

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

DG 21-008

Petition for Approval of a Firm Transportation Agreement with
Tennessee Gas Pipeline Company, LLC

Conservation Law Foundation Data Requests - Set 1

Date Request Received: 4/9/21
Request No. CLF 1-20

Date of Response: 4/23/21
Respondent: William R. Killeen

REQUEST:

Has the Company analyzed the costs and historic record of having propane facilities performing at their design or nameplate vaporization rates? Is there a record of them not performing as designed to help meet peak demands? Are there upgrades and investments in these facilities that can be made to help them perform to design and nameplate ratings? Have such upgrades been considered as options to help meet peak day demands? Please provide any workpapers and analyses with formulas intact.

RESPONSE:

The Company's three propane production facilities directly connected to its distribution system are located in Manchester, Nashua, and Tilton. In total, they have a design, or nameplate, vaporization capacity of approximately 34,600 MMBtu/day and a combined workable storage capacity of approximately 122,590 MMBtu. Historically, the facilities have never reached their nameplate vaporization capacity primarily due to the fact that there is not sufficient natural gas flowing by these propane facilities to provide a proper blending of a propane/air mix with natural gas. The historical peak sendout from the Nashua propane plant was 9,954 Dth which occurred on February 14, 2016. The historical peak sendout from the Manchester propane plant was 9,921 Dth which occurred on February 5, 2007. The historical peak sendout for the Tilton propane plant was 1,242 Dth (the Company does not have the date on which this occurred). While the combined total historical peak vaporization capacity of these facilities was 21,117 Dth, the peak vaporization capacity for each facility occurred on different days. The combined single day peak vaporization from these facilities was 18,869 Dth which occurred on February 5, 2007.

As to whether any upgrades or investments can be made to these propane facilities, the Company recently engaged with a process control engineer to analyze the current operating controls at Manchester and Nashua to see if upgrades would allow for increased vaporization capacity. The process control engineer will take into consideration the adverse impact that propane/air injection has on high efficiency equipment. As noted in prior dockets, the Company is very concerned with customer outages and complaints associated with propane production. Due to the low tolerance of high efficiency equipment to handle the particular characteristics of propane air, customer outages and complaints have been correlated directly to when the Company is utilizing

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its propane facilities. As recently as March 15, 2021, the Company received significant customer complaints when it had to utilize its propane facility in Manchester to meet increased demand due to much colder than forecast temperatures.

Given the increased installation of high efficiency equipment and the adverse impact that propane/air blending has on that equipment, it is highly unlikely that the operational capacity of the Company's existing propane facilities will reach, or exceed, historical levels. Rather, it is more likely that the operational capacity of the propane facilities will decrease over time as new high efficiency equipment is added by customers.