A.17-01-014
SDG&E 2018-2025 EE Rolling Portfolio Business Plan

TURN Data Request TURN-SDG&E-01

To: E. Gregory Barnes, San Diego Gas & Electric Company (SDG&E)

From: Hayley Goodson, The Utility Reform Network (TURN)

Date Sent: February 24, 2017
Response Due: March 10, 2017

Please provide electronic responses to the following questions which pertain to SDG&E's Application 17-01-014, requesting approval of SDG&E's 2018-2025 Energy Efficiency Rolling Portfolio Business Plan.

If partial responses are available prior to the requested due date, please forward them as soon as they become available. If any of these requests are unclear or otherwise objectionable, please contact me as soon as possible so that we may attempt to resolve any problems.

Responses should be provided to the following people:

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Energy Efficiency Policy Requests

1. On page 11 of SDG&E's application, SDG&E requests that the Commission "confirm" that "a 1.0 cost-effectiveness threshold" applies to the Business Plan, such that the TRC and PAC test estimates must exceed 1.0 for 2018. To support this request, SDG&E points to lower 2018 avoided costs; changes in Codes and Standards which "result in reductions in savings since the new code becomes the baseline for calculating savings for new equipment"; and the fact that "specific program designs, budgets and savings are still unknown" given the new bidding requirements for statewide programs and increase to third party programs required by the Commission. (A.17-01-014, Exhibit 1 ("SDG&E Business Plan"), Appendix A, p. 224). Regarding this request:

    a. Please explain SDG&E's understanding of why the Commission previously required SDG&E to meet a 1.25 cost-effectiveness level on an ex ante forecast basis (without Codes and Standards (C&S) advocacy savings and spillover effects, thus leaving C&S and spillover to serve as a "bonus" or "hedge" against the possibility that the portfolio as implemented would underperform relative to SDG&E's forecast and drop below a 1.0 cost-effectiveness level), including why SG&E believes that the Commission's prior caution is unnecessary to protect ratepayers in the current context.

b. Please identify the specific vintage of the changes in C&S that SDG&E has in mind.

   i. Explain whether these changes are reflected either in the potentials study underlying the current EE goals adopted in D.15-10-028 or in the 2017 update to the potentials study, or both.

   ii. Does SDG&E contend that these C&S updates are particularly unusual in their impact on potential EE savings, such that the current circumstances should be distinguished from those at issue when the Commission required a 1.25 cost-effectiveness threshold in D.12-11-015?

c. Is it SDG&E's understanding that "the new code becomes the baseline for calculating savings for new equipment" across its portfolio in 2018? If not, please explain SDG&E's assumptions regarding the rough percentage of forecasted 2018 portfolio savings that will fall under a "code baseline," and thus be directly impacted by changes in C&S, as opposed to the rough proportion that will be subject to an "existing conditions baseline," pursuant to D.16-08-019. By forecasted portfolio savings, TURN refers to the savings assumptions reflected in SDG&E's cost-effectiveness calculations provided in support of its Business Plan application.

<u>Statewide Program Administration</u>

2. On pages 18-19 of SDG&E's Business Plan, SDG&E discusses its proposal to serve as lead statewide administrator of the statewide "Residential and Commercial Upstream HVAC program." SDG&E elsewhere refers to this program as the "Statewide HVAC Upstream/Midstream Program." Regarding this proposal:

   a. SDG&E states on p. 18 that the current distributor stocking program has "seen very low realization rates (18%) for air cooled units, which account for most of the units that participate in upstream programs." Please clarify whether this realization rate includes stocking of both residential and commercial HVAC units and explain what the realization rate means, how it was derived, and what it is applicable to.

   b. SDG&E reports on p. 18 that the recent impact evaluation suggests SDG&E should "set program efficiency criteria for full-load and part-load combinations" and pre-identify units "that meet the criteria such that savings claims are tied back to make and model numbers collected by participating distributors." PG&E goes a step farther in identifying current barriers to improving HVAC performance improvement, suggesting that the creation of a statewide tracking system for the sale and installation of new HVAC equipment (tracking by serial number) could aid in compliance improvement.[1] PG&E references the California Existing Buildings Energy Efficiency Action Plan – 2016 Update, which includes the following strategy: "1.5.8: Serial Number Tracking: If indicated as a critical resource for compliance improvement, establish HVAC equipment serial number tracking database." *See also* CEC Request for Proposal – RFP-16-403 – HVAC Equipment Installation Compliance Tracking System Business Needs and Functional Requirements, issued Feb. 22, 2017.

i. Does SDG&E agree with PG&E that the development of an HVAC equipment serial number tracking system by the CEC would help facilitate the enforcement of code compliance requirements and improved HVAC efficiency? Why or why not?

ii. Assuming that a statewide HVAC equipment serial number tracking system will be developed, how will SDG&E, as statewide administrator for the Upstream HVAC program (as well as the Residential QI/QM program) work with the CEC to support the development of the new tracking system and to align one or both of these statewide programs with that system?

iii. Per Figure 1.10 on p. 23 of SDG&E's Business Plan, SDG&E proposes to bid out the Statewide HVAC Upstream/Midstream Program in "Phase 1 2017" but to wait until mid-2018 to bid out the Statewide HVAC Downstream QI/QM program. Please explain whether SDG&E considered bidding out both programs together, which could potentially allow bidders to propose use of an upstream/midstream statewide serial number tracking system as part of the downstream QI/QM program, and other synergistic program elements.

3. Please explain how SDG&E, as administrator of the two proposed HVAC statewide programs, the HVAC Upstream/Midstream program and the Downstream QI/QM program, intends to support the specific HVAC goals set forth in the *California Energy Efficiency Strategic Plan*, January 2011 Update, Section 6.

4. On pages 20-21 of SDG&Es' Business Plan, SDG&E discusses its proposal to serve as the lead statewide administrator of the statewide "Plug Load and Appliance" (PLA) program. SDG&E envisions (p. 20) engaging "manufacturers, distributers, retailers and other influential market participants to develop comprehensive and innovative initiatives that reduce energy usage across technologies with high savings potential," and will "consider multiple intervention strategies for program delivery including, but not limited

[1] A.17-01-015, Attachment 1 (PG&E EE Business Plan), Appendix F, p. 30 (referencing the California Existing Building Energy Efficiency Action Plan -- 2016 Update, p. 22).

to, Retail Products Platform (RPP), point-of-sale (POS) or a hybrid approach." Regarding this proposal:

a. Does SDG&E anticipate any complications or barriers to success arising from PG&E's proposal, addressed on pages 27-28 of its Business Plan application (A.17-01-015), "to continue to administer its Retail Products Platform (RPP) pilot until evaluation studies suggest it is appropriate for statewide program treatment, at which time PG&E would transfer program administration to the statewide administrator of the Plug Load and Appliances program"? Please explain why or why not.

b. SoCalGas reports that major retailers, including the Home Depot and Lowe's hardware store chains, "are withdrawing from point-of-sale (POS) programs due to rising transactional costs associated with their participation in the program."[2] Please explain whether SDG&E has experienced barriers to recruiting and retaining large retailers in its POS programs, and if so, provide SDG&E's thoughts about removing such barriers and/or increasingly using other delivery approaches instead of POS, to support the success of the statewide PLA program it proposes to administer.

5. Please explain whether, and if so, how, SDG&E's proposed administration of both the Statewide PLA program (Business Plan, pp. 20-21) and Residential/Commercial Upstream HVAC program (Business Plan, pp. 18-19) creates potential synergetic opportunities. For instance, SDG&E proposes to bid out both of these statewide programs on the same timeline, as part of its proposed "Phase 1 2017" solicitation, per Figure 1.10. Might SDG&E invite potential bidders to propose to implement both programs, and accordingly to target manufacturers, distributers, and/or retailers of both HVAC and PLA products? Why or why not?

6. The following questions pertain to the "Statewide Administration Approach" proposed jointly by PG&E, SCE, SoCalGas, and SDG&E, which appears as Exhibit 2 to SDG&E's application.

   a. On page 2, the Joint IOUs point to the Commission's desire to prioritize "lower transaction costs for PAs and implementers," among other anticipated benefits of the new statewide program requirements. Does SDG&E's Business Plan budget request reflect a projection of lower transaction costs resulting from the proposed "Statewide Administration Approach"? If so, please quantify the cost reductions SDG&E projects and explain where specifically in SDG&E's budget those reductions are captured in Figure B.2 (Budget by Sector and Cost Category) in Appendix B to SDG&E's Business Plan, p. 233.

   b. On page 4, the Joint IOUs indicate that they considered specific factors in the marketplace in determining "natural bundling" of statewide programs, such as whether "different end uses or technologies require different skillsets, a different

[2] A.17-01-016, Attachment A (SoCalGas Energy Efficiency Business Plan), p. 64.

set of manufacturers, trade organizations, and distributors to engage." The IOUs report, "This is particularly true in the area of lighting and HVAC where the suppliers and experts in each area are vastly different."

i. Please provide a listing of all manufacturers whose lighting, HVAC, and PLA products are/were included in SDG&E's 2016 and 2017 portfolios.

ii. Please provide all research and analysis used by the Joint IOUs in assessing "natural bundling" opportunities, and specifically supporting the continued segregation of lighting, HVAC, and PLA end uses into distinct statewide programs, and assigning lighting to a different statewide administrator than HVAC and PLA.

iii. Despite the Joint IOUs' proposal to assign PLA and HVAC to SDG&E and Lighting to SCE, have SDG&E and SCE discussed the possibility of jointly bidding out implementation of the three programs so as to capture any synergetic opportunities that a common implementer for Lighting and PLA (or Lighting and HVAC) might offer? Please explain the status of any such discussions and indicate whether you expect the forthcoming "bottom-up review" (as described in the PA presentation to CAEECC on 12/7/16 and in the IOUs' joint response to Question 4 of TURN's Nov. 9, 2016 Data Request in R.13-11-005) to inform such bidding strategies.

c. On page 4, the Joint IOUs' mention their consideration of the historic cost-effectiveness of each PA in delivering each statewide program. Please clarify what year(s) of data were used by the Joint IOUs in this assessment and whether savings were IOU-reported gross savings or Energy Division's *ex post* net savings.

<u>Portfolio Budgets, Energy Savings, and Cost-Effectiveness</u>

7. On pp. 28-29 of SDG&E's Business Plan, SDG&E proposes to meet the EE portfolio savings goals adopted by the Commission in D.15-10-028 (*compare* SDG&E Figure 1.12 *with* Figure 1 on pages 8-9 of D.15-10-028) and to do so with EE budgets equal to SDG&E's 2016 budget. Regarding this proposal, and referencing Figure 1 in D.15-10-028:

    a. Please confirm that SDG&E's proposed annual GWh goals for 2018-2025 are substantially lower than its GWh goal in 2016 of 324 GWh, and if so, explain whether it is reasonable to conclude that SDG&E's Business Plan budget will provide fewer GWh/$ spend compared to SDG&E's 2016 portfolio.

    b. Please confirm that SDG&E's proposed annual MW goals for 2018-2025 are substantially lower than its MW goal in 2016 of 57 MW and if so, explain whether it is reasonable to conclude that SDG&E's Business Plan budget will provide fewer MW/$ spend compared to SDG&E's 2016 portfolio.

c. Please confirm that SDG&E's proposed annual MMTherm goals for 2018-2025 are substantially higher than its MMTherm goal in 2016 of 3.2 MW and if so, explain whether it is reasonable to conclude that SDG&E's Business Plan budget will provide more MMTherm/$ spend compared to SDG&E's 2016 portfolio.

d. Please explain the extent to which the reduced GWh/$ and MW/$ forecast by SDG&E are offset by the increase in MMTherm/$, and otherwise what factors should be considered in assessing the reasonableness of SDG&E's projected decline in GWh and MW savings per portfolio dollar.

8. In Appendix B of SDG&E's Business Plan, SDG&E explains the methodology it used to modify its 2017 portfolio mix to achieve a TRC over 1.0 using the updated avoided costs. See p. 232. Regarding this methodology:

    a. Please provide additional information about the major changes to the measure mix resulting from this methodology, including the individual measures that received larger or smaller funding allocations (with changes of 10% or more).

    b. Please explain how SDG&E modified its cost-effectiveness input assumptions regarding Home Upgrade in response to its observation that "eliminating Home Upgrade would improve the portfolio TRC by approximately 5%."

9. Please provide the same information underlying SDG&E's energy savings forecast as provided by SCE in "Appendix C – EE Portfolio Savings Forecast" attached to its Business Plan, specifically the information in Tab 1 (Portfolio Budget) and Tab 3 (2018 Subprograms Est), which present savings on an aggregate basis by budget categories (Tab 1) and subprograms (Tab 3). TURN is attaching the original version of SCE's Appendix C to this Data Request for SDG&E's convenience, though we note that SCE has amended this document as part of its amended application filed Feb. 10, 2017, and the revised version has different tabs.

<u>Portfolio Measure Composition and Intervention Strategies</u>

10. In Appendix F to SDG&E's Business Plan, wherein SDG&E responds to external stakeholder observations, SDG&E indicates that it "does not plan to target second refrigerators" in residential dwelling units for early retirement or replace-on-burnout as part of promoting appliance EE, and appears to suggest that such targeting would not be cost-effective or that SDG&E has inadequate budget. (See Appendix F, ID # 0940). Regarding this response:

    a. Is SDG&E's response specific to appliance recycling, or does it also reflect SDG&E's analysis of the potential for energy savings from downstream and midstream programs that expressly encourage retirement/removal of second refrigerators?

b. Does SDG&E believe that second refrigerators offer lower savings relative to primary refrigerators, cost more to capture, or both? Please explain and provide the basis for your conclusions.

11. The IOUs' joint response to Question 10 of TURN's Nov. 9, 2016 Data Request in R.13-11-005 (addressing the draft business plans of all four IOU PAs) included SDG&E's top 10 measure groupings expected to drive portfolio savings in 2016 and 2017, with that ranking determined by percentage of portfolio GWh, MW, and/or therm savings provided by each measure grouping (gross and net).

a. Please confirm that SDG&E's top 10 measure groupings for 2016-2017 are expected to provide less than 13% of gross kWh savings and 10% of gross KW savings, as reflected in the Nov. 2016 response. If so, please expand SDG&E's response to provide additional measure groupings, ranked by contribution to gross and net kWh and KW, until those measure groupings in aggregate provide at least 50% of the savings in SDG&E's 2016-2017 portfolio.

b. Please update your Nov. 2016 response to include the top 10 measure groupings, on a gross and net basis, underlying SDG&E's forecast of savings and portfolio cost-effectiveness for 2018, as reflected in Appendix B to its Business Plan. In preparing your response, please consider "behavior" or "behavior programs" as a measure category. If the top 10 ten measure groupings underlying your forecast for 2018 do not in aggregate provide at least 50% of the savings in your portfolio, please provide additional measure groupings, ranked by contribution to gross and net kWh and KW, until those measure groupings in aggregate provide at least 50% of the savings in your portfolio as modeled for your Business Plan.

c. For each of the top 10 (or more) measure groups underlying your 2018 savings forecast, as identified in your response to part (b) above, please specify the percentage of savings assumed in your cost-effectiveness calculations to come from each of the following intervention/delivery strategies: upstream/manufacturer, midstream/distribution, midstream/retail, downstream direct install, other downstream, and custom. If your forecast of cost-effectiveness does not reflect any assumptions regarding intervention/delivery strategies, please explain the basis for your "implementation" and "incentives" cost projections in Figure B.2 in Appendix B.

d. For each of the top 10 (or more) measure groups underlying your 2018 savings forecast, as identified in your response to part (b) above, please specify whether your savings and cost-effectiveness projections reflect the assumption that the key measure grouping will be targeted in whole or in part through early retirement interventions. If your forecast of cost-effectiveness does not reflect any assumptions regarding early retirement vs. replace-on-burnout interventions, please explain the basis for your "implementation" and "incentives" cost projections in Figure B.2 in Appendix B.

12. Following up on the IOUs' joint response to Question 11 of TURN's Nov. 9, 2016 Data Request in R.13-11-005 (addressing the draft business plans of all four IOU PAs), as it pertains to SDG&E:

    a. Please update your response, if appropriate in light of your Business Plan, to indicate whether you intend to require or encourage, as a general matter, either higher incentives for greater degree of energy efficiency above code requirements or variation in incentive levels by geography through your implementation plans and solicitations. If you do not expect to require or encourage implementers to offer either, please include in your response an explanation of why you believe this is reasonable given the possibility of stranding achievable, above-code, savings over the life of the new measure.

    b. Please specify all instances in your 2016 and 2017 portfolios in which incentives for replace-on-burnout interventions are either higher for greater degree of energy efficiency above code requirements or vary by geography.

    c. Please specify all instances in your 2016 and 2017 portfolios in which incentives for early retirement interventions are either higher for greater degree of energy efficiency above code requirements or vary by geography.

13. Following up on the IOUs' joint response to Questions 13 and 14 of TURN's Nov. 9, 2016 Data Request in R.13-11-005 (addressing the draft business plans of all four IOU PAs), as it pertains to SDG&E:

    a. Please specify all instances in your 2016 and 2017 portfolios in which direct install has been/will be used to promote early retirement, and indicate whether programs using this strategy permit "to code" installation, require above-code installation, or use tiered incentives to distinguish among to-code and above-code levels of efficiency. If "to code" installation is allowed, please include in your response an explanation of why you believe this is reasonable given the possibility of stranding achievable, above-code, savings over the life of the new measure.

    b. Please update your response to Question 13, if appropriate in light of your Business Plan, to indicate whether you intend to expand the use direct install to promote early retirement in 2018-2020, relative to your 2016-2017 portfolio. Include the measures, customer sectors, and building types for which you believe DI may be a reasonable strategy to surmount market barriers to EE, given cost-effectiveness considerations.

    c. Please specify all instances in your 2016 and 2017 portfolios in which direct install has been/will be used to promote replace-on-burnout measure interventions, and indicate whether programs using this strategy permit "to code" installation, require above-code installation, or use tiered incentives to distinguish among to-code and above-code levels of efficiency. If "to code" installation is allowed, please include in your response an explanation of why you believe this is reasonable given the possibility of stranding achievable, above-code, savings over the life of the new measure.

d. Please update your response to Question 14, if appropriate in light of your Business Plan, to indicate whether you intend to expand the use direct install to promote replace-on-burnout measure interventions in 2018-2020, relative to your 2016-2017 portfolio. Include the measures, customer sectors, and building types for which you believe DI may be a reasonable strategy to surmount market barriers to EE at burnout, given cost-effectiveness considerations.