BEFORE THE
MARYLAND PUBLIC SERVICE COMMISSION

PETITION OF THE OFFICE OF PEOPLE'S COUNSEL FOR NEAR-TERM PRIORITY ACTIONS AND COMPREHENSIVE, LONG-TERM PLANNING FOR MARYLAND'S GAS COMPANIES	* * *	CASE NO. 9707 (Phase II)

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REBUTTAL TESTIMONY

OF

SOL DELEON

ON BEHALF OF THE OFFICE OF PEOPLE'S COUNSEL

July 13, 2026

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Sol deLeon. I am a Principal Associate at Synapse Energy Economics located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.

Q. Have you previously testified in Case No. 9707?

A. Yes. I provided initial and reply testimony in this case on May 4, 2026.

Q. On whose behalf are you appearing?

A. I am presenting testimony on behalf of the Maryland Office of People's Counsel.

Q. Have you prepared exhibits to accompany your testimony?

A. Yes. I have prepared the following exhibit: Exhibit SD-R1, Staff response to OPC Data Request 1-12.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the Office of Staff Counsel ("Staff"), Maryland Department of the Environment ("MDE"), Maryland Energy Administration ("MEA"), Chesapeake Community Action Network ("CCAN"), and the Sierra Club filed on May 4, 2026 in Case No. 9707. Specifically, I respond to certain other parties' arguments regarding the use of certified natural gas ("CtNG") and alternative fuels such as renewable natural gas ("RNG") and hydrogen as a decarbonization strategy, and I raise concerns about the cost impacts of

a decarbonization strategy that includes CtNG, RNG or hydrogen. Note, this testimony does not respond to other parties' arguments exhaustively; my silence on any particular argument should not be construed to mean I agree with that argument nor should any other conclusion be drawn from that silence.

Q. What are your key findings from reviewing intervenors' May 4, 2026, testimony?

A. My findings are as follows:

- Staff witness John Clementson has not adequately considered the cost and availability of RNG. Furthermore, Mr. Clementson has not adequately considered the cost of implementing alternative fuels at scale.
- Mr. Clementson has not considered the emission reduction potential of CtNG and of RNG.
- I recommend caution regarding Staff witness Alden Manka's recommendation for the continued approval of the purchase and cost recovery of CtNG and RNG in the near term. The Commission should ensure that ratepayers are protected from the potential cost impacts of blending higher cost CtNG and RNG into the system..

Q. Please provide an overview of this rebuttal testimony.

A. In the first section, I summarize the policies in Maryland that have implications for building sector emissions. I then discuss the

recommendations made by Staff witnesses Clementson and Manka and address the areas where I disagree with them.

Q. What Maryland policies have implications for building sector emissions?

A. Maryland has current and forthcoming policies that require significant emission reductions within the building sector including the Climate Solutions Now Act ("CSNA") and the Clean Heat Standard ("CHS"). The CSNA calls for economy-wide GHG emissions reductions of 60 percent relative to a 2006 baseline by 2031 and net zero GHG emissions by 2045.[1] The CHS is a forthcoming policy expected to require gas companies to reduce their GHG emissions according to a schedule. Per Executive Order 01.01.2024.19, MDE is developing the specific requirements for the CHS, which is expected to be finalized in 2027.[2]

Q. Do MDE, MEA, Sierra Club, CCAN, and any Staff witnesses agree that changes to the building sector and to gas planning are necessary to achieve State emission reduction targets?

A. Yes. Staff witness Anson Justi states, "Maryland will have a difficult time achieving its climate goals and net-zero GHG emissions if it maintains

[1] Climate Solutions Now Act of 2022, S.B. 528, 2022 Leg., 444th Sess. (MD 2022), 2022 Md. Laws ch. 38.
[2] Executive Order 01.01.2024.19, Governor Moore, Implementing Maryland's Climate Pollution Reduction Plan, June 4, 2024. Available at: https://governor.maryland.gov/Lists/ExecutiveOrders/Attachments/52/EO%2001.01.2024.19%20Leadership%20by%20State%20Government-%20Implementing%20Maryland%27s%20Climate%20Pollution%20Reduction%20Plan_Accessible.pdf.

natural gas use at current levels."[3] MDE maintains that it is impossible to achieve climate targets if gas consumption stays at current levels.[4] MDE estimates that direct fuel use in residential buildings must decrease 82 percent from 2006 levels, and 92 percent in commercial buildings in order to meet the State's 2045 net zero goal.[5] MEA notes that climate policies should not merely be acknowledged conceptually, but incorporated quantitatively into scenario planning.[6] Sierra Club and CCAN similarly express the need to change current gas planning practices to achieve State energy policies.[7]

Q. Describe Staff witnesses' recommended decarbonization strategies involving alternative fuels.

A. Staff presents a variety of decarbonization strategies involving alternative fuels to pursue in the near-, mid-, and long-term. In the near term, Mr. Clementson recommends the use of RNG and CtNG.[8] He claims that implementing RNG and CtNG is a realistic and affordable strategy for achieving State climate goals that utilizes the existing system.[9]

[3] Direct Testimony of Staff Witness Anson R. Justi at 8:1-2.
[4] Direct Testimony of MDE Witness Chris Hoagland at 10.
[5] MDE Witness Hoagland Direct Testimony at 11.
[6] Direct Testimony of MEA Witness Joyce Lombardi at 7.
[7] Direct Testimony of Sierra Club Witness Jim Grevatt at 7:1-3; Direct Testimony of CCAN Witness Bradley Cebulko at 14:12-15:2.
[8] Direct Testimony of Staff Witness John J. Clementson at 2:22-25.
[9] Staff Witness Clementson Direct Testimony at 7:15-19.

Q. What does Mr. Clementson say about the cost and availability of RNG?

A. Mr. Clementson quotes an American Gas Association press release from 2025 indicating that RNG could be produced for a median of $20/MMBtu.[10] However, he does not discuss the supply and availability of RNG.

Q. What does Mr. Clementson say about the cost and availability of CtNG?

A. Mr. Clementson states that CtNG has a premium of five to 15 cents ($0.05-$0.15) over the market price of natural gas.[11] However, he does not discuss the supply and availability of CtNG.

Q. Do you agree with Mr. Clementson's position that gas companies should utilize RNG and CtNG as a near-term decarbonization strategy?

A. No, I disagree with Mr. Clementson's position because of several flaws with his recommendation.

First, CtNG is conventional natural gas. As I discussed in my initial and reply testimony, CtNG should not be considered an alternative fuel because it is conventional natural gas with an associated certification process.[12]

Second, Mr. Clementson does not demonstrate that he considered the scale or duration of the procurement that a meaningful decarbonization strategy would require, nor does he account for future market dynamics and

[10] Staff Witness Clementson Direct Testimony at 8:14-16.
[11] Staff Witness Clementson Direct Testimony at 11:1-2.
[12] Initial and Reply Testimony of OPC Witness Sol deLeon at 22:3-6.

the likelihood of rising costs of alternative fuels. Focusing on RNG, Mr. Clementson, referencing an AGA study, states that the RNG median production cost for RNG is $20.00 per MMBTU.[13] Mr. Clementson does not provide a range of production costs nor does he provide information on RNG prices for Maryland utilities.[14] While the $20/MMBtu figure is not inaccurate as the median figure, it is incomplete and not fully representative of the range of outcomes. The underlying study from ICF shows that RNG production costs vary substantially by feedstock. For example, the range of costs from water resource recovery facility ranges from $7/MMBtu to $97/MMBtu.[15] It reaches as high as $46/MMBtu for thermal gasification sources[16] and up to $170/MMBtu for RNG produced from animal manure.[17] The RNG cost information Mr. Clementson provides presents a false sense of precision, overlooking the many variables that will affect actual costs going forward. These estimates represent a snapshot of costs in a specific time and not a forward-looking assessment. There is the potential for upward pressure on RNG prices as demand increases, driven by other entities seeking RNG and other alternative fuels to decrease the carbon

[13] Staff Witness Clementson Direct Testimony at 8:14-16.
[14] Staff Response to OPC Data Request 1-12, Exhibit SD-R1.
[15] American Gas Foundation and ICF, *Renewable Natural Gas Supply Assessment: Final Report* (July 2025), at 72, *available at* https://gasfoundation.org/wp-content/uploads/2025/07/AGF-RNG-Study_FINAL-09022025.pdf (hereinafter "ICF RNG"). Note: Per page 65 of the report, the production cost estimates are for 2050 (reported in 2024 dollars).
[16] ICF RNG at 82
[17] ICF RNG at 69.

intensity of the gas they are using, and as suppliers begin to rely on feedstock that is more costly to convert to RNG.

With respect to CtNG, Mr. Clementson states that certified natural gas costs an additional $0.05-$0.15 per MMBTU over market natural gas rates.[18] As with RNG, there can be upward pressure on CtNG prices as demand increases.

Third, Mr. Clementson does not investigate the ratepayer impacts of switching to alternative fuels at the whole system level. The utilities themselves have expressed concerns about the price and volume of RNG as I discussed in Section III of my initial and reply testimony.[19] An increasing percentage of RNG in delivered natural gas would increase the supply rates of the commodity, given that RNG is projected to cost more than conventional natural gas.[20] This may also change the relative cost of gas versus electric heating, potentially leading to increased levels of electrification.

[18] Staff Witness Clementson Direct Testimony at 11:1-2.
[19] OPC Witness deLeon Initial and Reply Testimony at 29:13 to 30:2.
[20] OPC Witness deLeon Initial and Reply Testimony at 28:8-11.

Q. Finally, Mr. Clementson does not adequately consider the limited availability of RNG. As I noted in my testimony,[21] it is very unlikely that sufficient volumes of RNG will be available for gas utilities to blend into their systems at a scale sufficient to support meeting the state's climate goals. Do Mr. Clementson and Mr. Manka adequately address the implications for the utilities and the gas system of utilizing alternative fuels?

No. Mr. Clementson and Mr. Manka fail to adequately address two issues facing the utilities if they were to attempt to significantly scale up their use of RNG and CtNG. First, procuring and injecting alternative fuels, particularly RNG, requires internal utility resources to develop supply contracts, verify environmental claims, and ensure safe injection of RNG into the distribution system. To the extent that specialized knowledge about RNG contracting or RNG interconnections is required, operational costs could increase as new employees may need to be hired or current employees have to undergo specialized training.

Second, the use of alternative fuels will require continued maintenance and investment in the gas system at or near its current levels. The utilities and Staff should evaluate and consider these maintenance and investment costs when discussing the economics of a strategy that includes the use of alternative fuels. Instead of CtNG and RNG blending, utilities should focus on identifying and implementing lower cost methods to support achieving the state's climate goals. For example, as OPC Witness Alice

[21] OPC Witness deLeon Initial and Reply Testimony at 27:1-16.

Napoleon discusses, the utilities and Staff should evaluate and consider the costs and other aspects of alternatives when discussing the economics of a decarbonization strategy.[22]

Q. What does Staff witness Manka request from the Public Service Commission regarding the procurement of alternative fuels?

A. Regarding Issue 10(a), Mr. Manka requests that the Commission continue to approve the purchase and cost recovery of CtNG and RNG in Purchased Gas Adjustment ("PGA") cases, as long as these purchases are "within the market price range."[23] Mr. Manka states that "[t]his will reduce the overall GHG emissions associated with the natural gas distribution system without increasing costs to consumers."[24]

Q. What is your response to Staff witness Manka's recommendation for the Commission to continue approving the purchase and cost recovery of CtNG and RNG?

A. I recommend the Commission exercise caution regarding the purchase and cost recovery of CtNG and RNG. As discussed above, both CtNG and RNG are projected to cost more than traditional natural gas. Moreover, it is unclear if Mr. Manka has evaluated the emission reduction potential of RNG. As I noted in my testimony, depending on the feedstock used to create RNG, the carbon intensity reduction may not be as significant as expected.[25]

[22] OPC Witness Napoleon Rebuttal Testimony at 10:18-11:9.
[23] Direct Testimony of Staff Witness Alden Manka at 3:10-14.
[24] Staff Witness Manka Direct Testimony at 3.14-16
[25] OPC Witness deLeon Initial and Reply Testimony at 34: 11-13.

Furthermore, even the types of RNG with relatively lower emissions factors generate substantial lifecycle emissions.[26] Finally, as discussed in my testimony, CtNG should not be considered an alternative fuel and it will not meaningfully contribute to the reduction of the State's carbon emissions inventory.[27]

Considering that CtNG and RNG are not viable alternatives for use in the existing natural gas system to assist in achieving the State's climate goals,[28] immediate term utility purchases of CtNG and RNG should be examined rigorously to ensure that ratepayers are not paying additional premiums over the cost of traditional natural gas for little or no benefit.

Q. Do certain other parties agree that alternative fuels are not a viable, scalable decarbonization strategy?

A. Yes. MDE and Sierra Club hold similar positions to OPC that alternative fuels are not a viable strategy for decarbonizing the distribution system at scale. MDE asserts that RNG and other alternative fuels could be beneficial for hard-to-decarbonize industrial customers or as a back-up alternative fuels are not a sustainable alternative to natural gas due to limited supply, high cost, and the impacts on local air pollution.[29] Sierra Club witness Michael Walsh argues that neither RNG nor hydrogen can realistically or affordably

[26] OPC Witness deLeon Initial and Reply Testimony at 34:15-16.
[27] OPC Witness deLeon Initial and Reply Testimony at 32:9-16.
[28] OPC Witness deLeon Initial and Reply Testimony at 5:20-6:7.
[29] MDE Witness Hoagland Direct Testimony at 19.

serve as decarbonization strategy, and that certified gas is not an alternative fuel.[30]

Q. Does this conclude your rebuttal testimony?

A. Yes.

[30] Direct Testimony of Sierra Club Witness Michael Walsh at 4:16-20 and 10:7-13.

Petition of the Office of People's Counsel for Near-Term, Priority Actions and Comprehensive, Long-Term Planning for Maryland's Gas Companies

Case No. 9707, Phase II

Exhibit SD-R1 – Staff Response to OPC Data Requests

Staff Response to OPC DR 1-12

Staff Response to
Office of People's Counsel Data Request No. 1
Case No. 9707, Phase II
July 7, 2026

1-12. Refer to Witness Clementson's testimony at page 8, line 14 through line 16, where he references an American Gas Association ("AGA") news release indicating that "RNG could be produced for a median of $20 per MMBtu."

(a) The $20/MMBtu figure reflects a median production cost. Please provide the full range of production costs reported in the same source, including the low and high ends of the distribution, and identify what share of projected RNG supply in Maryland would be available at or below $20/MMBtu.

Response:

Unfortunately, the news release did not provide the full range of production costs. Witness Clementson does not have any information regarding the share of projected RNG supply in Maryland that would be available at or below $20/MMBtu.

(b) Is Witness Clementson aware of any studies, analysis, or actual procurement transactions specific to Maryland that indicate the price at which Maryland gas utilities would need to purchase RNG? If so, please provide them or identify where they are publicly available. If no Maryland-specific data exists, please explain how the AGA national median of $20/MMBtu can be considered representative of the costs that Maryland utilities will incur.

Response:

No, Witness Clementson is not aware of any studies, analysis or actual procurement transactions specific to Maryland that indicate the price at which gas utilities need to purchase RNG. The AGA national median of $20/MMBtu for RNG is the national average of the cost of RNG at the time of the study completion. At this time, Witness Clementson is unaware of if the current average cost of RNG being produced in Maryland is above or below the national median reported in AGA's study.

Sponsor:

John Clementson