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I. Introduction

Acadia Center appreciates the opportunity to file this brief concerning the petition of Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty (“Liberty” or “the Company”) seeking review and approval by the Department of Public Utilities (the “Department”) of an agreement to purchase renewable natural gas (“RNG”) from Fall River RNG LLC and of the Liberty RNG Program in the above-captioned proceedings.

As a non-profit research and advocacy organization committed to advancing the clean energy future, Acadia Center has been a thought leader concerning the future of natural gas in the Commonwealth. Through Acadia Center’s participation in the D.P.U. 20-80 stakeholder process and docket, we have undertaken extensive research and analysis into the net greenhouse gas (“GHG”) impacts, availability, and likely cost of renewable natural gas, and the interplay between the market for biomethane and synthetic natural gas. Our organization has seen first-hand in that docket the issues presented with labeling RNG as “low-carbon” or “low-emissions.”

Acadia Center strongly supports adopting utility incentives and programs that will advance equity and reduce energy burdens and GHG emissions. However, the RNG contract and program proposed by Liberty do nothing to advance those priorities and will only impede the Commonwealth’s economy-wide decarbonization efforts.

The enactment of Chapter 8 of the Acts of 2021, *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy* (“the Climate Act”) expanded the priorities that the Department must balance. The Department must now, “with respect to itself and the entities it regulates, prioritize...equity and reductions in GHG emissions to meet statewide GHG emission

limits and sublimits established pursuant to chapter 21N.”¹ This mandate must be front and center in every decision that the Department makes, and this petition is no exception.

With this directive in mind, the Department should not approve Liberty’s proposed contract, RNG program, or tariff. Acadia Center has several concerns with the petition and has identified the following issues:

- 1) The proposed RNG Contract does not compare favorably to the range of alternative options reasonably available.
- 2) The proposed contract is not in the public interest, as it is not consistent with the Global Warming Solutions Act and other climate laws.
- 3) The Liberty RNG voluntary participation program provides no emissions reduction benefit, results in higher costs for participants, and is potentially deceptive.
- 4) The proposed tariff is unnecessary, as the RNG Contract and Liberty RNG should be rejected, and the Company should bear the risk.

II. Background

A. Procedural History

On March 31, 2022, Liberty filed with the Department a petition for approval of an agreement with Fall River RNG LLC, a subsidiary of Fortistar Methane Group (“Fortistar”), for its Fall River and North Attleboro service territories. The filing includes an agreement for a twenty-year period commencing November 1, 2022 (“RNG Contract”), a voluntary RNG participation program, and a proposed RNG Service tariff. The evaluation of these provisions was docketed in these proceedings. In support of its plans, the Company filed multiple sets of testimony and exhibits, along with numerous responses to information requests. On May 13,

¹ G.L. c. 25, § 1A.

2022, Acadia Center filed for intervention, which the Department granted. On June 3, 2022, Acadia Center, Conservation Law Foundation, and Sierra Club filed a Joint Motion to Stay the Proceeding, which the Department denied. The Office of the Attorney General filed a Motion to Dismiss on June 24th, 2022, which was also denied. Acadia Center filed Direct Testimony on July 15th, 2022.

B. Liberty's Proposal

Liberty proposes a purchase and sale agreement for RNG with Fall River RNG LCC, a subsidiary of Fortistar. Fortistar is expected to construct an RNG Facility to collect, treat, and compress landfill gas to meet the specifications of the RNG Contract.² The RNG Contract is for a term of 20 years, with an anticipated commencement date of November 1, 2022.³ On that date, Liberty will have the exclusive right to purchase from Fortistar, and Fortistar is obligated to sell and deliver exclusively to the Company specific annual minimum and maximum RNG volumes.⁴ Under the RNG Contract, Fortistar must deliver quantities of RNG ranging from 84,458 Dths to 196,796 Dths per year over the course of 20 years, up to maximum annual supply quantities ranging from 168,917 Dths to 281,137 Dths.⁵ The purchase price for RNG meeting the requirements of the RNG Contract delivered to Liberty is a fixed price of \$9.25 per Dth, which will be increased annually by two percent.⁶ By the final year of the contract, the fixed price will be \$13.48 per Dth.⁷

² Exh. LUI-WC/TW-1, at 5.

³ *Id.*

⁴ *Id.*, at 4-5.

⁵ Exh. LU-DG/KJ-1, at 6.

⁶ *Id.*

⁷ *Id.*, at 6-7.

The Company further proposes to create *Liberty RNG*, a voluntary RNG participation program for customers in Fall River and North Attleboro service territories. Liberty RNG would allow participating customers to purchase RNG representing either the equivalent of: (1) 100 percent; (2) 50 percent; or (3) 25 percent of the participant's total gas usage.⁸ The RNG would be priced at the RNG rate determined in the Company's Seasonal Cost of Gas Adjustment filings.⁹ Any RNG volumes not sold to Liberty RNG customers that the Company is obligated to pay for under the RNG Contract would be included as recoverable firm gas costs under the Company's Seasonal Cost of Gas Adjustment Clause ("CGAC") tariff.¹⁰

The bill impact analysis shows annual increases of \$159 (10.6%), \$318 (21.3%), and \$636 (42.6%), respectively for customers opting for 25, 50, or 100 percent of RNG supply, for an average use residential heating customer using 906 therms per year.¹¹ The bill impact analysis shows annual increases of \$17 (6.1%), \$34 (12.2%), and \$69 (24.4%), respectively for customers opting for 25, 50, or 100 percent of RNG Supply, for an average use residential non-heating customer using 151 therms per year.¹² These bill impacts represent the additional costs paid by Liberty RNG participating customers, compared to typical non-participating customers using the same amount of natural gas.¹³

III. The Department Should Reject Liberty's Petition

G.L. c. 164, § 94A mandates that the Department review contracts for the purchase of gas covering a period in excess of one year. The Department has determined that in evaluating a gas

⁸ Exh. LU-DAH-1, at 3.

⁹ *Id.*

¹⁰ *Id.*

¹¹ Exh. LU-DAH-1, at 8.

¹² *Id.*

¹³ *Id.*

utility's options for the acquisition of capacity as well as commodity resources under this section, the Department will determine whether or not it is consistent with the public interest.¹⁴ In order to demonstrate that a proposal is within the public interest, a local distribution company ("LDC") must demonstrate that the proposal is 1) consistent with the company's portfolio objectives, and 2) compares favorably to the range of alternative options reasonably available to the company and its customers.¹⁵

In establishing that a resource is consistent with the Company's portfolio objectives, the Company may refer to portfolio objectives established in a recently approved forecast and supply plan or in a recent review of supply contracts under G.L. c. 164, § 94A, or may describe its objectives in the filing accompanying the proposed resource.¹⁶ The Department considers relevant price and non-price factors in its review.¹⁷ The Department will consider whether the pricing terms are competitive with those for the broad range of capacity, storage and commodity options that were available to the filing LDC at the time of the acquisition, as well as with those opportunities that were available to other LDCs in the region.¹⁸ The Department also typically considers consistency with the Global Warming Solutions Act as part of its public interest review.¹⁹ With the passage of climate legislation in 2021, the Department now has a mandate to prioritize safety, security, reliability of service, affordability, equity and reductions in GHG emissions to meet statewide GHG emission limits and sublimits established pursuant to chapter 21N.²⁰ Liberty's petition should be rejected by the Department, as it is not in the public interest.

¹⁴ D.P.U. 94-174-A, at 27.

¹⁵ *Id.*

¹⁶ D.P.U. 94-174-A at 27-28.

¹⁷ *Id.*, at 28.

¹⁸ *Id.*

¹⁹ D.P.U. 17-172, at 55.

²⁰ D.P.U. 21-29, at 31 n15.

The proposal fails the public interest test of D.P.U. 94-174-A, as the proposal is too costly and purported climate benefits are not consistent with the Global Warming Solutions Act and other climate laws. In addition, the proposed *Liberty RNG* is unnecessary, potentially deceptive, and not in the public interest. The proposed tariff is unnecessary and improperly places commercial risk upon ratepayers rather than the Company.

A. The Proposed RNG Contract Does Not Compare Favorably to the Range of Alternative Options Reasonably Available to the Company and Should Be Rejected

When reviewing a traditional natural gas proposal, the Department compares the resource to market offerings and reviews relevant price and non-price factors.²¹ The Department considers whether pricing terms are competitive with those for the broad range of capacity, storage and commodity options that were available to the filing LDC at the time of acquisition, as well as those that were available to other LDCs in the region.²² The Department also considers non-price alternatives, such as the flexibility of nominations, and reliability and diversity of supplies.²³ In making these determinations, the Department considers whether the LDC used a competitive solicitation process that was fair, open, and transparent.²⁴

RNG as a commodity is different than traditional natural gas and should be analyzed under a different lens, as this brief will cover in greater detail below. However, because this proposed RNG contract assigns the Environmental Attributes to Fortistar, this proposed contract could be evaluated as one for traditional natural gas.²⁵ Under a standard D.P.U. 94-174-A

²¹ D.P.U. 94-174-A, at 28.

²² *Id.*

²³ *Id.*, at 28-29.

²⁴ D.T.E. 02-56, at 10.

²⁵ Exh. AG-DM-1, at 37.

analysis, Liberty has not demonstrated that the proposed contract compares favorably to the range of alternative options reasonably available to the Company.

As stated above, the purchase price for RNG meeting the requirements of the RNG Contract delivered to Liberty is a fixed price of \$9.25 per Dth, which will be increased annually by two percent.²⁶ By the final year of the contract, the fixed price will be \$13.48 per Dth.²⁷ The average costs of geologic gas purchased by Liberty over the last five years was around \$4.78/Dth.²⁸ The Company's forecast of NYMEX monthly average price through 2032 is \$4.76/Dth.²⁹ Both of these figures are an order of magnitude away from Liberty's proposed pricing for the start and final year of the RNG Contract. Liberty stated that neither of these options are fair comparisons, for various reasons.³⁰ However, the figures provided by the Company also give pause. They compare the initial \$9.25 per Dth contract price to the current effective Gas Adjustment Factor of \$7.258 per Dth, a difference of around \$1.99 per Dth.³¹ Even this more favorable comparison still represents around a 27 percent increase. Clearly this is not a favorable comparison.

As stated above, the bill impact analysis shows significant annual increases for customers, ranging from 6.1% to 42.6% depending on the percentage of RNG supply and rate structure. Additionally, absent participation in the program, the RNG Contract may cost an additional \$1.26 million during a normal weather year, representing the potential for a 3.6 percent increase in overall gas costs, even for non-participants.³² It could be possible for a

²⁶ Exh. LU-DG/KJ-1, at 6.

²⁷ *Id.*, at 6, 7.

²⁸ Exh. SC-BC-CS-1, citing Liberty Utilities Response to Information Request SC-1-1 Attachment.

²⁹ *Id.*, citing Liberty Utilities Response to Information Request SC-2-11.

³⁰ Exh. LU-Rebuttal-1, at 16-17.

³¹ Exh. LU-DAH-1, at 10-11.

³² Exh. LU-Rebuttal-1, at 9.

company to prove that these higher costs are reasonable, such as by demonstrating benefits of this product over alternatives, including potential environmental benefits from capturing would-be-vented landfill gas. But in this case, there are none. Given that Liberty will not retain the environmental attributes in this proposal, there is no reason for this premium over traditional natural gas. The pricing and cost fail that comparison.

Further, the Company has not shown that the proposed contract compares favorably to other options, such as energy efficiency, demand response, or other “non-pipeline alternatives.”³³ The RFP that the Company issued was specifically seeking bids for RNG supplies.³⁴ Measures like energy efficiency are not guaranteed to be more cost effective.³⁵ But evidence to support a comparison is needed to determine the favorability of RNG.³⁶ Liberty makes no attempt at any other methods of comparing the pricing and terms of this proposed contract with other alternatives, like other RNG contracts, or alternative ways to provide GHG reductions.³⁷ The Company notes in rebuttal testimony that it has assessed and pursued non-pipeline alternatives, such as energy efficiency, to reduce demand.³⁸ However, they provide no figures or information to support this claim. Liberty bears the burden of proof to show that the contract compares favorably to alternatives.³⁹ Without such information on “non-pipeline alternatives,” the Department cannot conclude that Liberty has done so. Given that the pricing of the contract is excessive and the Company has not provided enough information about reasonable alternatives, the Department should reject Liberty’s proposed contract.

³³ Exh. SC-BC-CS-1, at 26.

³⁴ Exh. LU-DG/KJ-1, at 27.

³⁵ Exh. CLF-MJW-JK-01, at 12.

³⁶ *Id.*, at 13.

³⁷ Exh. AG-DM-1, at 37.

³⁸ Exh. LU-Rebuttal-1, at 3.

³⁹ D.P.U. 94-174-A, at 22.

B. The proposed Contract is not in the Public Interest, as it is not Consistent with the Global Warming Solutions Act and other Climate Laws, and Should be Rejected.

As outlined above, when determining public interest, the Department considers whether a proposal is consistent with the Global Warming Solutions Act.⁴⁰ Liberty's proposed RNG Contract is inconsistent with Global Warming Solutions Act, and therefore should be rejected.

1. The Proposed Contract is not in line with the Massachusetts' 2050 Roadmap

The original Global Warming Solutions Act set statewide emissions limits for the Commonwealth of 25 per cent below 1990 emissions levels by 2020 and at least 80 per cent below the 1990 emissions levels 2050.⁴¹ These figures were updated in 2021 to net zero by 2050, with interim limits of at least 50 per cent by 2030 and at least 75 per cent by 2040.⁴² The Department of Environmental Protection was also tasked with developing clear and specific roadmap plans to realize these limits.⁴³ The Executive Office of Energy and Environmental Affairs published its final Decarbonization Roadmap ("2050 Roadmap") in December of 2020.⁴⁴ This 2050 Roadmap included a technical report on Energy Pathways to Deep Decarbonization ("Pathways Report").⁴⁵ The takeaway from these reports is clear. According to the Commonwealth's own 2050 Roadmap, in order to achieve Massachusetts' emissions reduction

⁴⁰ D.P.U. 17-172, at 55.

⁴¹ 2008 Mass. Acts c. 298, § 3.

⁴² 2021 Mass. Acts c. 8, § 10.

⁴³ *Id.*, at § 8.

⁴⁴ See <https://www.mass.gov/info-details/ma-decarbonization-roadmap>.

⁴⁵ See <https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download>.

requirements under the Global Warming Solutions Act, the state must begin reducing the amount of natural gas utilized by the Commonwealth *immediately*.

The Pathways Report “All Options” pathway was specifically designed to answer the question: “Under the most likely assumptions, what is the least-cost deployment of energy system technologies that achieve deep decarbonization?”⁴⁶ According to the “All Options” pathway, Massachusetts must reduce its use of natural gas from 599 trillion BTUs of gas in 2020 to 44 trillion BTUs of gas in 2050.⁴⁷ By 2030, the All Options pathway shows about a 13% reduction in natural gas usage for residential and commercial buildings relative to 2020 levels. We will need significant changes to business as usual to hit that 13% reduction by the end of the decade. The study found that widespread adoption of electrification paired with increased energy efficiency measures are a lower cost decarbonization strategy in buildings than the use of “alternative fuels,” including RNG, biodiesel, hydrogen, and synthetic natural gas (SNG). In the “All Options” pathway, none of these alternative fuels are used in residential and commercial buildings, as these supply-constrained fuels were found to be most efficiently used in decarbonizing the most difficult-to-electrify portions of the transportation and industrial sectors.⁴⁸ As the “All Options” pathway shows, the use of RNG in pipelines as part of the supply to buildings is inconsistent with meeting GHG emissions reductions requirements.

2. *Liberty has failed to show that the RNG Contract reduces GHG emissions*

The Company claims that the RNG Contract is consistent with the public interest because it contributes to the reduction of GHG emissions.⁴⁹ However, it has failed to adequately support

⁴⁶ Exh. AC-1, at 9.

⁴⁷ Exh. AC-6, at 9.

⁴⁸ *Id.*

⁴⁹ Exh. LU-DG/KJ-1, at 34.

its claims of GHG emissions reduction. Liberty did not conduct any GHG emissions modeling.⁵⁰ Instead they rely upon a consultant's report for Future of Gas analysis submitted in D.P.U. 20-80.⁵¹ Unfortunately, this Future of Gas analysis is critically flawed, because it: 1) dramatically underestimates the GHG impacts associated with methane leaks from the gas system and 2) completely ignores lifecycle emissions of the biofuels used to produce the RNG.⁵² These modeling errors undermine any potential claims for GHG emission reductions from RNG.⁵³ In fact, correcting for these errors shows that potential avoided emissions stemming from using RNG are relatively small. If one utilizes a 20-year Global Warming Potential value of methane of 84 from the IPCC Fifth Assessment Report, if just 3.2% of consumed natural gas is lost to the atmosphere as methane, the GHG impact of that gas is equivalent to that of coal.⁵⁴ Given the significant amount of methane leaks within Massachusetts's distribution system,⁵⁵ even flaring landfill gas at its point of origin would result in lower GHG emissions than carrying it for other uses through pipes.⁵⁶ The Company maintains that this contract will avoid methane leaks on interstate pipelines, as the Fortistar facility is about 500 feet from the Company's distribution system.⁵⁷ However, the Company did not quantify transmission system gas leaks or behind-the-meter gas leaks, and, as such, cannot claim those benefits.⁵⁸

⁵⁰ Exh. AC-1, at 4.

⁵¹ Exh. LU-DG/KJ-1, at 8-9.

⁵² Exh. AC-1, at 4.

⁵³ *Id.*

⁵⁴ *Id.*, at 6.

⁵⁵ Exh. AC-3. This study found six times more methane leaking into the air around Boston than reported in the Massachusetts Greenhouse Gas Inventory compiled by the Massachusetts Department of Environmental Protection. Although similar top-down analyses have not been conducted on a statewide basis, the findings in the Boston Metro area bring into question the current Department of Environmental Protection practice of methane leaks accounting.

⁵⁶ Exh. AC-5, at 8.

⁵⁷ AC-1-3.

⁵⁸ *Id.*

C. The Department Should Reject the Creation of the Voluntary RNG Participation Program, *Liberty RNG*, as it Provides No Emissions Reduction Benefits, Results in Higher Costs for Participants, and is Potentially Deceptive.

In its initial filing, Liberty claims that customers would be interested in RNG because it offers a pathway to the reduction of GHG through the displacement of conventional natural gas.⁵⁹ However, as outlined above, no real emission reductions benefits can be reasonably claimed from this proposed RNG contract. The Company's claims rest upon flawed modeling and other assumptions, and Fortistar, not the Company, would retain the environmental attributes that would be associated with the project.⁶⁰ In fact, when asked if the Company will quantify for enrolled customers the reduction in GHG emissions achieved through this program, Liberty stated that it would not.⁶¹ Liberty would not reference emissions reductions achieved since the environmental attributes would be retained by Fortistar and will not transfer to the customers.⁶² Liberty will not even market the program as "green," or "clean," or make any claims of a reduction in a customer's carbon emissions.⁶³

Instead, Liberty will market the RNG as "surface level methane locally upgraded from the Fall River landfill and directly injected into Liberty's distribution system."⁶⁴ Even with this description, the *Liberty RNG* offering creates a situation ripe for deceptive greenwashing. Liberty need not market the product as green, clean, or emission reducing to cause confusion or mislead consumers. Merely identifying the methane available through this program as "renewable natural

⁵⁹ Exh. LU-WC-TW-1, at 17.

⁶⁰ D.P.U. 3-10.

⁶¹ *Id.*

⁶² *Id.*

⁶³ SC-1-19.

⁶⁴ *Id.*

gas” or “landfill gas” implies some environmental value. By the Company’s own admission, customer interest in the voluntary program would be through an interest in reducing GHG emissions.⁶⁵ Why else would a consumer opt-in to pay more?

Participation in this program comes at a premium, with significantly increased bills. The bill impact analysis shows marked annual increases for customers, ranging from 6.1% to 42.6% depending on the percentage of RNG supply and rate structure.⁶⁶ Consumers will reasonably expect a premium product, namely one that will reduce emissions. They will not understand that most, if not all, of the environmental value has been separated from the product they’re buying. This is dangerously close to deceptive greenwashing.

Given that *Liberty RNG* offering would result in an increase in bills for participants, and is potentially deceptive greenwashing, it is not in the public interest and should be rejected.

D. The Department Should Reject the RNG Tariff, as the Contract Should be Rejected and Ratepayers Should not Bear the Risk

As part of its proposal, the Company has submitted a voluntary RNG opt-in sales tariff service for Department approval.⁶⁷ This tariff would allow participating residential and C&I customers to choose RNG as a supply option and pay the Company’s contract price for RNG plus applicable distribution charges.⁶⁸ As outlined above, the Department should reject both the proposal for the RNG contract and *Liberty RNG*. With no RNG Contract or *Liberty RNG* moving forward, the need for the RNG tariff dissipates, and the Department should reject the proposal.

⁶⁵ Exh. LU-WC/TW-1, 17.

⁶⁶ Exh. LU-DAH-1, at 8.

⁶⁷ Exh. LU-WC/TW-1, at 26.

⁶⁸ *Id.*

But even if the Department opts to accept both the RNG contract and *Liberty RNG*, the RNG tariff should still be rejected. It would be improper for the Company's obligations under the RNG Contract that are not sold to *Liberty RNG* customers to be included as recoverable firm gas costs under the Company's CGAC tariff.⁶⁹ The Company has made the decision to pursue this resource at a premium price, on the belief that they could sell it at a premium based, at least in part, on the perceived environmental attributes.⁷⁰ If the Company is wrong, and consumers do not opt in at predicted rates, it should not fall to the rate base to fill in the gaps. Ratepayers should not bear the higher costs associated with a business risk.

IV. The Department Should Give Greater Weight to the Overall Picture in its Decisions Regarding Climate

As stated above, the Department typically considers consistency with the Global Warming Solutions Act as part of its public interest review.⁷¹ The Department also has a mandate to prioritize safety, security, reliability of service, affordability, equity and reductions in GHG emissions to meet statewide GHG emission limits and sublimits established pursuant to chapter 21N (which was created by the Global Warming Solutions Act).⁷² As also outlined above, the state's 2050 Roadmap clearly demonstrates that the Commonwealth must reduce natural gas usage immediately. However, in decisions issued since the 2050 Roadmap was finalized, the Department has authorized increased or stable natural gas usage.⁷³ In these decisions, the Department found that natural gas special contracts would assist the Commonwealth in achieving its climate and clean energy goals by encouraging customers to use

⁶⁹ *Id.*, at 28.

⁷⁰ Exh. LU-WC/TW-1, at 17.

⁷¹ D.P.U. 17-172, at 55.

⁷² D.P.U. 21-29, at 31 n15.

⁷³ D.P.U. 21-GC-25; D.P.U. 22-GC-03; D.P.U. 21-GC-07.

a lower GHG emitting energy source.⁷⁴ This line of thinking is inconsistent with the Global Warming Solutions Act and the Department’s mandate. While an oil-to-gas conversion may marginally reduce GHG emissions in the near term, decisions that prioritize short-term reductions in GHG emissions over long-term decarbonization will harm the Commonwealth’s attempts to meet its GHG reduction targets and lock the Commonwealth into expensive and dirty infrastructure. Acadia Center urges the Department to adopt a more holistic approach and place a greater weight on the state’s 2050 Roadmap to reach 2030, 2040, and 2050 targets.

Applied in this situation, the Department should not allow any contract that utilizes RNG for home heating – as the *Liberty RNG* program would. As outlined previously, the 2050 Roadmap, concluded, in part, that there is no cost-effective role for “alternative fuels” like RNG in residential and commercial buildings.⁷⁵ Instead, that study’s “All Options” pathway analysis specifically answered the question: “Under the most likely assumptions, what is the least-cost deployment of energy system technologies that achieve deep decarbonization?” with widespread electrification of buildings, primarily using highly efficient heat pumps.⁷⁶ This study concluded electrification is the most cost-effective path to building decarbonization, with the “All Options” pathway calling for electrification of over 90% of residential space heating, 95% of residential water heating, and 95% of commercial heating, water heating and cooking by 2050.⁷⁷ In the “All Options” pathway, no “alternative fuels” like RNG, biodiesel, hydrogen, or synthetic natural gas (SNG) were used in residential and commercial buildings, as the model found these supply-

⁷⁴ D.P.U. 21-GC-07, at 4.

⁷⁵ Exh. AC-1, at 9.

⁷⁶ *Id.*

⁷⁷ *Id.*, at 9-10.

constrained fuels would be most efficiently used in decarbonizing the most difficult-to-electrify portions of the transportation and industrial sectors.⁷⁸

The Princeton Net-Zero America (NZA) Project is another well-respected quantitative modeling study investing cost-effective pathways to economy-wide decarbonization.⁷⁹ While the study is at a national scale, many of the key takeaways from the modeling can help to inform state level decarbonization pathway decision-making.⁸⁰ Similar to the Massachusetts 2050 Roadmap, Princeton’s study found overwhelmingly that the most cost-effective end uses of green hydrogen and RNG were in hard-to-electrify portions of the industrial and transportation sectors and in the provision of “firm power generation” that is less GHG-intensive than, for example, combined cycle natural gas generation and can be relied on when it is needed for as long as it’s needed and serves to compliment intermittent renewable energy resources like wind and solar.⁸¹ In none of the five decarbonization pathways in the study was it cost-effective to use RNG in residential or commercial buildings.⁸² The study also found that the two pathways with the lowest energy system costs over the next 30 years were the “High Electrification” and “High Electrification, Renewables Constrained” pathways.⁸³ Both of these pathways assumed “aggressive end-use electrification” with electricity accounting for 85%-90% of total energy consumption in residential and commercial buildings.⁸⁴

Applying this more holistic view, the Department should reject any contract for RNG that would utilize the fuel to heat buildings. As the *Liberty RNG* program would provide fuel

⁷⁸ *Id.*, at 10.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*, at 10-11.

generally available in the pipeline, it would be used in buildings. As a policy matter, in keeping with the Department's obligations, such contracts should not be approved.

V. Conclusion

Acadia Center appreciates the opportunity to submit this Initial Brief. Based on the foregoing, Acadia Center recommends that the Department reject Liberty's petition, as it is not in the public interest.

Respectfully submitted,

ACADIA CENTER

By its attorney,

/s/ Kyle T. Murray

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Dated: September 16, 2022

CERTIFICATE OF SERVICE

I hereby certify that on September 16, 2022, I electronically served the foregoing documents upon each person identified in the DPU's service lists for the above-captioned proceedings.

Respectfully submitted,

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