



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

Docket No. DG 17-198

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition to Approve Firm Supply and Transportation Agreements and the Granite Bridge Project

**SECOND SUPPLEMENTAL DIRECT TESTIMONY**

**OF**

**FRANCISCO C. DAFONTE**

**AND**

**WILLIAM R. KILLEEN**

July 31, 2020

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1   **I.    INTRODUCTION**

2   **Q.    Please state your name, title, and business address.**

3   A.    My name is Francisco C. DaFonte. I am Vice President, Regulated Infrastructure  
4        Development – Gas, of Liberty Utilities Service Co., which provides services to Liberty  
5        Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (hereinafter referred to as  
6        “EnergyNorth” or the “Company”). My business address is 15 Buttrick Road,  
7        Londonderry, New Hampshire.

8        My name is William R. (Bill) Killeen. I am Director, Energy Procurement of Liberty  
9        Utilities (Canada) Corp., the indirect parent company of Liberty Utilities Co. My business  
10       address is 354 Davis Road, Oakville, Ontario, Canada.

11   **Q.    Are you the same Francisco C. DaFonte and William R. (Bill) Killeen that submitted**  
12        **Direct Testimony on December 22, 2017, and Supplemental Direct Testimony on**  
13        **March 15, 2019, in this docket?**

14   A.    Yes, we are.

15   **Q.    On whose behalf are you submitting this Second Supplemental Direct Testimony?**

16   A.    We are submitting this joint Second Supplemental Direct Testimony before the New  
17        Hampshire Public Utilities Commission (the “Commission”) on behalf of EnergyNorth.

18   **Q.    What is the purpose of your Second Supplemental Direct Testimony?**

19   A.    The purpose of our Second Supplemental Direct Testimony is to: (i) provide an update  
20        regarding the resource options under consideration in this docket and request the

1 Commission’s approval of a long-term contract for pipeline capacity; (ii) incorporate the  
2 various updates and changes in the Company’s analyses of incremental capacity and supply  
3 options; and (iii) request the Commission’s approval for recovery of certain prudently  
4 incurred costs that were necessary to evaluate, analyze, and begin to develop the Granite  
5 Bridge Project option and to negotiate the resolution presented for approval here.

6 **II. EXECUTIVE SUMMARY**

7 **Q. Please summarize the purpose of the Company’s initial application in this docket.**

8 A. Since the 2012 acquisition of EnergyNorth by Liberty Energy Utilities (New Hampshire)  
9 Corp., EnergyNorth has continued to experience growth in natural gas customers and  
10 overall natural gas demand and, as a result, EnergyNorth determined it necessary to acquire  
11 additional gas supply and pipeline capacity to serve that demand.<sup>1</sup> However, the  
12 Company’s system relies on a single feed from Tennessee Gas Pipeline Company, LLC  
13 (“TGP”) for the delivery of gas supply to its service territory. At the time of the initial  
14 application in this docket, it was clear that TGP would need to expand its facilities in order  
15 to provide additional capacity to the Company. Therefore, using the resource planning  
16 standards and decision-making process previously approved by the Commission,<sup>2</sup> the

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<sup>1</sup> Commission Staff has acknowledged this circumstance, stating: “[W]e nevertheless do find sound the Company’s conclusion that its needs for the next five years require additional capacity to support its gas-supply requirements. *Specifically, we find increased pipeline capacity to be necessary ....*” Revised Testimony of The Liberty Consulting Group, filed at 9, submitted in this docket on September 20, 2019, on behalf of Staff (emphasis added).

<sup>2</sup> The most recent review of the resource planning process used by the Company and the results of that process were submitted to and approved by the Commission in Docket No. DG 14-380 related to the Company’s transportation agreement on the TGP Northeast Energy Direct (“NED”) Project.

1 Company's initial filing identified and evaluated the available and viable resource options  
2 for incremental capacity.<sup>3</sup> As discussed in the initial filing, dated December 22, 2017,  
3 EnergyNorth developed a natural gas supply strategy, based on the best information  
4 available at that time, to meet the long-term needs of customers in a reliable and best-cost<sup>4</sup>  
5 manner. The information the Company presented at the outset of this docket included  
6 substantial economic analysis and preliminary engineering and field work used to support  
7 estimated costs of the alternatives. The new information presented in this testimony is the  
8 result of changed circumstances and the updated analysis that relies on updated data.

9 The Company's natural gas supply strategy presented for approval in this docket included  
10 a contract with Constellation LNG, LLC ("CLNG")<sup>5</sup> and a precedent agreement with  
11 Portland Natural Gas Transmission System ("PNGTS") for transportation capacity on the  
12 Portland XPress ("PXP") Project, which requests remain, as well as the development of  
13 the Granite Bridge Project, comprised of the Granite Bridge Pipeline (as a second feed to  
14 the Company's service territory) and the Granite Bridge LNG facility.<sup>6</sup> The request for

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<sup>3</sup> The Company's resource planning approach was also outlined in the Company's Least Cost Integrated Resource Plan ("LCIRP") filed on October 2, 2017 in Docket No. DG 17-152 (the "2017 LCIRP").

<sup>4</sup> Pursuit of a best-cost portfolio appropriately balances costs with EnergyNorth's planning objectives and allows the Company to provide its customers with reliable service at the lowest reasonable cost.

<sup>5</sup> Exelon Generation Company, LLC ("Exelon") completed the acquisition of the Everett LNG facility from ENGIE Gas & LNG LLC ("ENGIE") in October 2018. Exelon's subsidiary (CLNG) is responsible for purchasing and selling LNG to gas utilities, marketers, and other market participants throughout New England. See, Motion of Constellation LNG, LLC for Leave to Intervene Out-of-Time, Docket No. DG 17-198, December 12, 2018.

<sup>6</sup> See, Direct Testimony of Susan L. Fleck and Francisco C. DaFonte, Docket No. DG 17-198, Bates 008.

1 approval of the Granite Bridge Pipeline as the delivery option is now superseded by the  
2 proposed capacity contract with TGP, described below.

3 **Q. Please summarize the recent developments in this docket.**

4 A. During the course of this proceeding, the Company has continued to evaluate the two  
5 delivery options for incremental capacity identified in this docket, which were the Granite  
6 Bridge Pipeline and an expansion of the existing TGP system. The Company's evaluation  
7 involved engineering work and other professional investigations to refine the estimated  
8 costs of the Granite Bridge Project. In refining the cost estimates while continuing to  
9 pursue both resource options, the Company assured its ability to meet the resource needs  
10 of customers on a timely basis, but also created significant leverage with TGP.

11 Based on the information available in December 2017 when the initial filing in this docket  
12 was made, the Company recommended (and sought approval of) the Granite Bridge Project  
13 as the least-cost option between the two alternatives (the then-available TGP alternatives  
14 being more expensive). In May 2019, TGP provided to the Company an updated estimate  
15 that affirmed expansion of TGP's facilities would be more expensive than the Company's  
16 proposed Granite Bridge Project. Thus, the updated estimate made available by TGP in  
17 May 2019 and the existing status of the Company's investigation demonstrated that the  
18 Granite Bridge Project remained the least-cost option. Accordingly, the Company  
19 continued to perform the engineering and other development work necessary to support a  
20 final determination of whether the Granite Bridge Project was the least-cost, long-term  
21 solution for customers.

1           In October 2019, EnergyNorth disclosed in a public filing that the Granite Bridge Pipeline  
2           had completed evaluation work representing a 70% design stage and that the Company was  
3           issuing an RFP for contractor bids based on that design.<sup>7</sup> Shortly before that disclosure,  
4           EnergyNorth had again contacted TGP to obtain updated expansion cost estimates. The  
5           Company received a revised estimate from TGP at the end of October 2019 that was  
6           significantly lower than the prior estimates provided by TGP in 2017 and May of 2019.  
7           Based on an initial assessment of the revised estimate, the Company determined that the  
8           TGP option could be cost competitive with the Granite Bridge Project. Therefore, the  
9           Company continued to engage with TGP to better understand and further analyze the  
10          resource options.

11          In late 2019 and early 2020, the Company and TGP reviewed various scenarios and  
12          alternatives, which resulted in the Company's decision to move forward with a revised  
13          TGP option that had emerged as the least cost option for customers. At that time, the  
14          Company began negotiating a capacity contract with TGP that could meet EnergyNorth's  
15          needs as shown in Table 2, at Bates 19 below.

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<sup>7</sup> The Company's October 16, 2019, *Expedited Motion to Extend Date for Filing Rebuttal Testimony* stated: "Liberty recently completed the 70% engineering of the pipeline and will shortly issue RFPs to a number of pipeline contractors. The RFP responses will give a mature cost estimate for the pipeline."

1   **Q.   Please briefly outline the revised TGP option and the Company’s process to contract**  
2       **with TGP.**

3   A.   In April 2020, at the request of EnergyNorth, TGP provided revised information to the  
4       Company for various scenarios (i.e., different quantities to be delivered to different  
5       metering stations along the Concord Lateral) with even lower cost estimates than the  
6       revised cost estimates provided to EnergyNorth in October 2019. The Company’s analysis  
7       focused on two alternatives that were considered the best options for meeting demand  
8       growth and optimizing the TGP deliveries. After a comprehensive review of the revised  
9       TGP information, the Company ultimately made the decision to contract with TGP for  
10      40,000 Dth/day of capacity from the Dracut, MA receipt point to the Londonderry, NH  
11      delivery point, and consequently signed a firm transportation agreement (“FT-A”) with  
12      TGP on July 14, 2020 (the “TGP Contract”). *See* Attachment FCD-WRK-1 at Bates 46.  
13      In addition, and consistent with its Commission approved resource planning process, since  
14      the revised TGP option is now the least-cost option, the Company has made the decision  
15      to withdraw its request for approval of the Granite Bridge Project.

16   **Q.   What are the material terms of the TGP Contract?**

17   A.   The TGP Contract is a standard Gas Transportation Agreement for use under TGP’s FT-A  
18      rate schedule. Most of the terms and conditions are industry standard and are contained in  
19      TGP’s Federal Energy Regulatory Commission (“FERC”) approved tariff. The material  
20      terms of this agreement are the effective date (November 1, 2021), the term (20 years), that  
21      EnergyNorth has the unilateral right to renew the contract, the quantity (up to 40,000

1 dekatherms per day), the delivery point (the Calpine Granite Ridge gate station in  
2 Londonderry), the referenced FT-A rate (currently \$0.14/Dth on a volumetric basis), and  
3 the ability to effectively terminate the contract after one year: “Shipper shall have a one-  
4 time option to reduce the TQ of this Agreement to -0- Dth/d effective November 1, 2022.”  
5 This termination right will protect the Company should the Commission not approve the  
6 TGP Contract.

7 **Q. Does the Company seek approval of the TGP Contract in this proceeding?**

8 A. Yes. The Company respectfully asks the Commission to approve the TGP Contract as it  
9 is the least cost option to meet EnergyNorth’s resource requirements.

10 **Q. How does the withdrawal of the Granite Bridge Project impact the Company’s**  
11 **assessment of its incremental resource needs?**

12 A. Since the proposed Granite Bridge Project would have provided natural gas as a fuel option  
13 for residents and businesses in the towns of Epping, Raymond, and Candia, towns which  
14 cannot be served absent the Granite Bridge Pipeline, EnergyNorth has revised its demand  
15 forecast to exclude growth from these towns. However, given the limited volumes  
16 associated with those service territories, and as discussed in Section III below, the updated  
17 demand forecast shows that the Company continues to require incremental resources to  
18 meet the long-term demand requirements of its customers in its existing franchise areas.  
19 The addition of the TGP Contract to the Company’s resource portfolio provides 40,000  
20 Dth/day of capacity to meet a portion of the overall projected requirement and affords the  
21 Company additional time to review and evaluate resource options in the future, as needed.

1 **Q. Would the TGP option require any additional facilities or investments?**

2 A. Yes. As detailed in Section IV, the Company would need to invest in certain on-system  
3 distribution enhancement projects to optimize deliveries from TGP and provide additional  
4 supply to the high growth areas of the Company's distribution system. The Company's  
5 detailed analysis of the costs and benefits associated with the revised TGP option, including  
6 the on-system enhancement projects to optimize deliveries, demonstrates that the TGP  
7 Contract is the least cost solution.

8 **Q. Are there any risks associated with the TGP Contract?**

9 A. Yes, there are certain risks associated with the TGP Contract, including a significant  
10 increase in EnergyNorth's reliance on natural gas supplies at the Dracut receipt point. As  
11 outlined in Section V, the Company has reviewed and considered various options for risk  
12 mitigation, such as the procurement of fixed basis products at the Dracut receipt point for  
13 the winter period, contracting for upstream capacity and supply deliveries to the Dracut  
14 receipt point, as well as the continued assessment of opportunities to develop on-system  
15 resource options (*e.g.*, an LNG facility).

16 **Q. Please summarize the Company's request for recovery of costs incurred as a result of**  
17 **its assessment and pursuit of the Granite Bridge Project to evaluate resource options**  
18 **in order to assure the availability of adequate resources to serve customers.**

19 A. As discussed in Section VI, the Company's plan to develop the Granite Bridge Project was  
20 designed to meet a critical need, to access additional gas supplies from a second feed, and,  
21 at that time, it was the least cost option. The pursuit of the Granite Bridge Project

1 positioned the Company to continue the discussions with TGP and benefit from the  
2 significantly lower pricing from TGP for capacity on the Concord Lateral. Because the  
3 work that EnergyNorth conducted yielded significant savings for customers in relation to  
4 a critically needed gas resource, EnergyNorth is requesting the Commission to authorize  
5 recovery of the expenses incurred to investigate, analyze, and begin development of the  
6 Granite Bridge Project option. Lastly, there are no carrying charges included in the  
7 Company's request.

8 As further outlined in Section VI, the Company proposes to recover the Granite Bridge  
9 Project costs from customers via the cost-of-gas adjustment clause over a five-year period,  
10 which will have only a minimal direct impact on customers, and no impact on customers  
11 when netted out against the substantial cost reduction that is arising due to the decision to  
12 move forward with the TGP Contract.

13 **Q. Why is it reasonable and appropriate for the Company to recover the costs associated**  
14 **with the Granite Bridge Project?**

15 A. Recovery of the costs associated with the Granite Bridge Project is appropriate because the  
16 Company is fundamentally obligated to take the steps necessary to assure a safe and  
17 reliable gas supply for customers. The Company's existing resource portfolio is not  
18 sufficient to meet the demand requirements of customers over time, without the addition  
19 of incremental capacity resources. Therefore, in accordance with Commission-approved  
20 resource planning standards and decision-making processes, the Company was obligated  
21 to evaluate and/or develop viable resource options to meet forecasted demand. The Granite

1 Bridge Project represented a solution that could be delivered at a cost substantially less  
2 than TGP's original cost estimates.

3 However, by diligently pursuing an EnergyNorth supply and capacity project, the  
4 Company not only demonstrated to TGP and other market participants its commitment to  
5 a viable alternative, but positioned the Company to continue discussions with TGP  
6 regarding service and price options. This approach (*i.e.*, creating leverage) enabled the  
7 Company to execute the TGP Contract, which in turn resulted in a capacity alternative that  
8 constitutes an even lesser cost solution than the Granite Bridge Project; thereby creating  
9 significant savings for customers in achieving the least-cost resource portfolio. Given that  
10 customers will be the direct *and sole* beneficiaries of the cost savings achieved by the TGP  
11 Contract presented for approval here, the Company's request to recover these necessary  
12 and prudently incurred costs is warranted, consistent with the payment of a termination or  
13 exit fee associated with a third-party precedent agreement for pipeline capacity.

14 Allowing recovery of the Granite Bridge Project costs will also incentivize utilities like  
15 EnergyNorth to continue seeking least cost options that may arise after the Company has  
16 chosen a different route.

17 **Q. How is the remainder of your Second Supplemental Direct Testimony organized?**

18 A. The remainder of our Second Supplemental Direct Testimony is organized as follows:

- 19 • Section III – Summary of Demand/Resource Requirements: This section reviews  
20 the updated demand projections to reflect the withdrawal of the Granite Bridge

1 Project and, therefore, the inability for EnergyNorth to provide service to certain  
2 towns; and summarizes the Company's incremental resource needs.

- 3 • Section IV – Evaluation of Resource Alternatives: This section provides details  
4 regarding EnergyNorth's analysis of the two identified delivery options from the  
5 Company's initial filing (*i.e.*, the Granite Bridge Pipeline and the Concord Lateral  
6 expansion) and includes a timeline and review of the revised TGP option.
- 7 • Section V – TGP Contract Risks and Mitigation: This section reviews the risks  
8 associated with the decision to contract for additional capacity from TGP and  
9 outlines the options considered by the Company for risk mitigation.
- 10 • Section VI – Recovery of Granite Bridge Project Costs: This section provides  
11 appropriate context and support for the Company's request for recovery of costs  
12 associated with the evaluation and development of the Granite Bridge Project.
- 13 • Section VII – Conclusions and Recommendation: This section summarizes the  
14 results of the various updates to EnergyNorth's resource planning process and  
15 analyses, which support the Company's decisions to (i) withdraw the Granite  
16 Bridge Project; and (ii) contract with TGP for additional capacity.

17 **III. SUMMARY OF DEMAND/RESOURCE REQUIREMENTS**

18 **Q. Please provide a brief summary of EnergyNorth's demand forecast.**

19 A. The Company's 2017 LCIRP discussed the demand forecast for the five planning years  
20 from 2017/18 through 2021/22 under Normal Year, Design Year, and Design Day weather

1 conditions.<sup>8</sup> As explained in the initial filing in this docket, the Company extended the  
2 demand forecast using the same econometric models developed in the 2017 LCIRP using  
3 the economic, demographic, and energy price data provided by Moody's and the U.S.  
4 Energy Information Administration through 2037/38, and developed assumptions for the  
5 various out-of-model adjustments to analyze EnergyNorth's long-term resource  
6 requirements.<sup>9</sup> The demand forecast was subsequently updated during discovery to reflect  
7 certain modifications,<sup>10</sup> and was further updated to incorporate more recent information  
8 with minor additional changes in our Supplemental Direct Testimony filed on March 15,  
9 2019.<sup>11</sup>

10 **Q. Has the Company's demand forecast been updated to reflect the withdrawal of the**  
11 **Granite Bridge Project?**

12 A. Yes, it has. Since the Company is withdrawing its request for approval of the Granite  
13 Bridge Project, the demand forecast has been updated to exclude the out-of-model

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<sup>8</sup> As discussed in the 2017 LCIRP, econometric analysis was used to develop customer segment models to forecast the number of customers and the use per customer, which were multiplied together to estimate demand for each segment and summed across segments to derive total demand. The resulting demand based on the econometric models was then adjusted to account for energy efficiency savings, unaccounted for gas, unbilled sales, and certain out-of-model adjustments. The forecast was translated from monthly to daily data to arrive at the Company's forecast of daily sendout requirements. *See*, 2017 LCIRP, Bates 025-036.

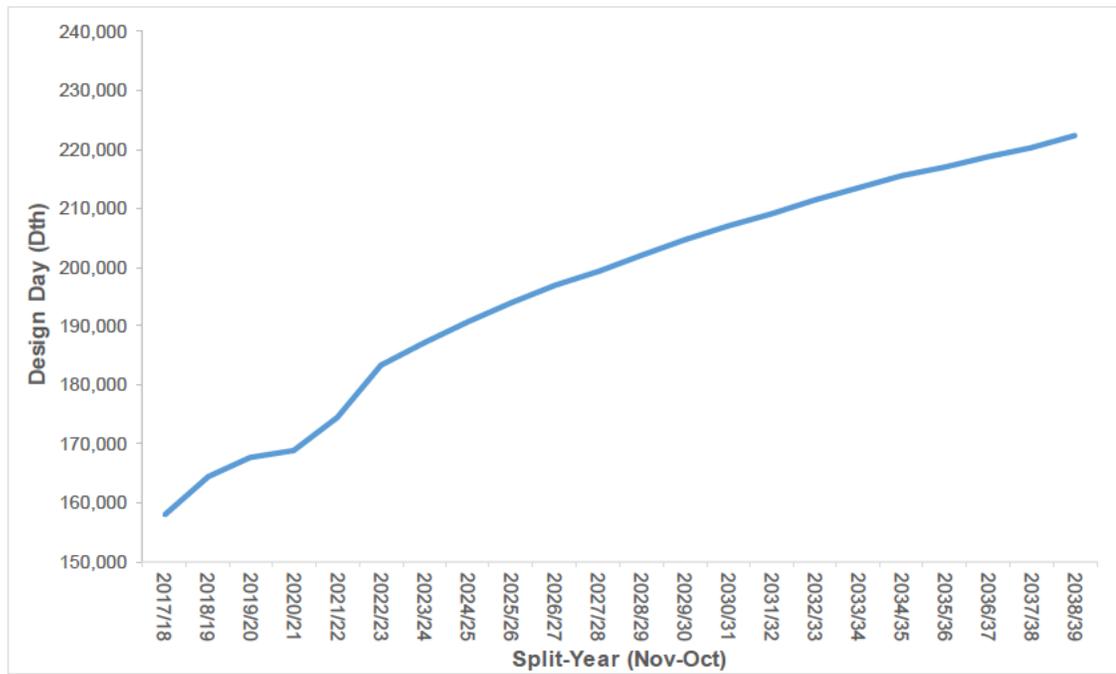
<sup>9</sup> *See*, Direct Testimony of William R. Killeen and James M. Stephens, Docket No. DG 17-198, Figure 17 and Bates 153R-156R.

<sup>10</sup> *See*, Attachment CLF Tech 1-2.1, filed in response to data request CLF Tech 1-2 on June 27, 2018, and submitted as Attachment FCD/WRK-1 to the Supplemental Direct Testimony of Francisco C. DaFonte and William R. Killeen, filed March 15, 2019.

<sup>11</sup> *See*, Supplemental Direct Testimony of Francisco C. DaFonte and William R. Killeen, Docket No. DG 17-198, Bates 051-053. The changes to the demand forecast presented in our Supplemental Direct Testimony resulted in a 0.1% decrease in Normal Year and Design Year demand in the last year of the Forecast Period (*i.e.*, 2021/22). There were no changes to the Design Day demand results.

1 adjustment for customers and usage in the new service territories associated with the  
2 Granite Bridge Pipeline (*i.e.*, the towns of Epping, Raymond, and Candia). Figure 1 below  
3 illustrates the Updated Base Case demand forecast.

4 **Figure 1: Updated Base Case Demand Forecast – Design Day**



5

6 **Q. How does the Updated Base Case demand forecast compare to normalized actual**  
7 **demand?**

8 A. Three winters have passed since initially preparing the 2017 demand forecast. Therefore,  
9 the Company is able to compare the updated forecast to actual demand over those winters.  
10 Although the actual number of customer additions have been below the forecast of  
11 customer additions, the Updated Base Case demand forecast continues to be reasonable  
12 and is supported by actual experience over the most recent two years. Indeed, the actual

usage has exceeded the forecast. As shown in Table 1 below, the normalized actual demand<sup>12</sup> was 129,046 Dth higher in 2017/18 than the Company’s forecast (a 0.9% difference) and 524,159 Dth higher in 2018/19 than the Company’s forecast (a 3.6% difference). Focusing on the most recent data (*i.e.*, winter of 2019/20),<sup>13</sup> normalized actual demand exceeded the Company’s forecast by 260,839 Dth (a 2.6% difference).

**Table 1: Forecast Versus Actual Demand (Dth)<sup>14</sup>**

<b>Split-Year (Nov-Oct)</b>	<b>Updated Base Case – Normal Year</b>	<b>Normalized Actual Demand</b>	<b>Difference</b>	<b>% Difference</b>
2017/18	14,475,900	14,604,946	129,046	0.9%
2018/19	14,758,927	15,283,086	524,159	3.6%
2019/20 Winter	9,845,553	10,106,392	260,839	2.6%

**Q. How does the Updated Base Case demand forecast compare to the Company’s gas supply resources?**

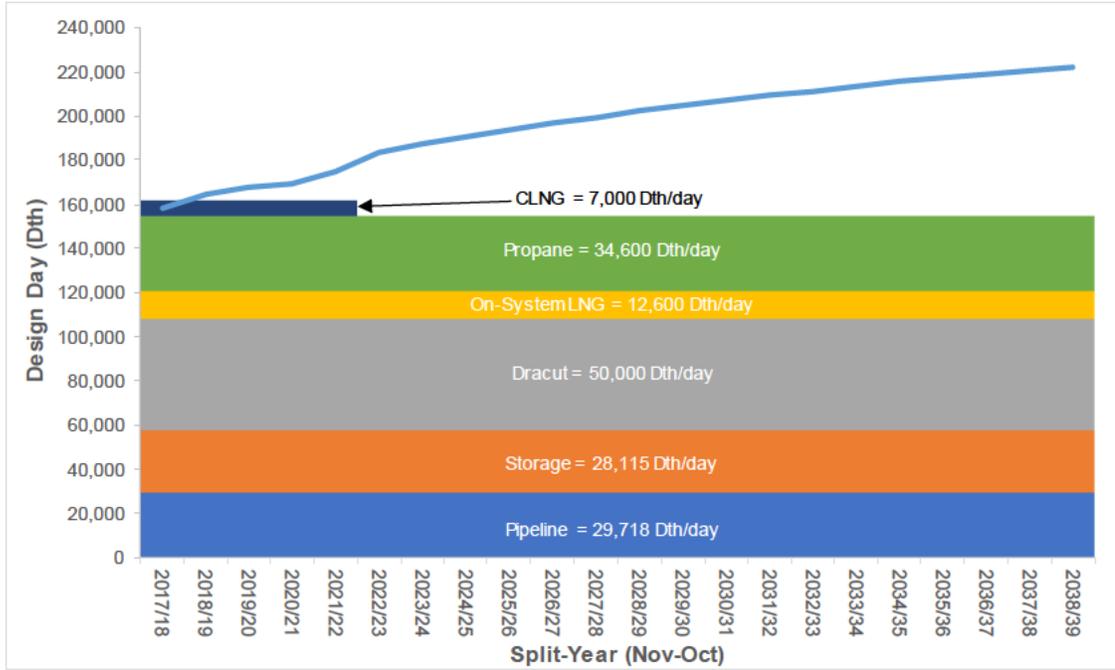
**A.** Figure 2 below illustrates the Updated Base Case Design Day demand forecast relative to EnergyNorth’s Design Day resources. Even assuming the continued reliance on the aging propane facilities at the design (or nameplate) vaporization rate of approximately 34,600 Dth/day, the Company has a growing resource deficit on Design Day.

<sup>12</sup> “Normalized actual demand” represents actual demand adjusted for the impact of weather.

<sup>13</sup> 2019/20 Winter represents the period November 2019 through March 2020.

<sup>14</sup> The normalized actual demand data is based on billing data on a customer segment basis. To provide an appropriate comparison, the Updated Base Case demand forecast includes energy efficiency, but is presented prior to other adjustments such as unbilled sales. Values have been rounded to nearest Dth.

1 **Figure 2: Updated Base Case Design Day Demand and Resource Portfolio<sup>15</sup>**



2

3 **Q. When would the TGP option be available and how does it impact the Company's**  
4 **resource portfolio?**

5 A. The TGP Contract would provide an additional 40,000 Dth/day to meet demand  
6 requirements starting in the 2021/22 split-year (the contract's effective date is November  
7 1, 2021). Table 2 below summarizes the Company's Updated Base Case Design Day  
8 demand forecast and resource portfolio with the addition of the TGP Contract. As shown  
9 in Table 2, absent the additional capacity provided by this TGP Contract, the Company  
10 would have a resource deficiency of 12,585 Dth in 2021/22; however, the addition of the

<sup>15</sup> The Design Day resources include the contract with CLNG, submitted for approval in this docket, for combination vapor/liquid for up to 7,000 Dth/day through 2021/22. Given the current deliverability limitations on the TGP Concord Lateral, the PNGTS PXP contract, also submitted for approval in this docket, does not provide incremental Design Day supply to the Company's city-gates.

1           40,000 Dth/day of capacity from TGP would provide the Company with sufficient  
2           resources to meet demand requirements through 2025/26, assuming the current level of  
3           portfolio resources (*e.g.*, propane vaporization of 34,600 Dth/day and the termination of  
4           the CLNG contract). By 2038/39, even with the addition of the TGP Contract, the Design  
5           Day resource shortfall is approximately 27,000 Dth/day (or nearly 62,000 Dth/day<sup>16</sup>  
6           excluding the propane facilities).

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<sup>16</sup> The forecasted resource deficiency of approximately 27,000 Dth/day plus the propane design vaporization of 34,600 Dth/day equals approximately 62,000 Dth/day of deficiency.

1 **Table 2: Updated Base Case Design Day Resource Shortfall (Dth)**

<b>Split-Year (Nov-Oct)</b>	<b>Updated Base Case Design Day Demand</b>	<b>Current Design Day Resources<sup>17</sup></b>	<b>Reserve / (Deficiency) including Propane</b>	<b>Reserve / (Deficiency), including Propane and TGP Contract</b>
2021/22	174,618	162,033	(12,585)	27,415
2022/23	183,409	155,033	(28,376)	11,624
2023/24	187,181	155,033	(32,148)	7,852
2024/25	190,657	155,033	(35,624)	4,376
2025/26	193,952	155,033	(38,919)	1,081
2026/27	196,975	155,033	(41,942)	(1,942)
2027/28	199,349	155,033	(44,316)	(4,316)
2028/29	202,008	155,033	(46,975)	(6,975)
2029/30	204,467	155,033	(49,434)	(9,434)
2030/31	206,942	155,033	(51,909)	(11,909)
2031/32	209,168	155,033	(54,135)	(14,135)
2032/33	211,373	155,033	(56,340)	(16,340)
2033/34	213,536	155,033	(58,503)	(18,503)
2034/35	215,447	155,033	(60,414)	(20,414)
2035/36	216,995	155,033	(61,962)	(21,962)
2036/37	218,679	155,033	(63,646)	(23,646)
2037/38	220,381	155,033	(65,348)	(25,348)
2038/39	222,210	155,033	(67,177)	(27,177)

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<sup>17</sup> The Design Day resources include the propane facilities at the design (or nameplate) vaporization rate of approximately 34,600 Dth/day and assumes the contract with CLNG terminates in 2021/22. Given the current deliverability limitations on the TGP Concord Lateral, the PNGTS PXP contract does not provide incremental Design Day supply to the Company's city-gates.

1 **IV. EVALUATION OF RESOURCE ALTERNATIVES**

2 **Q. Please discuss the resource options evaluated by the Company as part of its natural**  
3 **gas supply strategy in this docket.**

4 A. As detailed in the Company's initial filing, EnergyNorth assessed not only the available  
5 gas supply options, but the Company also identified the only two available delivery options  
6 associated with those supplies.<sup>18</sup> The first option was the expansion of the existing TGP  
7 system and the second option was the Granite Bridge Pipeline. Based on extensive  
8 quantitative and qualitative analysis developed by the Company, including extensive  
9 engineering, cost estimates, and work to determine the project's viability, EnergyNorth  
10 recommended the Granite Bridge Pipeline as the preferred delivery option. The Company  
11 therefore filed the petition in this docket requesting the Commission's affirmation that the  
12 Granite Bridge Project was the prudent choice.

13 **Q. Did the Company continue to review and assess the resource options following the**  
14 **initial filing in December 2017?**

15 A. Yes, after making its initial filing, EnergyNorth continued to review and assess the resource  
16 options under consideration in this docket, including the TGP expansion option, in order  
17 to confirm that the Granite Bridge Project remained the prudent option prior to  
18 commencement of any construction. These efforts included public outreach and substantial  
19 engineering of the Granite Bridge Project (e.g., 30% of pipeline design was completed in

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<sup>18</sup> See, Direct Testimony of William R. Killeen and James M. Stephens, Docket No. DG 17-198, Bates 172R-181R.

1 the summer of 2019; 70% of pipeline design was completed in or about October 2019; and  
2 the Company's consultants reviewed environmental and geological conditions to estimate  
3 impacts on construction costs of both the pipeline and LNG facility). This work helped to  
4 determine the viability of the project and to refine the construction cost estimates, which  
5 are foundational pieces of the final analysis necessary to support moving forward with the  
6 project.

7 **Q. Please summarize the Company's discussions with TGP regarding the options**  
8 **available to the Company on the TGP Concord Lateral.**

9 A. Subsequent to the cancellation of the TGP NED Project in May 2016, the Company had  
10 discussions with TGP regarding an expansion of the existing TGP Concord Lateral.  
11 Pursuant to those confidential discussions, the Company received capital cost estimates in  
12 August 2016 and March 2017 for an expansion of approximately 75,000 Dth/day on the  
13 TGP Concord Lateral resulting in daily indicative rates ranging from [REDACTED] to [REDACTED] per  
14 Dth, which were reviewed as part of the Company's analysis submitted in this docket.

15 In May 2019, TGP confirmed the August 2016 and March 2017 price estimates and also  
16 provided capital costs and indicative rates for 50,000 Dth/day of TGP capacity from two  
17 receipt points (*i.e.*, CLNG at Everett, MA or Dracut, MA), which ranged from [REDACTED] to  
18 [REDACTED] per Dth. Thus, based on the information provided by TGP in 2016, 2017, and again  
19 in May 2019, the Granite Bridge Pipeline remained the least-cost delivery option and the  
20 Company continued to work on the Granite Bridge Project as it was still the least-cost,  
21 long-term solution.

1 In October 2019, after EnergyNorth again reached out to TGP regarding updated expansion  
2 cost estimates, and after filings were made in this docket indicating that the Company was  
3 working on 70% design drawings to enable cost estimates for the Granite Bridge Pipeline,  
4 the Company for the first time received updated information from TGP with significantly  
5 lower capital cost estimates for 25,000 Dth/day, 50,000 Dth/day, and 75,000 Dth/day  
6 delivery options at daily indicative rates ranging from [REDACTED] to [REDACTED] per Dth. Based on  
7 an initial review of the revised TGP information, the Company concluded that if these  
8 options and prices materialized, then the Granite Bridge Pipeline might no longer be the  
9 least-cost delivery option. The Company continued to engage with TGP to better  
10 understand and further analyze the resource options.

11 In December 2019 and January 2020, after continued negotiations and requested scenario  
12 options by EnergyNorth, the Company received updated information from TGP that  
13 showed even lower cost estimates. Specifically, TGP provided to the Company estimates  
14 for 25,000 Dth/day and 50,000 Dth/day delivery options with daily indicative rates of [REDACTED]  
15 to [REDACTED] per Dth.

16 **Q. Did the Company continue to discuss the updated capital cost and indicative rate**  
17 **information with TGP?**

18 A. Yes, it did. Specifically, the Company engaged with TGP to understand the updated  
19 information, which allowed EnergyNorth to conduct detailed analysis of the capital costs  
20 and indicative rates associated with the TGP alternatives. Based on the revised information

1 received from TGP in April 2020, the Company focused on the two best alternatives that  
2 TGP proposed.

3 **Q. Please describe the two TGP alternatives that the Company evaluated.**

4 A. To address the high growth areas on the Company’s distribution system (e.g., Nashua,  
5 Manchester, Londonderry, and surrounding towns), the Company focused on two  
6 alternatives provided by TGP in April 2020 that were considered the best options for  
7 meeting demand growth and optimizing the TGP deliveries.

8 • The first TGP alternative, hereinafter referred to as the “TGP Nashua/Manchester  
9 Alternative,” consisted of a 40,000 Dth/day contract originating at Dracut and  
10 delivering 20,000 Dth/day to the Nashua gate station and 20,000 Dth/day to the  
11 Manchester gate station. Under this alternative, TGP would need to loop the  
12 existing Nashua/Hudson Lateral, which resulted in a daily indicative rate of [REDACTED]  
13 per Dth for an annual cost of approximately [REDACTED] million.<sup>19</sup>

14 • The second TGP alternative, hereinafter referred to as the “TGP Londonderry  
15 Alternative,” consisted of a 40,000 Dth/day contract originating at Dracut and  
16 delivering to the Londonderry gate station. Since there was no need for TGP to  
17 loop the existing Nashua/Hudson Lateral in this alternative, the daily indicative rate  
18 was \$0.14 per Dth resulting in an annual cost of approximately \$2.0 million.<sup>20</sup>

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<sup>19</sup> Annual cost calculated as 40,000 Dth/day multiplied by the rate of [REDACTED] per Dth, multiplied by 365 days.

<sup>20</sup> Annual cost calculated as 40,000 Dth/day multiplied by the rate of \$0.14 per Dth, multiplied by 365 days.

1 **Q. Please explain how deliveries from TGP would be optimized.**

2 A. Both TGP alternatives would require certain on-system distribution enhancement projects  
3 to optimize deliveries. These on-system enhancement projects would provide an increase  
4 in pressure support and additional supply to the parts of the Company's distribution system  
5 that are experiencing high growth.

6 **Q. Does the Company require different levels of investment in on-system distribution**  
7 **enhancements under the TGP Nashua/Manchester and TGP Londonderry**  
8 **Alternatives?**

9 A. Yes, it does. However, prior to discussing the different levels of on-system investment  
10 needed to optimize deliveries under the two TGP alternatives, there are certain common  
11 investments across both alternatives. Specifically, under both TGP alternatives, the  
12 Company would need to upgrade the Candia Road Station, which is estimated to cost [REDACTED]  
13 million. In addition, the Company would need to uprate a feeder line in Manchester at an  
14 estimated cost of [REDACTED] million. For simplicity, the upgrade of the Candia Road Station and  
15 the uprate of the feeder line in Manchester, which estimates total \$5.5 million, are referred  
16 to as the "Common Costs."

17 The estimated capital costs for the TGP Nashua/Manchester Alternative are as follows:

- 18 • TGP Costs:
- 19 ○ Nashua/Hudson Lateral Loop: [REDACTED] million
  - 20 ○ Remote Crossover: [REDACTED] million

- 1           o TGP Sub-total: [REDACTED] million
- 2           • Common Costs: \$5.5 million
- 3           • Company On-System Enhancements:
- 4           o Replace feeder line in Nashua: [REDACTED] million
- 5           o Cross Souhegan River: [REDACTED] million
- 6           o Company On-System Enhancements Sub-total: [REDACTED] million

7           Therefore, under the TGP Nashua/Manchester Alternative, TGP estimated [REDACTED] million  
8           in capital costs and the Company on-system capital investments are estimated to be [REDACTED]  
9           million resulting in a total capital cost estimate for this alternative of \$44.5 million.

10           For the TGP Londonderry Alternative, the Company has the following estimates of capital  
11           costs:

- 12           • Common Costs: \$5.5 million
- 13           • Company On-System Enhancements:
- 14           o Granite Ridge Station: [REDACTED] million
- 15           o Budweiser line in Nashua: [REDACTED] million
- 16           o Brown Avenue pipeline and regulator in Manchester: [REDACTED] million
- 17           o Daniel Webster Highway Merrimack station in Manchester: [REDACTED] million
- 18           o Company On-System Enhancements Sub-total: [REDACTED] million

1 In total, the capital cost estimate is \$50.5 million under the TGP Londonderry Alternative.

2 **Q. Please provide the cost consequences to customers associated with the TGP**  
3 **Nashua/Manchester and TGP Londonderry Alternatives.**

4 A. To compare the consequences of the estimated capital costs for the two TGP alternatives,  
5 the Company calculated the annual cost of service associated with the total capital cost  
6 estimates, then levelized those costs so they could be combined with the fixed, annual TGP  
7 costs. Specifically, the annual cost of service under the TGP Nashua/Manchester  
8 Alternative is approximately \$10.2 million, of which [REDACTED] million is associated with the  
9 TGP Contract and [REDACTED] million is the levelized annual cost associated with the Company's  
10 on-system enhancement projects. In the TGP Londonderry Alternative, the annual cost of  
11 service is approximately \$6.5 million, with the TGP Contract representing \$2.0 million and  
12 the Company's levelized annual cost for the on-system investment representing \$4.5  
13 million. Therefore, the annual cost to the Company and its customers under the TGP  
14 Londonderry Alternative is approximately \$3.7 million lower than the annual cost of  
15 service associated with the TGP Nashua/Manchester Alternative.

16 **Q. In addition to the cost consequence analysis, did the Company evaluate the qualitative**  
17 **benefits associated with each TGP alternative?**

18 A. Yes, it did. First, there are some common benefits associated with both TGP alternatives.  
19 Specifically, both TGP alternatives would provide for an increase in on-system pressure  
20 support and additional supply to certain high growth areas on the Company's distribution  
21 system. The addition of either TGP alternative to EnergyNorth's resource portfolio would

1 also allow the Company to reduce reliance on its aging propane facilities, with the  
2 flexibility of phasing out those facilities. Furthermore, both TGP alternatives would  
3 provide the Company with risk mitigation regarding the CLNG contracting process.

4 However, the TGP Londonderry Alternative would provide additional benefits, including:

5 • Nashua

6 ○ Avoids significant construction risk associated with work on the  
7 Nashua/Hudson Lateral, which currently runs through several residential  
8 neighborhoods and closely past many houses;

9 ○ Provides a redundant feed to the Nashua area;

10 ○ Equivalent pressure upgrades to Nashua-Bridge Street as the TGP  
11 Nashua/Manchester Alternative, but higher pressure at Nashua-Warren  
12 Lane and Budweiser locations, two distant ends of the distribution system;  
13 and

14 ○ Reduces flow/stress on the existing Nashua/Hudson Lateral, which allows  
15 for future growth.

16 • Manchester

17 ○ Equivalent pressure upgrades to Manchester-Elm Street as the TGP  
18 Nashua/Manchester Alternative, but higher pressure at Manchester-Brown  
19 Ave and Saint-Gobain locations; and

- 1                   o Relieves flow/stress on the Candia Road facilities, which supports future  
2                   growth.

3 **Q. Are there other qualitative benefits associated with the TGP Londonderry**  
4 **Alternative?**

5 A. Yes, a significant benefit of the TGP Londonderry Alternative would be the increase in  
6 delivery pressure from TGP. In the TGP Nashua/Manchester Alternative, the guaranteed  
7 minimum pressure from TGP would remain at the existing level of 100 PSI at all  
8 EnergyNorth interconnects with TGP. However, in the TGP Londonderry Alternative, the  
9 TGP minimum pressure guarantee at Londonderry is 300 PSI, which is a 200% increase  
10 compared to the 100 PSI at the other gate stations. This increase in the guaranteed  
11 minimum pressure from TGP is a significant operational enhancement as the Company  
12 requires a minimum of 250 PSI inlet pressure in order to maintain adequate pressure on its  
13 distribution system. To date, the Company has not experienced inlet pressures below 250  
14 PSI. However, the pressure guarantee of 300 PSI at Londonderry provides a much greater  
15 level of flexibility and reliability for EnergyNorth's distribution systems in Nashua and  
16 Manchester.

17 Lastly, the on-system distribution facilities associated with the TGP Londonderry  
18 Alternative could be phased in over time, providing another cost benefit to customers and  
19 reducing the risk associated with constructing all the required facilities in a shorter period  
20 of time.

1 **Q. Please summarize the Company's analysis regarding the TGP alternatives and its**  
2 **conclusion.**

3 A. The TGP Londonderry Alternative has a lower cost impact on customers because the  
4 annual cost of service is over 30% lower than the TGP Nashua/Manchester Alternative. In  
5 addition, the TGP Londonderry Alternative would provide significant qualitative benefits,  
6 including: (i) secondary feeds into the Nashua and Manchester distribution systems; (ii) a  
7 TGP minimum guaranteed pressure of 300 PSI at the Londonderry interconnect (*i.e.*, a  
8 200% increase in the TGP minimum guaranteed pressure when compared to the other  
9 TGP/EnergyNorth interconnects), which increases on-system pressure at key points on the  
10 distribution system; (iii) reductions in flow/stress in certain distribution locations; and (iv)  
11 the ability to phase in the on-system facilities, spreading out the cost impacts and reducing  
12 overall risk. As a result, the Company has determined that the TGP Londonderry  
13 Alternative is the best option of the two TGP alternatives and has executed the TGP  
14 Contract for 40,000 Dth/day from Dracut to Londonderry.

15 **Q. Is EnergyNorth seeking the Commission's authorization to recover the costs of the**  
16 **on-system distribution enhancement projects in this docket?**

17 A. No, the on-system enhancement projects required to optimize the TGP deliveries  
18 (discussed in Section IV above) will be addressed in the normal course through rate case  
19 proceedings.

1 **V. TGP CONTRACT RISKS AND MITIGATION**

2 **Q. Please review the major attributes of the TGP Contract.**

3 A. The TGP Contract has the following major components: contract MDQ (Maximum Daily  
4 Quantity) of 40,000 Dth/day; receipt point of Dracut, MA; delivery point of Londonderry,  
5 NH; in-service date of November 1, 2021; term of 20 years; rate equal to the currently  
6 effective TGP tariff for FT-A service defined as Zone 6 to Zone 6; and one-time option to  
7 terminate in 2022 should the Company not receive approval from the Commission for the  
8 TGP Contract.

9 **Q. Given the on-system distribution enhancements required to optimize the deliveries**  
10 **associated with the TGP Contract, is the Company concerned regarding potential**  
11 **delays in the proposed in-service date for the on-system enhancement projects?**

12 A. As discussed above, the Company has identified certain on-system distribution  
13 enhancements necessary to optimize the incremental supply from TGP. These on-system  
14 enhancements would be phased in over time to reduce construction delays and minimize  
15 costs for customers, while ensuring the benefits of the new TGP volumes are available to  
16 meet system demand.<sup>21</sup>

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<sup>21</sup> The Company's current schedule for these on system enhancements is as follows:

2021 - Complete design and permitting;

2022 - Rebuild the point of delivery from TGP in Manchester at Candia Road, build a new point of delivery into the distribution system from the Granite Ridge transmission pipeline, and then build a pipeline from the new point of delivery into the Manchester distribution system;

1 **Q. The proposed service from TGP has a receipt point of Dracut. Does EnergyNorth**  
2 **have concerns regarding the use of this receipt point?**

3 A. Yes, it does. As detailed through various testimony and responses to discovery requests in  
4 this docket, as well as in prior dockets (*e.g.*, the NED matter, Docket No. DG 14-380), the  
5 Company has concerns regarding its reliance on Dracut as a receipt point. Specifically,  
6 with the addition of this new TGP contract, EnergyNorth will increase its service from the  
7 Dracut receipt point by 80%, from 50,000 Dth/day to 90,000 Dth/day. As a result, the  
8 90,000 Dth/day from Dracut will represent approximately 45% of the Company's Design  
9 Day resources.<sup>22</sup> To address the liquidity and volatility of the pricing associated with the  
10 Dracut receipt point, the Company plans to pursue the following risk mitigation strategies:  
11 (i) continue to procure fixed basis products at the Dracut receipt point for the winter period;  
12 (ii) review long-term gas supply contracts deliverable to Dracut; (iii) continue to assess  
13 upstream contracting options (*e.g.*, incremental capacity on PNGTS that could provide firm  
14 service to Dracut from a more liquid receipt point); and (iv) monitor and explore any new  
15 supply and capacity options that may be proposed.

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2023 - Uprate the pressure of the existing 130 psig sub-transmission feeder in Manchester, and build a river crossing from the new pipeline into the distribution system in Merrimack; and

2024 – Build a pipeline that connects the Granite Ridge transmission station constructed in 2022 to the end of the existing Nashua sub-transmission feeder near the Budweiser plant in Merrimack.

<sup>22</sup> Using the Design Day Resources of 155,033 Dth as illustrated in Table 2 for 2022/23 and increasing that by the 40,000 Dth associated with the TGP Contract, the 90,000 Dth at Dracut represents approximately 45% of the 195,033 Dth of resources.

1 **Q. Given the significant reliance on the Dracut receipt point, is the Company continuing**  
2 **to review on-system resource options?**

3 A. Although the Granite Bridge Project is being withdrawn, the Company will continue to  
4 assess opportunities to develop smaller on-system LNG projects as these types of facilities  
5 provide numerous benefits, including: (i) increasing the reliability, flexibility, and diversity  
6 of the Company's gas supply portfolio; (ii) providing a secondary feed into the Concord  
7 Lateral and/or its distribution system; (iii) providing pressure support at the end of TGP  
8 Concord Lateral; (iv) allowing the Company to reduce its reliance on the aging propane  
9 facilities; (v) providing a load following resource to better manage demand swings and  
10 mitigate upstream balancing costs; and (vi) providing a locally managed physical price  
11 hedge for customers, which is increasingly important given the Company's reliance on gas  
12 supply at the Dracut receipt point. Similar to the approach used and approved by the  
13 Commission for other resource-related decisions, the Company will continue to rely on the  
14 integrated resource planning process for identifying, evaluating both quantitatively and  
15 qualitatively, and communicating its resource analysis and recommendations.

16 **VI. RECOVERY OF GRANITE BRIDGE PROJECT COSTS**

17 **Q. Is the Company seeking the Commission's authorization to recover the costs incurred**  
18 **to investigate, develop, and analyze the Granite Bridge Project in this docket?**

19 A. Yes, as discussed in detail below, the Company is seeking the Commission's approval to  
20 recover certain prudently incurred costs associated with the investigation and analysis of  
21 the Granite Bridge Project, as these costs were necessary to determine whether the Granite

1 Bridge Project was the least-cost resource alternative to meet the growing demand of  
2 EnergyNorth's customers in accordance with the Company's Commission-approved  
3 resource planning standards and decision-making process. Further, the work analyzing the  
4 viability of the Granite Bridge Project, from the perspective of ability to construct and  
5 likelihood of approval, was instrumental and critical in achieving the current, highly  
6 beneficial outcome for customers.

7 **Q. Why did the Company incur development costs associated with the Granite Bridge**  
8 **Project?**

9 A. The Company's objective has always been to develop a gas supply portfolio that provides  
10 reliable service to customers at the lowest reasonable cost.<sup>23</sup> In addition, the Company  
11 employs a gas supply portfolio strategy to increase the reliability, flexibility, and diversity  
12 of the assets and contracts in the portfolio, thus enabling the Company to respond to  
13 changing market and regulatory conditions over both the short and long term. As such,  
14 and given the outcome of the NED project, the Company pursued viable resource options  
15 to meet long-term forecasted demand. Specifically, the Company evaluated resource  
16 portfolios that included the Granite Bridge Project, which required substantial work to  
17 arrive at reasonable cost estimates, as well as incremental service from TGP. When the  
18 resource portfolio with the Granite Bridge Project initially demonstrated a lower cost than  
19 the resource portfolio with the proposed capital costs and indicative rates from TGP, the  
20 Company moved ahead to refine the Granite Bridge Project cost projections to further

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<sup>23</sup> See, Direct Testimony of Susan L. Fleck and Francisco C. DaFonte, Docket No. DG 17-198, Bates 007.

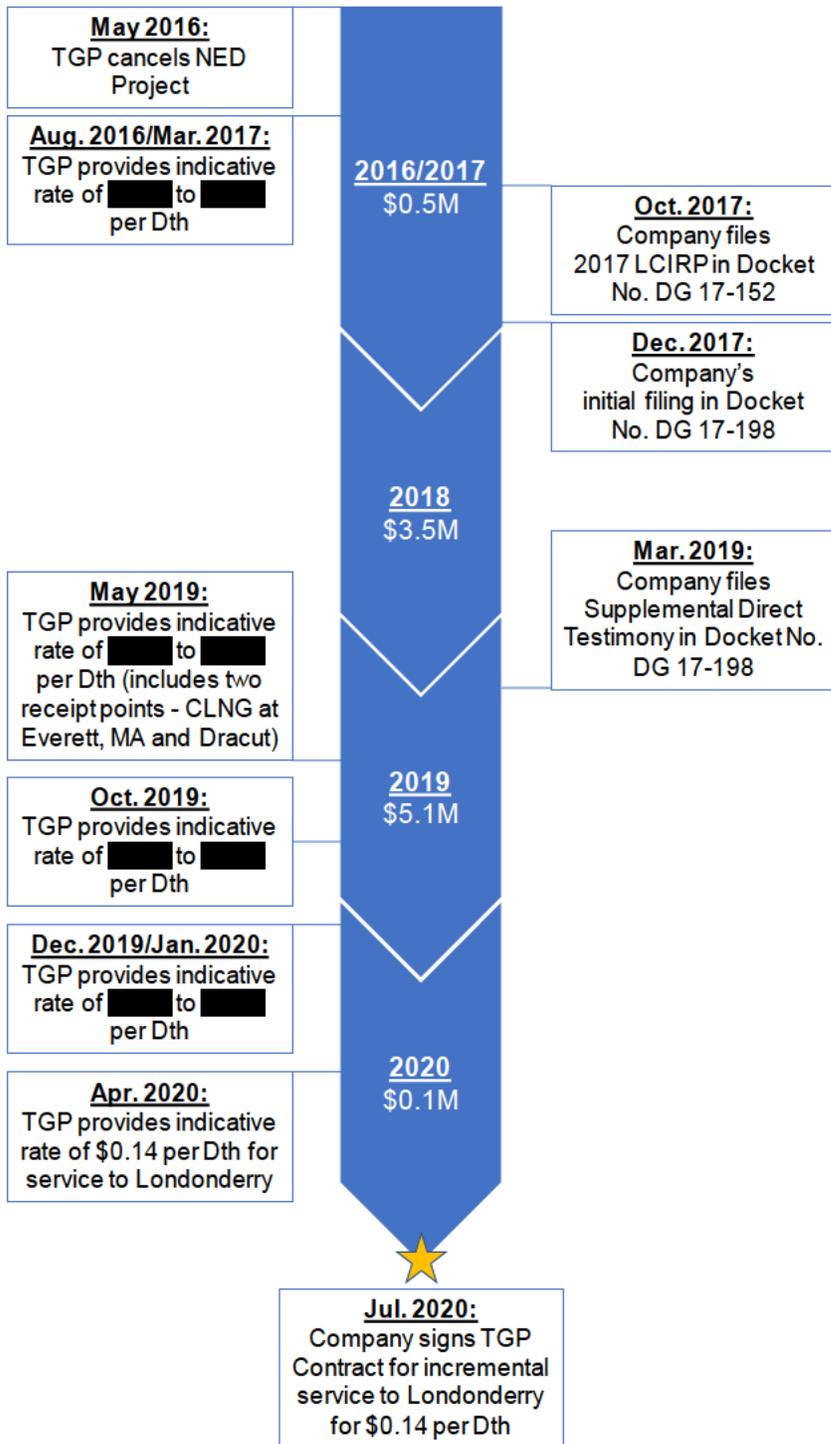
1           validate the decision on resource selection. The incurrence of these costs was reasonable  
2           based on the Company's analysis of resource portfolios that concluded the Granite Bridge  
3           Project was the preferred alternative for customers.

4   **Q.   Please summarize the costs incurred by the Company related to the Granite Bridge**  
5   **Project and the associated timing of those costs.**

6   A.   The Company has incurred approximately \$9.2 million in costs to investigate, develop, and  
7       analyze the viability of the Granite Bridge Project. The majority of these costs were  
8       incurred by the Company during 2018 and 2019 at a time when the current TGP pricing  
9       was not available. Specifically, the Company incurred engineering, environmental, and  
10      related (e.g., permitting, consulting, legal, etc.) costs associated with the Granite Bridge  
11      Project for each of the following years: approximately \$0.5 million in 2016/2017, \$3.5  
12      million in 2018, \$5.1 million in 2019, and \$0.1 million in 2020. To provide context  
13      regarding when the Granite Bridge Project costs were incurred by EnergyNorth relative to  
14      the indicative rates for a capacity contract on TGP, in Figure 3 the Company provides a  
15      timeline with respect to the indicative rate signals for a capacity contract from TGP.

1

**Figure 3: Timeline of Granite Bridge Project Costs and TGP Rates**



2

1 As shown by Figure 3, the Company worked on the Granite Bridge Project and incurred  
2 associated costs during the period 2016 through 2019, the time frame in which the TGP  
3 estimated rates for service (*i.e.*, the alternative option to the Granite Bridge Project) ranged  
4 from [REDACTED] to [REDACTED] per Dth. Stated differently, when the TGP indicative capital costs and  
5 rates were higher than the levelized cost of the Granite Bridge Project, the Company  
6 incurred costs to refine projections for the Granite Bridge Project as it was the lower cost  
7 alternative at that time. However, when the TGP capital cost and indicative rates were  
8 significantly reduced, EnergyNorth suspended most activities associated with the Granite  
9 Bridge Project to focus on assessing the TGP options.

10 **Q. Please quantify the difference in the annual cost of service associated with the initial**  
11 **indicative rates provided by TGP during the 2016/2017 period to the rate outlined in**  
12 **the TGP Contract, assuming a contract service level of 40,000 Dth.**

13 A. To quantify the annual cost savings associated with the reduction in the TGP pricing, the  
14 Company used indicative rates of [REDACTED] and [REDACTED] per Dth to represent the range of price  
15 signals provided by TGP in 2016/2017, and assumed a contract volume of 40,000 Dth per  
16 day. The resultant *annual* cost, under the aforementioned indicative rate and volume  
17 assumptions, ranged from [REDACTED] million to [REDACTED] million. However, using the \$0.14 per  
18 Dth rate in the TGP Contract executed by the Company in July 2020 results in an annual  
19 cost of approximately \$2 million. In other words, the reduction in the indicative rate signals  
20 from TGP of [REDACTED] and [REDACTED] per Dth to the contract rate of \$0.14 per Dth (a decrease of

1 over [REDACTED] %) results in an *annual* cost savings of approximately [REDACTED] million to [REDACTED] million  
2 for customers.

3 **Q. If the Company's Granite Bridge Project costs are added to the cost of the TGP**  
4 **Londonderry Alternative, is the combined cost still lower than the levelized cost for**  
5 **the Granite Bridge Project?**

6 A. Yes, the total combined costs are well below the levelized cost for the Granite Bridge  
7 Project. Specifically, combining the approximately \$2 million per year in demand charges  
8 associated with the TGP Contract, \$4.5 million per year for the Company's on-system  
9 enhancements, and \$9.2 million in total costs to scope, evaluate, analyze and develop the  
10 Granite Bridge Project results in total combined costs of \$15.7 million for one year, which  
11 is approximately 65% (*i.e.*, \$30.7 million) lower than the levelized cost of service of \$46.4  
12 million per year for the Granite Bridge Project.<sup>24</sup> Stated differently, if all of the \$9.2  
13 million in Granite Bridge Project costs were added to the annual cost of service for the  
14 TGP Londonderry Alternative, and collected in one year, that total cost is still well below  
15 the estimated annual cost of service for the Granite Bridge Project. Please note that, after  
16 the recovery of the Granite Bridge Project costs, the annual cost of service for the TGP  
17 Contract and the associated on-system enhancements reverts to the \$6.5 million per year.

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<sup>24</sup> Total levelized cost includes the Granite Bridge Pipeline levelized cost of \$17.6 million per year and \$28.8 million per year for the Granite Bridge LNG facility. *See*, Supplemental Direct Testimony of Francisco C. DaFonte and William R. Killeen, Docket No. DG 17-198, Bates 034 and 041.

1 **Q. Has the Company conducted a bill impact analysis associated with the recovery of the**  
2 **Granite Bridge Project costs?**

3 Yes, however it is important to note that the per-unit cost of the initial indicative TGP rate  
4 of [REDACTED] per Dth would have produced an annual cost of [REDACTED] million, as compared to the  
5 annual cost of the TGP Contract, which is \$2 million (*i.e.*, *annual* savings for customers of  
6 [REDACTED] million over the contract term). If the [REDACTED] million in savings is spread over the  
7 sales and non-capacity exempt annual volume of 16 Bcf, the benefit to customers is [REDACTED]  
8 per Dth of savings multiplied by the average residential heating use of 78 Dth per year  
9 equates to approximately [REDACTED] of savings per year.

10 By comparison, EnergyNorth has assessed the bill impact to residential customers of  
11 recovering the Granite Bridge Project costs over five- and ten-year periods via the cost-of-  
12 gas adjustment clause. With a five-year recovery period, the typical annual bill for a  
13 residential customer would increase by 1.4% or \$13.46 per year (*i.e.*, just over \$1 per  
14 month). Whereas the annual savings of [REDACTED] million to [REDACTED] million, discussed above,  
15 will produce thousands of dollars in savings for a typical residential customers (*i.e.*,  
16 approximately [REDACTED] to [REDACTED] per year over the 20-year contract term), the benefit of the  
17 TGP Contract far outweighs the recovery of Granite Bridge Project costs.

18 **Q. Are you familiar with the statute that excludes from base rates the costs associated**  
19 **with construction work in progress?**

20 A. We are generally aware that RSA 378:30-a addresses the costs associated with construction  
21 work in progress (“CWIP”) and is known as the “Anti-CWIP statute”.

1 **Q. Based on your understanding of RSA 378:30-a, is that statute applicable to the costs**  
2 **associated with the Granite Bridge Project?**

3 A. It is the Company's position that the law does not apply to the Granite Bridge Project costs,  
4 but that is a legal argument to be presented by counsel.

5 **Q. Please explain why the costs associated with the Granite Bridge Project should be**  
6 **recovered from EnergyNorth customers?**

7 A. The Granite Bridge Project costs should be recovered from customers because, first, these  
8 costs were necessary to evaluate and demonstrate the viability and feasibility of one of two  
9 identified resource options that could meet EnergyNorth's customers' needs. Second, the  
10 work that gave rise to these costs strongly positioned the Company in its negotiations with  
11 TGP, as it indicated EnergyNorth's ability and willingness to solve the Company's  
12 resource constraints without contracting with TGP. The Company's customers are the  
13 direct beneficiaries of these costs as they will see a substantial reduction in the gas costs  
14 that they will incur for these needed resources. As noted above, the rate in the executed  
15 TGP Contract is over [REDACTED] lower than the previously provided indicative rates, thus saving  
16 customers hundreds of millions of dollars (approximately [REDACTED] to [REDACTED])  
17 over the 20-year contract term.

18 The Commission should encourage EnergyNorth (and all utilities) to behave similarly by  
19 allowing recovery of such prudently incurred costs.

1 **Q. Is the request to recover the Granite Bridge Project costs comparable to how the**  
2 **Company would treat the costs to exit or terminate any other gas supply option?**

3 A. Yes, it is. If the Company had signed a precedent agreement for pipeline capacity and,  
4 subsequent to that decision, another gas supply option was identified as the preferred  
5 option, then the Company would have evaluated its alternatives and the cost implications  
6 to customers. Typically, precedent agreements for pipeline capacity have certain clauses  
7 that allow the customer to terminate the contract, but with a cost consequence (e.g., paying  
8 pro rata share of costs incurred by the pipeline company prior to receiving the customer's  
9 termination notice). Under this scenario, the Company would compare the cost of the gas  
10 supply option that was subject to the precedent agreement to the combined cost of  
11 terminating the precedent agreement and the expected cost of the new alternative. If the  
12 cost of the new alternative combined with the termination cost outlined in the precedent  
13 agreement was lower than the original alternative, the prudent course would be to incur the  
14 termination cost and request approval to recover those costs from the customers. In other  
15 words, regardless of the resource arrangement (e.g., contract with a third-party, contract  
16 with an affiliate, or asset under development), if the Company and its customers are better  
17 positioned by a new option, then the Company would terminate its existing precedent  
18 agreement or suspend asset development, incur the cost of that termination (e.g.,  
19 development costs or exit fees), and commit to the new alternative. As such, recovery of  
20 the asset development or contract termination costs from customers who benefited from  
21 the Company's decision to pursue an alternative gas supply option is reasonable.

1 **Q. Is there a prior situation in New Hampshire where a local distribution company has**  
2 **recovered an exit fee from customers associated with canceling an arrangement for a**  
3 **gas supply resource because of the availability of a new resource?**

4 A. Yes, Northern Utilities Inc. (“Northern”) recovered from customers certain costs associated  
5 with terminating an arrangement with its affiliate Granite State Gas Transmission  
6 (“GSGT”) for service from a proposed LNG facility.

7 **Q. Please summarize the circumstances associated with the Northern and GSGT**  
8 **arrangement and recovery of an exit fee.**

9 A. In August 1996, the Commission approved Northern’s precedent agreement with GSGT  
10 for capacity associated with a proposed 2 Bcf LNG facility near Wells, Maine (“Wells  
11 LNG”). In May 1998, GSGT received authorization from the FERC to construct and  
12 operate the Wells LNG facility. In February 1999, Northern provided notice to GSGT  
13 requesting that it be released from the contract obligations associated with Wells LNG as  
14 Northern had received new gas supply proposals that were more attractive than the  
15 arrangement with GSGT. In February 1999, GSGT agreed to release Northern from its  
16 obligation pending an approval from FERC for an exit fee associated with Northern’s  
17 decision. In March 1999, GSGT filed at the FERC for recovery from Northern of Wells  
18 LNG project development costs equal to \$11.6 million. In August 1999, the parties to the  
19 proceeding including Northern, GSGT, the Commission Staff, and the New Hampshire  
20 Office of the Consumer Advocate submitted a settlement agreement to the FERC. The  
21 settlement agreement addressed certain issues including: (i) identification of the

1 recoverable project costs as \$6.95 million, which excluded amounts related to allowance  
2 for funds used during construction; (ii) identification of the total collections of \$8.34  
3 million, which reflected the recoverable project costs plus carrying costs; (iii) setting a  
4 recovery period of seven years; and (iv) determining that any benefit associated with the  
5 land remained with GSGT shareholders.

6 **Q. Please discuss the similarities of the Northern/GSGT settlement and the recovery of**  
7 **costs associated with the Granite Bridge Project.**

8 A. The Northern/GSGT settlement and the Company's proposed recovery of Granite Bridge  
9 Project costs have certain similarities including: (i) the Wells LNG facility and the Granite  
10 Bridge Project were proposed to provide more reliable and flexible service to local  
11 distribution company ("LDC") customers; (ii) although Northern had a commitment to  
12 Wells LNG, and EnergyNorth incurred costs for the Granite Bridge Project, in each  
13 circumstance gas supply options continued to be reviewed; (iii) in both situations, a better  
14 alternative was identified that was lower cost than the initial resource; (iv) the cost to  
15 terminate the initial resource (*i.e.*, exit fee from GSGT or investigative costs for Granite  
16 Bridge Project) when added to the cost of the preferred alternative were lower than the cost  
17 of the initial resource; and (v) the customers of the LDC were the beneficiary of the lower  
18 cost resource.

1   **Q.   Please discuss why it is important that the Company recover the costs associated with**  
2       **evaluating the Granite Bridge Project.**

3   A.   As discussed throughout this proceeding, the Company is directly connected to the TGP  
4       Concord Lateral and, therefore, relies on this single feed to serve its customers.  The  
5       Company does not have the option to negotiate with a second pipeline company, thus a  
6       primary lever in any negotiation with TGP is developing an on-system project (*e.g.*, an  
7       LNG facility).  Absent this lever, there is very limited or no pressure on TGP to offer the  
8       Company best-effort pricing, an innovative service or other incentives to enable contract  
9       decisions.  The recovery of the costs necessary to create this impetus is warranted because  
10      the Company's work directly reduced costs for customers.

11      As discussed above, the \$9.2 million of costs associated with the Granite Bridge Project  
12      will be paid back in the first year compared to the TGP indicative rates provided during the  
13      2016/2017 through early October 2019 time period.  In addition, once the Company  
14      received the lower price signals from TGP, it suspended most activity on the Granite Bridge  
15      Project, thereby minimizing the level of costs to be recovered.  To not allow the Company  
16      to recover reasonable costs would place EnergyNorth and its customers at a significant  
17      disadvantage in any subsequent contract negotiation with TGP and would likely result in  
18      higher costs for customers.  Lastly, should the Company not be allowed to recover these  
19      costs it would result in asymmetrical risk, whereby the Company incurred costs to  
20      investigate and propose the Granite Bridge Project, but the customers benefited from that  
21      expenditure resulting in a disincentive for the Company to pursue such tactics (*i.e.*,

1 continued negotiations and reassessment of options) in the future potentially leading to  
2 higher costs for its customers.

3 **VII. CONCLUSIONS AND RECOMMENDATION**

4 **Q. Please summarize your conclusions and recommendations.**

5 A. As discussed, the Company, during the course of this proceeding, continued to evaluate the  
6 viable gas supply options available to meet its forecasted demand over the long term. From  
7 2016 through early October 2019, the TGP capital cost estimates and associated indicative  
8 rates supported the continued investigation and pursuit of the Granite Bridge Project (*i.e.*,  
9 the TGP price signals were higher than the cost estimates for the Granite Bridge Project),  
10 which the Company pursued in a reasonable manner. However, in October 2019, the TGP  
11 capital cost estimates and indicative rates decreased significantly causing the Company to  
12 pause investigation and development of more refined pricing of the Granite Bridge Project  
13 and focus its effort on further evaluating the TGP options.

14 Based on the Company's analysis of the revised TGP option, it is submitting a TGP  
15 Contract for 40,000 Dth/day of service to the Commission for approval, and the Company  
16 in subsequent filings will ask for recovery of on-system enhancements needed to optimize  
17 the TGP deliveries. Concurrently with its request to approve the TGP Contract, the  
18 Company is withdrawing its Granite Bridge Project, but requesting approval to recover the  
19 prudently incurred costs of investigating and analyzing the costs of the Granite Bridge  
20 Project. The Company proposes to recover these costs from customers via the cost-of-gas  
21 adjustment clause over a 5-year period, which would have only a small impact on

1 customers. This impact is offset by many multiples when considering the substantially  
2 lower cost of the resource procured. Lastly, the Company will continue to assess on-system  
3 LNG facilities as part of an overall gas supply strategy to meet long-term demand in a cost-  
4 effective manner.

5 **Q. Does this conclude your Second Supplemental Direct Testimony?**

6 **A.** Yes, it does.