

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 21-xxx

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty

Petition for Approval of a Renewable Natural Gas Supply and Transportation Agreement

**DIRECT TESTIMONY**

**OF**

**WILLIAM J. CLARK**

**AND**

**MARK R. STEVENS**

March 4, 2021



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1 **I. INTRODUCTION**

2 **Q. Please state your names, positions, and business addresses.**

3 A. (WC) My name is William J. Clark and my title is Senior Director, Business  
4 Development. My business address is 116 N. Main Street, Concord, New Hampshire.

5 (MS) My name is Mark Stevens and my title is Business Development Professional. My  
6 business address is 116 N. Main Street, Concord, New Hampshire.

7 **Q. By whom are you employed?**

8 A. We are employed by Liberty Utilities Service Corp., which provides services to Liberty  
9 Utilities (EnergyNorth Natural Gas) Corp. (“Liberty” or “the Company”) and Liberty  
10 Utilities (Granite State Electric) Corp. (“Granite State”).

11 **Q. On whose behalf are you testifying today?**

12 A. We are testifying on behalf of Liberty.

13 **Q. Mr. Clark, please state your educational background and professional experience.**

14 A. I graduated from St. Anselm College in Goffstown, New Hampshire, with a Bachelor of  
15 Science degree in Financial Economics in 1991. I have twenty-seven years of experience  
16 in the natural gas and electric LDC industry with roles in Operations, Sales, Marketing,  
17 and Business Development. I joined Liberty in 2012 and progressed into my current  
18 position as Senior Director, Business Development. In this role I am responsible for  
19 strategic growth and expansion opportunities for Liberty’s Eastern Region and New  
20 Hampshire businesses.

1 **Q. Have you previously testified before the Commission?**

2 A. Yes, I have testified before the Commission regarding Liberty's various growth  
3 initiatives.

4 **Q. Mr. Stevens, please state your educational background and professional experience.**

5 A. I graduated from Saint Anselm College in Goffstown, New Hampshire, with a Bachelor  
6 of Science degree in Business in 2000. I have approximately six years of experience in  
7 the natural gas and LDC industry with roles in Sales and Business Development. I joined  
8 Liberty in July 2015 as a Sales Account Manager and have been in my current position as  
9 a Business Development Professional since January 2019. In my current role I am  
10 responsible for strategic growth and expansion opportunities for Liberty's New  
11 Hampshire businesses.

12 **Q. Have you previously testified before the Commission?**

13 A. No, I have not previously testified before the Commission.

14 **II. PURPOSE OF TESTIMONY**

15 **Q. What is the purpose of this filing?**

16 A. In this filing, Liberty is seeking Commission approval of an *RNG Supply and*  
17 *Transportation Agreement* ("RNG Agreement") with RUDARPA North Country, LLC  
18 ("RUDARPA"). An executed copy of the RNG Agreement is provided as Attachment  
19 WJC/MRS-1. The Company is also requesting approval (a) to credit the proceeds from  
20 the sale of the New Hampshire environmental attributes of the RNG toward the  
21 Company's cost of gas ("COG"), excluding the attributes of the RNG sold to those

1 customers who have entered into special contracts, and (b) to cap at five percent the  
2 quantity of “unsold” RNG included in the Company’s overall COG.

3 Our testimony provides an overview of RNG, including the interchangeability of RNG  
4 and traditional pipeline natural gas, and the new infrastructure required. We describe the  
5 material terms of the RNG Agreement and explain how Liberty will utilize and account  
6 for the RNG, including the related environmental attributes. We also review the Letters  
7 of Intent (“LOIs”) from three commercial customers who will sign special contracts to  
8 purchase the RNG, and the Company’s plans to offer RNG more broadly through a  
9 customer “Opt-In” tariff.

10 **III. OVERVIEW OF RENEWABLE NATURAL GAS**

11 **Q. What is Renewable Natural Gas?**

12 A. Renewable natural gas, or RNG, is pipeline compatible gas derived from biogenic or  
13 other renewable sources. The majority of RNG produced today comes from capturing  
14 emissions from existing waste streams found in landfills, wastewater treatment plants,  
15 food waste, and animal manure. To produce RNG, this gas must be treated and cleaned  
16 to remove non-methane components. Once treated and cleaned so that the RNG meets  
17 quality specifications for the receiving natural gas pipeline, it is fully interchangeable  
18 with conventional natural gas and can be injected into the existing gas pipeline system.

19 The many advantages of RNG include the double environmental benefits resulting from  
20 the lower use of fossil fuels and the elimination of natural sources of methane and  
21 greenhouse gas (“GHG”) emissions. That is, use of RNG reduces the methane directly

1 emitted into the atmosphere that would otherwise occur when the organic matter  
2 decomposes, or reduces the GHG emissions when the landfill gas is collected and flared.  
3 GHG emissions are further reduced as a direct result of customers replacing fossil fuel  
4 with RNG.

5 **Q. Is RNG a new product?**

6 A. No, RNG is an established product that has been used for many years. One of the first  
7 RNG projects came online in 1982 at the Fresh Kills landfill in New York. Locally, the  
8 University of New Hampshire has been utilizing bio-methane sourced from the Turnkey  
9 Landfill since 2009 as the primary fuel to operate the university's cogeneration plant.  
10 Most recently, Vermont Gas received Vermont Public Service Board approval to  
11 introduce RNG directly into its pipeline system. RNG is expected to flow for delivery to  
12 Vermont Gas's customers in the first or second quarter of 2021.

13 According to the RNG Coalition, there are currently 157 operational RNG facilities in  
14 North America, with an additional 76 under construction and 79 in development. For a  
15 list of operational RNG facilities, please see Attachment WJC/MRS-2. A link to the  
16 report is available here: <https://www.rngcoalition.com/rng-production-facilities>

17 The National Association of Regulatory Utility Commissioners also supports the  
18 development of pipeline quality biomethane as an RNG resource in the clean energy  
19 economy, as is evidenced by the resolution they passed in February 2010. For a copy of  
20 this resolution, please see Attachment WJC/MRS-3.

1 **Q. Does independent research support the viability and environmental benefits of RNG**  
2 **projects such as the Bethlehem project at issue here?**

3 A. Yes. Research conducted by ICF International for the American Gas Foundation  
4 assessed the potential of RNG production from various feedstocks, the corresponding  
5 GHG emission reductions, and the estimated costs of bringing RNG supply onto the  
6 system. The resulting report, *Renewable Sources of Natural Gas: Supply and Emissions*  
7 *Reduction Assessment*, concluded that RNG resources are significant and could  
8 substantially reduce GHG emissions. A link to the report is available here:

9 <https://www.gasfoundation.org/2019/12/18/renewable-sources-of-natural-gas/>

10 Another report, *The Role of Renewable Biofuels in a Low Carbon Economy*, issued by MJ  
11 Bradley & Associates in February 2020, concluded that the complementary use of RNG  
12 and biomass-based diesel fuel could further reduce GHG emissions by as much as 52  
13 million metric tons (“MT”) in 2030, a 19 percent reduction from the present, and by as  
14 much as 194 million MT’s in 2050, a 47 percent reduction from today. A link to the MJ  
15 Bradley report is available here:

16 [https://www.mjbradley.com/news-events/mjba-evaluates-use-renewable-biofuels-](https://www.mjbradley.com/news-events/mjba-evaluates-use-renewable-biofuels-northeast-and-mid-atlantic-states)  
17 [northeast-and-mid-atlantic-states](https://www.mjbradley.com/news-events/mjba-evaluates-use-renewable-biofuels-northeast-and-mid-atlantic-states)

18 Liberty's proposed Bethlehem RNG project will foster similar benefits. The landfill gas  
19 (“LFG”) produced at the site is currently being collected and flared into the atmosphere  
20 without providing any benefit. Upgrading this LFG into pipeline quality RNG for use in  
21 the Liberty distribution system will eliminate the need for the wasteful flaring of the

1 LFG, and will also offset an equal amount of conventional natural gas. Thus, the RNG  
2 will reduce GHG emissions in New Hampshire.

3 **IV. DESCRIPTION OF THE PROJECT AND RNG AGREEMENT**

4 **Q. Please describe the RNG project that is the subject of this docket.**

5 A. Under the RNG Agreement, RUDARPA will finance, design, and construct a facility to  
6 accept, clean, and process LFG, thereby converting it into RNG and other beneficial end  
7 use products. After processing and testing the landfill gas, RUDARPA will compress the  
8 pipeline-quality RNG, making it compressed natural gas (“CNG”), and then transport the  
9 CNG to designated Liberty receipt points. RUDARPA is solely responsible for all costs  
10 associated with the collection, cleaning, compression, and delivery of the RNG to these  
11 Liberty receipt points.

12 RUDARPA has executed a contract and ground lease with Casella Waste Systems, the  
13 owner of the North Country Environmental Services (NCES) landfill in Bethlehem, New  
14 Hampshire. These agreements grant RUDARPA rights to all of the facility’s landfill gas,  
15 which currently is collected and flared on-site.

16 Liberty will sell the RNG to customers who have expressed interest in the RNG by  
17 signing Letters of Intent (“LOI Customers”), and who will have signed special contracts  
18 to purchase the RNG at the prices stated in the RNG Agreement. To deliver the RNG to  
19 Liberty’s customers, the Company will construct, own, operate, and maintain certain  
20 required infrastructure at the Liberty-owned receipt points, mostly consisting of  
21 decompression facilities. Those LOI Customers requiring independent decompression

1 equipment and line extensions will be charged for Liberty’s ownership and operation of  
2 the infrastructure in accordance with Liberty’s Service and Main Extension Policy in its  
3 tariff. Liberty will use the decompression facilities in Keene to serve that system  
4 because, as stated above, the RNG is interchangeable with the current CNG being  
5 delivered there. In the event that CNG is not part of the final fuel supply solution for the  
6 Keene Division, Liberty has been in discussion with the Keene LOI customer to install a  
7 dedicated CNG skid on their site which would be subject to Liberty’s Service and Main  
8 Extension Policy. Therefore, no incremental cost for RNG deliveries is anticipated in  
9 Keene.

10 The cost of Liberty’s decompression facilities on its legacy (i.e., non-Keene) system<sup>1</sup> will  
11 be added to the RNG’s delivered price, which will be paid for only by those customers  
12 who agree to buy RNG. That is, Liberty will charge customers for their RNG and the  
13 RNG required facilities in the COG portion of their bill based on the contract price. All  
14 other charges will be at approved tariff rates then applicable to each customer’s rate  
15 classification and situation. These RNG customers will also own any available State of  
16 New Hampshire environmental attributes such as Thermal Renewable Energy  
17 Certificates (“TREC’s”). LOI customers taking RNG will sign special contracts that will  
18 be subject to separate review and approval by the Commission. We expect three special  
19 contracts to be signed and filed with the Commission for review and approval in the near  
20 future.

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<sup>1</sup> The Company is evaluating the best location for the decompression facility, likely in Tilton and/or Concord.

1 **Q. Please describe the important provisions of the RNG Agreement.**

2 A. Term:

3 The RNG Agreement will be in effect for 17 years, beginning on the date Liberty  
4 receives the first delivery of RNG that meets the gas quality specifications, which is the  
5 “Service Commencement Date.” Liberty has the right to extend the term of the RNG  
6 Agreement an additional 10 years.

7 Volumes:

8 The RNG Agreement requires that RUDARPA deliver certain minimum annual  
9 quantities (“MASQ”) of RNG to the Designated Receipt Points, as follows:

<u>Contract Years</u>	<u>DTH/year</u>
1 through 5	490,000
6 through 10	375,000
11 through 17	270,000

10

11 In the event RUDARPA provides a total supply of RNG during contract years 1 through  
12 15 in excess of 6,000,000 DTHs, the MASQ for years 16 through 17 will be waived. If  
13 RUDARPA supplies RNG volumes in excess of the MASQ for one or more contract  
14 years, RUDARPA has the ability to apply all or part of the cumulative excess to meet its  
15 MASQs of subsequent years.

16 Additionally, RUDARPA and Liberty have agreed that the maximum daily amount of  
17 RNG to be delivered to all of the designated receipt points is 2,400 DTHs, unless

1 otherwise agreed in writing. Liberty will have no obligation to purchase any RNG in  
2 excess of that daily maximum.

3 Transportation Services:

4 RUDARPA is solely responsible for transporting all RNG from RUDARPA's facility to  
5 Liberty's designated receipt points, using a method acceptable to Liberty. In the case of  
6 transport by truck, all truck drivers shall be Operator Qualified for (i) the transport of  
7 RNG, (ii) the connection and disconnection of compressed natural gas to a  
8 decompression trailer, and (iii) the connection and disconnection of a compressed natural  
9 gas trailer to a gas distribution system, each in accordance with the rules and regulations  
10 of the Department of Transportation prior to transporting any RNG to Liberty.

11 RUDARPA also retains responsibility for transporting away from Liberty's receipt points  
12 any RNG that is rejected as non-conforming.

13 Pricing:

14 During the term of the RNG Agreement, Liberty has the right to purchase the production  
15 facility, subject to separate Commission approval. RNG pricing varies based on whether  
16 the Company elects to exercise its option to purchase the facility

If Liberty does <u>not</u> purchase the production facility, the pricing over the term of the contract, subject to certain adjustments, <sup>2</sup> as follows:	
Year 1	\$10.47/DTH
Year 2	\$10.70/DTH
Year 3	\$11.53/DTH

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<sup>2</sup> See RNG Agreement, Article 5.

Years 4 through 17	\$12.43/DTH
If Liberty exercises its option and purchases the production facility, then the contract calls for a single fixed price for the duration of the RNG Agreement, subject to annual inflation-based adjustments.	\$6.11/DTH

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Under the terms of the RNG Agreement, RUDARPA has committed not to sell the production facility to any party prior to the completion of Contract Year 4. In the event RUDARPA thereafter signs an agreement for the sale of the production facility to a third party, Liberty retains a right of first refusal.

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Finally, if RUDARPA acquires rights to additional LFG from the North Country Landfill, the RNG Agreement provides Liberty with a right of first refusal to purchase the additional RNG that RUDARPA produces.

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**Q. Please explain Liberty's option to purchase the RNG production facility.**

10

A. As stated above, the RNG Agreement grants Liberty an option to purchase the RNG production facility following the end of production Year 4. Such a purchase of the RNG production facility would require separate approval from the Commission in a future proceeding. Liberty would only exercise its option to purchase the production facility if its analysis demonstrated clear benefits to customers, and if the expected economics and strict quality requirements had been realized during RUDARPA's ownership over the beginning years. If Liberty purchases the production facility per the contract terms and estimated price, Liberty estimates that it could reduce the per-therm cost of the RNG by

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1 25% by Year 5. For an analysis and comparison of RNG pricing under both Liberty and  
2 RUDARPA ownership, please see Attachment WJC/MRS-4.

3 Attachment WJC/MRS-4 compares the potential savings for customers if the production  
4 facility is owned by Liberty versus owned by RUDARPA. The model assumes that  
5 Liberty acquires the Bethlehem production facility at the estimated net book value at the  
6 end of production Year 4, which is the earliest Liberty could exercise its option. The first  
7 page (Projections) analyzes RNG quantities based on RNG projections using historical  
8 flare rates. The second page (MASQ) performs the same analysis utilizing the contract's  
9 Minimum Annual Supply Quantities. Both tabs show savings beginning in Year 5, as  
10 shown in the highlighted Row 22. The delivered cost of RNG under Liberty ownership is  
11 \$9.66 DTH, as shown in Column P. The delivered cost of RNG under RUDARPA  
12 ownership is \$12.86 DTH, as shown in Column Q. The percentage savings is 25%, as  
13 reported in Column R.

14 **Q. In the event Liberty exercises its option to purchase the RNG production facility,**  
15 **who is responsible for ongoing maintenance, operation, taxes, and delivery of the**  
16 **RNG?**

17 A. If Liberty exercises its option to purchase the production facility, and the Commission  
18 approves the purchase, RUDARPA will still be responsible for operating and maintaining  
19 the production facility, including payment of real estate taxes and electrical costs.  
20 RUDARPA also will retain responsibility for delivery of the RNG to the designated  
21 receipt points. These RUDARPA costs include the provision of CNG trailers, trucks, and

1 drivers, and payments for fuel and tolls. Liberty will pay a fixed charge per DTH for  
2 these services with annual CPI adjustments. As mentioned previously and as  
3 demonstrated in Attachment WJC/MRS-4, the revenue requirement associated with  
4 Liberty's future ownership of the facility, plus these fixed costs, could reduce the cost of  
5 RNG for Liberty's customers by approximately 25% starting in production Year 5, as  
6 compared to the costs that would be incurred under continued RUDARPA ownership.

7 **Q. Where are the designated receipt points?**

8 A. There are three designated receipt points, as identified below:

- 9 • Broken Bridge Road, Concord, NH, and/or Tilton Road, Tilton, NH;
- 10 • Production Avenue, Keene, NH; and
- 11 • West Lebanon, NH.<sup>3</sup>

12 Liberty also retains the option to designate the specific receipt points within the Liberty  
13 franchise area, provided that the receipt point is at an equal or shorter distance than the  
14 original designated receipt point in Concord. Liberty may choose an alternate designated  
15 receipt point that is a greater distance than the designated receipt points, provided the  
16 parties agree to a delivery adder.

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<sup>3</sup> Liberty will include a geographically targeted franchise filing along with the special contract filing in order to serve the commercial customer utilizing the West Lebanon receipt point.

1 **V. CURRENT RNG MARKET AND OPPORTUNITIES**

2 **Q. Why did the Company select this project as opposed to other RNG opportunities??**

3 A. Liberty identified this as the most worthy RNG project as compared to other RNG  
4 opportunities because the NCES landfill in Bethlehem already had the necessary  
5 collection equipment and was flaring gas. Of the alternate RNG projects considered, this  
6 was the least cost, most economical, and most “shovel-ready.” RUDARPA recently  
7 closed on its financing, has obtained all required state and local permits, and will  
8 commence construction this spring.

9 Liberty also wished to develop an RNG project in New Hampshire to demonstrate the  
10 viability and benefits of locally sourced RNG. Although RNG sourced from out-of-state  
11 projects would also meet renewable and sustainability goals, it would not come with the  
12 local economic and environmental benefits of the Bethlehem project.

13 **Q. How does RNG fit within the Company’s Least Cost Integrated Resource Plan?**

14 A. RNG fits squarely within the Company’s Least Cost Integrated Resource Plan (“LCIRP”)  
15 because, by statute, the Company must assess supply options, including owned capacity,  
16 market procurements, *renewable energy*, and distributed energy resources. See RSA  
17 378:38, III.

18 In its most recently filed LCIRP in Docket No. DG 17-152, Liberty assessed its  
19 renewable options and noted that, “renewable sources of gas are not yet readily available  
20 in quantities that will have a material effect on Liberty’s planning.” The Company also  
21 noted that it was “nonetheless exploring opportunities to develop renewable sources of

1 methane, and will report to the Commission as those projects become more certain.”

2 Liberty’s LCIRP at 30.<sup>4</sup>

3 **Q. Is RNG consistent with the State’s energy policy?**

4 A. Yes, Liberty’s proposal is consistent with the State’s energy policy. In the most recent  
5 10-Year Energy Strategy, the state asserts that “New Hampshire will be best served by  
6 fostering technologies and solutions that are tailored to our state’s needs,” and that  
7 “having a diverse resource mix can help ensure a secure, reliable, and resilient energy  
8 system.” The Energy Strategy specifically notes that renewables have an important role  
9 to play in our resource mix.<sup>5</sup>

10 The RNG project Liberty proposes here is consistent with many of the goals of the state’s  
11 Energy Strategy and State Energy Policy as expressed in the least cost planning statutes.

12 For example, the project:

- 13 • Helps ensure a secure, reliable, and resilient energy system;<sup>6</sup>
- 14 • Supports the goal of adopting an all-resource energy strategy;

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<sup>4</sup> Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty, Least Cost Integrated Resource Plan, Docket No. DG 17-152, at Bates 60.

<sup>5</sup> See also State energy Strategy at 8:

Our desire for energy independence also informs our energy policies. Increasingly, states are seeking to utilize local sources of energy to keep energy expenditures within their economies and to produce local jobs. This reduces our dependence on imported sources of energy and can decrease our vulnerability to supply and price volatility. In addition, because all of New Hampshire’s local sources are renewable, increasing the use of in-state energy resources also provides air quality, health, and fuel diversity benefits.

<sup>6</sup> See RSA 378:37.

- 1           • Helps achieve environmental protection that is cost-effective and enables
- 2           economic growth;
- 3           • Generates in-state economic activity without reliance on the permanent
- 4           subsidization of energy; and
- 5           • Leads to the siting of appropriate energy infrastructure with the input and
- 6           guidance of stakeholders.

7           New Hampshire requires, and this project delivers, a new source of clean, renewable  
8           energy that meets the current and future demands of Liberty customers with minimally  
9           disruptive impact and at reasonable cost.

10   **Q.    Are there customers who want to buy RNG?**

11   A.    Yes. As societal demands for clean, affordable, renewable energy continue to grow, our  
12   customers are increasingly expressing interest in products and services that will help  
13   them achieve their own sustainability goals and help them manage their carbon and  
14   environmental footprint. Specific to this RNG project, Liberty secured LOIs from three  
15   commercial and industrial customers. Please see Confidential Attachments WJC/MRS-5,  
16   WJC/MRS-6, and WJC/MRS-7. In each LOI, the customer agreed to execute special  
17   contracts for delivery of RNG whereby they will pay the actual cost of the RNG in the  
18   cost of gas portion of their gas bill. All other charges (Customer Charge, Distribution  
19   Charges, and the Local Distribution Adjustment Clause charge) will be at standard tariff  
20   rates applicable to each customer's rate classification, as adjusted by future rate  
21   proceedings. These customers will also own any State of New Hampshire environmental

1 attributes such as TREC's that may be available to them. Liberty is in ongoing  
2 communication with all three customers who are waiting for estimated RNG availability  
3 dates before finalizing their special contracts and filing for Commission approval.  
4 Liberty expects to finalize these special contracts and file them for Commission approval  
5 in the near future. And, as mentioned above Liberty will include with the special contract  
6 filing for the industrial customer in West Lebanon a request for a targeted franchise area  
7 to serve that customer.

8 **Q. What portion of the annual RNG volume are these three LOI Customers expected**  
9 **to purchase?**

10 A. Liberty has commitments from these LOI Customers for approximately 317,000  
11 DTH/year. This quantity represents approximately 65% of the MASQ for each of the  
12 first five contract years, and 85% of the MASQ for each of the second five contract years.  
13 In terms of production volumes, current customer commitments represent approximately  
14 60% of the landfill's estimated average annual output over the first five contract years  
15 and 80% over the second five contract years. The result is that the LOI Customer volume  
16 would consume 70% of the Bethlehem facility's estimated production capacity over the  
17 first ten years.

18 The remaining 30% would be offered to all Liberty customers through an RNG Opt-In  
19 tariff, as discussed below.

20 After ten years, when the production of RNG is expected to decline, the estimated  
21 production volumes from the Project would then be less than the annual volumes of the

1 three LOI customers and Liberty would have to acquire incremental RNG supply to meet  
2 the needs of the LOI customers and future Opt-In customers. For a breakdown of LOI  
3 volumes by customer, please refer to Confidential Attachment WJC/MRS-8.

4 **Q. How does Liberty intend to use the remaining RNG?**

5 A. Given the growing customer interest in sustainability, Liberty worked with a consultant  
6 to determine the potential customer demand for a voluntary RNG product offering. The  
7 results of this market analysis suggest that over a three to seven year span, a voluntary  
8 RNG program offered by Liberty in New Hampshire could achieve an overall  
9 participation rate of 1.7% to 4.3% of residential customers, and an overall participation  
10 rate of 0.7% to 1.6% of commercial customers. Participation at the mid-points of these  
11 ranges, together with their respective associated average volumes, suggests that adequate  
12 customer demand for RNG exists and Liberty could expect to sell 100% of the RNG  
13 associated with this project after the first few years. Liberty will continue to develop  
14 appropriate marketing strategies and retail tariffs.

15 Opt-in customers would pay the full contract price for the RNG, thus eliminating the  
16 concern that non-RNG customers would subsidize the cost of RNG. Until an opt-in tariff  
17 is approved and in place, however, Liberty plans to direct the balance of the contracted  
18 RNG, first, to locations where it is most economic such as Keene, and then to use any  
19 remaining RNG as general supply to be recovered through the standard COG.

20 Liberty anticipates that within twelve months of the Bethlehem production facility's  
21 service commencement date, the Company will complete the tariff design, marketing, and

1 IT requirements necessary to support a proposed “Opt-In” tariff that would allow  
2 residential, commercial, and industrial customers to choose RNG as a supply option and  
3 pay the Company’s contract price of the RNG.

4 **Q. Please explain the five percent cap that the Company is proposing.**

5 A. As stated above, the Company intends to sell RNG through special contracts and through  
6 its future opt-in tariff. Until the full RNG contract volumes are spoken for, whether  
7 through special contracts or customers opting-in, the Company proposes to include the  
8 balance of the unsold RNG in the Company’s overall COG subject to a cap of five  
9 percent of the Company’s overall annual sendout. The RNG would be included at its  
10 contract price.

11 The impact of including the unsold RNG in the Liberty COG would be *de minimus*. For  
12 example, including all of the currently uncontracted RNG in the 2020–2021 COG at the  
13 Year 1 contract price of \$1.047 (and making reasonable simplifying assumptions) would  
14 cause the Liberty COG rate to increase by less than one penny per therm.<sup>7</sup>

15 This five percent cap serves two purposes. First, it provides a mechanism to balance  
16 supply and demand over the course of time. Because customers will opt-in to RNG at  
17 different times during the year and because the Company will issue RFPs to acquire  
18 supply at different times during the year, it is necessary to have a mechanism in place to  
19 balance supply with demand. Second, the five percent cap protects non-RNG customers

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<sup>7</sup> Note, also, that two of the LOI customers would be new Liberty customers, so receipt of their incremental distribution charges will have a downward impact on Liberty’s overall distribution rates.

1 from potentially higher costs of RNG. In short, when the production of RNG under the  
2 RNG Agreement results in volumes that exceed the volumes required under the special  
3 contracts, the Company's proposed cap provides a practical solution to meet customer  
4 demand for RNG while limiting the exposure of other customers.

5 **Q. Are TRECs available for customers who use RNG to create “useful thermal  
6 energy”?**

7 A. Yes. Due in large part to Liberty's efforts, in 2018 the Legislature amended RSA 362-  
8 F:4, I(e) to clarify its intent that the combustion of “methane gas” (which includes RNG)  
9 is eligible for TRECs “if the methane gas energy output is in the form of useful thermal  
10 energy.” Laws 2018, Ch. 340:4. Therefore, customers who burn RNG to heat their  
11 homes or business or for other thermal processes are eligible for TRECs.

12 There remain questions of how customers connected to a utility's distribution system may  
13 take credit for the thermal energy produced by the RNG they purchased, that is, whether  
14 they may take credit for the fossil fuel displaced by their RNG similar to how renewable  
15 electric generation is treated, or through some other mechanism. Liberty expects to  
16 resolve this question during the Commission's upcoming Puc 2500 rulemaking docket.

17 **Q. How does the Company intend to treat any New Hampshire environmental  
18 attributes, such as TRECs, of the RNG not sold to the special contract customers?**

19 A. When the opt-in tariff is in place and the above question is resolved, Liberty plans to  
20 monetize the TRECs of the opt-in customers and use the proceeds to reduce the COG.  
21 The Company will aggregate and sell the TRECs through the established marketplace and

1 credit 100% of the proceeds back to customers through the COG. The TREC proceeds  
2 will be allocated proportionally to customers in each division based on the volumes of  
3 RNG delivered to each receipt point.

4 **Q. What if the rule changes necessary to monetize TRECs do not occur?**

5 A. If the Company is unable to monetize the TRECS for its opt-in customers, it would add  
6 the slightly higher cost of the additional RNG to the overall cost of gas, which will have a  
7 *de minimus* impact on the COG for existing customers, as illustrated above. After  
8 accounting for the LOI volumes, the remaining RNG only represents approximately 1%  
9 of the total annual send-out volume for Liberty.<sup>8</sup>

10 **Q. Is expansion of the NCES landfill required to provide the needed volumes of RNG**  
11 **to support the project's economics??**

12 A. No. All RNG volumes discussed in this testimony and attachments are based on the  
13 estimated production of the existing landfill footprint. Neither the current operations nor  
14 any future expansion of the NCES landfill has any bearing on the economics of the  
15 project as presented.

16 **Q. Why is it in the public interest to approve this project?**

17 A. This RNG project is in the public interest and should be approved by the Commission  
18 because it:

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<sup>8</sup> See 2018 Annual Report.

- 1           • Supports the state’s energy goal of adopting an all-resource energy strategy while  
2           providing New Hampshire customers an avenue to further their voluntarily  
3           established sustainability goals;
- 4           • Helps ensure a secure, reliable, and resilient energy system since, unlike many  
5           other renewable energy supplies, RNG is easily stored and can be made available  
6           on-demand;
- 7           • Generates in-state economic activity by using locally produced, renewable fuel;
- 8           • Helps protect the environment and host communities and enables economic  
9           growth;
- 10          • Implements strict minimum quality specifications and makes RUDARPA  
11          responsible for any RNG found to be non-conforming;
- 12          • Is consistent with the Company’s IRP regarding exploring opportunities to  
13          develop renewable sources of methane;
- 14          • Is consistent with RSA 378:39, which concludes with the following sentence:

15                   Where the commission determines the options have  
16                   equivalent financial costs, equivalent reliability, and  
17                   equivalent environmental, economic, and health-  
18                   related impacts, the following order of energy policy  
19                   priorities shall guide the commission's evaluation: I.  
20                   Energy efficiency and other demand-side  
21                   management resources; II. Renewable energy  
22                   sources; III. All other energy sources.

- 23          • Insulates customers and the Company from risks arising from the construction,  
24          ownership, and operation of the proposed RNG facility.

1 **Q. Why did the Company withdraw its prior filing?**

2 A. The Company withdrew its prior RNG filing<sup>9</sup> because the Commission Staff and the  
3 Office of the Consumer Advocate provided specific feedback which the Company was  
4 able to incorporate to significantly improve its proposal. For example, the Company  
5 renegotiated the RNG Agreement such that customers and the Company are now  
6 insulated from risks arising from the construction, ownership, and operation of the  
7 proposed RNG facility. This included removing the “must purchase” requirement if the  
8 facility met quality and quantity milestones. This is replaced by an option to purchase  
9 after Year 4, the exercise of which would require approval from the Commission. The  
10 amended RNG Agreement also requires the RNG to meet strict quality requirements,  
11 obligates the Company to purchase only conforming RNG, and obligates RUDARPA to  
12 remove from the Designated Receipt Points any RNG found to be non-conforming.  
13 Given these significant changes, the Company concluded that withdrawing the filing and  
14 resubmitting the amended agreement would provide for a more efficient and focused  
15 review.

16 In addition, the Company has modified its proposal regarding how it will use the RNG  
17 volumes remaining after the special contract volumes have been dispatched. The current  
18 proposal insulates customers by incorporating a cap on RNG volumes included in the  
19 COG of five percent as compared to Liberty’s annual throughput volumes, being  
20 recovered through base COG rates.

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<sup>9</sup> See Docket No. DG 18-140.

1 **Q. What activities have occurred since the prior petition was withdrawn?**

2 A. The Company has taken important steps since the initial filing. First, a third commercial  
3 customer looking for help achieving its sustainability goals expressed interest in RNG,  
4 signed an LOI, and is in the process of finalizing its special contract. Second, as  
5 described above, the Company contracted with a consultant to assess the market for an  
6 opt-in tariff.

7 In addition to activities undertaken by the Company, other significant events and  
8 milestones have occurred. For instance,

- 9 • RUDARPA closed on its financing for the RNG facility construction costs;
- 10 • RUDARPA received its final air permit from the New Hampshire Department of  
11 Environmental Services, received all other required permits to begin construction,  
12 and plans to commence construction this spring; and
- 13 • The Northeast Gas Association and GTI released the Interconnect Guide for  
14 Renewable Natural Gas (RNG) in New York State, and Liberty adopted its  
15 suggested RNG gas quality specifications for each of its natural gas local  
16 distribution companies. For a copy of this report, please see Attachment  
17 WJC/MRS-9.

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.

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