DIRECT TESTIMONY OF MICHAEL COLVIN

ON BEHALF OF ENVIRONMENTAL DEFENSE FUND

ON THE APPLICATION OF SOUTHERN CALIOFNIRA GAS COMPANY

AND SAN DIEGO GAS & ELECTRIC COMPANY FOR

A RENEWABLE NATURAL GAS TARIFF

Application 19-02-015

Environmental Defense Fund

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October 14, 2019

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I. Introduction

This testimony is presented by Michael Colvin, Director of the California Energy Program, Environmental Defense Fund (EDF), and addresses issues raised in the joint application of Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) (hereafter, Applicants) for a voluntary Renewable Natural Gas (RNG) tariff. This testimony addresses a number of issues within the scope of the proceeding pursuant to the August 6, 2019 Assigned Commissioner's Scoping Memo and Ruling.

II. Additionality and Verifiability of Gas to Be Procured

In general, when RNG is combusted (on a stove top burner, for instance) it still creates carbon dioxide, but since it is derived from organic sources , the carbon dioxide emissions are generally considered climate-neutral as relatively little fossil-based carbon is added to the atmosphere. So, there are climate benefits to capturing and using RNG currently emitted from landfills, lagoons, animal-feeding operations and other existing sources that would otherwise be burned or released into the atmosphere.

For the purposes of this Application, EDF seeks to ensure that any gas that is procured as part of this program reduce the emissions of greenhouse gases. Therefore, any renewable natural gas (RNG) that is procured under this tariff should be both (1) additional and (2) verifiable. EDF recognizes that formal standards are not yet adopted by either the Commission or by a third-party verification entity; however, they are under evaluation by various entities.[1] Therefore, the Commission has the opportunity to implement preliminary standards in considering this Application to inform those efforts. EDF recommends that procurement guidelines adopted in this tariff be flexible enough so that if and when any subsequent standard is adopted (either by a third-party verification entity or by the Commission in a broader Rulemaking) that the Applicants be directed to make future procurement to reach this standard.

[1] One example is Green-e, which is in process of developing a standard and certification for RNG which is expected to be complete in Summer 2020. *See,* https://www.green-e.org/renewable-fuels.

The RNG procured in this program should be produced from waste and not other organic materials, including "purpose grown crops."[2], [3] This ensures that any RNG that is sourced has the minimum level of additionality attached to it. In his testimony, witness Cheung does not explicitly state which sources of RNG will be used. Cheung does state that the team's "primary objective will be to minimized RNG rate volatility, manage RNG costs, and ensure supply reliability for the benefit of program participants."[4] EDF recommends that a specific directive ensuring that the RNG is sourced from additional and verifiable sources is critical to the program's success. Elimination of purpose grown crops would help ensure high integrity of the program. EDF further clarifies that the "RNG commodity charge" as discussed in Witness Wooden's testimony[5] should include any additional funds needed for tracking and verifying that the RNG procured meets the standards.

III. Limit Offering to Non-Residential Customers

EDF would like to see the RNG Tariff focus on core non-residential customers. EDF seeks this modification for a few reasons: 1) the limited availability of high quality (additional and verifiable) RNG suggests that electrification is a more viable and cost effective strategy for residential customers, and 2) a percentage of total gas consumption will be easier to track procurement. These reasons are outlined more below.

The Commission has an existing robust energy efficiency portfolio. In August 2019, the Commission adopted Decision (D.) 19-08-009, which allowed the usage of energy efficiency funds to apply for fuel substitution. This decision allows a customer to electrify a gas appliance for an electric one and receive ratepayer assistance for it. As the state moves towards a carbon neutral electric grid, efficiency and electrification are low-cost and low risk options to decarbonize buildings. It is possible that additional and verifiable RNG could be another strategy. Since there is limited availability of RNG, the RNG should be prioritized to end uses where electrification is not a cost-effective or viable strategy. These end uses, such as industrial heating, are good uses of RNG where electrification cannot occur.[6] Another example might be high-reliability organizations who have installed self-generation, such as a fuel cell, who still want to decarbonize. Last, limiting

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[2] This is explained more in Appendix A, EDF blog, "Not All Biogas Is Created Equal" and is based on recommendations from a paper released by the World Resources Institute in April 2018.
[3] See Gasper and Serachinger, "The Production and Use of Waste-Derived Renewable Natural Gas as a Climate Strategy in the United States." 2018. Available online at https://www.wri.org/publication/renewable-natural-gas
[4] Applicants Direct Testimony, Chapter 3, at 3.
[5] Applicants Direct Testimony, Chapter 2, at 8.
[6] See https://www.ethree.com/wp-content/uploads/2019/10/The-Role-of-Electricity-in-Decarbonizing-California%E2%80%99s-Energy-System-CEC-Workshop-24-Sept-2019.pdf

participation to non-residential customers would also align with the rules that are being developed for the BUILD and TECH programs to promote building decarbonization in Rulemaking 19-01-011[7].

As proposed, non-residential customers who elect to enroll in the RNG Tariff sign up for a percentage of total gas delivery to come from RNG. This amount is relatively easy to estimate and therefore procure. The Applicants have access to historical customer gas usage information, and can estimate the amount of RNG that would be needed to be solicited during a procurement process. The same level of clarity cannot be determined from the process proposed for residential customers. It is unclear how much RNG can be procured from a fixed dollar amount as proposed in the residential portion of the Application. There is not yet a robust of a market index for RNG that would translate the fixed price surcharge into an amount of RNG to be procured. The Applicants would need to know how much gas it needs to procure as part of its solicitation, and because the market is relatively nascent, it is not clear how much "bang for the buck" it can achieve from having residential customers dollars participate. As identified[8] in Witness Peacock's testimony, one of the goals of this program is to further develop the RNG market itself. The ability to estimate the amount of RNG available on a fixed surcharge amount might be a metric of a successful market in the future. For now, however, it is unclear how much gas would be procured by a monthly surcharge.

Since the Commission should track the total amount of gas being procured under this program to ensure its additionality and verifiability that it is reducing greenhouse gas emissions, looking at a set amount of gas to be purchased using the methodology determined for non-residential customers (on a percentage basis) is far easier to implement and to track.

If the Commission elects to allow residential customers to participate in this program, EDF suggests that it should prioritize residential buildings that have undergone recent energy efficiency upgrades. In these instances, customers will have already taken steps to reduce energy usage so customers could use this tariff to further decarbonize their building beyond the efficiency measures installed.

IV. Marketing and Enrollment

The Application and Witness testimony does not fully contemplate how existing customer facing programs, including energy efficiency, could be used to target customers. Customers who have

[7] The Commission should ensure that participation in this voluntary tariff does not constitute exclusivity in participation in other offering envisioned either in R.19-01-011, the energy efficiency portfolio or other program offerings.
[8] Applicant Direct Testimony, Chapter 1, at 4.

undergone energy efficiency have self-identified as either being interested in energy usage management, bill management, or both. Given the state's long history with the energy efficiency programs, using these customers as a starting point could result in a higher "hit rate" than a generic notice of availability, and therefore be a more cost-effective strategy.

The joint Applicants should also be directed to explain in customer-friendly ways the difference between RNG and fossil gas, including sources, location of the gas. Rather than litigate marketing education and outreach strategies, it is more appropriate for the Commission to order the Applicants to participate in a working group (perhaps moderated by Commission staff) to determine some of these details in a collaborative fashion.

Last, the Application does not include sufficient references to how enrollment in this program could be used as an on-ramp to other customer energy management programs. Given the limited availability of RNG, customers should use the RNG as efficiently as possible. EDF recommends that any customer that participates in this voluntary tariff be directed to the relevant energy efficiency audit and program offerings.

V. Safety Matters

It is possible that the Applicants may target specific municipalities, neighborhoods or geographic regions to enroll in this tariff. To the extent that this style of customer targeting occurs, the utility should be directed to coordinate with operational functions to ensure that the underlying distribution pipelines are high integrity and are not leaking. As identified in the Assigned Commissioner's Scoping Memo Question #7,[9] ensuring that the limited RNG gas is not leaked into the atmosphere needlessly through low integrity pipes is a critical infrastructure issue.[10]

Further, the same standards of "lost and unaccounted for gas" that the Commission established in D.19-08-020 should be applied to RNG. In this Decision, the Commission rationalized that since the gas utilities received money to prevent leaks from pipes, that they should not also be allowed to recover money from customers for leaked gas that was "lost and accounted for." The same principles should apply to leaked RNG, and the ratemaking treatment outlined in Witness Austria's testimony[11] should be augmented to reflect the standard developed in D.19-08-020. Specifically, the Balancing Account being requested should be specified to not include any recovery for "lost and unaccounted for gas" consistent with D.19-08-020. This would continue to align the Commission's

[9] Assigned Commissioner Scoping Memo and Ruling, at 3.
[10] Applicants Supplemental Testimony, Chapter 5, at 17, did not determine any infrastructure or safety investments necessitated by this tariff.
[11] Applicants Direct Testimony, Chapter 4, at 2.

objectives of ensuring that leaks are prioritized and that shareholders continue to receive the incentive to not leak methane, whether it come from fossil or biogenic sources.

VI. CARE Program Eligibility

EDF recommends that this program be offered to non-residential customers. However, if the Commission elects to also offer this program to residential customers, then the program should be offered to customers who receive an income qualified bill discount via the California Alternate Rates for Energy (CARE).

In D.16-11-022, the Commission authorized the use of the CARE discount for a similar voluntary electric program, the Green Tariff Shared Renewables (GTSR) Program.[12] Unlike the GTSR, this Application is voluntary and does not contain the same constraints as established by the legislature. This Application is deficient that it does not adequately address how the CARE subsidy could be applied to participating customers. For the sake of simplicity, EDF suggests that the natural gas 25% discount simply be applied to any program surcharge that is offered. This is illustrated below, using the examples provided in Witness Wooden's testimony[13] as the values in the left hand side and the 25% CARE discount take out on the right hand side.

Proposed Monthly Residential Surcharge	**Monthly Residential Surcharge With CARE Discount (20%)**
$10	$8
$20	$16
$30	$24
$50	$40

Since this is a voluntary program, the non-CARE participating customers can make up any revenue shortfalls that may be experienced by the Applicants. However, since the total amount of gas being purchased for residential customers is determined using a budget established by a fixed dollar amount, this amount should be negligible.

[12] D.15-01-051 established the rules of the GTSR as established in California Public Utilities Code 2831.
[13] Applicant Direct Testimony, Chapter 3, at 3.

VII. Qualifications

Michael Colvin is the Director, California Energy Program at EDF. He has been with EDF since August 2018. At EDF, Mr. Colvin works on issues related to building decarbonization, transportation electrification, wholesale markets, stranded assets, procurement, amongst others. Mr. Colvin routinely appears before both the Commission, California Energy Commission and the legislature. Prior to joining EDF, he worked at the California Public Utilities Commission for 10 years. Mr. Colvin holds a Masters in Public Policy from the Goldman School of Public Policy at University of California Berkeley. He also received a Bachelor of Science with honors in Environmental Economics and Policy, also from University of California, Berkeley.

VIII. Appendix A

As referenced above, the Appendix contains a blog post, entitled "Not All Biogas is Created Equal" posted on April 15, 2019.