaningful stakeholder input during the study process, internal quality control of the product, and stakeholder review before publication.

In addition, the Commission should direct the Energy Division to increase transparency, improve work product quality, and improve coordination. When the Energy Division solicits technical advice and input from stakeholders, it should provide documentation including the reasoning as to why the feedback was incorporated or not. The Commission should also direct the Energy Division to coordinate with the Integrated Resources Planning proceeding, so that future EE potential and goals studies contain the relevant data and are published a timely fashion to inform that proceeding.

B. CEDMC misinterprets the legal requirements of SB 350 and the purpose of the potential and goals study.

In opening comments, CEDMC contends that the Draft Study's estimates of market potential are not consistent with legislative mandates,[8] specifically Senate Bill (SB) 350.[9] CEDMC implies that SB 350 requires the Commission to double savings from EE and claims that the Draft Study is "dangerously undermining the foundation of

[8] *Opening Comments of the California Efficiency + Demand Management Council on Administrative Law Judge's Ruling Inviting Comments on the Draft Potential and Goals Study,* May 21, 2019, p. 3.

[9] SB 350 (De León, 2015), Chapter 547, Statutes of 2015.

the savings needed to comply with SB 350."[10] Not only is CEDMC mistaken about the purpose of a potential and goals study, but CEDMC misinterprets the requirements of SB 350 and asserts a statutory requirement that does not exist.

1. CEDMC's recommended approach would negate any value of conducting a potential and goals study.

CEDMC apparently misunderstands the purpose of the EE potential and goals study. By suggesting that the potential and goals study should "align utility program goals with the savings needed"[11] to achieve a pre-determined target, CEDMC would put the cart before the horse. The purpose of the EE potential and goals study is to ascertain how much energy savings can be achieved cost-effectively through utility-administered and ratepayer-funded EE programs. Based on this analysis of technology options, costs, potential benefits, and market conditions, the Commission then sets goals for each utility's EE portfolio.

It is not the purpose of the EE potential and goals study to work backwards from a fixed goal to an analysis of market conditions and technological possibilities. It would be illogical and wasteful to conduct this study with a predetermined outcome.

2. SB 350 does not require a doubling of ratepayer-funded EE programs.

Section 25310 (c)(1) of the Public Resources Code[12] requires the California Energy Commission (CEC) "to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030" but only "*to the extent doing so is cost effective, feasible,* and will not adversely impact public health and safety."[13]

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[10] *Opening Comments of the California Efficiency + Demand Management Council on Administrative Law Judge's Ruling Inviting Comments on the Draft Potential and Goals Study,* May 21, 2019, pp. 2-4.

[11] *Opening Comments of the California Efficiency + Demand Management Council on Administrative Law Judge's Ruling Inviting Comments on the Draft Potential and Goals Study,* May 21, 2019, p. 3.

[12] SB 350, Section 6.

[13] Public Resources Code Section 25310(c)(1), emphasis added. Section 25310(c)(1) also directs the CEC

Public Utilities Code Section 454.55 (a)(1)[14] requires the Commission, in consultation with the CEC, to establish energy efficiency targets for investor-owned utilities[15] consistent with the EE targets established pursuant to Section 25310 (c) of the Public Resources Code. Public Utilities Code Section 454.55(b)(2) requires that if the Commission concludes that the EE targets adopted pursuant to Section 25310 (c) of the Public Resources Code "are not *cost effective, feasible*, or pose potential adverse impacts to public health and safety," the Commission "shall revise" the EE targets.[16]

In reading these statutes, it is essential to first observe that SB 350's target of doubling EE savings is a directive to the CEC and is not solely related to the Commission or the utility portfolios. No provision of SB 350 requires the Commission to double the goals or actual savings achievements of the utility EE portfolios. Section 25310(d) of the Public Resources Code lists eleven potential sources for the EE savings, of which utility-administered EE portfolios are but one.[17]

Second, achieving a cumulative doubling of savings through EE is a target with major caveats, not a mandate. The CEC is directed to chart a pathway to this target. The statutes do not require either the CEC or the Commission to attain a certain level of ratepayer-funded energy savings, such that the Commission might be in danger of "severely falling behind."[18]

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to "base the targets on a doubling of the midcase estimate of additional achievable energy efficiency savings, as contained in the California Energy Demand Updated Forecast, 2015-2025, adopted by the commission, extended to 2030 using an average annual growth rate, and the targets adopted by local publicly owned electric utilities pursuant to Section 9505 of the Public Utilities Code, extended to 2030 using an average annual growth rate…."

[14] SB 350, Section 28.

[15] Public Utilities Code Section 218(a).

[16] Public Utilities Code Section 454.55(b)(2), emphasis added. Public Utilities Code Section 454.55 (a)(2) also requires the Commission to modify its policies to remove barriers to achieving the target.

[17] Public Resources Code, Section 25310(d). Subsection (6) refers to "Programs of electrical or gas corporations, or community choice aggregators, that provide financial incentives, rebates, technical assistance, and support to their customers to increase energy efficiency, authorized by the Public Utilities Commission."

[18] *Opening Comments of the California Efficiency + Demand Management Council on Administrative Law Judge's Ruling Inviting Comments on the Draft Potential and Goals Study,* May 21, 2019, p. 3.

Third, the goal of doubling EE savings is contingent on cost-effectiveness.[19] SB 350 plainly requires both the Commission and the CEC to set EE targets that are cost-effective and feasible to achieve. Moreover, the energy efficiency provisions of SB 350 direct the CEC and the Commission to establish and implement a cumulative doubling of energy efficiency savings by 2030, but only if those savings are cost effective.

The purpose of the EE potential and goals study is to determine how much energy efficiency is cost-effective and feasible to achieve (within the context of utility portfolios). Therefore, conducting an unbiased potential and goals study, *without a predetermined outcome*, is essential for the Commission to fulfill its statutory mandates under SB 350.

C. The Commission should not grant PG&E additional time to submit an annual budget advice letter (ABAL) unless the Commission also sets a deadline for PG&E to file a new business plan application.

PG&E requests "relief from the requirement to file a 2020 ABAL in September 2019" because the future composition of PG&E's portfolio is uncertain while PG&E conducts a solicitation for third-party programs.[20] The ABAL allows the Commission and stakeholders to perform oversight of the programs and budgets in each utility's EE portfolio. The uncertainty about utility portfolio offerings following third-party solicitations that PG&E identifies has been entirely foreseeable for years and does not provide a justification for the Commission to forgo oversight of PG&E's EE portfolio. Allowing PG&E to submit a 2020 ABAL three to four months after the year begins, as PG&E suggests,[21] is not acceptable because it does not allow for effective and meaningful oversight. By the time the Commission reviewed and disposed of the ABAL,

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[19] Public Resources Code Section 25310(c)(1); Public Utilities Code Section 454.55(a)(2).

[20] *Comments of Pacific Gas and Electric Company (U 39 M) Regarding Energy Efficiency Potential and Goals for 2018 and Beyond in Response to Administrative Law Judge's Ruling Dated May 1, 2019,* May 21, 2019, pp. 20-21.

[21] *Comments of Pacific Gas and Electric Company (U 39 M) Regarding Energy Efficiency Potential and Goals for 2018 and Beyond in Response to Administrative Law Judge's Ruling Dated May 1, 2019,* May 21, 2019, p. 21.

it is likely that the year would be at least halfway over and PG&E would be preparing its ABAL for 2021.

The EE business plan process allows utilities to obtain long-term approval for EE portfolios at a high level in exchange for providing detailed annual updates on the composition and budget of the portfolio, in the form of the ABAL. PG&E appears to be asking the Commission to maintain its spending authority without any review of the programs or costs. It would be unreasonable and imprudent for the Commission to approve a utility's EE portfolio for eight years or more without continuing oversight of the EE portfolio during the business plan period.

If PG&E cannot submit a timely ABAL as required by Decision (D.) 15-10-028 and D.18-05-041, it should file a new business plan application. Failure to submit a timely ABAL would indicate that PG&E is "unable to adjust its portfolio" to meet goals, budget parameters, and cost-effectiveness requirements, which is a trigger for filing a new business plan application.[22] As the Public Advocates Office has previously observed, PG&E's 2019 ABAL already met the triggers established in D.15-10-028 and D.18-05-041 to file a new business plan application.[23]

Therefore, rather than granting PG&E's request for relief from filing a timely 2020 ABAL, the Commission should order PG&E to file a new business plan application and set a deadline for that filing. This is an appropriate course of action that adheres to the balance of authorities and obligations laid out in D.15-10-028 and D.18-05-041.

[22] D.15-10-028, p. 123 (Ordering Paragraph 2); D.18-05-041, pp. 57, 130-131, and 181 (Conclusion of Law 74)

[23] Public Advocates Office Opening Comments on Draft Study, p. 30; Request of the Public Advocates Office for Commission Review of Energy Division's Dispositions of Pacific Gas & Electric Company's Supplemental Advice 4011-G-B/5375-E-B … and Southern California Edison Company's Supplemental Advice 3859-E-A, April 12, 2019; The Public Advocates Office's Protest to Pacific Gas & Electric Company Supplementary Advice 4011-G-B/5375-E-B, February 12, 2019.

D. The penetration rates for Home Energy Reports assumed in the Draft Study are realistic.

Oracle notes that "most of the IOUs have significantly increased the size of their [Home Energy Report] programs" since 2017 (when the program was last evaluated).[24] Based on Oracle's opening comments, the Public Advocates Office would like to modify our opening comments on this issue.

In opening comments, the Public Advocates Office stated that "the Draft Study assumes that the penetration rate of Home Energy Reports will increase dramatically."[25] In fact, due to recent program expansions, three of the utilities have already achieved the penetration rates assumed in the Draft Study. Therefore, it is not necessary to reduce the expected penetration rate for Home Energy Reports by assuming that the program is limited to the upper 50 percent of customers by usage, as the Public Advocates Office recommended.[26]

However, it remains important to consider how the recent expansion of the Home Energy Reports programs will affect the rate of energy savings per household and the cost-effectiveness of the programs, as the Public Advocates Office previously observed.[27] Oracle notes that "it is certainly the case that each incremental expansion of the [Home Energy Report] program as currently constituted is likely to generate less savings per household than prior cohorts," because the new cohorts of participants will include fewer high-usage households.[28] High-usage households have the greatest potential to achieve energy savings through Home Energy Reports. If all participating households saved the same percentage of energy consumption, high-usage households would save the most energy in absolute terms, for the obvious reason that they use more energy. However,

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[24] *Comments of Oracle on Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study,* May 21, 2019, p. 3.

[25] Public Advocates Office Opening Comments on Draft Study*,* May 21, 2019, p. 20.

[26] Public Advocates Office Opening Comments on Draft Study, p. 18.

[27] Public Advocates Office Opening Comments on Draft Study, pp. 20-21.

[28] *Comments of Oracle on Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study,* May 21, 2019, p. 3.

evaluations also show that high-usage households save *a larger percentage* of their energy consumption than other households,[29] which suggests that these households have significant opportunities to reduce waste.

The Draft Study estimates the per-household savings rates from Home Energy Reports based on evaluations from 2011 through 2015.[30] These evaluations are dated and may not accurately represent the performance of the Home Energy Reports programs in their current form. All four utilities have dramatically expanded their Home Energy Reports programs since 2015, which has resulted in targeting more households with low-to-moderate usage, as well as high users.

The Commission should ensure that the final potential and goals study relies on accurate estimates of the rate of energy savings due to Home Energy Reports. At minimum, the Energy Division should revise the Draft Study using data from the 2017 program evaluations (the most recent evaluations of the Home Energy Reports programs),[31] rather than data from 2011 through 2015. However, as Oracle notes, these programs have scaled out substantially even since 2017. Therefore, the Energy Division should request data from the utilities and Oracle on the current performance of the programs, and work with the utilities and Oracle to develop an estimate of the current energy savings rate. The final potential and goals study should use a savings rate that reflects how Home Energy Reports programs perform when deployed at broad scale, rather than when targeted to households with unusually high energy consumption.

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[29] California Public Utilities Commission, *Impact Evaluation Report: Home Energy Reports – Residential Program Year 2017*, May 1, 2019, pp. 33-34. Available at http://www.calmac.org/publications/CPUC_Group_A_Res_2017_HER_finalCALMAC.pdf. Pages 33-34 discuss PG&E's Home Energy Reports program, which was then the largest and most mature program among the four utilities. The evaluation states that "there is a general pattern of higher savings for waves with higher baseline usage levels."

[30] Draft Study, p. C-3.

[31] California Public Utilities Commission, *Impact Evaluation Report: Home Energy Reports – Residential Program Year 2017*, May 1, 2019, pp. 33-34. Available at http://www.calmac.org/publications/CPUC_Group_A_Res_2017_HER_finalCALMAC.pdf.

III. CONCLUSION

For the reasons stated above, the Public Advocates Office respectfully requests that the Commission adopt the recommendations discussed herein.

Respectfully Submitted,

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