

September 18, 2020

**VIA ELECTRONIC MAIL**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: Docket 5043 - National Grid's Gas Long-Range Resource and Requirements Plan  
Forecast Period 2020/21 to 2024/25  
Responses to PUC Data Requests – Set 1**

Dear Ms. Massaro:

I have enclosed an electronic version of National Grid's<sup>1</sup> responses to data requests PUC 1-1 and PUC 1-5.

This transmittal completes the Company's responses to the Public Utilities Commission's First Set of Data Requests in the above-referenced docket.<sup>2</sup>

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosures

cc: Docket 5043 Service List  
Leo Wold, Esq.  
Al Mancini, Division  
John Bell, Division

---

<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

<sup>2</sup> Because of the COVID-19 Pandemic emergency period, the Company is providing a PDF version of the above-referenced transmittal. The Company is providing the PUC with one copy and, if needed, additional hard copies at a later date.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.



\_\_\_\_\_  
Joanne M. Scanlon

September 18, 2020  
Date

**Docket No. 5043 – National Grid’s Gas Long-Range Resource Plan  
Service List as of 9/18/2020**

<b>Name/Address</b>	<b>E-mail</b>	<b>Phone</b>
Raquel Webster, Esq. National Grid 280 Melrose St. Providence, RI 02907	<a href="mailto:Raquel.webster@nationalgrid.com">Raquel.webster@nationalgrid.com</a> ;	781-907-2121
	<a href="mailto:Celia.obrien@nationalgrid.com">Celia.obrien@nationalgrid.com</a> ;	
	<a href="mailto:Jennifer.Hutchinson@nationalgrid.com">Jennifer.Hutchinson@nationalgrid.com</a> ;	
	<a href="mailto:Joanne.scanlon@nationalgrid.com">Joanne.scanlon@nationalgrid.com</a> ;	
Elizabeth D. Arangio Theodore Poe MaryBeth Carroll National Grid 40 Sylvan Road Waltham, MA 02541	<a href="mailto:Theodore.poe@nationalgrid.com">Theodore.poe@nationalgrid.com</a> ;	
	<a href="mailto:Elizabeth.Arangio@nationalgrid.com">Elizabeth.Arangio@nationalgrid.com</a> ;	
	<a href="mailto:MaryBeth.Carroll@nationalgrid.com">MaryBeth.Carroll@nationalgrid.com</a> ;	
Leo Wold, Esq. Division of Public Utilities & Carriers	<a href="mailto:Leo.Wold@dpuc.ri.gov">Leo.Wold@dpuc.ri.gov</a> ;	401-780-2177
	<a href="mailto:John.bell@dpuc.ri.gov">John.bell@dpuc.ri.gov</a> ;	
	<a href="mailto:dmacrae@riag.ri.gov">dmacrae@riag.ri.gov</a> ;	
	<a href="mailto:Al.mancini@dpuc.ri.gov">Al.mancini@dpuc.ri.gov</a> ;	
	<a href="mailto:MFolcarelli@riag.ri.gov">MFolcarelli@riag.ri.gov</a> ;	
James Crowley, Esq. Conservation Law Foundation 235 Promenade Street, Suite 560 Mailbox 28 Providence, RI 02908	<a href="mailto:jcrowley@clf.org">jcrowley@clf.org</a>	401- 228-1905

Jerome Mierzwa Exeter Associates	<a href="mailto:jmierzwa@exeterassociates.com">jmierzwa@exeterassociates.com;</a>	
<b>File an original &amp; nine (9) copies w/:</b> Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov;</a>	401-780-2107
	<a href="mailto:Alan.nault@puc.ri.gov">Alan.nault@puc.ri.gov;</a>	
	<a href="mailto:Patricia.lucarelli@puc.ri.gov">Patricia.lucarelli@puc.ri.gov;</a>	
	<a href="mailto:Todd.bianco@puc.ri.gov">Todd.bianco@puc.ri.gov;</a>	
James Crowley, CLF	<a href="mailto:jcrowley@clf.org">jcrowley@clf.org;</a>	
Office of Energy Resources Christopher Kearns Nicholas Ucci	<a href="mailto:Christopher.Kearns@energy.ri.gov">Christopher.Kearns@energy.ri.gov;</a>	
	<a href="mailto:Nicholas.ucci@energy.ri.gov">Nicholas.ucci@energy.ri.gov;</a>	
	<a href="mailto:Carrie.Gill@energy.ri.gov">Carrie.Gill@energy.ri.gov;</a>	

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5043  
In Re: Gas Long-Range Resource and Requirements Plan  
for the Forecast Period 2020/21 to 2024/25  
Responses to the Commission's First Set of Data Requests  
Issued on August 28, 2020

---

PUC 1-1

Request:

What is the average cost to connect a new customer to the natural gas system in Rhode Island? Please provide the average cost for each customer class in the instance when a gas line is already at the premise. Please provide the average cost, if known (e.g., from previous extension requests and work) in the instance when gas is not available at the premise.

Response:

Please see Attachment PUC 1-1 for details regarding the costs requested in this data request. The following costs are based on project data from the past two fiscal years (April 2018 through March 2020):

The average cost to connect a new customer (residential and commercial) to the natural gas system in Rhode Island is approximately \$8,591. This average assumes new main costs averaged across all services.

The average cost to connect a new customer structure when a gas line is in front of the premise is approximately \$5,916 for a residential customer and \$9,799 for a commercial customer.

The average cost to connect a new customer structure when a gas line is not in front of the premise is approximately \$14,612 for a residential customer and \$37,774 for a commercial customer. These average costs are calculated by adding the average main cost per new connection (i.e. \$8,696 residential and \$27,975 commercial) to the average service cost per new connection (\$5,916 residential and \$9,799 commercial).

**GAS-RI-5043 Long Range Gas Plan**  
Forecast Period: 2020/21 to 2024/25  
PUC Data Requests Set 1

Question 1-1: What is the average cost to connect a new customer to the natural gas system in Rhode Island? Please provide the average for each customer class in the instance when a gas line is already at the premise. Please provide the average cost, if known (e.g., from previous extension requests and work) in the instance when gas is not available at the premise.

<b>Residential</b>		<b>Main Cost</b>	<b>Service Cost</b>	<b>Overall Cost</b>
FY19				
	Average cost per new connection (service)	\$ 8,913	\$ 6,114	\$ 7,902
	Number of new connections (services)	299	1,490	1,490
FY20				
	Average cost per new connection (service)	\$ 8,462	\$ 5,728	\$ 7,228
	Number of new connections (services)	278	1,569	1,569
Average FY19 & FY20				
	Average cost per new connection (service)	\$ 8,696	\$ 5,916	\$ 7,556
	Number of new connections (services)	289	1,530	1,530

<b>Commercial</b>		<b>Main Cost</b>	<b>Service Cost</b>	<b>Overall Cost</b>
FY19				
	Average cost per new connection (service)	\$ 21,497	\$ 10,309	\$ 14,555
	Number of new connections (services)	47	238	238
FY20				
	Average cost per new connection (service)	\$ 34,741	\$ 9,315	\$ 15,543
	Number of new connections (services)	45	251	251
Average FY19 & FY20				
	Average cost per new connection (service)	\$ 27,975	\$ 9,799	\$ 15,062
	Number of new connections (services)	46	245	245

37,774

<b>Residential &amp; Commercial</b>		<b>Main Cost</b>	<b>Service Cost</b>	<b>Overall Cost</b>
FY19				
	Average cost per new connection (service)	\$ 10,623	\$ 6,692	\$ 8,819
	Number of new connections (services)	346	1,728	1,728
FY20				
	Average cost per new connection (service)	\$ 12,123	\$ 6,223	\$ 8,374
	Number of new connections (services)	323	1,820	1,820
Average FY19 & FY20				
	Average cost per new connection (service)	\$ 11,347	\$ 6,451	\$ 8,591
	Number of new connections (services)	335	1,774	1,774

PUC 1-5

Request:

Please describe whether and how the following resources were considered in the development of the Long-Range Gas Supply Plan. If the resource was not considered, please explain why it was not considered.

- a. Incremental energy efficiency (above and beyond what is included and planned for in the 3-year energy efficiency plan)
- b. Incremental heating electrification (above and beyond what is included and planned for in the 3-year energy efficiency plan)
- c. Contracting for more pipeline capacity
- d. Expansion of LNG capabilities
- e. Changes to the parameters of the GPIIP and NGPMP
- f. Greater access to liquid markets for spot gas alternatives
- g. Gas demand side management
- h. Incremental interruptible gas service
- i. Curtailment plans for non-essential gas uses during extremely high-priced periods

Response:

- a. The Company's gas load forecast is a forecast of customers' net natural gas requirements. Inherent in the historical data, and, therefore, in its forecast, is the reduction in gas requirements due to customers' adoption of energy efficiency measures, both organic and Company-sponsored. Since the organic implementation of energy efficiency measures cannot be measured, the Company's forecast assumes that that rate of adoption continues into the forecast period. As for Company-sponsored energy efficiency programs, the Company's gas requirements forecast will only be modified (further reduced) if the anticipated savings due to the Company's programs exceeds the most-recent three-year historical average of claimed savings to avoid double-counting energy efficiency reductions.

In the Company's Long-Range Gas Supply Plan base case forecast, the assumed level of Company-sponsored energy efficiency savings was set at the "low achievable" level of the Energy Efficiency and Resource Management Council Market Potential Study, completed in Spring 2020. The "low achievable" scenario has savings levels somewhat greater than the goals in its Draft 2021-2023 three-year energy efficiency plan.

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5043  
In Re: Gas Long-Range Resource and Requirements Plan  
for the Forecast Period 2020/21 to 2024/25  
Responses to the Commission's First Set of Data Requests  
Issued on August 28, 2020

---

PUC 1-5, page 2

- b. Since the organic implementation of electrification measures cannot be measured, the Company's forecast assumes that that rate of adoption continues into the forecast period. Please note that, at this time, the Company is continuing to explore regulatory and other legal avenues that may be available to effectuate the Company's advancement of incremental heating electrification.
- c. The Company is considering contracting for incremental pipeline capacity as part of its long-term Cumberland solution. The Company will continue to engage Tennessee regarding the availability of primary firm capacity into Rhode Island as it finalizes design and permitting requirements of the Cumberland (aka Scott Road) take station rebuild. The current incremental need to resolve the peak day shortfall is approximately 20,000 Dth/day.

The Company is also considering contracting for more pipeline capacity as part of its long term Aquidneck Island solution. The Company has identified several options to meet its long-term needs on Aquidneck Island, including a pipeline project with Algonquin. The Company is in the process of soliciting stakeholder feedback on the various options.

- d. The expansion of LNG capabilities is considered an on-system solution for the Long Range Gas Supply Plan. The expansion of LNG capabilities at existing permanent LNG facilities would require increasing storage and vaporization capability above what is already in the supply plan. A project that requires the increase of storage and vaporization capability, if initiated in 2020, would have an earliest in-service date of 2025/26 gas year. Similarly, the Company is developing the scope for the rebuild of the Cumberland LNG facility. The Company continues to develop the scope and feasibility of the storage and vaporization capacity that can be constructed to meet current safety requirements. The Company will endeavor to ensure the scope of the rebuild of the Cumberland LNG facility meets needs of the Cumberland region and the overall portfolio, if feasible. However, the Company will consider expanding portable LNG resources as an option, along with other solutions, when developing the options analysis to meet the overall portfolio deficit forecasted to start in 2023/24 gas year.
- e. At this time, the Company does not propose changes to the parameters of the GPIIP and NGPMP. The Company has been working closely with the Division and its consultant to review these plans in their current formats.

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5043  
In Re: Gas Long-Range Resource and Requirements Plan  
for the Forecast Period 2020/21 to 2024/25  
Responses to the Commission's First Set of Data Requests  
Issued on August 28, 2020

---

PUC 1-5, page 3

- f. As part of the Long-Range Gas Supply Plan, the Company has considered greater access to liquid markets for spot gas alternatives. As described in section IV.C.8, the Company recently gave notice to Columbia Gas Transmission to terminate two contracts originating and Pennsburg and Eagle and shifted the receipt point of an equivalent amount of downstream Algonquin capacity to a more liquid point at Ramapo. The Company continuously evaluates supply options for its existing pipeline capacity and is in frequent contact with regional interstate pipeline companies regarding expansion opportunities that may provide greater access to liquid markets.
- g. Presently, the Company's demand response program is in the pilot phase and, until the Company completes the pilot phase, it does not have sufficient information to claim savings or include it in the current forecast. The demand response program is of interest to the Company since it could be useful in addressing localized supply issues.
- h. The Company's forecast reflects minimal growth in the meter count and volumes of its interruptible gas service and there is no indication that there is active interest in this type of service for its customers.
- i. The Company normally curtails non-firm gas service during periods when the Company is using LNG to support system reliability and supplement gas supply. These non-firm curtailments were considered in the development of the Long-Range Gas Supply Plan. Although high daily city-gate gas prices are typically a byproduct of increased demand and cold weather, non-firm curtailments are based on weather and not gas prices. No other economic-based curtailments of non-essential gas use were considered.