

DOCKETED	
Docket Number:	19-MISC-03
Project Title:	The Natural Gas Infrastructure and Decarbonization Targets
TN #:	230673
Document Title:	PG&E Comments - PGE Comments on Natural Gas Distribution Report
Description:	N/A
Filer:	System
Organization:	PG&E
Submitter Role:	Public
Submission Date:	11/13/2019 5:00:17 PM
Docketed Date:	11/14/2019

Comment Received From: PG&E
Submitted On: 11/13/2019
Docket Number: 19-MISC-03

PGE Comments on Natural Gas Distribution Report

Additional submitted attachment is included below.



Jessica M Melton
Representative
State Agency Relations

1415 L Street, Suite 280
Sacramento, CA 95814
O: (916) 386-5712
M: (916) 386-5720
Jessica.Melton@pge.com

November 13, 2019

California Energy Commission
Docket Office, MS-4
Docket No. 19-MISC-03
1516 Ninth Street
Sacramento, CA 95814-5512

Re: PG&E Comments on the “Natural Gas Distribution in California’s Low-Carbon Future” Report

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the draft “Natural Gas Distribution in California’s Low-Carbon Future” report. PG&E values the California Energy Commission’s (CEC) foresight in identifying the need to further explore the opportunities and challenges facing California’s drive toward a carbon-free future. Furthermore, PG&E commends the work of Energy and Environmental Economics (E3) and the University of California Irvine (UCI) in undertaking the modeling and coordination needed to bring together this report and its findings.

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 California’s 2050 target of 80% below 1990 levels. E3’s work indicates that the natural gas delivery system will play a key role in supporting California’s long-term GHG reduction goals by enabling critical responsive electric generation to accommodate intermittent renewable electricity resources and supplying Renewable Natural Gas (RNG) and hydrogen to end uses that cannot be electrified. It also indicates that the natural gas delivery system has a role to play in managing emissions from California’s waste streams by converting them to net-emissions-negative fuels. This will require continued investment to ensure the safety and reliability of California’s gas delivery systems.

As E3’s work highlights, if throughput on the natural gas delivery system declines significantly, the fixed costs associated with ensuring the continued safe and reliable operation of California’s natural gas systems would be spread over fewer therms and fewer customers. Without intervention, natural gas rates could become unaffordable for customers who choose not to or cannot fully electrify their homes and businesses. A strategic approach to building decarbonization coupled with a well-informed gas transition plan will be critical to ensuring California can successfully meet its long-term GHG reduction goals while also serving as a model for other jurisdictions to follow.

PG&E requests the CEC take action on E3’s conclusion that a “comprehensive gas transition strategy, informed by a myriad of interested parties, is needed.” For example, the next Integrated Energy Policy Report (IEPR) could explore some of the recommendations E3 offered in this draft report as well as

those proposed in Gridworks' 2019 whitepaper, "California's Gas System in Transition: Equitable, Affordable, Decarbonized, and Smaller."¹ Additional modeling should be pursued in future years to incorporate feedback loops into E3's analytics. For example, will 2 million residential customers remain on a system where gas costs ~\$19/therm?

As E3 and UCI endeavor to finalize this draft report, PG&E recommends:

- a) Appropriate accounting of GHG emissions produced by homes and buildings that frames the scope and scale of decarbonization activities needed
- b) The analytics should include panel upgrade costs for existing buildings
- c) Better labeling of charts/graphs

A. Accounting for GHG Emissions from the Building Sector

PG&E recommends that the final report estimate the total GHG emissions from the residential and commercial building sector, broken down by source (electricity, natural gas, propane, refrigerants, etc.) and by usage (space heating/cooling, water heating, cooking, lighting, others) for today and future years. Inclusion of \$/MT estimations for the various decarbonization strategies detailed in the report would be useful as well. This will provide an important foundation for the report by indicating the portion of the state's GHG emission reduction target that building decarbonization can deliver. This additional information would also inform the cost-effectiveness of various building decarbonization strategies. Emission reductions that occur further upstream through the capture or avoidance of methane and black carbon emissions through RNG production should be included in this accounting and should be calculated on the basis of the global warming potential if the methane were not captured.

B. Inclusion of Panel Upgrade Costs

PG&E appreciates the inclusion of an "early retirement sensitivity" to capture the impact of early appliance retirement needed to realize some of the gas system savings identified in E3's recommended gas transition strategy. PG&E asks that the report also include an estimation of the panel upgrade costs that might be incurred in converting California's existing buildings to be all-electric. How might that alter the total incremental societal costs associated with a high building electrification panel? How might that change the lifecycle costs of an all-electric home for an individual? E3's "Residential Building Electrification in California"² report includes an estimate of "\$2,000-4,000" that could potentially be leveraged in this report as well.

C. Better Labeling of Graphs/Charts

To assist readers in interpreting the report's analytics, PG&E asks that 2050 values be labeled on graphs (e.g., throughput, rates, bills, etc.). Attempting to estimate the numerical results on the right-hand side

¹ California's Gas System in Transition available here: https://gridworks.org/wp-content/uploads/2019/09/GW_Calif-Gas-System-report-1.pdf

² E3's Residential Building Electrification in California available here: https://www.ethree.com/wp-content/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf

of E3's graphs could otherwise lead to a wide-array of interpretations. Examples where additional labels could prove helpful include, Figures 10, 11, 13, 14, 15, 19, etc.

Thank you for the opportunity to comment on the Natural Gas and Infrastructure Targets. PG&E looks forward to working with the CEC and other stakeholders, and we are happy to meet to further discuss these comments.

Sincerely,

Jessica Melton