

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

DG 20-152
Winter 2020/2021 Cost of Gas

Staff Data Requests - Set 1

Date Request Received: 9/24/20
Request No. Staff 1-10

Date of Response: 10/5/20
Respondent: Steven Mullen

REQUEST:

Please explain plans to convert additional Keene customers (residential and commercial) to CNG or LNG; please provide a timeline and next steps.

RESPONSE:

As the Company has consistently stated, the first step in further conversion of Keene customers from propane-air to natural gas is the siting of a permanent CNG/LNG facility. This was most recently stated in the testimony of Susan Fleck that was filed in EnergyNorth's distribution service rate case, Docket No. DG 20-105. In that testimony, Ms. Fleck stated:

With respect to its Keene Division, the Company is committed to undertaking a methodical approach to converting the system, over time, from propane/air to natural gas. This will occur over a period of years to allow for conversions, following the siting and installation of a permanent compressed natural gas/liquefied natural gas supply facility, that are not disruptive to customers while also providing for potential expansion of the system consistent with the risk sharing provisions established by the Commission in Docket No. DG 17-048. (Fleck testimony at Bates II-089, II-090)

As required by the NH Department of Environmental Services before it would grant permits for a facility at the Company-owned land on Production Avenue, and as is prudent utility practice, the Company has spent a considerable amount of time exploring different possibilities for a location for the permanent facility with the potential land parcels each having various restrictions or other drawbacks and complicating factors. Any future plans for conversion/expansion of the Keene system necessarily must begin with the location of that permanent facility determined as the anchor point from which future plans can be developed and detailed. As the search for an appropriate site is still ongoing, the timeline for subsequent events is necessarily uncertain at this time.

With respect to future conversion/expansion plans, the Company is mindful of the impending date for the cessation of the lease at the propane-air production plant.¹ On a related note, the Company engaged a consultant to assess the conditions and long-term viability of the propane-air plant. The report by the consultant is expected to be finalized in the near future and will be shared with the Staff and the OCA when it is available. The results of that report are expected to be a significant input into the decision making process regarding the length of time available before conversion of the entire Keene system is a necessity.

Once a site for the permanent facility is selected, it will be necessary, in accordance with the terms of orders issued in Docket Nos. DG 17-048 and DG 17-068 that the Company review its plans for the system with the Safety Division as well as attempt to obtain commitments from prospective new customers. Logistically speaking, though, it may be more challenging to obtain customer commitments prior to obtaining support from the Safety Division, other Staff, and the OCA regarding the permanent facility and its associated costs. In addition, the Company's replacement of leak-prone pipe in Keene continues so that is another factor that has to be taken into account in terms of timing.

As stated in Ms. Fleck's testimony cited above, the process is expected to take a number of years and is not something that can be accomplished in a short period of time, particularly as the time prior to the termination of the lease for the propane-air plant continues to shrink.

¹ The lease was prepaid by the former owner through March 2026, and there is the option for three additional years at \$70,000 to \$75,000 per year.

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

DG 20-152
Winter 2020/2021 Cost of Gas

Staff Data Requests - Set 1

Date Request Received: 9/24/20
Request No. Staff 1-4

Date of Response: 10/5/20
Respondent: Steven Mullen

REQUEST:

Ref. Bates p. 9. Please describe each obstacle and the associated delay. To what form of permission does the phrase “the go-ahead to put the CNG system online at any time” refer?

RESPONSE:

The obstacles to putting the temporary CNG system online varied since early 2017 when the Company informed Staff and the OCA of its plan to install the facility on its Production Avenue site to serve the Monadnock Marketplace and retire the blower systems. (In 2016, the Company and Staff discussed a temporary facility located behind a store at the Marketplace, but there was not sufficient time to work through the various issues that arose with siting the facility there.) The permissions also evolved over time.

The first obstacle was Staff’s statement that the Company did not have the franchise right to serve natural gas in Keene. As described in the April 24, 2017, Petition for a Declaratory Ruling (“Petition”) (revised on April 26, 2017) in Docket No. DG 17-068, the Company had been discussing with Staff its plan for a temporary CNG facility in Keene on several occasions and, during a March 27, 2017, meeting, was advised by Staff that the Company needed to file for franchise approval to be able to serve natural gas to its customers in Keene. The Petition further stated the Company’s plans to have the temporary CNG facility ready for the 2017–2018 winter season. Although the Company did not agree that it needed to seek franchise authority, it filed the Petition in an attempt to avoid significant delay given the difference in position and essentially obtain “permission” to serve natural gas in Keene.

The Company received this “permission” on October 20, 2017, six months after filing with no other activity in the docket, when the Commission issued Order No. 26,065 in DG 17-068 granting the Company’s petition and declaring that additional franchise authority was not required. Given the timing of that order, even if it was issued without the further requirements discussed below, the temporary CNG facility could not have been put online to serve customers because it was already too late in the season to be able to convert the customers in the Marketplace for the 2017–2018 winter season. The conversions cannot safely occur during cold weather. Had the Company known the Petition was going to be pending at the Commission for

an extended period of time then it likely would have altered its plans regarding the timing of putting the CNG facility in service and not entered into a CNG supply contract in advance of the 2017–2018 winter season.

The second obstacle to the CNG facility going online, and the second permission needed before serving CNG, arose from the conditions imposed in Order No. 26,065:

FURTHER ORDERED, that Liberty provide the final comprehensive plans and reports as described above; and it is

FURTHER ORDERED, that Liberty shall not flow any gas through the CNG/LNG installation in Keene until the Commission's Safety Division has found the required plans and reports adequate, and completed its physical inspection of the facilities as described above.

This language indicates that the ability to grant permission rested with the Commission's Safety Division with no mention that further action by the Commission would be necessary.¹ The requirement to obtain Safety Division approval gave rise to nearly a two year delay.

As the Company proceeded to provide plans and reports as required in Order No. 26,065, it became apparent that there was a significant difference in interpretation of the appropriate demarcation point on the CNG decompression equipment between where ASME B31.3 and 49 CFR Part 192 standards applied. The Company submitted its documentation consistent with ASME B31.3, which is the code governing the supplier of the CNG skid and is what that company used in its other installations of CNG unloading facilities, including those that feed into utility transmission and distribution piping, throughout the country. As part of that documentation, the demarcation point between the applicability of ASME B31.3 and 49 CFR Part 192 would be the outlet flange after the decompression was complete. The Safety Division, while acknowledging that “[t]here is no single applicable safety standard used within New Hampshire, nor nationwide, for CNG trailers,”² applied 49 CFR Part 192 to the installation as part of its assessment of the CNG installation, which meant that the demarcation point was the hose that connects the decompression facility to the trailers. This interpretation was not expected by the Company and resulted in the entire CNG skid having to be modified to meet the different standards, and also necessitated significant revisions to the Company's documentation, including the documentation of the owner of the CNG skid. The Safety Division's October 3, 2018, Adequacy Assessment took approximately a year to produce.

¹ The Company did not definitively learn that Commission approval of the Safety Division's assessment was a portion of the permission until twenty-one months later when the Commission issued Order No. 26,274 (July 24, 2019) and “accepted” and approved the Safety Division's assessment.

² NHPUC Safety Division Adequacy Assessment of the Proposed Compressed Natural Gas Installation by Liberty Utilities - Keene, NH Division (October 3, 2018) at 7.

The Company understands that this CNG installation was the first of its kind in New Hampshire and required significant research and investigation, but this was a significant portion of the delays that were encountered throughout the process. As the Company had no idea how long the Safety Division's assessment might take or what it might say, it was reasonable for the Company to have a CNG supply contract in place to be ready to serve customers for the 2018–2019 winter as the approval could have happened “at any time.”

Following months of the Company providing the necessary responses and updates to the Safety Division's Adequacy Assessment, on April 6, 2019, the Safety Division submitted its recommendation that “allows the commencement of the proposed Monadnock Marketplace system conversion from propane-air to natural gas and begins the flow of natural gas.” Although receipt of the Safety Division's recommendation gave support for the commencement of natural gas service, the Commission subsequently issued Order No. 26,274 (July 24, 2019) which denied Mr. Clark's motion for rehearing of Order 26,065 (which had been pending since May 2018), and “accepted” and approved the Safety Division's recommendation. As stated earlier, this was a procedural step that was not expected by the Company nor previously articulated by the Commission.

Mr. Clark sought further reconsideration of the July 24 order. As long as Mr. Clark's motion was still pending, the Company could not proceed because there was still the possibility the Commission could alter its ruling after rehearing. The Commission denied that pending motion in Order No. 26,294 (September 25, 2019), almost two years after issuing Order 26,065, which, coupled with the other events described above, finally provided the “go-ahead” to proceeding customer conversions and the provision of natural gas service in advance of the 2019–2020 winter season.

The Company converted the Marketplace customers and began flowing CNG in October 2019, two and one half years after encountering the first obstacle.

REVISED

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

DG 20-152
Winter 2020/2021 Cost of Gas

Staff Data Requests - Set 1

Date Request Received: 9/24/20
Request No. Staff 1-4

Date of Response: 10/20/20
Respondent: Steven Mullen

REQUEST:

Ref. Bates p. 9. Please describe each obstacle and the associated delay. To what form of permission does the phrase “the go-ahead to put the CNG system online at any time” refer?

RESPONSE:

The obstacles to putting the temporary CNG system online varied since early 2017 when the Company informed Staff and the OCA of its plan to install the facility on its Production Avenue site to serve the Monadnock Marketplace and retire the blower systems. (In 2016, the Company and Staff discussed a temporary facility located behind a store at the Marketplace, but there was not sufficient time to work through the various issues that arose with siting the facility there.) The permissions also evolved over time.

The first obstacle was Staff’s statement that the Company did not have the franchise right to serve natural gas in Keene. As described in the April 24, 2017, Petition for a Declaratory Ruling (“Petition”) (revised on April 26, 2017) in Docket No. DG 17-068, the Company had been discussing with Staff its plan for a temporary CNG facility in Keene on several occasions and, during a March 27, 2017, meeting, was advised by Staff that the Company needed to file for franchise approval to be able to serve natural gas to its customers in Keene. The Petition further stated the Company’s plans to have the temporary CNG facility ready for the 2017–2018 winter season. Although the Company did not agree that it needed to seek franchise authority, it filed the Petition in an attempt to avoid significant delay given the difference in position and essentially obtain “permission” to serve natural gas in Keene.

The Company received this “permission” on October 20, 2017, six months after filing with no other activity in the docket, when the Commission issued Order No. 26,065 in DG 17-068 granting the Company’s petition and declaring that additional franchise authority was not required. Given the timing of that order, even if it was issued without the further requirements discussed below, the temporary CNG facility could not have been put online to serve customers because it was already too late in the season to be able to convert the customers in the

Marketplace for the 2017–2018 winter season. The conversions cannot safely occur during cold weather. Had the Company known the Petition was going to be pending at the Commission for an extended period of time then it likely would have altered its plans regarding the timing of putting the CNG facility in service and not entered into a CNG supply contract in advance of the 2017–2018 winter season.

The second obstacle to the CNG facility going online, and the second permission needed before serving CNG, arose from the conditions imposed in Order No. 26,065:

FURTHER ORDERED, that Liberty provide the final comprehensive plans and reports as described above; and it is

FURTHER ORDERED, that Liberty shall not flow any gas through the CNG/LNG installation in Keene until the Commission's Safety Division has found the required plans and reports adequate, and completed its physical inspection of the facilities as described above.

This language indicates that the ability to grant permission rested with the Commission's Safety Division with no mention that further action by the Commission would be necessary.¹ The requirement to obtain Safety Division approval gave rise to nearly a two year delay.

As the Company proceeded to provide plans and reports as required in Order No. 26,065, it became apparent that there was a significant difference in interpretation of the appropriate demarcation point on the CNG decompression equipment between where ASME B31.3 and 49 CFR Part 192 standards applied. The Company submitted its documentation consistent with ASME B31.3, which is the code governing the supplier of the CNG skid and is what that company used in its other installations of CNG unloading facilities, including those that feed into utility transmission and distribution piping, throughout the country. As part of that documentation, the demarcation point between the applicability of ASME B31.3 and 49 CFR Part 192 would be the outlet flange after the decompression was complete. The Safety Division, while acknowledging that “[t]here is no single applicable safety standard used within New Hampshire, nor nationwide, for CNG trailers,”² applied 49 CFR Part 192 to the installation as part of its assessment of the CNG installation, which meant that the demarcation point was the hose that connects the decompression facility to the trailers. This interpretation was not expected by the Company and resulted in the entire CNG skid having to be modified to meet the different standards, and also necessitated significant revisions to the Company's documentation, including the documentation of the owner of the CNG skid. The Safety

¹ The Company did not definitively learn that Commission approval of the Safety Division's assessment was a portion of the permission until twenty-one months later when the Commission issued Order No. 26,274 (July 24, 2019) and “accepted” and approved the Safety Division's assessment.

² NHPUC Safety Division Adequacy Assessment of the Proposed Compressed Natural Gas Installation by Liberty Utilities - Keene, NH Division (October 3, 2018) at 7.

Division's October 3, 2018, Adequacy Assessment took approximately a year to produce. The Company understands that this CNG installation was the first of its kind in New Hampshire and required significant research and investigation, but this was a significant portion of the delays that were encountered throughout the process. As the Company had no idea how long the Safety Division's assessment might take or what it might say, it was reasonable for the Company to have a CNG supply contract in place to be ready to serve customers for the 2018–2019 winter as the approval could have happened “at any time.”

Following months of the Company providing the necessary responses and updates to the Safety Division's Adequacy Assessment, on April 6, 2019, the Safety Division submitted its recommendation that “allows the commencement of the proposed Monadnock Marketplace system conversion from propane-air to natural gas and begins the flow of natural gas.” Although receipt of the Safety Division's recommendation gave support for the commencement of natural gas service, the Commission subsequently issued Order No. 26,274 (July 24, 2019) which denied Mr. Clark's motion for rehearing of Order 26,065 (which had been pending since May 2018), and “accepted” and approved the Safety Division's recommendation. As stated earlier, this was a procedural step that was not expected by the Company nor previously articulated by the Commission.

Mr. Clark sought further reconsideration of the July 24 order. As long as Mr. Clark's motion was still pending, the Company could not proceed because there was still the possibility the Commission could alter its ruling after rehearing. The Commission denied that pending motion in Order No. 26,294 (September 25, 2019), almost two years after issuing Order 26,065, which, coupled with the other events described above, finally provided the “go-ahead” to proceeding customer conversions and the provision of natural gas service in advance of the 2019–2020 winter season.

The Company converted the Marketplace customers and began flowing CNG in October 2019, two and one half years after encountering the first obstacle.

REVISED RESPONSE:

Upon review, the Company determined that certain clarifying language should have been included in one of the paragraphs of the response. That paragraph is reproduced below with the added language shown in underline format.

As the Company proceeded to provide plans and reports as required in Order No. 26,065, it became apparent that there was a significant difference in interpretation of the appropriate demarcation point on the CNG decompression equipment between where ASME B31.3 and 49 CFR Part 192 standards applied. The Company submitted its documentation consistent with ASME B31.3, which is the code governing the supplier of the CNG skid and is what that company used in its other installations of CNG unloading facilities, including those that feed into utility transmission and distribution piping,

throughout the country. As part of that documentation, the demarcation point between the applicability of ASME B31.3 and 49 CFR Part 192 would be the outlet flange after the decompression was complete. The Safety Division, while acknowledging that “[t]here is no single applicable safety standard used within New Hampshire, nor nationwide, for CNG trailers,” applied 49 CFR Part 192 to the installation as part of its assessment of the CNG installation, which meant that the demarcation point was the hose that connects the decompression facility to the trailers. This interpretation was not expected by the Company at the time it entered into the CNG supply contract, nor at the time of the amendment to that contract, and resulted in the entire CNG skid having to be modified to meet the different standards, and also necessitated significant revisions to the Company’s documentation, including the documentation of the owner of the CNG skid. The Safety Division’s October 3, 2018, Adequacy Assessment took approximately a year to produce. The Company understands that this CNG installation was the first of its kind in New Hampshire and required significant research and investigation, but this was a significant portion of the delays that were encountered throughout the process. As the Company had no idea how long the Safety Division’s assessment might take or what it might say, it was reasonable for the Company to have a CNG supply contract in place to be ready to serve customers for the 2018–2019 winter as the approval could have happened “at any time.”

In addition, a date in another paragraph was incorrect and the corrected date is indicated below:

Following months of the Company providing the necessary responses and updates to the Safety Division’s Adequacy Assessment, on April 6, 2019, the Safety Division submitted its recommendation that “allows the commencement of the proposed Monadnock Marketplace system conversion from propane-air to natural gas and begins the flow of natural gas.” Although receipt of the Safety Division’s recommendation gave support for the commencement of natural gas service, the Commission subsequently issued Order No. 26,274 (July 24, 2019) which denied Mr. Clark’s motion for rehearing of Order 26,065 (which had been pending since November 2017), and “accepted” and approved the Safety Division’s recommendation. As stated earlier, this was a procedural step that was not expected by the Company nor previously articulated by the Commission.

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

DG 20-152
Winter 2020/2021 Cost of Gas

Staff Data Requests - Set 1

Date Request Received: 9/24/20
Request No. Staff 1-12

Date of Response: 10/5/20
Respondent: Steven Mullen

REQUEST:

Re: Testimony of Gilbertson, McNamara and Simek at 8 and Order 26,305 (October 31, 2019 Docket No. 19-153) at 2 (“When seeking Commission approval for its acquisition of Keene in 2014, Liberty mentioned future plans to convert the existing Keene propane-air gas system to a natural gas system”) at 7 (“The Commission has yet to find the use of natural gas in Keene to be consistent with a least cost supply, or otherwise prudent”). Given that the prudence of the CNG conversion, including the CNG supply contract, has not been determined, isn’t it premature to include demand charges from August 2017 through September 2019 in this filing? Would this matter more appropriately be considered in a future docket that presents the question of whether the conversion was prudent?

RESPONSE:

The Company disagrees with the statement that “the prudence of the CNG conversion, including the CNG supply contract, has not been determined,” at least with respect to the limited number of customer conversions that have taken place to date.

First, in Docket No. DG 17-069, the Commission allowed to go into effect changes to the Company’s tariff that allowed for the conversion to CNG in Keene. “Specifically, Liberty-Keene plans to convert from a system that delivers propane-air to a system that delivers natural gas, and the adjustments to Page 17 of NHPUC No.1 are designed to accommodate this conversion.” Order No. 26,019 at 1 (May 24, 2017). The Order suspended the proposed tariff until August 24, 2017, and, since the Commission elected to take no further action in the docket, the tariff became effective on August 24 by operation of law.

Second, the Commission approved Liberty’s conversion of the customers at the Monadnock Marketplace from propane-air to CNG in Order No. 26,274 (July 26, 2019) in Docket No. DG 17-068 with the following language:

FURTHER ORDERED, that the Commission’s Safety Division’s recommendation that Liberty be permitted to initiate the conversion of the Keene propane-air distribution

system to compressed natural gas to customers in the Keene Division for Phase I is approved; and it is

FURTHER ORDERED, that Liberty shall not flow any gas through Phases II through V of CNG/LNG installations in Keene until the Director of the Commission's Safety Division has DG 17-068 found the required plans and reports to be adequate and has completed its physical inspection of the facilities;

Third, the Commission twice approved as "just and reasonable" cost of gas rates that included CNG demand charges in the Summer 2018 and Summer 2019 cost of gas proceedings. *See* Order No. 26,126 at 5 (May 1, 2018); Order No. 26,241 at 5 (Apr. 29, 2019). The 2018 order did not condition its approval on some future prudence determination. The 2019 order rejected Staff's argument that the CNG costs may be imprudent, simply saying Staff could make that argument elsewhere: "We decline to address Staff's concerns with regard to CNG costs that may exceed the cost of alternative fuels at this time. Staff is free to raise the issue in future dockets, including in the Company's next rate case." Order No. 26,241 at 5. The Order unequivocally approved the requested COG rates as filed, which included demand charges. Although the Company later removed the demand charges through the summer period reconciliations because the CNG did not flow during those seasons, these orders remain conclusive findings that it was prudent for the Company to incur the CNG demand costs at the time they were incurred, which, of course, is the appropriate prudence standard.

The discussion above indicates that (a) the Commission approved the demand charges through the 2018 and 2019 cost of gas orders; (b) since the conversion of the customers in the Monadnock Marketplace from propane-air to compressed natural gas was approved, the Company needed to provide those customers with CNG, and (c) there was no approval at that point of any further conversions on the Keene system.

The CNG costs that have been incurred to date relate to the temporary CNG facility that is being used to supply customers in the Monadnock Marketplace and the contract to provide the needed CNG supply for those same customers. The Company had planned to put the temporary CNG facility online in the latter part of 2017, so it was necessary to have a CNG contract in place, including the incurrence of demand charges, to be ready to serve customers. Although the conversion of customers in the Monadnock Marketplace to natural gas was delayed until the fall of 2019, it was expected at various interim times that CNG service would commence sooner. *See, for example, the Company's testimony during the October 13, 2017, hearing in the 2017 Winter cost of gas proceeding, at 26-27, stating the Company intended to begin serving CNG on November 2, 2017, and the testimony filed on March 30, 2018, in Docket No. DG 18-052 which stated that the Company expected to begin serving a limited number of customers with CNG during June or July 2018. Also see the Company's response to Staff 1-4 for further information about events that occurred to cause the commencement of CNG service to be delayed.*

From the Company's perspective, there are really three decisions at issue with respect to CNG costs:

- 1) The incurrence of demand charges beginning in August 2017;
- 2) The incurrence of CNG costs to serve customers that have been converted from propane-air to natural gas; and
- 3) Future conversion of portions of the Keene system beyond the Monadnock Marketplace.

While the first topic has been included in this docket for consideration, the Company views the second topic as costs it needs to incur to provide service to the customers in the portion of its system that have been converted to natural gas service. Given the Commission's approval of the cost of gas rates described above, and approval of the conversion of that limited part of the system, it is inappropriate to put the Company in a position where the costs to supply natural gas to those customers will continually be compared to propane costs as if the conversion had never happened because those prudently converted customers must be served natural gas.

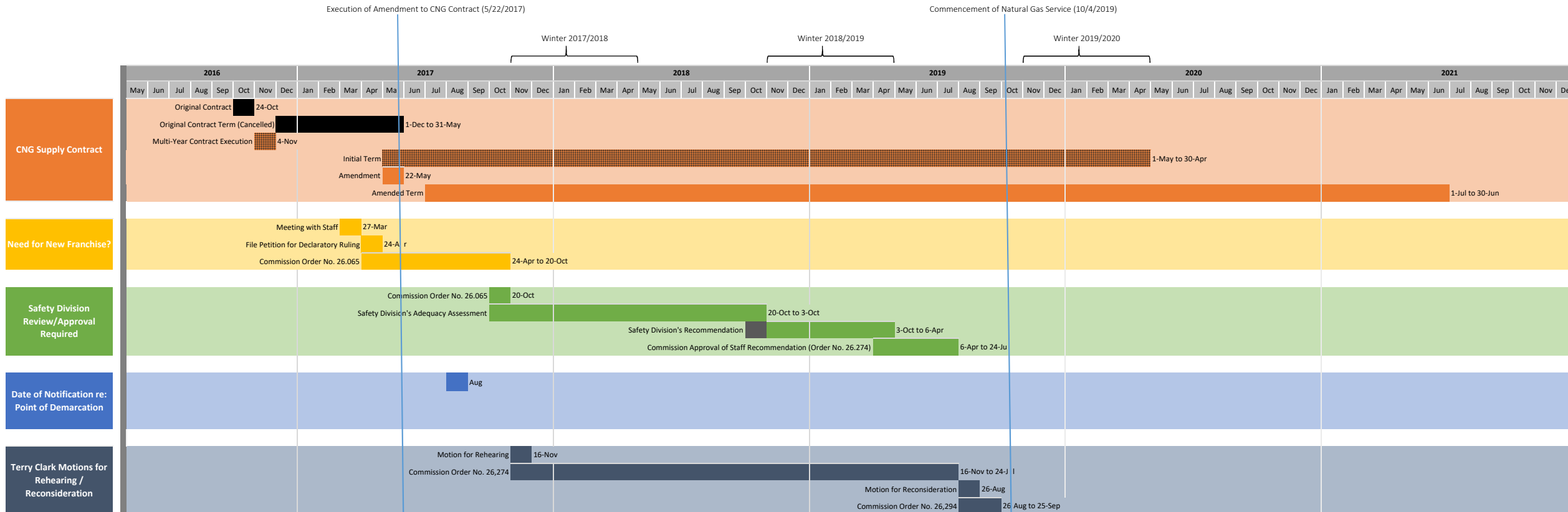
The third topic will be dealt with in the future as each conversion/expansion phase is being considered. Pursuant to the provisions included in Order No. 26,122 (April 27, 2018), the Company needs to meet a series of requirements and get specific approval of all future conversion/expansion plans by both the Safety Division and the Commission before proceeding with any future phase. It seems at those times the Commission will have the opportunity to determine whether any future conversion/expansion phase would be in customers' interests.

Thus, the Company believes the Commission has already approved the CNG demand charges and does not believe a future docket is needed to address the question of the Marketplace CNG conversion. The Company is trying to methodically plan for the future of the Keene system, but the continual uncertainty regarding cost recovery makes future planning much more problematic.

Keene CNG Contract Historical Timeline

Execution of Amendment to CNG Contract (5/22/2017)

Commencement of Natural Gas Service (10/4/2019)



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

DG 20-152
Winter 2020/2021 Cost of Gas

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/7/20
Request No. Staff TS 1-9

Date of Response: 10/19/20
Respondent: Andrew Mills

REQUEST:

Ref. LU-K response to Staff DR Set 1-4 and Staff DR 1-12

[a.] Please confirm that during the conversion from supplying propane/air to CNG, the pressure per pound in Liberty-Keene’s distribution system(s) changed from a pressure system rated at approximately 0.5 psig MAOP –operating at 0.25 psig and another smaller system rated at 5 psig MAOP- operating at 3 psig (propane/air) to a CNG system that has portions rated at 4,250 psig MAOP operating at up to 4,000 psig, portions rated at 1400 psig MAOP – operating at up to 500 psig, portions rated at 105 psig MAOP – operating at 75 psig and finally portions rated at 60 psig MAOP – operating at approximately 55 psig (CNG).

[b.] Please state whether Liberty-Keene agrees that this operating pressure level is significant and increases system risk including potential consequences for any potential puncture, rupture, accidental operation, equipment failure that the public (employees, PUC inspectors, first responders, end use customers and general public that may include non-use customer) may potentially be subjected to in the event of an abnormal operation.

RESPONSE:

- a. Not confirmed to the extent this question suggests that the MAOP of the entire “Liberty-Keene distribution system(s)” changed from a very low pressure to very high pressures, i.e., the conversion to CNG did *not* result in “the pressure per pound in Liberty-Keene’s distribution system(s)” changing “from a pressure system rated at approximately 0.5 psig [and 5 psig MAOP] ... to a CNG system that has portions rated at 4,250 psig MAOP ..., portions rated at 1400 psig MAOP ..., portions rated at 105 psig MAOP ... and finally portions rated at 60 psig MAOP”

Approximately 29 miles of the 31-mile Keene distribution system remains serving propane-air and remains at the existing MAOP of 5.0 psig or lower,¹ and the propane-air

¹ The Keene distribution system consists of 9,670 feet (1.831 miles or 5.9%) of pipe flowing CNG; 9,710 feet (1.839 miles or 5.8%) of pipe flowing propane-air at the higher propane-air pressure; and 144,203 feet (27.311 miles or 87%) of pipe flowing propane-air at the lower propane-air pressure.

system is physically separated from any of the natural gas piping. That is, the MAOP for approximately 95% of the Keene distribution system serving propane-air did not change after the CNG conversion of the Marketplace. Thus, as to the vast majority of the Keene system, “the pressure per pound in Liberty-Keene’s distribution system(s)” *did not change* “from a pressure system rated at approximately 0.5 psig MAOP ... and another smaller system rated at 5 psig MAOP ... to a CNG system that has portions rated at 4,250 psig MAOP ..., portions rated at 1400 psig MAOP ..., portions rated at 105 psig MAOP ... and finally portions rated at 60 psig MAOP”

Of the remaining 1.8 miles that now contain natural gas and serve solely the Monadnock Marketplace, the Company confirms that about 60 feet of new lines are at an MAOP of 4250 psig (the lines from the CNG trailer into the CNG skid), about 23 feet of new lines are at an MAOP of 1400 psig (all within the enclosed CNG skid itself), approximately 40 feet of new piping is at an MAOP of 105 psig (from inside the CNG skid to where the piping connects with the 60 psig MAOP piping outside the CNG skid), and that the remaining 1.8 miles of piping serving the Monadnock Marketplace increased from 5.0 psig MAOP to 60 psig MAOP, which is an MAOP common to much of the EnergyNorth natural gas distribution system.

- b. Liberty-Keene does not agree that the higher operating pressures within the CNG decompression skid necessarily increase system risk.

First, there is no physical connection between the piping that contains CNG and the piping that contains propane air. Thus, the higher pressures of the CNG system pose zero risk to customers, employees, Safety Division Staff, or anyone else having contact with any of the 29 miles of piping delivering propane-air. They are two separate and distinct systems.

Second, although the conversion of the Monadnock Marketplace in Keene only changed the MAOP of a small portion of the Liberty-Keene system, the conversion increased the level of safety for the entire system -- both the propane-air portion and for the newly converted natural gas system. This is because the reduction of propane-air load by converting some of the largest Liberty-Keene customers to natural gas allowed Liberty-Keene to shut down the propane-air facility’s troublesome blower system which, as illustrated during the December 2015 event, posed a substantial safety risk to the entire Keene system.

Third, CNG decompression facilities are very safe. There are two non-utility CNG decompression skids in Keene -- one located at the Cheshire Medical Center and the other at the Brox Industries asphalt plant – that were built in accordance with ASME B31.3 and have been operating safely outside the Safety Division’s jurisdiction for years. There are other CNG decompression facilities built to the ASME B31.3 standard that have been safely injecting gas directly into transmission lines and local distribution systems for years, also operating outside the jurisdiction of the applicable regulatory safety divisions.

Fourth, although the Liberty-Keene CNG decompression facility was built to the same, safe, ASME standard referenced above, in 2018 the Safety Division elected to assert jurisdiction over the entire decompression skid, which triggered application of the PHMSA safety standards of 49 CFR Part 192. This change in the point of custody transfer between Liberty and its CNG supplier, and resulting change in standard, resulted in Liberty-Keene taking ownership, control, and responsibility for the additional, small sections of high pressure systems lines -- the 120 feet of lines at 4250 psig, 1400 psig, and psig 105 MAOP described above. Under the original plan using the ASME standard, Liberty-Keene was going to connect to the CNG supplier's 105 psig MAOP system outside the CNG skid, and regulate this pressure down and into a 60 psig MAOP system. In this configuration, the only higher pressure piping was going to be a small section of pipe prior to Liberty's gas regulators operating with a 105 psig MAOP. The Liberty regulation set-up for the 105 to 60 psig MAOP consists of a typical redundant-run monitor control regulator set-up and downstream relief valve to protect the 60 psig MAOP system. This relief valve is an additional safety feature not required under 49 CFR Part 192 when a monitor control regulator set-up is used.

Once the Safety Division moved the custody transfer point from the outlet of the CNG decompression skid to where the hose from CNG skid connects to the CNG trailer, Liberty-Keene had to take control over the high pressure systems located within the CNG decompression skid referenced above. Each of these pressure systems are equipped with their own relief valves to prevent over pressurization of their individual system. Neither of these pressure systems serve any customers in Keene.

Fifth, the Safety Division's interpretation of 49 CFR 192.5, titled "class locations," extended the class location unit beyond the pressure system length of pipe associated with a specific pressure system, which has its own over-protection devices in compliance with 49 CFR Part 192. The Safety Division mandated that a complete mile of additional pipe, over and above the pipe actually operating at the specific pressure, had be included in the class location study. This resulted in changing the CNG skid from being a Class 2 location to a Class 3 location. This change of class location required thicker wall pipe on the back of the CNG skid in order to operate in compliance with a Class 3 location.

Liberty-Keene complied with the Safety Division's interpretation, replaced the pipe, and treated the CNG decompression skid site as a Class 3 location. This resulted in an even safer decompression skid then would actually be required under federal pipeline code. In addition to the Safety Division's requirements (and outside its jurisdiction), the CNG trailers each have their own relief valve that release gas if pressures in the trailers exceed 4500 psig.

Last, Liberty-Keene operates the CNG decompression skid similarly to existing gas regulation stations on the EnergyNorth system where the Company takes custody of natural gas from the interstate pipeline operator. The safety systems located on the Keene CNG site and its operations are no different than the custody transfer points and their operation throughout the EnergyNorth system. Thus, the safety of the Keene CNG

decompression skid is on par with all other sites operated by Liberty Utilities, which are routinely audited by the Safety Division.

Given the above, there are no additional dangers to the public in Keene, Keene customers, Liberty-Keene employees, and Safety Division staff as a result of converting the Marketplace to CNG. Indeed, given the substantial safety gains arising from retiring the blower systems, the CNG conversion has increased overall safety in Keene.