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PG&E Comments on AB 3232 Building Decarb Assessment

Additional submitted attachment is included below.



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California Energy Commission Docket Unit, MS-4 Re: Docket No. 19-DECARB-01 1516 Ninth Street Sacramento, CA 95814-5512

Re: <u>PG&E COMMENTS ON CALIFORNIA ENERGY COMMISSION WORKSHOP ON</u> <u>AB 3232 BUILDING DECARBONIZATION ASSESSMENT</u>

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to submit these comments regarding the December 4, 2019, Building Decarbonization Assessment workshop. PG&E embraces California's climate goals and understands that reducing greenhouse gas (GHG) emissions from the state's buildings will be a necessary part of reaching the California's 2050 target of 80% below 1990 levels. The Building Decarbonization Assessment required by Assembly Bill 3232 (AB 3232) is a critical component in working to achieve these targets.

PG&E recognizes that part of achieving these goals involves increasing the use of energyefficient electric appliances in buildings where cost-effective. PG&E also supports policies that promote all-electric new construction but believes a multi-faceted approach is needed to achieve California's broader economy-wide long-term GHG reduction objectives. This includes transportation and building electrification as well as decarbonizing the gas system with renewable natural gas and hydrogen.

PG&E appreciates the engagement of the California Energy Commission (CEC) with stakeholders during this public process. PG&E submits the following comments organized as answers to the questions posed by Staff during the workshop:

1. The legislation calls for a building decarbonization assessment for 2030. Should CEC staff also include a review of feasibility for California's 2045 zero-carbon goals?

PG&E believes the assessment should include a review of the feasibility for California to meet the 2045 zero-carbon goals.

2. Is the proposed 1990 Greenhouse Gas Emissions Baseline the best approach for the Assessment? Why or why not?

PG&E is supportive of using 1990 as the building emissions baseline to ensure consistency with California's other objectives.

3. Staff has identified sectors and topics that will be assessed for impacts, challenges, and opportunities. Do you think this list is appropriate? What additional sectors or topics should be added to the scope of the Assessment?

PG&E believes the list of sectors and topics is appropriate but suggests including renters on the list and ensuring that "ratepayers" identifies both gas and electric customers. CEC staff should also consider including appliance/equipment manufacturers.

4. Building costs from substituting end-use appliances include direct and indirect costs. One example of indirect costs are fuel infrastructure costs, such as gas piping to and within buildings, and electric distribution systems. Which indirect costs should be included in this Assessment and what are sources for this information?

Regarding indirect costs, PG&E suggests limiting this to costs that can be easily quantified and avoiding those that can be more difficult to measure. For example, non-energy benefits such as improved indoor air quality, or the safety, health and comfort of participating customers, are difficult to quantify and may be subject to debate between stakeholders.

PG&E recommends that indirect infrastructure costs (both for avoided gas infrastructure and concomitant electric infrastructure) should be included in the analysis. PG&E previously provided the CEC its own estimates of gas line extension, service extension and meter costs for use in building energy efficiency codes and standards rulemaking processes. A copy of these memorandums, including the initial estimates from March 2018, and updated estimates from December 2019, are included with this letter (Attachment A). As noted in the December 2019 memo, these indirect cost estimates for will vary widely depending on the job-specific conditions, and the figures in the memo represent historical averages over many different job types. While these costs will not be representative of each potential job type or use case, PG&E encourages the CEC to consider these types of costs in its assessment because they represent real costs and savings to customers.

PG&E notes that whether there are any gas infrastructure savings will also be job specific. Unless an entire housing development is electric-only service, there are no gas line extension savings. Unless the entire building is electrified, there are no service extension savings or meter savings. Cost savings from gas piping within a building will vary depending on what appliances are still gas fueled.

5. The total costs to reduce or eliminate emissions from energy usage are uncertain. However, reducing or eliminating emissions will have cost impacts, at the individual and social level. Which cost-effectiveness tests should be included in this Assessment? PG&E recommends that the CEC include a study of the least-cost pathway to meet its decarbonization goals. In analyzing the cost-effectiveness of a target, program or strategy, it is important to align the cost-effectiveness screen with the problem you are trying to solve. The CPUC's Standard Practice Manual (SPM)¹ outlines a multi-perspective framework for setting up cost-effectiveness tests, each test with its own strengths and weaknesses.

PG&E recommends the CEC rely on this framework and that the primary test for costeffectiveness should be the Total Resource Cost (TRC) test. The TRC is best suited for this purpose because it answers the question of whether and how much total costs (for both the participating customer and the utility) in the utility area will increase or decrease as a result of a resource or program of resources. Participant cost tests such as those considered in the CEC's Time Dependent Valuation (TDV) for codes and standards are an important measure of customer willingness to participate in a program, but using participant costs alone in the analysis will mask a key portion of the total cost to decarbonize the building sector. This may result in inefficient outcomes or recommendations for future policies and programs.

The assessment should also consider impacts to utility rates using the Ratepayer Impact Measure (RIM) test. This will help stakeholders identify the costs to non-participants of building decarbonization efforts, and whether proposed strategies will result in cross-sectoral cost shifts.

Finally, as codified in AB 3232, the assessment should produce findings, "relative to other statewide GHG emissions reductions strategies". This should include an assessment of the relative cost of GHG emissions reductions strategies in other sectors, such as transportation and electric generation. We encourage the CEC to leverage the cost estimates from other strategies/sectors beyond building decarbonization from CARB's Scoping Plan analysis for 2030 and to utilize CARB's next Scoping Plan analysis (due in 2022) for post-2030 estimates.

PG&E thanks the CEC for the opportunity to comment and looks forward to working with the CEC and other stakeholders. We are happy to meet to further discuss these comments.

Sincerely,

/s/

Jessica M Melton

¹ See CPUC Cost-Effectiveness:

https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-

_Electricity_and_Natural_Gas/CPUC_STANDARD_PRACTICE_MANUAL.pdf