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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 (Filed November 14, 2013)

COMMENTS OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) TO ADMINISTRATIVE LAW JUDGE KAO'S RULING INVITING COMMENTS ON DRAFT POTENTIAL AND GOALS STUDY

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Pursuant to the May 1, 2019 *Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study* ("Ruling") in the above-captioned proceeding, Southern California Gas Company ("SoCalGas") hereby submits its comments to the California Public Utilities Commission ("Commission") on the Ruling. SoCalGas responds to the specific questions on pages 3-5 of the Ruling and the 2019 Energy Efficiency Potential and Goals Study ("Navigant study") set forth in Appendix A to the Ruling.

I. INTRODUCTION

In accordance with Public Utilities Code Sections 454.55 and 454.56(a), which require the Commission, in consultation with the California Energy Commission (CEC), to identify potentially achievable cost-effective electricity and natural gas efficiency savings and establish efficiency targets for electrical or gas corporations to achieve, Commission Staff recommends that the Commission set post-2019 energy efficiency ("EE") goals using the Navigant study. This would revise energy savings goals adopted by the Commission in Decision (D.) 17-09-025 and guide program administrators (PAs) as they make their post-2019 portfolio filings. The Navigant study includes five scenarios that reflect varying assumptions regarding cost-effectiveness; incentive levels; marketing and outreach; behavior, retro commissioning and operational (BROs) programs; and financing programs. Commission Staff put forth the five scenarios to provide a reasonable range of EE potential from which to consider and adopt an appropriate set of post-2019 EE goals.

SoCalGas appreciates the opportunity to provide responses to the Ruling's questions regarding the Navigant study and post-2019 goal setting for EE. The Navigant study represents an exhaustive analysis of historical data and literary research to model and quantify market savings potential that informs the CPUC's goal setting process. Unique to the 2019 Navigant study, when compared to prior potential studies, is the consideration of various measure-level TRC thresholds through scenario analysis to reflect current Commission requirements for portfolio forecasting, as well as the employment of a new methodology to forecast low-income sector potential, both of which significantly impact the market potential forecasted for natural gas savings.[1,2] SoCalGas' responses to the Ruling's questions reflect the Commission's requirement that the 2019 potential study identifies potential that is truly cost-effective and achievable. In accordance, SoCalGas believes that the scenario adopted, and therefore the savings potential informing goals, should reflect the current policy framework that guides the administration of both EE and low-income energy savings assistance programs.

II. QUESTIONS REGARDING THE NAVIGANT STUDY

1. *Commission staff proposed five scenarios that attempt to capture a reasonable range of energy efficiency potential for 2020-2030. Which scenario – either in the Navigant study or an alternative recommendation – is most appropriate to inform 2020 – 2030 goals? Justify your recommendation.*

SoCalGas believes that Alternative Scenario 1 is the most appropriate, based on the scenarios presented in the Navigant study. The Navigant study indicates the particular sensitivity of gas measures to the measure-level TRC threshold, as a notable amount of gas measures fall in the range of 0.85 and 1.25.[3] This situation is observed with many of the process heat measures in the AIMS sector which become cost-effective in different years of the forecast dependent on the TRC threshold used within the scenarios.[4] Such custom measures are currently offered in

[1] Navigant Study, p. 87 ("…there are more gas measures and savings that have measure-level TRCs in the range of 0.85 and 1.25 relative to electric measures and savings. Thus, gas savings are far more sensitive to the TRC threshold.").
[2] *Id.*, p. 78 ("For gas savings, the largest savings potential comes from the industrial and residential sectors, followed by low income.").
[3] *Id.*, p. 87.
[4] The 2019 PG Study Measure Level Results Viewer (Draft dated 04/26/19) begins forecasting savings for the measure group "Ind | Heat Recovery – Efficient" in the following years when it becomes cost-effective as a function of the measure-level TRC threshold set by the scenario in the Navigant study: Reference – 2022, Alternate 1 – 2020, Alternate 2 – 2026, Alternate 3 – 2022, Alternate 4 – 2020.

SoCalGas' EE programs, where historical statewide project data in EEStats for similar measure groups have been cost-effective.[5]

SoCalGas remains concerned with the use of a 0.85 cost-effectiveness threshold, as it is not representative of Commission policy for utility programs in light of the Commission's current requirements for forecasted EE portfolio cost-effectiveness.[6] Thus, SoCalGas currently believes that Alternative Scenario 1 provides a compromise to these competing issues which considers both the variability of savings potential within the TRC-threshold band and past portfolio performance for similar projects. Given this sensitivity, a review of cost assumptions for the AIMS sector measures may be required to assure that measure-level cost-effectiveness results are correct.

SoCalGas believes that it is inappropriate to use Alternate scenarios 3 and 4 to inform goals based on the observations made in the Navigant study regarding the aggressive assumptions utilized for BRO savings. The Navigant study notes that (1) penetration forecasts were the most uncertain of the data used in forecasting BROs savings potential given limited historic penetration rates, and (2) that savings potential for these programs under the aggressive scenario were included regardless of the program not being cost-effective.[7] SoCalGas correlates the stated uncertainty with the unrealistic savings observed for the aggressive scenario as indicated in the response to questions 2.b.i and 2.b.ii. Further, the Navigant study does not identify the BROs measures or savings potential deemed not cost-effective in the aggressive scenario. Given the measure-level thresholds set in the scenario analysis, non-cost-effective potential should be excluded.

2. *Do you recommend alternative values for any of the inputs or modeling used in the Navigant study? If so, specify the particular input or modeling (with section or page references, if applicable) and your recommendation for alternative values. Justify your recommendation and provide references.*

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[5] From 2013-2015 and 2016 EEStats program cycle data, the majority of projects within the "Process Heat Recovery" and "Process Boiler Controls Other" were indicated cost-effective.

[6] D.18-05-041, Conclusions of Law 36.

[7] Navigant study, pp. 68 and 70.

a. *Do you agree with the cost assumptions used in the Navigant study? Explain why or why not, and (if applicable) provide references to alternative sources of information for specific cost assumptions used in the Navigant study.*

SoCalGas believes that cost assumptions used in the Navigant study to inform program spending and spending scenarios should include the costs related to non-resource programs.[8,9] While non-resource programs do not provide incentives to customers nor directly claim resource savings, many of these programs support short and long-term program savings strategies that facilitate a customer's implementation of EE projects. Furthermore, inclusion of these costs provides a more accurate picture of portfolio cost effectiveness, calculated as part of the Navigant study. Historical program costs for non-resource programs are available in the EEStats database for program years 2013-2017Q3, as well as filed program budgets for program years 2018 and 2019 in the California Energy and Data Reporting System ("CEDARS"). To be consistent with prior potential studies, the Navigant study can identify/report on two unique values for non-resource costs and subsequent calculations for portfolio cost-effectiveness, (1) based on non-resource costs from resource programs and (2) based on non-resource costs from resource and non-resource programs.

b. *Do you agree with the assumptions used in the BROs section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study.*

SoCalGas cautions against the assumptions made for BRO measures where current program delivery occurs through non-resource programs or where PAs do not currently claim savings. Additional timing will be required to transition existing programs or establish new programs to offer the BRO measure. As an example, the Navigant study indicated that SoCalGas would not claim savings for the Commercial Building Operator Training measure until 2018, based on comments provided in the development of the previous potential study.[10]

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[8] *Id.*, p. 120, "Utility program spending includes incentives and non-incentive costs paid for equipment rebate programs (inclusive of low income) and BROs interventions. This data does not include costs associated with non-resource programs or C&S advocacy."
[9] *Id.*, p. 113, "[cost effectiveness] calculation exclude several cost categories that would typically be accounted for in a portfolio-level C-E assessment (i.e., non-resource program costs)."
[10] Navigant study, p. C-13.

SoCalGas has yet to deploy the measure in its programs.[11] Penetration rate assumptions should be adjusted to consider the ramp up of program activities for this measure.

i. HERs represent a significant amount of incremental electric savings in 2020. Do you agree with the assumptions used to forecast HERs energy savings in this study?

HERs also represent a significant amount of incremental gas savings in the Navigant study. SoCalGas agrees with the methodology quantifying the savings outlined in Appendix C under the reference scenario. The forecasted penetration rates for the reference scenario is generally aligned with SoCalGas' recent experience in offering the program. However, the penetration rates are unrealistic given the diminishing pool of untreated customers over time under the aggressive scenario. SoCalGas requests that Navigant provide the source used for the gas savings (noted to be 0.7% to 1.4%) in Table C-1 as it is not readily apparent.

ii. The Navigant study includes new items in BROs forecasting, which indicate significant savings potential. Do you agree with the building benchmarking and universal audit tool assumptions used to calculate BROs savings?

No gas savings potential was identified in the Navigant study for the Building Benchmarking measure under the reference scenario for SoCalGas. The Navigant study indicated penetration rates for electric utilities under the reference scenario but does not offer a penetration rate for SoCalGas.[12] The Navigant study should identify whether this is due to a lack of cost-effectiveness for the measure. Further, a common penetration rate was applied to SoCalGas, Southern California Edison ("SCE"), and San Diego Gas & Electric ("SDG&E") in the aggressive scenario.[13] SoCalGas questions the appropriateness of applying this penetration rate and including forecasted savings in the aggressive scenario given the prior concerns around cost-effectiveness as indicated for the reference scenario.

In regard to the savings potential forecasted for the UAT measure, SoCalGas generally agrees with the assumptions made under the reference scenario, which is based on data from the March 31, 2017 report by DNV GL "Universal Audit Tool Impact Evaluation – Residential".[14]

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[11] D.18-05-041, pp. 64-66.
[12] Navigant study, p. C-20.
[13] *Id.*
[14] DNV GL, March 31, 2017. Universal Audit Tool Impact Evaluation – Residential, retrieved at http://www.calmac.org/publications/EDRes9_UAT_ResReport_CALMAC_final.pdf.

The forecasted penetration rates for the reference scenario are consistent with observed performance from the impact evaluation and projections SoCalGas expects from this measure in its future program as savings are not currently claimed for this measure. Similar to the savings potential observed in the HERs program, penetration rates may be unrealistic under the aggressive scenario given the diminishing pool of untreated customers over time. Further, the Navigant study should consider the growth of HER activities which may impact savings potential for UAT motivated savings.[15] Use of an aggressive scenario for HERs, UAT, and other comparative energy use-based measures/programs have the potential to exacerbate this overlap and would not accurately represent market savings potential.

c. Whole Building rebate programs represent a significant portion of potential savings. Whole Building rebate programs encompass elements from multiple technology types and construction measures. Do you agree with the assumptions used in the Whole Building section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study.

SoCalGas generally agrees with the assumptions used in this study as part of the Whole Building approach, with the exception of assumptions for zero net energy measures ("ZNE"). No natural gas savings potential is currently forecasted for the commercial ZNE measure in the measure level results viewer for any of the scenarios. While SoCalGas is concerned with the age of studies currently used to identify incremental cost and savings for commercial ZNE new construction, SoCalGas is unaware of additional resources that can inform commercial ZNE potential. Additionally, caution should be taken in using of the study's Whole Building measure savings potential in future portfolio planning. Although the study identifies the residential whole building potential contributing significantly to overall potential savings, it does not include forecasted savings from residential whole building retrofit programs. For example, home energy upgrade measures were not found to be cost-effective across the five scenarios.

[15] *Id*., p. 22.

> d. *Do you agree with the assumptions used in the Low-Income section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study.*

SoCalGas disagrees with some of the dated sources and assumptions used in the Low-Income section of the Navigant study. SoCalGas notes that a more recent version of the Low Income Needs Assessment (LINA) study is available,[16] and that the Impact Evaluation of the ESA Program for Program Years 2015-2017 final report ("ESA Program Impact Evaluation") has recently been released.[17] As prior versions of these reports were used for contextual purposes, SoCalGas recommends that the Navigant study adjust assumptions based on the updated information, where applicable, to the most recent version of the report(s).[18] Furthermore, the approach using the indicated data sources to determine measure prevalence and efficiency is more appropriate for the development of a technical/economic potential than a market potential. The Navigant study does not account for decision factors which differ for customers within the energy savings assistance program(s) versus customers participating in conventional EE programs.

SoCalGas also recommends that the Navigant study incorporate the results of the 2015-2017 ESA Program Impact Evaluation to ensure that appropriate unit energy savings values are utilized. The 2019 measure input characterization system ("MICS") database utilizes the same energy use data for like measures classified for both the residential and low-income sectors. Conclusions from the ESA Program Impact Evaluation indicate that ex ante savings assumptions were higher than achieved savings, with some measures leading to an increase in consumption.[19] As the goals of the ESA program include improving the health, safety, and comfort (non-energy

[16] Evergreen Economics, December 15, 2016. 2016 Low Income Needs Assessment Report – Volume 1, retrieved at https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442452159.

[17] DNV GL, April 26, 2019. Impact Evaluation of the ESA Program for Program Years 2015-2017 – Study ID SCG0223.01, retrieved at http://www.calmac.org/publications/2015-2017_ESA_Impact_Evaluation_-_FINAL_-_CALMAC_Posting.pdf.

[18] The Navigant study referenced the 2013 LINA and ESA study for context, particularly to understand the population of low-income households across California. Navigant study, p. 56.

[19] Impact Evaluation of the ESA Program for Program Years 2015-2017, p. 5.

benefits) of ESA customers, repair or replacement of inoperative furnaces may lead to higher energy use.[20]

Additionally, SoCalGas points out that the low-income savings potential presented in the web-based Results Explorer in the "Market potential" and "Savings Scenarios" tabs differ from the tables presented in Appendix H for the detailed scenario results.[21] This difference is due to BROs measure potential forecasted for the low-income sector. To reduce confusion in identifying energy savings potential from the low-income sector attributed to low-income programs, this difference should be identified in the Results Explorer.

3. *Should the Commission adopt goals that include energy savings potential from the low-income sector? Explain why or why not.*

It is appropriate for the Commission to adopt EE goals that include market potential from the low-income sector. SoCalGas notes that prior EE goals, informed through previous potential studies, have historically included the potential for low-income program savings. Further, annual report results of energy savings achieved against EE goals includes savings achieved by low-income programs. Including low-income savings potential in post 2019 EE goals maintains consistency in the breadth of program savings included in prior EE goals, and should reflect the policies and rules of the Energy Savings Assistance ("ESA") program to accurately represent market potential in the low-income sector. SoCalGas makes the distinction that while the Navigant study identifies savings potential from rebate, BROs, and the low-income sector programs, it does not set distinct sub-goals for these programs or the ESA program proceeding, within the overall EE goals adopted by the Commission in this proceeding, and thus should not be treated as such.

The Commission determined through D.16-11-022 that a more robust analysis of savings potential in the low-income sector was necessary, through the potential study, to provide an

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[20] Tabulated values for evaluated ESA program measure savings are provided in the 2015-2017 ESA Impact Evaluation Report EXCEL Worksheet Tool, retrieved at https://pda.energydataweb.com/api/downloads/2173/2015-2017%20ESA%20Impact%20Eval%20Results%20-%20Phase%202%20-%20FINAL%20-%20April%2026%20Public%20Posting.xlsx.

[21] As an example, the reference scenario for low income gas savings from Table H-6 of the Navigant study indicates 3.8 MM therms. This is much lower than the 5.8 MM therms from the Results Explorer in the "Market potential" tab.

analysis and determination of the ESA Program energy savings goal potential.[22] Due to timing, this analysis was deferred from the 2017 potential study to the current Navigant study.[23] Efforts to update energy savings targets and/or any consideration toward a goal for the ESA program based on the savings potential identified in the Navigant study should be determined in the ESA program proceeding.

> *4. In D.10-04-029, the Commission adopted a different process for crediting savings from comparative energy use (e.g., HERs) programs, prohibiting the utilities from submitting workpapers for ex ante numbers to project savings for these programs; instead, savings from these programs can only be credited after the Commission verifies them. Results from HERs program impact evaluations have been consistently high for the past several (approximately seven) years. Should the Commission continue to evaluate home energy report behavior programs that have had consistent evaluation results for several years?*

The Commission should not continue to evaluate home energy report behavior programs that have had consistent evaluation results for several years. SoCalGas' savings results for HERs from the third-party M&V process (as measured by the gross realization rate ("GRR")) are consistent to those documented in the "Impact Evaluation Report Home Energy Reports – Residential Program Year 2017".[24] Given this outcome, SoCalGas believes it is appropriate to claim the savings from the Home Energy Report at the conclusion of the third-party M&V process as opposed to the Commission's ex-post evaluation.

> *5. What are the impacts of reduced energy savings goals, if adopted by the Commission? Should reduced energy savings goals result in smaller portfolio budgets, going forward? Explain why or why not, and (if applicable) how much smaller.*

SoCalGas asserts, as with prior potential studies, that there are consequential impacts to approved business plan strategies and tactics if reduced/increased energy savings goals are adopted by the Commission, as the results of these studies drive a portion of the planning process of future savings forecasts. However, SoCalGas believes these results should not have a direct impact to their portfolio budgets and the results of the Navigant study should not equate to

[22] D.16-11-022, pp. 51 and 465 (Ordering Paragraph 62).
[23] D.17-09-025, p. 46 (Conclusions of Law 8).
[24] DNV GL, May 1, 2019. Impact Evaluation Report Home Energy Reports – Residential Program Year 2017, retrieved at http://www.calmac.org/publications/CPUC_Group_A_Res_2017_HER_finalCALMAC.pdf.

simply reducing/increasing budgets, as there are many additional metrics that drive the budget planning process, such as cost-effectiveness and current program success. The Annual Budget Advice Letter ("ABAL") filing process as defined in D.15-10-028 and subsequently addressed in D.18-05-041 should act as the mechanism to drive the portfolio budget planning, however, SoCalGas understands that the results of these studies will be utilized in that process.[25]

> *6. Given the changes in potential for 2020, should there be any changes to the required components of annual budget advice letters (ABALs) due from the PAs in September 2019, and/or to the process or criteria for reviewing the September 2019 ABALs (Sections 7.2 and 7.3 of D.18-05-041)? Explain why or why not. Any recommendations in response to this question should focus on new ideas and not repeat recommendations previously made and that the Commission has already dismissed.*

As discussed above, the results of this study will be utilized in the development of SoCalGas' ABAL filing in September 2019. SoCalGas does not believe that changes are necessary to the components of the ABAL due in September 2019. However, the Commission should ensure that the results of the study align with current Commission requirements to guarantee that PAs and third-party implementers are able to develop portfolios and programs that do not conflict with Commission direction.

Furthermore, the Commission should take into consideration the closeness in timing of the study and the ABAL filing which may present its challenges in filing thoroughly planned ABALs that depict a realistic picture of the 2020 EE portfolio. While SoCalGas may not have issues with developing its 2020 portfolio budget based on current policy, any significant change made based on this study or other matters such as third-party solicitations have the potential of impacting portfolio planning.

[25] D.18-05-041, p. 15 ("[W]e will require the PAs to base their subsequent budget advice letters on both the updated avoided cost assumptions and the 2018-2030 goals adopted in 2017, and any modifications to programs").

III. CONCLUSION

SoCalGas appreciates the opportunity to provide responses to the questions regarding information presented in the Navigant study in the Commission's efforts toward post-2019 EE goal setting.

Respectfully submitted on behalf of SoCalGas,

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