

The Narragansett Electric Company
d/b/a National Grid

**INTERIM GAS COST
RECOVERY FILING**

Testimony and Attachments of:

Gas Supply Panel,
Ryan M. Scheib,
and John Protano

November 19, 2021

Submitted to:

Rhode Island Public Utilities Commission
RIPUC Docket No. 5180

Submitted by:

nationalgrid

Filing Letter
& Motion



Raquel J. Webster
Senior Counsel

November 19, 2021

BY HAND DELIVERY AND ELECTRONIC MAIL

Lully E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888 508

**RE: Docket 5180 – Gas Cost Recovery Filing (“GCR”)
Proposed Interim Adjustment to 2021 GCR Factors**

Dear Ms. Massaro:

I have attached an electronic version of testimony and attachments in support of National Grid's¹ proposed interim adjustment to the GCR Factors for effect January 1, 2022 for the following services: Firm sales service customers in the Residential Non-Heating and Heating rate classes and Commercial and Industrial firm sales customers in the Small, Medium, Large and Extra Large rate classes.

As explained in the enclosed testimony, the Company is proposing to revise its current GCR Factors to recover the projected deferred gas cost balance at the end of October 2022. Pursuant to the Company's Tariff, 4 Section 2, Schedule A, Part 1.2, if the projected deferred gas cost balance exceeds five percent of the Company's annual gas cost revenue, the Company may request a change to its GCR Factors to eliminate this deferred balance. Currently, the Company is projecting that the deferred gas cost balance will be approximately \$19.2 million, or 11 percent of the total annual gas cost revenue as of October 31, 2022. Because of the size of the estimated deferral balance, the Company believes it is appropriate to increase its current GCR Factors at this time.

This filing includes direct testimony and attachments of Elizabeth D. Arangio, Megan J. Borst and Samara A. Jaffe (“Gas Supply Panel”), Ryan M. Scheib, and John Protano. This filing also contains a Request for Protective Treatment of Confidential Information in accordance with Rule 810-RICR-00-00-1.3(H) of the Public Utilities Commission's (PUC) Rules of Practice and Procedure and R.I. Gen. Laws § 38-2-2(4)(B). National Grid seeks protection from public disclosure certain confidential gas-cost pricing information and commercial contract terms which are provided Attachment GSP-1 to the Gas Supply Panel testimony and Attachments RMS-2, RMS-3, and RMS-4 to the direct testimony of Mr. Scheib.

¹ The Narragansett Electric Company d/b/a National Grid (“National Grid” or “Company”).

Luly E. Massaro, Commission Clerk
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Accordingly, National Grid has provided the PUC with two complete unredacted copies of the confidential materials in a sealed envelope marked “**Contains Privileged and Confidential Materials – Do Not Release.**” National Grid has also included redacted copies of the materials for the public filing.

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 5180 Service List
Leo Wold, Esq.
John Bell, Division
Al Mancini, Division (w/confidential Excel files via Egress Switch)
Jerome D. Mierzwa, Division Consultant (w/confidential Excel files via Egress Switch)

STATE OF RHODE ISLAND
RHODE ISLAND PUBLIC UTILITIES COMMISSION

)
)
Annual Gas Cost Recovery Filing) Docket No. 5180
2021)
)
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**MOTION OF THE NARRAGANSETT ELECTRIC
COMPANY D/B/A NATIONAL GRID FOR PROTECTIVE
TREATMENT OF CONFIDENTIAL INFORMATION**

National Grid¹ respectfully requests that the Rhode Island Public Utilities Commission (“PUC”) grant protection from public disclosure certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by 810-RICR-00-00-1.3(H) (Rule 1.3(H)) of the PUC’s Rules of Practice and Procedure and R.I. Gen. Laws § 38-2-2(4)(B). The Company also respectfully requests that, pending entry of that finding, the PUC preliminarily grant the Company’s request for confidential treatment pursuant to Rule 1.3(H)(2).

I. BACKGROUND

On November 19, 2021, the Company submitted an interim filing to its 2021 Annual Gas Cost Recovery (“GCR”) filing in the above-referenced docket. The interim GCR filing includes confidential gas cost pricing information, contract terms and counter-party identities which are provided in: (1) Attachment GSP-1 to the joint direct testimony of the Elizabeth D. Arangio, Megan J. Borst and Samara A. Jaffe, referred to as the Gas Supply Panel; and (2) Attachments RMS-2, RMS-3 and RMS-4 to the direct testimony of Ryan M. Scheib. In accordance with Rule

¹ The Narragansett Electric Company d/b/a National Grid (“National Grid” or the “Company”).

1.3(H)(3), National Grid has provided a redacted public version of the GCR filing and an unredacted, confidential version.

Therefore, the Company requests that, pursuant to Rule 1.3(H), the PUC afford confidential treatment to the gas cost pricing information, contract terms and counter-party identities contained in the following: (1) Attachment GSP-1 to the revised joint direct testimony of the Gas Supply Panel; and (2) in Attachments RMS-2, RMS-3, and RMS-4 to the direct testimony of Mr. Scheib.

II. LEGAL STANDARD

Rule 1.3(H) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under the APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a “public record,” unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). To the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information as confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where the disclosure of information would be likely either (1) to impair the government’s ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive

position of the person from whom the information was obtained. *Providence Journal*, 774 A.2d 40 (R.I. 2001).

The first prong of the test is satisfied when information is provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. *Providence Journal*, 774 A.2d at 47.

III. BASIS FOR CONFIDENTIALITY

The gas cost pricing information, confidential contract terms and counter-party identities—which are provided in Attachment GSP-1 to the direct Gas Supply Panel testimony and Attachments RMS-2, RMS-3, and RMS-4 to the direct testimony of Mr. Scheib – are confidential and privileged information of the type that National Grid would not ordinarily make public. As such, this information should be protected from public disclosure. Public disclosure of such information could impair National Grid’s ability to obtain advantageous pricing or other terms in the future, thereby causing substantial competitive harm. Accordingly, National Grid is providing the information on a voluntary basis to assist the PUC with its decision-making in this proceeding, but respectfully requests that the PUC provide confidential treatment to the information.

IV. CONCLUSION

For the foregoing reasons, National Grid respectfully requests that the PUC grant its Motion for Protective Treatment of Confidential Information.

[SIGNATURE ON NEXT PAGE]

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC
COMPANY d/b/a NATIONAL GRID**

By its attorney,



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Dated: November 19, 2021

Testimony of
Gas Supply Panel

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
INTERIM 2021 GAS COST RECOVERY FILING
WITNESSES: GAS SUPPLY PANEL
NOVEMBER 19, 2021**

JOINT DIRECT TESTIMONY

OF

GAS SUPPLY PANEL

**THE NARRAGANSETT ELECTRIC COMPANY
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INTERIM 2021 GAS COST RECOVERY FILING

**WITNESSES: GAS SUPPLY PANEL
NOVEMBER 19, 2021**

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1 I. Introduction

2 Q. Please identify the members of the Gas Supply Panel.

3 A. The Gas Supply Panel (“Panel”) consists of Elizabeth D. Arangio, Megan J. Borst and
4 Samara A. Jaffe.

5

6 Q. Ms. Arangio, please state your name and business address.

7 A. My name is Elizabeth Danehy Arangio. My business address is National Grid, 40 Sylvan
8 Road, Waltham, Massachusetts 02451.

9

10 O. Ms. Borst, please state your name and business address.

11 A. My name is Megan J. Borst. My business address is National Grid, 100 East Old
12 Country Road, Hicksville, New York 11801.

13

14 Q. Ms. Jaffe, please state your name and business address.

15 A. My name is Samara A. Jaffe. My business address is National Grid, 100 East Old
16 Country Road, Hicksville, NY 11801.

17

18 Q. Have you previously submitted joint testimony in this docket?

19 A. Yes. On September 1, 2021, we submitted joint pre-filed direct testimony in The
20 Narragansett Electric Company d/b/a National Grid’s (the “Company”) annual Gas Cost
21 Recovery (“GCR”) filing regarding the estimated gas costs and items relating to the

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1 Company's proposed 2021-22 GCR factors. In addition, our testimony also described
2 modifications the Company made to its portfolio for the 2021-22 GCR period. On
3 September 10, 2021, we also provided direct testimony providing support for the
4 estimated gas costs, assignments of pipeline capacity to marketers, and other issues
5 relating to the Company's proposed GCR factors.

6

7 **Q. What is the purpose of your joint testimony in this proceeding?**

8 A. Our testimony supports the updated gas costs and other issues relating to the Company's
9 proposed GCR factors.

10

11 **Q. Are you sponsoring attachments to your testimony?**

12 A. Yes. We are sponsoring the following attachments that accompany our testimony:

13 Attachment GSP-1 Updated Projected Gas Costs– **CONFIDENTIAL Information**

14

15 Attachment GSP-2 Updated NYMEX Strip Comparison & Forward Curves

16

17 **II. Projected Gas Costs**

18 **Q. Why is it necessary to request an increase in the GCR factors at this time?**

19 A. It is necessary to request an increase in the GCR factors to reflect updated gas costs since
20 the Company's September 10, 2021 filing.

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1 **Q. What is driving the increase in gas costs?**

2 A. There are two main factors driving the increase in gas costs: the increase in forecasted
3 gas costs is primarily driven by New York Mercantile Exchange (NYMEX) commodity
4 price increases. In addition, the updated costs also reflect pending pipeline rate
5 proceedings and actual costs for contracts finalized after the Company's September 10,
6 2021 filing.

7

8 **Q. How does the NYMEX forward curve referenced in the GCR year filed on**
9 **September 10, 2021 compare to the current NYMEX being used for this filing?**

10 A. The GCR filed on September 10, 2021 was based on the NYMEX forward curve as of the
11 close of trading on August 3, 2021¹. The NYMEX forward curve, which represents the
12 current value of natural gas at the Henry Hub for delivery in the future, is the baseline
13 price assumption for the GCR.

14

15 Attachment GSP-2 compares NYMEX pricing from August 3, 2021 utilized in
16 September's GCR filing to NYMEX pricing from November 2, 2021 used in this current
17 filing. In summary, when comparing the November 2, 2021 NYMEX strip to the
18 August 3, 2021 NYMEX strip:

¹ Regional basis forward curves as of August 3, 2021 were used to adjust NYMEX to estimate prices at the locations at which it expects to purchase gas supplies.

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- 1 • For the peak season of November through March, the NYMEX strip is on average
2 \$1.49, or 36.2 percent higher;
- 3 • For the off-peak season of April through October, the NYMEX strip is on average
4 \$0.72, or 21.8 percent higher; and
- 5 • Overall, for the November through October period, the NYMEX strip is on
6 average \$1.04, or 28.6 percent higher.
- 7

8 **Q. How are projected gas costs calculated in this filing?**

9 A. Consistent with prior filings, projected gas costs are calculated using the SENDOUT®
10 model to perform a dispatch optimization of the portfolio of gas supply, pipeline
11 transportation, underground storage and peaking supplies. SENDOUT® allows the
12 Company to determine the optimal dispatch of its existing resources subject to
13 contractual and operating constraints to minimize the cost of supply over the year. The
14 pricing of various pipeline services is based directly on the pipeline tariffs and the rates in
15 effect as of November 1, 2021. The pricing of gas supplies is based on the November 2,
16 2021 NYMEX forward curve and regional basis curves, also from November 2, 2021 as
17 further described above.

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- 1 **Q. How did the Company categorize the projected gas cost components?**
- 2 A. For the purpose of this filing, gas costs are disaggregated into two components: (1) Fixed
3 Costs, and (2) Variable Costs. Fixed Costs include all fixed costs related to the purchase,
4 storage, or delivery of firm gas, including pipeline and supplier fixed reservation costs
5 and demand charges. The Company will incur Supply Fixed Cost Components in
6 consideration of a right, but not an obligation, to call on transportation and/or supply
7 needed to meet customers' supply requirements.
- 8
- 9 Variable Costs include all variable costs of firm gas, including, but not limited to,
10 commodity costs, taxes on commodity and other gas supply expenses incurred to
11 transport supplies, transportation fees, storage commodity costs, taxes on storage
12 commodity and other gas storage expense incurred to transport supplies, and inventory
13 commodity costs.
- 14
- 15 A summary of gas costs included in the GCR and disaggregated into these cost
16 components by month for the period November 2021 through October 2022 is shown in
17 Attachment GSP-1 page 1 of 17.
- 18

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1 **Q. Please describe Attachment GSP-1, Pages 2 through 17.**

2 A. Attachment GSP-1 includes the following information:

- 3 • Pages 2 through 12: show the supporting detail for gas costs included in this filing
4 for the period November 2021 through October 2022;
- 5 ○ Pages 2 through 4: shows a summary of volumes and costs by supply path;
- 6 ○ Pages 5 through 6: show the detail pertaining to Commodity costs listed
7 by supply source;
- 8 ○ Pages 7 through 10: show the variable and fixed costs detail for
9 transportation and storage;
- 10 ○ Page 11: includes the detail supporting the supplier fixed costs;
- 11 ○ Page 12: shows the fixed costs attributable to hourly peaking needs;
- 12 • Page 13: includes a summary of the projected underground storage and LNG
13 inventories;
- 14 • Pages 14 through 17: show the optimized, forecasted sendout by supply source
15 under normal weather conditions from the SENDOUT® model and the detailed
16 makeup of supply by pipeline source, storage contract, and peaking
17 facility/contract;
- 18 ○ Pages 14 through 15: shows the forecasted volumes at the receipt or
19 purchase point;

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- 1 o Pages 16 through 17: shows the forecasted volumes at the point of
2 delivery after all pipeline fuel is accounted for; and

3
4 The pricing included in this filing reflects actual pricing and indicative pricing and terms
5 based on the Company's current contracts with suppliers. To comply with confidentiality
6 terms in the Company's agreements with suppliers, charges for the supply contracts have
7 been redacted in the public version of the filing.

8
9 **Q. Please summarize how gas costs presented in the Company's Gas Cost Recovery
10 filing on September 10 compare with those in the present filing?**

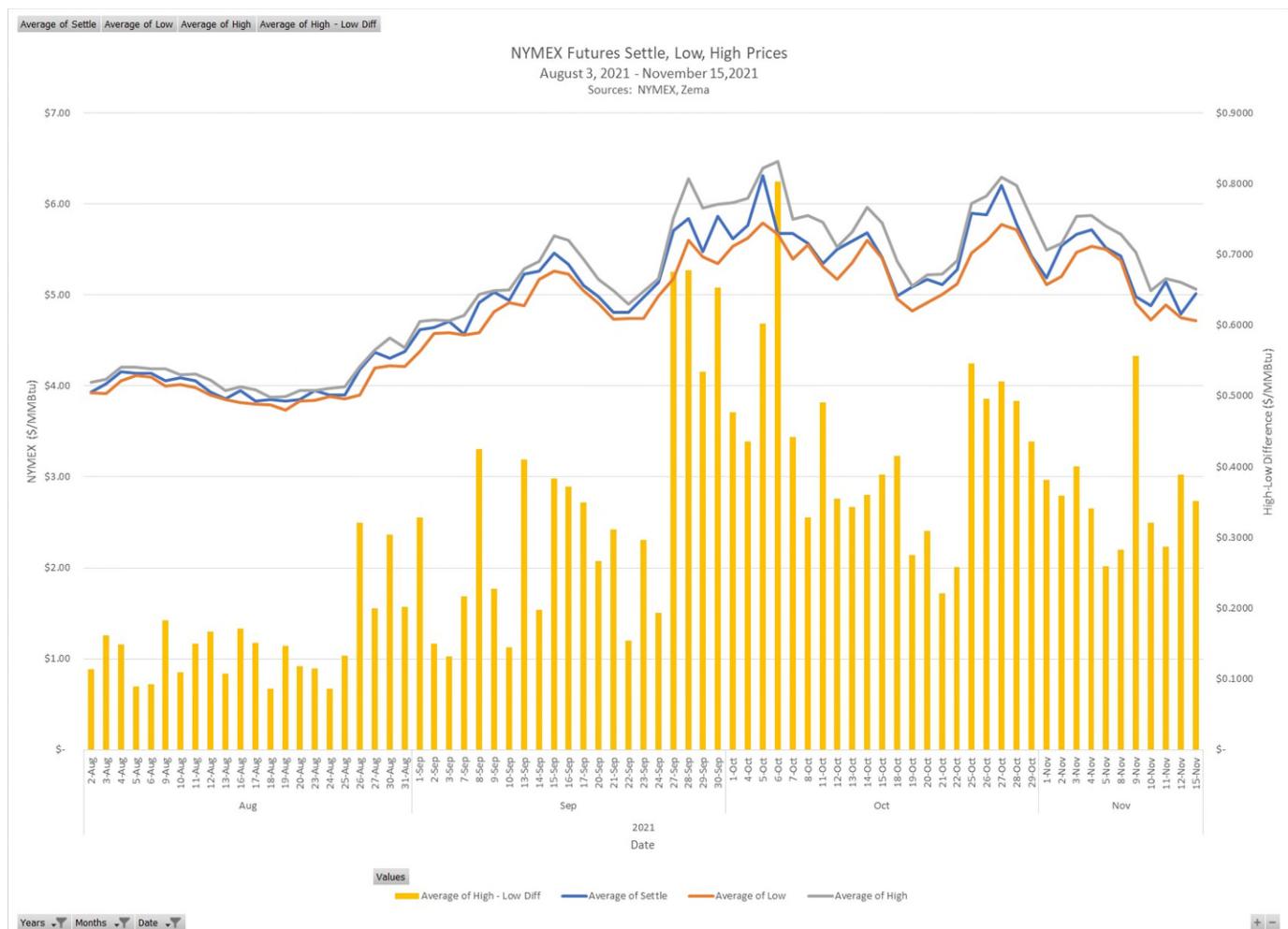
11 A. Total gas costs are \$39.46 million higher in this GCR Interim filing compared with the
12 costs forecasted in the Company's GCR filed on September 10. The differences are
13 summarized in the following table:

Cost Item	Difference in \$Millions (Interim GCR value – Filed GCR value)
a. Fixed Costs	\$8.83
b. Fixed Cost Credits	\$2.37
c. Net Fixed Costs (a-b)	\$6.46
d. Variable Costs	\$33.00
e. Total Gas Costs (c+d)	\$39.46
f. Hedging	(\$23.49)
g. Adjusted Total Gas Costs (e+f)	\$15.97

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1 **Q. Please provide more detail on the differences in NYMEX pricing between the 2021**
 2 **GCR filed on September 10 and this 2021 GCR Interim Update.**

3 A. The chart below shows the NYMEX Futures settle, low and high prices from the period
 4 August 3, 2021 (the NYMEX used in the Company's September 10th filing) through
 5 November 15, 2021. The chart demonstrates volatility, based on weather, economics,
 6 supply and demand and global issues facing the market currently.



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1 **Q. In the Company's September 10 filing, the Company stated that it was resubmitting its
2 GCR to reflect the Federal Energy Regulatory Commission's ("FERC") rejection of
3 the Texas Eastern Transmission, LP ("TETCO") rate case. Please provide an
4 update on the TETCO rate case and whether any TETCO rate changes are reflected
5 in the instant filing.**

6 A. On September 30, 2021, TETCO filed a revised rate case, proposing increases in rates
7 and other rate related tariff provisions applicable to its various FERC jurisdictional
8 services. Similar to its original rate case rejected by the FERC, TETCO stated that in its
9 rate case, it was seeking to recover substantial capital investments as part of its ongoing
10 efforts to modernize its system and that the proposed rate changes are designed to recover
11 a return on these capital investments and reflect the increase in system operating and
12 maintenance costs resulting from its long term integrity management plan. On
13 October 29, 2021, FERC issued an Order in Docket No. RP21-1188 accepting and
14 suspending certain tariff records related to rate increases to be effective upon motion
15 April 1, 2022, subject to refund and the outcome of hearing procedures. Additionally,
16 FERC accepted, without suspension, certain rate decreases for Rate Schedules FT-1,
17 effective November 1, 2021, subject to hearing procedures. The implementation of these
18 revised rates is reflected in the Company's Interim GCR.

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1 **Q. In addition to the TETCO rate case, the Company indicated in its initial filing that**
2 **it also anticipated Eastern Gas Transmission and Storage, Inc (EGTS) to file a rate**
3 **case with the FERC. Please provide an update on the EGTS rate case and whether**
4 **any EGTS rate changes are reflected in the instant filing.**

5 A. On September 30, 2021, EGTS filed a general rate case with the FERC. The filing
6 represents EGTS's first general rate case since a 1998 settlement and reflects a substantial
7 increase in the pipeline's cost of service that are being driven by significant growth in the
8 rate base through capital expenditures to ensure reliability; increases in the overall cost of
9 providing service; a weighted average cost of capital that will provide a reasonable return;
10 revised depreciation rates and new negative salvage rates; and changes in accumulated
11 deferred income tax balances resulting from the sale of EGTS. On October 29, 2021, FERC
12 issued an Order in Docket No. RP21-1187 accepting and suspending the tariff records filed
13 by EGTS. This resulted: (i) in a rate increase to customers (including the Company) to be
14 effective upon motion April 1, 2022, subject to refund, conditions, and the outcome of
15 hearing procedures; and (ii) accepted, without suspension, certain rate decreases effective
16 November 1, 2021, including fuel, subject to the hearing procedures. The implementation
17 of these revised rates is reflected in the Company's Interim GCR.

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1 **Q. In addition to rate filings made by TETCO and EGTS, are there any other changes**
2 **to natural gas pipeline rates reflected in the Company's Interim GCR.**

3 A. Yes. In addition to the rate changes already discussed with TETCO and EGTS, the
4 Company's Interim GCR reflects several decreases in pipeline reservation and variable
5 components, including changes to fixed costs for service on Tennessee Gas Pipeline and
6 Portland Natural Gas Transmission System, as well as a change to a variable component
7 for service on TransCanada PipeLines Limited. Finally, the instant filing reflects
8 settlement rates filed on October 29, 2021 between Columbia Gas Transmission, LLC
9 (TCo) and its customers at the FERC to take effect December 1, 2021.

10
11 **Q. Are there any other changes that are driving cost increases?**

12 A. Yes. In the Company's GCR filing on September 10, 2021, the Company estimated
13 pricing for a winter LNG refill deal based on services provided to the Company for the
14 2020-2021 heating season as the Company had not yet finalized its forecasted
15 requirements for the present winter. The actual cost of the winter LNG refill arrangement
16 for this season is higher than last year. A portion of these costs are attributed to the
17 Hourly Peaking Fixed Cost and will be recovered in the System Pressure Factor.

18
19 **Q. How does the Company's Hedging program impact gas costs?**

20 A. The impacts of hedging are discussed in the revised interim testimony of John Protano.

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

2 **A.** Yes, it does.

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ATTACHMENTS**

Attachments of the Gas Supply Panel

Attachment GSP-1	Projected Gas Costs— CONFIDENTIAL Information
Attachment GSP-2	NYMEX Strip Comparison & Forward Curves

Attachment GSP-1
Redacted

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ATTACHMENTS**

Attachment GSP-1

Summary of Projected Gas Costs

REDACTED

The Narragansett Electric Company
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National Grid Rhode Island		Normal Weather Scenario - Sales															
Gas Cost Recovery	Cost of Gas (\$'000)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Sep-22	Oct-22	Total	
FIXED COSTS																	
Total Transportation Fixed Costs	\$ 4,869.6	\$ 5,081.1	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	\$ 5,076.5	
Total Storage Delivery Fixed Costs	\$ 460.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	
Total Storage Fixed Costs	\$ 573.7	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	
Total Liquefaction Fixed Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Supplier Fixed Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
LESS:																	
AMVA Credits	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	\$ 125.2	
Hourly Peaking Fixed Costs	\$ 20.5	\$ 2223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	
TOTAL FIXED COSTS	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
VARIABLE COSTS																	
Commodity	\$ 11,267.5	\$ 19,497.3	\$ 23,895.9	\$ 20,504.0	\$ 17,716.3	\$ 7,999.6	\$ 3,845.7	\$ 2,557.2	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	\$ 2,098.7	
Commodity for Purchases to City Gate	\$ 22.6	\$ -	\$ -	\$ -	\$ 1,152.2	\$ 649.5	\$ 2,847.3	\$ 2,602.0	\$ 1,426.0	\$ 2,415.3	\$ 2,316.3	\$ 2,239.0	\$ 4,574.2	\$ 6,953.0	\$ 4,574.2	\$ 6,953.0	
Commodity for Purchases to Injections	\$ 11,290.0	\$ 19,497.3	\$ 23,895.9	\$ 20,504.0	\$ 18,868.5	\$ 8,649.1	\$ 6,693.0	\$ 5,159.1	\$ 3,524.5	\$ 4,514.0	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	
Total Commodity Costs	\$ 11,111.1	\$ 1,659.2	\$ 2,939.6	\$ 2,609.8	\$ 1,249.0	\$ 295.4	\$ 101.5	\$ 98.0	\$ 98.0	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	
Withdrawal	\$ 2,028.0	\$ 1,613.1	\$ 2,416.1	\$ 2,220.3	\$ 1,149.0	\$ 195.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Underground Storage Withdrawal Value	\$ 83.1	\$ 86.1	\$ 523.6	\$ 389.5	\$ 100.0	\$ 99.7	\$ 101.5	\$ 98.0	\$ 98.0	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	\$ 101.1	
LNG Storage Withdrawal Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Storage Withdrawal Value	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Transportation	\$ 181.3	\$ 281.5	\$ 325.6	\$ 292.1	\$ 273.8	\$ 90.5	\$ 42.6	\$ 29.6	\$ 58.7	\$ 58.6	\$ 74.8	\$ 137.4	\$ 137.4	\$ 137.4	\$ 137.4	\$ 137.4	
Variable Costs for Purchases to City Gate	\$ 84.4	\$ 70.8	\$ 97.3	\$ 92.1	\$ 39.2	\$ 5.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variable Costs for Storage Withdrawal	\$ 16.2	\$ -	\$ -	\$ -	\$ 140.5	\$ 48.0	\$ 81.6	\$ 61.3	\$ 30.6	\$ 74.4	\$ 71.4	\$ 61.9	\$ 61.9	\$ 61.9	\$ 61.9	\$ 61.9	
Variable Costs for Storage Injection	\$ 250.2	\$ 316.0	\$ 384.3	\$ 346.2	\$ 445.7	\$ 137.3	\$ 98.2	\$ 67.6	\$ 73.0	\$ 108.9	\$ 122.8	\$ 176.2	\$ 176.2	\$ 176.2	\$ 176.2	\$ 176.2	
Total Transportation Variable Costs	\$ 31.7	\$ 36.3	\$ 38.6	\$ 38.0	\$ 7.7	\$ 6.4	\$ 26.0	\$ 23.4	\$ 16.3	\$ 24.1	\$ 23.3	\$ 23.3	\$ 23.3	\$ 23.3	\$ 23.3	\$ 23.3	
Total Storage Variable Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
LESS:																	
LNG Trucking	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Storage Refill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Liquefaction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Storage and Liquefaction	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
TOTAL VARIABLE COSTS	\$ 13,644.2	\$ 21,548.8	\$ 27,258.4	\$ 23,497.9	\$ 19,278.3	\$ 8,390.8	\$ 3,989.7	\$ 2,684.8	\$ 2,258.3	\$ 2,258.3	\$ 2,430.5	\$ 4,952.6	\$ 4,952.6	\$ 4,952.6	\$ 4,952.6	\$ 4,952.6	
TOTAL FIXED AND VARIABLE COSTS	\$ 19,505.3	\$ 30,522.0	\$ 36,227.0	\$ 32,466.5	\$ 28,247.0	\$ 14,674.6	\$ 10,273.5	\$ 8,968.5	\$ 8,542.1	\$ 8,542.1	\$ 8,714.2	\$ 11,236.3	\$ 11,236.3	\$ 11,236.3	\$ 11,236.3	\$ 11,236.3	
NGPMP Credit	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	\$ 669.9	
TOTAL GAS COSTS	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
																\$ 209,880.080	

REDACTED

Narragansett Electric Company	
Volume & Cost Summary	Sendout Volumes (MDth)

Normal Weather Scenario - Sales														
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Total
Algonquin														
TETCO CDS Long Haul	1,100	1,083	1,135	1,009	1,067	61	495	413	552	772	854	1,073	9,615	
TETCO SCT Long Haul	-	11	29	39	22	2	-	-	-	-	-	-	104	
AIM	203	222	234	212	227	218	223	215	222	222	215	222	2,632	
AGT M3	40	29	89	46	170	1,420	722	415	-	-	6	398	3,336	
TCO Appalachia	381	998	998	902	998	101	5	49	50	50	32	25	4,590	
Storage	444	510	550	520	198	83	-	-	-	-	-	-	2,307	
Total Algonquin	2,168	2,834	3,037	2,729	2,683	1,885	1,445	1,092	824	1,044	1,106	1,718	22,584	
Tennessee														
TGP Long Haul	120	616	658	588	490	208	-	-	-	-	75	207	2,962	
TGP Connexion	95	293	293	264	253	187	275	264	150	237	282	292	2,886	
Storage	393	166	453	401	273	-	-	-	-	-	-	-	1,685	
Total Tennessee	608	1,075	1,404	1,254	1,016	394	275	264	150	237	357	499	7,533	
Other														
Dawn via PNGTS	22	263	496	439	233	2	-	-	-	-	-	-	1,456	
Dracut	-	-	-	-	-	174	107	-	-	-	-	-	282	
Dawn / Niagara / Waddington	14	38	50	35	17	32	-	-	33	-	-	-	219	
Dominion / Transco Leidy	21	35	53	44	43	19	19	18	19	19	19	18	39	
Everett	-	90	239	181	5	-	-	-	-	-	-	-	345	
LNG Vapor	19	19	118	88	19	19	19	19	19	19	19	19	398	
LNG Truck	5	-	-	-	192	56	44	24	2	39	33	19	416	
City Gate	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Other	80	445	957	789	509	127	257	168	73	73	77	70	78	3,631
Total Purchases	2,856	4,374	5,397	4,771	4,208	2,406	1,977	1,524	1,047	1,358	1,534	2,295	33,748	
LESS:														
Liquefaction	-	-	-	-	-	-	-	-	-	-	-	-	-	
LNG Truck	5	-	-	-	-	192	56	44	24	2	39	33	19	416
AGT Storage Refill	-	-	-	-	-	62	500	462	309	514	467	453	2,768	
TGP Storage Refill	-	-	-	-	-	42	275	264	101	152	248	251	1,334	
Total	5	-	-	-	-	192	160	820	750	413	706	748	724	4,518
Total Sendout	2,852	4,374	5,397	4,771	4,016	2,246	1,157	774	635	652	785	1,571	29,230	
Datacheck	2,852	4,374	5,397	4,771	4,016	2,246	1,157	774	635	652	785	1,571	29,230	
Delta	-	-	-	-	-	-	-	-	-	-	-	-	-	

Narragansett Electric Company
Volume & Cost Summary
Cost of Gas (\$'000)

COMMODITY	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	May-22	Apr-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
TETCO CDS Long Haul Transportation	\$ 6,247	\$ 5,772	\$ 6,225	\$ 5,436	\$ 5,389	\$ 227	\$ 1,677	\$ 1,406	\$ 1,918	\$ 2,598	\$ 2,559	\$ 3,275	\$ 42,729
TETCO SCT Long Haul	\$ -	\$ 65	\$ 173	\$ 226	\$ 120	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 591
AIM	\$ 1,156	\$ 1,157	\$ 1,313	\$ 1,170	\$ 1,126	\$ 799	\$ 751	\$ 728	\$ 765	\$ 745	\$ 641	\$ 661	\$ 11,013
AGTM3	\$ 241	\$ 213	\$ 885	\$ 441	\$ 958	\$ 5,337	\$ 2,454	\$ 1,415	\$ -	\$ -	\$ 18	\$ 1275	\$ 13,237
TCO Appalachia	\$ 2,190	\$ 5,246	\$ 5,387	\$ 4,774	\$ 4,982	\$ 385	\$ 19	\$ 171	\$ 175	\$ 173	\$ 104	\$ 82	\$ 25,688
TGP Long Haul	\$ 714	\$ 3,327	\$ 3,648	\$ 3,193	\$ 2,520	\$ 816	\$ -	\$ -	\$ -	\$ -	\$ 248	\$ 686	\$ 14,437
TGP Connexion	\$ 557	\$ 1,555	\$ 1,597	\$ 1,412	\$ 1,281	\$ 720	\$ 998	\$ 956	\$ 558	\$ 860	\$ 917	\$ 948	\$ 12,357
Dawn via PNGTS	\$ 142	\$ 1,480	\$ 2,862	\$ 2,545	\$ 1,283	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,319
Dracut	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 620	\$ 383	\$ -	\$ -	\$ -	\$ -	\$ 1,003
Dawn / Niagara / Waddington	\$ 82	\$ 205	\$ 280	\$ 201	\$ 89	\$ 118	\$ -	\$ -	\$ 120	\$ -	\$ -	\$ -	\$ 1,096
Dominion / Transco Leidy	\$ 120	\$ 184	\$ 290	\$ 239	\$ 69	\$ 63	\$ 61	\$ 64	\$ 62	\$ 53	\$ 121	\$ 1,541	\$ -
Everett	\$ 2,112	\$ 1,684	\$ 2,513	\$ 2,312	\$ 1,188	\$ 201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage Withdrawals	\$ 83	\$ 86	\$ 524	\$ 389	\$ 100	\$ 101	\$ 98	\$ 101	\$ 101	\$ 98	\$ 101	\$ 101	\$ 10,011
LNG Vapor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,883
LNG Truck	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
City Gate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL COMMODITY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 148,449
Datacheck	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 148,449
Delta	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DEMAND	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	May-22	Apr-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
TETCO CDS Long Haul Transportation	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,440	\$ 1,440	\$ 1,440	\$ 1,440	\$ 1,440	\$ 1,440	\$ 15,078
TETCO SCT Long Haul Transportation	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 270
AIM Transportation	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 760	\$ 9,123
AGTM3 Transportation	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 127	\$ 1,521
TCO Appalachia Transportation	\$ 703	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 7,308
TGP Long Haul Transportation	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 442	\$ 5,300
TGP Connexion Transportation	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 216	\$ 2,593
Dawn via PNGTS Transportation	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 13,365
Dracut Transportation	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 983
Dawn / Niagara / Waddington Transportation	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 32	\$ 385
Dominion / Transco Leidy Transportation	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 214
Manchester Lateral / Yankee Interconnect	\$ 257	\$ 257	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 3,039
Everett Transportation	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 1,229
Storage Delivery	\$ 460	\$ 452	\$ 452	\$ 452	\$ 452	\$ 452	\$ 445	\$ 445	\$ 445	\$ 445	\$ 445	\$ 445	\$ 5,386
Storage Capacity	\$ 283	\$ 275	\$ 275	\$ 275	\$ 275	\$ 275	\$ 369	\$ 369	\$ 369	\$ 369	\$ 369	\$ 369	\$ 3,968
NG LNG	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 3,486
LNG Truck	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,918
Liquefaction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,256
Portable LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,865
Supplier Reservation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Demand	\$ 6,007	\$ 11,322	\$ 11,317	\$ 11,317	\$ 11,317	\$ 11,317	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 96,287
Datacheck	\$ 6,007	\$ 11,322	\$ 11,317	\$ 11,317	\$ 11,317	\$ 11,317	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 6,429	\$ 96,287
Delta	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

REDACTED

REDACTED

The Narragansett Electric Company
 d/b/a National Grid
 RIPUC Docket No. 5180
 Attachment GSP-1
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	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Tota
TOTAL DC+CC	\$ 19,690	\$ 32,871	\$ 38,576	\$ 34,815	\$ 31,888	\$ 15,518	\$ 13,348	\$ 11,777	\$ 10,144	\$ 11,178	\$ 11,248	\$ 13,683	\$ 244,736
LEES:													
Liquefaction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LNG Truck	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,506
AGT Storage Refill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 231	\$ 1,686	\$ 1,577	\$ 1,065	\$ 1,725	\$ 1,396	\$ 1,372
TGP Storage Refill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 163	\$ 998	\$ 956	\$ 379	\$ 555	\$ 812	\$ 825
Total Liquefaction & Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,062
TOTAL GAS COST													\$ 4,688
Commodity to Sendout													\$ 16,256
Days/month	30	31	31	28	31	30	31	30	31	31	30	31	365
Unit Commodity Cost (\$/MMBtu)	\$4.785	\$4.927	\$5.051	\$4.925	\$4.801	\$3.736	\$3.448	\$3.468	\$3.559	\$3.463	\$3.095	\$3.152	\$4,523
NYMEX (11/02/2021)	\$6,202	\$5,542	\$5,640	\$5,522	\$5,206	\$4,066	\$3,955	\$3,989	\$4,030	\$4,033	\$4,013	\$4,042	

REDACTED

The Narragansett Electric Company
d/b/a National Grid
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National Grid Rhode Island
Gas Commodity Costs
Normal Year

Commodity Cost (\$000)	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
AGT Citygate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AIM at Ramapo	\$ 40.4	\$ 11.5	\$ 138.6	\$ 128.9	\$ 42.2	\$ 12.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 373.7
Dawn via IGTS	\$ 12.5	\$ 28.1	\$ 98.1	\$ 88.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,152.2
Dawn via PNGTS	\$ 141.3	\$ 1,470.4	\$ 2,844.4	\$ 2,529.1	\$ 1,274.6	\$ 7.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 226.7
Dominion SP	\$ 68.9	\$ 84.0	\$ 86.1	\$ 76.3	\$ 79.4	\$ 57.3	\$ 54.6	\$ 52.9	\$ 55.6	\$ 50.1	\$ 46.5	\$ 47.9	\$ 8,267.3
Dracut Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 763.5
Everett Long-Term	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 994.3
Everett Swing	\$ 1,104.0	\$ 1,132.7	\$ 1,160.9	\$ 1,029.3	\$ 1,070.4	\$ 774.6	\$ 738.3	\$ 715.4	\$ 752.3	\$ 731.9	\$ 628.5	\$ 648.6	\$ -
Millennium	\$ 68.8	\$ 173.3	\$ 177.3	\$ 110.2	\$ 43.5	\$ 115.2	\$ -	\$ -	\$ 117.8	\$ -	\$ -	\$ -	\$ 806.0
Niagara	\$ 2,171.5	\$ 5,199.3	\$ 5,340.8	\$ 4,731.4	\$ 4,935.0	\$ 380.2	\$ 18.9	\$ 169.6	\$ 173.9	\$ 171.6	\$ 103.6	\$ 81.3	\$ 23,477.0
TCO Appalachia	\$ 239.2	\$ 212.1	\$ 880.1	\$ 438.4	\$ 951.9	\$ 528.9	\$ 2,430.7	\$ 1,402.4	\$ -	\$ -	\$ 17.9	\$ 1,261.8	\$ 13,124.0
Tetco M3	\$ 48.0	\$ 94.1	\$ 192.0	\$ 153.4	\$ 127.4	\$ 10.2	\$ 7.2	\$ 7.0	\$ 7.4	\$ 7.2	\$ 6.2	\$ 65.9	\$ 725.2
Transco Leidy	\$ -	\$ 0.5	\$ 1.2	\$ 0.4	\$ 44.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46.3
Waddington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22.6
Tetco M2 CDS	\$ 6,114.5	\$ 5,641.3	\$ 6,088.0	\$ 5,313.9	\$ 5,260.0	\$ 221.9	\$ 1,634.9	\$ 1,370.7	\$ 1,833.3	\$ 2,513.9	\$ 2,461.9	\$ 3,145.5	\$ 41,619.8
Tetco M2 SCT	\$ -	\$ -	\$ 59.7	\$ 158.9	\$ 207.2	\$ 109.3	\$ 6.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 541.4
TGP Z4 Cnx	\$ 555.8	\$ 1,552.1	\$ 1,594.5	\$ 1,409.1	\$ 1,278.9	\$ 716.7	\$ 991.1	\$ 949.4	\$ 533.0	\$ 854.2	\$ 912.0	\$ 942.7	\$ 12,309.6
TGP Z4 LH	\$ 702.5	\$ 3,265.3	\$ 3,583.4	\$ 3,155.0	\$ 2,471.3	\$ 795.3	\$ -	\$ -	\$ -	\$ -	\$ 243.1	\$ 669.0	\$ 14,865.9
Grand Total	\$ 11,290.0	\$ 19,497.3	\$ 23,895.9	\$ 20,504.0	\$ 18,868.5	\$ 8,649.1	\$ 6,693.0	\$ 5,159.1	\$ 4,514.0	\$ 4,574.2	\$ 6,953.0	\$ 134,122.6	

Unit Cost (\$/Dth)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Weighted Average
AGT Citygate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AIM at Ramapo	\$ 5.88	\$ 7.18	\$ 9.76	\$ 9.41	\$ 5.55	\$ 3.69	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7.91
Dawn via IGTS	\$ 6.08	\$ 5.49	\$ 5.63	\$ 5.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.99
Dawn via PNGTS	\$ 6.08	\$ 5.49	\$ 5.63	\$ 5.65	\$ 5.37	\$ 3.95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.64
Dominion SP	\$ 5.45	\$ 4.95	\$ 5.07	\$ 4.98	\$ 4.67	\$ 3.50	\$ 3.22	\$ 3.23	\$ 3.29	\$ 3.20	\$ 2.84	\$ 2.83	\$ 5.57
Dracut Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.90
Everett Long-Term	\$ 5.45	\$ 4.95	\$ 5.07	\$ 4.98	\$ 4.67	\$ 3.49	\$ 3.22	\$ 3.23	\$ 3.29	\$ 3.20	\$ 2.84	\$ 2.83	\$ 6.41
Everett Swing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Millennium	\$ 5.81	\$ 5.19	\$ 5.31	\$ 5.34	\$ 5.05	\$ 3.57	\$ -	\$ -	\$ 3.53	\$ -	\$ -	\$ -	\$ 4.65
Niagara	\$ 5.56	\$ 5.07	\$ 5.21	\$ 5.11	\$ 4.82	\$ 3.68	\$ 3.46	\$ 3.41	\$ 3.38	\$ 3.34	\$ 3.18	\$ 3.13	\$ 5.57
TCO Appalachia	\$ 5.88	\$ 7.18	\$ 9.76	\$ 9.41	\$ 5.55	\$ 3.69	\$ 3.33	\$ 3.34	\$ -	\$ -	\$ 3.14	\$ 3.14	\$ 3.90
Tetco M3	\$ 5.43	\$ 5.04	\$ 5.13	\$ 5.05	\$ 4.74	\$ 3.51	\$ 3.20	\$ 3.21	\$ 3.26	\$ 3.18	\$ 2.83	\$ 2.82	\$ 4.54
Tetco M2 CDS	\$ 5.40	\$ 5.06	\$ 5.21	\$ 5.11	\$ 4.79	\$ 3.52	\$ 3.22	\$ 3.23	\$ 3.27	\$ 3.16	\$ 2.80	\$ 2.85	\$ 4.21
Tetco M2 SCT	\$ -	\$ 5.06	\$ 6.26	\$ 7.62	\$ 7.50	\$ 5.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.04
TGP Z4 Cnx	\$ 5.78	\$ 5.24	\$ 5.38	\$ 5.26	\$ 4.98	\$ 3.79	\$ 3.53	\$ 3.53	\$ 3.63	\$ 3.54	\$ 3.18	\$ 3.18	\$ 4.20
TGP Z4 LH	\$ 5.78	\$ 5.24	\$ 5.38	\$ 5.26	\$ 4.98	\$ 3.79	\$ -	\$ -	\$ -	\$ -	\$ 3.18	\$ 3.18	\$ 4.96
Weighted Average	\$ 5.50	\$ 5.18	\$ 5.47	\$ 5.33	\$ 4.96	\$ 3.70	\$ 3.36	\$ 3.34	\$ 3.28	\$ 3.34	\$ 2.94	\$ 2.99	\$ 4.47

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	National Grid Rhode Island Gas Commodity Costs Normal Year												
Commodity to Injections (\$'000)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Grand Total
AGT Citygate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AIM at Ramapo	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ 1,152.2
Dawn via IGTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dominion SP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dracut Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Everett Long-Term	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Everett Swing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Millennium	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Niagara	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TCO Appalachia	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.9	\$ 18.9	\$ 169.6	\$ 173.9	\$ 171.6	\$ 103.6	\$ 56.3	\$ 697.8
Tetco M3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Leidy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Waddington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tetco M2 CDS	\$ -	\$ -	\$ -	\$ -	\$ 221.9	\$ 1,634.9	\$ 1,370.7	\$ 866.1	\$ 1,512.1	\$ 1,254.5	\$ 1,277.6	\$ 8,137.9	\$ 22.6
Tetco M2 SCT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TGP Z4 Cix	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161.4	\$ 991.1	\$ 949.4	\$ 374.7	\$ 550.5	\$ 567.3	\$ 491.6	\$ 4,086.0
TGP Z4 LH	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 559.6
Grand Total	\$ 22.6	\$ -	\$ 1,152.2	\$ -	\$ 649.5	\$ 2,847.3	\$ 2,602.0	\$ 1,426.0	\$ 2,415.3	\$ 2,316.3	\$ 2,239.0	\$ 15,670.1	

National Grid Rhode Island
 Transportation Variable Costs
 Normal Year
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	Transportation Costs	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Dracut	\$ 0.6	\$ 7.4	\$ 13.4	\$ 11.5	\$ 6.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39.5
Everett	\$ -	\$ 2.8	\$ 7.6	\$ 5.8	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16.3
██████████	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316.9
Manchester Lateral	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Niagara	\$ 0.9	\$ 2.5	\$ 2.5	\$ 1.5	\$ 0.6	\$ 2.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12.9
Storage Delivery	\$ 54.0	\$ 59.2	\$ 66.3	\$ 56.8	\$ 58.4	\$ 24.6	\$ 7.8	\$ 5.1	\$ 6.4	\$ 5.2	\$ 6.0	\$ 15.3	\$ 365.2	
Yankee Interconnect	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AIM	\$ 11.7	\$ 12.9	\$ 13.5	\$ 12.3	\$ 13.2	\$ 12.6	\$ 12.9	\$ 12.4	\$ 12.9	\$ 12.9	\$ 12.4	\$ 12.9	\$ 152.5	
Transco	\$ 2.3	\$ 5.4	\$ 11.5	\$ 9.2	\$ 8.1	\$ 0.3	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 6.9	\$ 44.2
TCO (Pool)	\$ 11.5	\$ 24.1	\$ 24.1	\$ 21.8	\$ 24.1	\$ 8.7	\$ 6.8	\$ 6.6	\$ -	\$ -	\$ 0.2	\$ 0.2	\$ 3.8	\$ 131.8
TETCO SCT Long Haul	\$ -	\$ 5.1	\$ 13.2	\$ 17.3	\$ 9.7	\$ 0.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46.2
AGT M3	\$ 42.0	\$ 49.4	\$ 54.9	\$ 51.2	\$ 42.4	\$ 27.0	\$ 9.0	\$ 2.4	\$ 4.6	\$ 6.3	\$ 9.1	\$ 20.1	\$ 318.5	
TETCO CDS Long Haul	\$ 97.8	\$ 98.0	\$ 103.4	\$ 92.5	\$ 96.4	\$ 4.6	\$ 22.0	\$ 18.1	\$ 43.6	\$ 54.2	\$ 65.2	\$ 89.7	\$ 785.5	
Dominion	\$ 0.1	\$ 0.3	\$ 0.7	\$ 0.5	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2	\$ 3.0
Dawn via Waddington	\$ 0.2	\$ 0.4	\$ 1.4	\$ 1.2	\$ 0.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.8
Dawn via PNGTS	\$ 0.2	\$ 1.9	\$ 4.3	\$ 4.1	\$ 1.7	\$ 0.1	\$ 5.5	\$ 3.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21.2
TGP Long Haul	\$ 11.8	\$ 43.7	\$ 64.9	\$ 58.0	\$ 40.7	\$ 13.5	\$ -	\$ -	\$ -	\$ -	\$ 3.3	\$ 10.9	\$ 246.8	
TGP Connexion	\$ 0.9	\$ 2.8	\$ 2.8	\$ 2.5	\$ 2.4	\$ 1.6	\$ 1.4	\$ 1.3	\$ 1.0	\$ 1.6	\$ 1.9	\$ 2.1	\$ 22.1	
Portable LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														\$ 2,526.3

National Grid Rhode Island
 Storage Variable Costs
 Normal Year
 (\$000)

Storage Costs	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Columbia FSS	\$ 0.6	\$ 0.2	\$ 1.0	\$ 0.8	\$ 0.4	\$ 0.0	\$ 0.1	\$ 0.7	\$ 0.8	\$ 0.8	\$ 0.5	\$ 0.3	\$ 6.2
Dominion GSS	\$ 4.6	\$ 2.8	\$ 2.9	\$ 3.8	\$ 2.6	\$ 2.7	\$ 6.4	\$ 6.0	\$ 5.9	\$ 5.6	\$ 5.1	\$ 5.0	\$ 53.4
Dominion GSSTE	\$ 3.6	\$ 3.7	\$ 3.7	\$ 3.3	\$ 3.7	\$ 2.2	\$ 8.1	\$ 5.5	\$ -	\$ 7.3	\$ 6.6	\$ 6.5	\$ 54.0
Providence LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tennessee FSMA	\$ 1.1	\$ -	\$ 2.5	\$ 1.6	\$ 1.1	\$ -	\$ 1.5	\$ 1.4	\$ -	\$ 0.5	\$ 1.4	\$ 1.5	\$ 12.5
Tetco FSS1	\$ 0.5	\$ 0.7	\$ 0.7	\$ 0.7	\$ -	\$ 0.0	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 5.3
Tetco SS1	\$ 21.4	\$ 28.9	\$ 27.8	\$ 27.8	\$ -	\$ 1.3	\$ 9.6	\$ 9.2	\$ 9.2	\$ 9.6	\$ 9.3	\$ 9.6	\$ 163.8
Exeter LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ 31.7	\$ 36.3	\$ 38.6	\$ 38.0	\$ 7.7	\$ 6.4	\$ 26.0	\$ 23.4	\$ 16.3	\$ 24.1	\$ 23.3	\$ 23.2	\$ 295.1

Withdrawal Value	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Columbia FSS	\$ 83.8	\$ 29.2	\$ 150.9	\$ 119.8	\$ 65.4	\$ 3.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 452.9
Dominion GSS	\$ 678.3	\$ 423.1	\$ 416.3	\$ 552.0	\$ 378.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,448.0
Dominion GSSTE	\$ 383.7	\$ 396.5	\$ 396.5	\$ 358.1	\$ 396.5	\$ 191.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,123.1
Exeter LNG	\$ 26.3	\$ 27.2	\$ 308.1	\$ 313.9	\$ 38.6	\$ 37.5	\$ 37.1	\$ 35.6	\$ 36.5	\$ 36.4	\$ 35.0	\$ 36.0	\$ 968.3
Providence LNG	\$ 56.8	\$ 58.8	\$ 215.4	\$ 75.5	\$ 61.4	\$ 62.2	\$ 64.4	\$ 62.4	\$ 64.6	\$ 64.8	\$ 62.8	\$ 65.2	\$ 914.2
Tennessee FSMA	\$ 315.3	\$ -	\$ 716.8	\$ 454.9	\$ 308.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,795.8
Tetco FSS1	\$ 25.7	\$ 33.4	\$ 32.1	\$ 32.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123.4
Tetco SS1	\$ 541.2	\$ 731.0	\$ 703.5	\$ 703.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,679.1
Grand Total	\$ 2,111.1	\$ 1,699.2	\$ 2,939.6	\$ 2,609.8	\$ 1,249.0	\$ 295.4	\$ 101.5	\$ 98.0	\$ 101.1	\$ 97.7	\$ 101.2	\$ 11,504.8	

Injection Value	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Columbia FSS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.9	\$ 19.1	\$ 171.1	\$ 175.4	\$ 173.1	\$ 104.5	\$ 56.8	\$ 703.8
Dominion GSS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 286.2	\$ 625.7	\$ 591.6	\$ 591.6	\$ 544.5	\$ 446.8	\$ 439.6	\$ 3,525.9
Dominion GSSTE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 755.1	\$ 519.1	\$ -	\$ 672.0	\$ 544.6	\$ 539.4	\$ 3,030.1	
Tennessee FSMA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ 1,270.2
Tetco FSS1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ 1,235.5
Tetco SS1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 101.0	\$ 664.0	\$ 642.5	\$ 645.8	\$ 654.8	\$ 562.9	\$ 591.2	\$ 3,862.1
Grand Total	\$ 38.8	\$ -	\$ -	\$ -	\$ -	\$ 1,292.7	\$ 697.4	\$ 2,939.0	\$ 2,663.3	\$ 1,456.6	\$ 2,489.7	\$ 2,387.7	\$ 16,256.1

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National Grid Rhode Island
 Transportation Fixed Costs
 Normal Year
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	Transportation Costs												
	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Diracut	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 81.9	\$ 983.2
Everett	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 102.4	\$ 1,229.0
LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Manchester Lateral	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 209.6	\$ 2,515.5
Niagara	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 78.9
Storage Delivery	\$ 460.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 452.2	\$ 445.3	\$ 445.3	\$ 445.3	\$ 445.3	\$ 445.3	\$ 445.3	\$ 5,386.0
Yankee Interconnect	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 760.2	\$ 5,23.5
AIM	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9.4	\$ 9,122.8
Transco	\$ 703.1	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 600.5	\$ 113.1
TCO (Pool)	\$ 17.9	\$ 17.9	\$ 17.9	\$ 17.9	\$ 17.9	\$ 17.9	\$ 25.8	\$ 25.8	\$ 25.8	\$ 25.8	\$ 25.8	\$ 25.8	\$ 7,308.5
TETCO SCT Long Haul	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 126.8	\$ 270.0
AGTM3	\$ 1,000.1	\$ 1,000.1	\$ 1,000.1	\$ 1,000.1	\$ 1,000.1	\$ 1,000.1	\$ 1,439.6	\$ 1,439.6	\$ 1,439.6	\$ 1,439.6	\$ 1,439.6	\$ 1,439.6	\$ 1,521.5
TETCO CDS Long Haul	\$ 7.1	\$ 7.1	\$ 7.1	\$ 7.1	\$ 7.1	\$ 7.1	\$ 9.3	\$ 9.3	\$ 9.3	\$ 9.3	\$ 9.3	\$ 9.3	\$ 15,077.9
Dominion	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 25.5	\$ 305.9
Dawn via Waddington	\$ 1,114.2	\$ 1,114.2	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 1,113.6	\$ 13,364.7
Dawn via PNGTS	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 441.7	\$ 5,300.0
TGP Long Haul	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 2,592.6
TGP Connexion	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 216.1	\$ 1,256.4
Portable LNG													\$ 1,256.4
Grand Total													\$ 67,050.1

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National Grid Rhode Island
 Storage Fixed Costs
 Normal Year
 (\$000)

Storage Costs	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Columbia FSS	\$ 23.2	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 15.4	\$ 192.9
Dominion GSS	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 36.3	\$ 677.3
Dominion GSSTE	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 46.7	\$ 560.4
Exeter LNG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Providence LNG	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 290.5	\$ 3,486.2
Tennessee FSMA	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 41.4	\$ 496.4
Terco FSS1	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5	\$ 51.1
Tetco SSI	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 132.1	\$ 1,990.3
Grand Total	\$ 573.7	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 566.0	\$ 7,454.7

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National Grid Rhode Island
 Supply Fixed Costs
 Normal Year
 (\$000)

Data Item	Total Supply Fixed Costs by Supply	11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	Grand Total
Supply Costs														
Everett Supply Deal	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ 6,822.5
Rampco	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dawn East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hereford	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dawn Waddington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dominion South Point	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Millenium East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Niagara	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TCO Appalachia	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TCO M3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tetco M3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Leidy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Waddington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dracut Supply Deal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Everett Supply Deal2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TGP Citygate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,250.0
Summer Liquid Refill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4.6
Tetco M2 CDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tetco M2 SCT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TGP Z4 Crx	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TGP Z4 LH	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Summer Trucking	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AGT Citygate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proposed Summer Liquid	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 787.6
Winter Liquid	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,026.6
Grand Total														\$ 21,782.3

REDACTED

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5180
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National Grid Rhode Island
Hourly Peaking Fixed Costs
Normal Year
(\$000)

Hourly Peaking Fixed Costs	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
Transportation Fixed Costs													
Portable LNG													
Everett													
Supplier Fixed Costs													
AGT Citygate													
Winter Liquid													
Everett Supply Deal2													
Total Hourly Peaking Fixed Costs	\$ 20.5	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 2,223.7	\$ 20.5	\$ 20.5	\$ 20.5	\$ 20.5	\$ 20.5	\$ 20.5	\$ 9,058.7

National Grid Rhode Island
 Storage Inventory
 Normal Year
 (\$000; MDth)

		11/1/2021	12/1/2021	1/1/2022	2/1/2022	3/1/2022	4/1/2022	5/1/2022	6/1/2022	7/1/2022	8/1/2022	9/1/2022	10/1/2022	
LNG	Beg Inv Value	\$ 3,239.5	\$ 3,195.2	\$ 3,109.1	\$ 2,961.5	\$ 2,555.5	\$ 2,196.1	\$ 3,388.7	\$ 3,592.3	\$ 3,725.6	\$ 3,757.7	\$ 3,669.6	\$ 3,778.1	\$ 3,855.3
LNG	Beg Inv Volume	735.0	720.8	701.3	582.9	494.7	667.7	705.0	730.0	735.7	718.7	735.7	738.3	753.0
LNG	End Inv Value	\$ 3,195.2	\$ 3,109.1	\$ 2,585.5	\$ 2,196.1	\$ 3,388.7	\$ 3,592.3	\$ 3,725.6	\$ 3,757.7	\$ 3,669.6	\$ 3,778.1	\$ 3,859.3	\$ 3,862.6	
LNG	End Inv Volume	720.8	701.3	582.9	494.7	667.7	705.0	730.0	735.7	718.7	738.3	753.0	753.0	
AGT Storage	Beg Inv Value	\$ 7,194.0	\$ 5,990.7	\$ 4,734.3	\$ 3,178.5	\$ 1,738.3	\$ 1,142.1	\$ 1,177.4	\$ 2,873.6	\$ 4,450.9	\$ 5,515.5	\$ 7,240.4	\$ 8,636.8	
AGT Storage	Beg Inv Volume	3,170.3	2,640.0	2,096.3	1,400.7	766.1	503.3	480.0	980.0	1,441.7	1,750.7	2,265.2	2,732.1	
AGT Storage	End Inv Value	\$ 5,990.7	\$ 4,734.3	\$ 3,178.5	\$ 1,738.3	\$ 1,142.1	\$ 1,177.4	\$ 2,873.6	\$ 4,450.9	\$ 5,515.5	\$ 7,240.4	\$ 8,636.8	\$ 10,008.6	
AGT Storage	End Inv Volume	2,640.0	2,086.3	1,400.7	766.1	503.3	480.0	980.0	1,441.7	1,750.7	2,265.2	2,732.1	3,185.5	
TGP Storage	Beg Inv Value	\$ 3,374.5	\$ 2,549.9	\$ 2,193.2	\$ 1,333.0	\$ 552.7	\$ -	\$ 163.1	\$ 1,161.1	\$ 2,117.0	\$ 2,495.9	\$ 3,051.1	\$ 3,863.5	
TGP Storage	Beg Inv Volume	1,336.8	1,010.1	868.8	528.0	219.0	-	41.8	317.0	581.1	682.4	834.8	1,082.8	
TGP Storage	End Inv Value	\$ 2,549.9	\$ 2,193.2	\$ 1,333.0	\$ 552.7	\$ -	\$ 163.1	\$ 1,161.1	\$ 2,117.0	\$ 2,495.9	\$ 3,051.1	\$ 3,863.5	\$ 4,688.1	
TGP Storage	End Inv Volume	1,010.1	868.8	528.0	219.0	-	41.8	317.0	581.1	682.4	834.8	1,082.8	1,334.2	

The Narragansett Electric Company
Gas Cost Recovery
Receipt Point Volumes (MDth)

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
To City Gate													

GAS PURCHASES

AGT Citygate	-	-	-	-	-	-	-	-	-	-	-	-	-
AIM at Ramapo	7	2	14	14	8	3	-	-	-	-	-	-	47
Dawn via GTS	2	5	17	16	-	-	-	-	-	-	-	-	40
Dawn via PNGTS	23	268	505	447	238	2	-	-	-	-	-	-	1,483
Dominion SP	13	17	17	15	17	16	17	16	17	17	16	17	196
Dracut Supply	-	-	-	-	-	-	-	-	-	-	-	-	282
Everett Long-Term	-	-	-	-	-	-	-	-	-	-	-	-	515
Everett Swing	-	-	-	-	-	-	-	-	-	-	-	-	-
Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-
Millennium	203	229	229	207	229	222	229	229	229	222	229	229	2,677
Niagara	12	33	33	21	9	32	-	-	33	-	-	-	173
Proposed Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-
TCO Appalachia	391	1,025	1,025	926	1,025	102	-	-	-	-	-	-	4,500
Tetco M2 SCT	-	12	31	41	23	2	-	-	-	-	-	-	107
Tetco M2 CDS	1,132	1,115	1,169	1,039	1,099	-	-	-	302	317	431	656	7,260
Tetco M3	41	30	90	47	172	1,433	729	419	-	-	6	401	3,367
TGP Z4 Crx	96	296	296	268	257	147	-	-	49	86	109	142	1,745
TGP Z4 LH	122	624	666	596	496	210	-	-	-	2	109	2,824	-
Transco Leidy	9	19	37	30	27	3	2	2	2	2	23	160	-
Waddington	-	0	0	0	8	-	-	-	-	-	-	-	8
TOTAL PURCHASES TO CITY GATE	2,049	3,764	4,370	3,847	3,610	2,172	1,151	767	633	651	788	1,585	25,386

STORAGE WITHDRAWALS

Columbia FSS	37	13	66	53	29	1	-	-	-	-	-	-	199
Dominion GSS	276	171	177	229	156	-	-	-	-	-	-	-	1,008
Dominion GSSTE	169	175	175	158	175	85	-	-	-	-	-	-	936
Exeter LNG	6	6	70	71	6	6	6	6	6	6	6	6	202
Providence LNG	13	13	49	17	13	13	13	13	13	13	13	13	196
Tennessee FSMA	125	-	284	180	122	-	-	-	-	-	-	-	711
Tetco SSI	239	322	310	310	-	-	-	-	-	-	-	-	1,181
Tetco FSS1	11	15	14	14	-	-	-	-	-	-	-	-	54
TOTAL WITHDRAWALS TO CITY GATE	876	714	1,145	1,032	501	104	19	19	19	19	19	19	4,488

GRAND TOTAL TO CITY GATE

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The Narragansett Electric Company
d/b/a National Grid
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The Narragansett Electric Company	
Gas Cost Recovery	
Receipt Point Volumes (MDth)	

To Storage Injection

GAS PURCHASES

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
AGT Citygate	-	-	-	-	-	-	-	-	-	-	-	-	-
AIM at Ramapo	-	-	-	-	-	-	-	-	-	-	-	-	-
Dawn via IGTS	-	-	-	-	-	-	-	-	-	-	-	-	-
Dawn via PNGTS	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominion SP	-	-	-	-	-	-	-	-	-	-	-	-	-
Dracut Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
Everett Long-Term	-	-	-	-	-	-	-	-	-	-	-	-	-
Everett Swing	-	-	-	-	-	-	-	-	-	-	-	-	-
Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-
Millennium	-	-	-	-	-	-	-	-	-	-	-	-	-
Niagara	-	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-
TCO Appalachia	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetco M2 SCT	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetco M2 CDS	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetco M3	-	-	-	-	-	-	-	-	-	-	-	-	-
TGP Z4 Cnx	-	-	-	-	-	-	-	-	-	-	-	-	-
TGP Z4 LH	-	-	-	-	-	-	-	-	-	-	-	-	-
Transco Leidy	-	-	-	-	-	-	-	-	-	-	-	-	-
Waddington	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PURCHASES/TESTIONS	5	-	-	-	-	-	192	163	838	767	422	724	767

STORAGE WITHDRAWALS

Columbia FSS	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominion GSS	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominion GSSTE	-	-	-	-	-	-	-	-	-	-	-	-	-
Exeter LNG	-	-	-	-	-	-	-	-	-	-	-	-	-
Providence LNG	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee FSMA	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetco SS1	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetco FSS1	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL WITHDRAWALS TO STORAGE INJECTION	-												

GRAND TOTAL TO CITY GATE

GRAND TOTAL TO CITY GATE	5	-	-	192	163	838	767	422	724	767	743	743	4,621
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REDACTED

The Narragansett Electric Company
d/b/a National Grid
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The Narragansett Electric Company
Gas Cost Recovery
Delivery Point Volumes (MDth)

To City Gate	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
GAS PURCHASES													
AGT Citygate													
AIM at Ramapo	-	-	-	-	-	-	-	-	-	-	-	-	46
Dawn via GTS	7	2	14	13	7	3	-	-	-	-	-	-	39
Dawn via PNGTS	2	5	17	15	-	-	-	-	-	-	-	-	1,456
Dominion SP	22	263	496	439	233	2	-	-	-	-	-	-	188
Dracut Supply	12	16	16	15	16	16	16	16	16	16	16	-	282
Everett Long-Term	-	-	-	-	-	-	174	107	-	-	-	-	514
Everett Swing	-	-	-	-	-	-	-	-	-	-	-	-	-
Liquid	196	220	220	199	220	215	223	215	222	215	222	222	2,587
Millennium	12	33	33	20	9	32	-	-	33	-	-	-	172
Niagara	-	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-
TCO Appalachia	381	998	998	902	998	100	-	-	-	-	-	-	4,385
Tetco M2 SCT	-	11	29	39	22	2	-	-	-	-	-	-	104
Tetco M2 CDS	1,100	1,083	1,135	1,009	1,067	-	-	-	293	308	419	638	7,052
Tetco M3	40	29	89	46	170	1,420	722	415	-	-	6	398	3,336
TGP Z4 Crx	95	293	293	264	253	145	-	-	48	85	107	140	1,724
TGP Z4 LH	120	616	658	588	490	208	-	-	-	2	2	107	2,790
Transco Leidy	9	18	37	30	27	3	2	2	2	2	2	23	157
Waddington	-	0	0	0	8	-	-	-	-	-	-	-	8
TOTAL PURCHASES TO CITY GATE	1,996	3,678	4,275	3,762	3,525	2,144	1,138	755	615	633	766	1,552	24,839
STORAGE WITHDRAWALS													
Columbia FSS	36	13	65	51	28	1	-	-	-	-	-	-	194
Dominion GSS	269	166	173	223	152	-	-	-	-	-	-	-	982
Dominion GSSTE	165	170	170	154	170	82	-	-	-	-	-	-	912
Exeter LNG	6	6	70	71	6	6	6	6	6	6	6	6	202
Providence LNG	13	13	49	17	13	13	13	13	13	13	13	13	196
Tennessee FSMA	123	-	280	178	121	-	-	-	-	-	-	-	703
Tetco SS1	232	313	302	302	-	-	-	-	-	-	-	-	1,149
Tetco FSS1	11	14	14	14	-	-	-	-	-	-	-	-	52
TOTAL WITHDRAWALS TO CITY GATE	855	696	1,122	1,009	490	102	19	19	19	19	19	19	4,391
GRAND TOTAL TO CITY GATE	2,852	4,374	5,397	4,771	4,016	2,246	1,157	774	635	652	785	1,571	29,230

REDACTED

The Narragansett Electric Company
d/b/a National Grid
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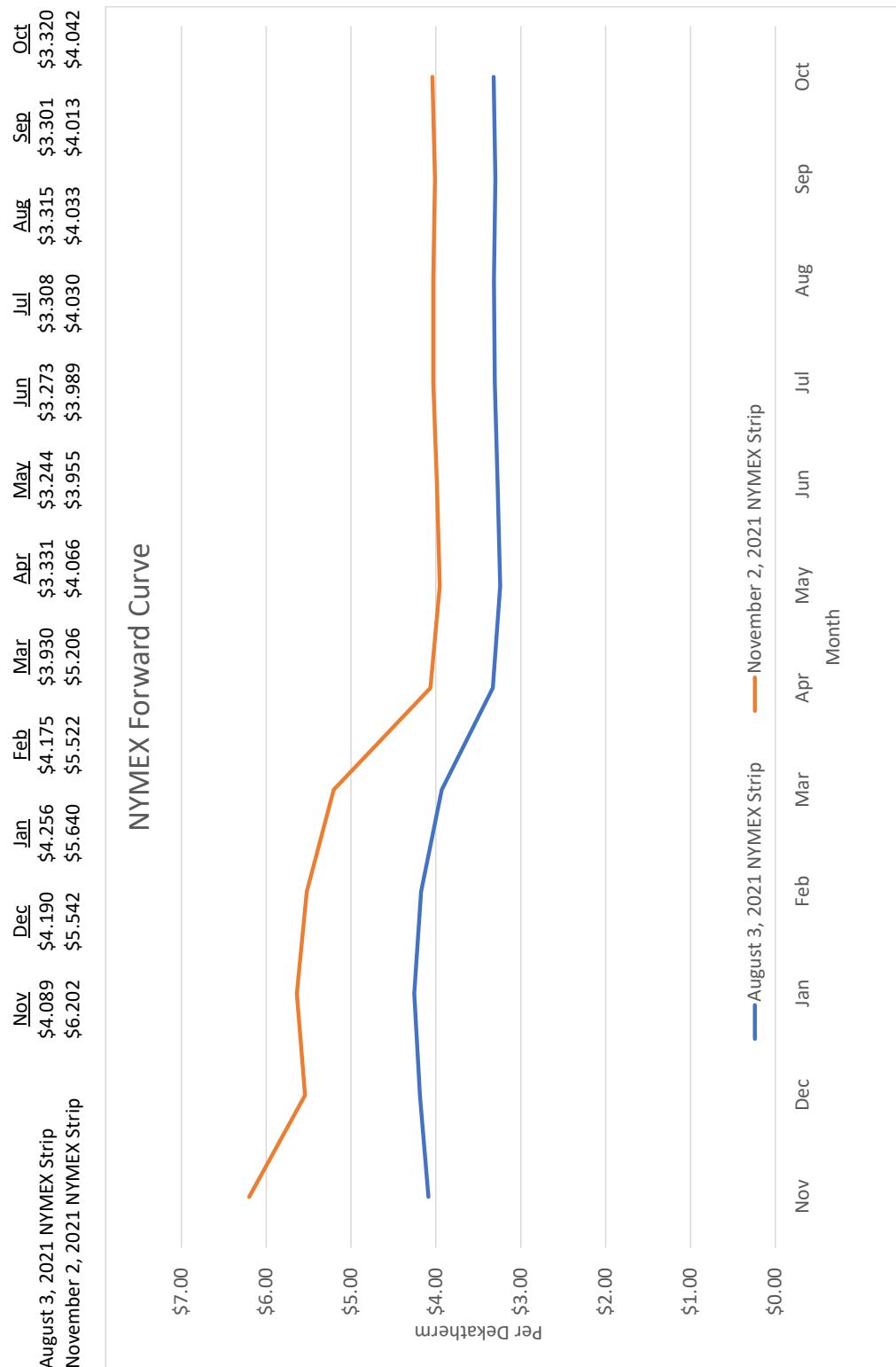
REDACTED

The Narragansett Electric Company		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
Gas Cost Recovery														
Delivery Point Volumes (MDth)														
<u>To Storage Injection</u>														
GAS PURCHASES														
AGT Citygate														
AIM at Ramapo														
Dawn via IGTS														
Dawn via PNGTS														
Dominion SP														
Dracut Supply														
Everett Long-Term														
Everett Swing														
Liquid														
Millennium														
Niagara														
Proposed Liquid														
TCO Appalachia														
Tetco M2 SCT														
Tetco M2 CDS														
Tetco M3														
TGP Z4 Cnx														
TGP Z4 LH														
Transco Leidy														
Waddington														
TOTAL PURCHASES	5	-	-	-	192	160	820	750	413	706	748	724	4,518	
STORAGE WITHDRAWALS														
Columbia FSS														
Dominion GSS														
Dominion GSSTE														
Exeter LNG														
Providence LNG														
Tennessee FSMA														
Tetco SS1														
Tetco FSS1														
TOTAL WITHDRAWALS TO STORAGE INJECTION	-	-	-	-	-	-	-	-	-	-	-	-	-	
GRAND TOTAL TO CITY GATE	5	-	-	192	160	820	750	413	706	748	724	4,518		

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
INTERIM 2021 GAS COST RECOVERY FILING
WITNESSES: GAS SUPPLY PANEL
NOVEMBER 19, 2021
ATTACHMENTS**

Attachment GSP-2

NYMEX Strip Comparison & Forward Curves



SUPPLY AREA BASIS SUMMARY

November 2021 - October 2022

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
11/02/2021 NYMEX	\$6.202	\$5.542	\$5.640	\$5.522	\$5.206	\$4.066	\$3.955	\$3.989	\$4.030	\$4.033	\$4.013	\$4.042
SUPPLY AREA	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
*												
TENN Z4	(\$0.422)	(\$0.306)	(\$0.261)	(\$0.259)	(\$0.222)	(\$0.280)	(\$0.423)	(\$0.463)	(\$0.398)	(\$0.490)	(\$0.836)	(\$0.864)
NIAGARA	(\$0.392)	(\$0.349)	(\$0.325)	(\$0.184)	(\$0.155)	(\$0.499)	(\$0.499)	(\$0.500)	(\$0.500)	(\$0.500)	(\$0.500)	(\$0.500)
IROQUOIS RECEIPTS	\$0.138	\$0.718	\$1.982	\$1.978	\$0.278	\$0.358	(\$0.357)	(\$0.357)	(\$0.358)	(\$0.603)	(\$0.357)	(\$0.358)
TETCO M3	(\$0.322)	\$1.642	\$4.115	\$3.888	\$0.342	(\$0.375)	(\$0.620)	(\$0.645)	(\$0.532)	(\$0.603)	(\$0.875)	(\$0.898)
DRACUT	\$3.748	\$8.926	\$13.092	\$13.970	\$5.322	\$1.102	(\$0.180)	(\$0.207)	\$0.100	\$0.103	(\$0.440)	(\$0.215)
TCO	(\$0.642)	(\$0.468)	(\$0.428)	(\$0.410)	(\$0.390)	(\$0.385)	(\$0.495)	(\$0.580)	(\$0.648)	(\$0.695)	(\$0.830)	(\$0.915)
DAWN	(\$0.122)	(\$0.055)	(\$0.010)	\$0.132	\$0.160	(\$0.120)	(\$0.155)	(\$0.170)	(\$0.182)	(\$0.207)	(\$0.203)	(\$0.220)
TETCO M2	(\$0.802)	(\$0.482)	(\$0.432)	(\$0.408)	(\$0.418)	(\$0.550)	(\$0.735)	(\$0.755)	(\$0.760)	(\$0.870)	(\$1.213)	(\$1.195)
TRANSCO LEIDY	(\$0.772)	(\$0.505)	(\$0.515)	(\$0.475)	(\$0.470)	(\$0.558)	(\$0.757)	(\$0.780)	(\$0.768)	(\$0.855)	(\$1.183)	(\$1.222)
ALGONQUIN	\$1.808	\$8.202	\$12.220	\$13.062	\$5.000	\$0.852	(\$0.425)	(\$0.453)	(\$0.145)	(\$0.143)	(\$0.685)	(\$0.460)
TENN Z6	\$2.778	\$8.202	\$12.218	\$13.055	\$5.000	\$0.852	(\$0.427)	(\$0.453)	(\$0.148)	(\$0.145)	(\$0.685)	(\$0.462)
EASTERN SP	(\$0.752)	(\$0.596)	(\$0.571)	(\$0.546)	(\$0.532)	(\$0.571)	(\$0.731)	(\$0.761)	(\$0.745)	(\$0.837)	(\$1.177)	(\$1.210)
EASTERN NP	(\$0.752)	(\$0.756)	(\$0.731)	(\$0.706)	(\$0.691)	(\$0.665)	(\$0.825)	(\$0.855)	(\$0.838)	(\$0.933)	(\$1.270)	(\$1.302)
IROQUOIS Z1	\$0.138	\$0.878	\$2.142	\$2.138	\$0.438	(\$0.198)	(\$0.197)	(\$0.197)	(\$0.198)	(\$0.197)	(\$0.197)	(\$0.198)
LEIDY HUB	(\$0.742)	(\$0.453)	(\$0.515)	(\$0.433)	(\$0.489)	(\$0.591)	(\$1.101)	(\$0.848)	(\$0.768)	(\$0.884)	(\$1.221)	(\$1.217)
MILLENNIUM EAST POOL	(\$0.782)	(\$0.598)	(\$0.595)	(\$0.578)	(\$0.550)	(\$0.605)	(\$0.755)	(\$0.803)	(\$0.812)	(\$0.865)	(\$1.200)	(\$1.222)
TENN Z6 NORTH	\$3.748	\$8.202	\$12.218	\$13.055	\$5.000	\$0.852	(\$0.427)	(\$0.453)	(\$0.148)	(\$0.145)	(\$0.685)	(\$0.462)

*November basis numbers are based on the 10/27/21 NYMEX Settle, all other basis numbers are based on 11/1/21 NYMEX

Testimony of
Ryan M. Scheib

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
INTERIM GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

DIRECT TESTIMONY

OF

RYAN M. SCHEIB

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
INTERIM 2021 GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

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1 I. Introduction

2 Q. Please state your name and business address.

3 A. My name is Ryan M. Scheib. My business address is 40 Sylvan Road, Waltham,
4 Massachusetts 02451.

5

6 Q. Have you previously submitted testimony in this docket?

7 A. Yes. On September 1, 2021, I submitted pre-filed direct testimony in The Narragansett
8 Electric Company d/b/a National Grid’s (the “Company”) annual Gas Cost Recovery
9 (“GCR”) filing regarding the Company’s proposed GCR Factors and resulting bill
10 impacts based on the proposed factors, pursuant to the Company’s Gas Cost Recovery
11 Clause in R.I.P.U.C. NG-GAS No. 101 (the “Tariff”). On September 10, 2021,
12 I submitted revised pre-filed direct testimony in the Company’s Revised GCR Filing.
13 The Rhode Island Public Utilities Commission (“PUC”) approved the currently effective
14 GCR Factors at an Open Meeting on October 26, 2021.

15

16 II. Purpose of Testimony

17 Q. What is the purpose of your testimony?

18 A. The purpose of my testimony is to propose an interim adjustment to the GCR Factors
19 effective January 1, 2022 for the following services: Firm sales service customers in the
20 Residential Non-Heating and Heating rate classes and Commercial and Industrial

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1 ("C&I") firm sales customers in the Small, Medium, Large, and Extra Large rate classes.
2 I also discuss the reason for the Company's interim GCR Filing.

4 Q. Are you including any attachments with your testimony?

5 A. Yes. I am sponsoring the following attachments:

6 Attachment RMS-1 Proposed Adjusted Gas Cost Recovery Factors

7 Attachment RMS-2 Estimated Deferred Gas Cost Balance without Adjustments to
8 the GCR Factors

9 Attachment RMS-3 Estimated Deferred Gas Cost Balance with Adjustments to the
10 GCR Factors

11 Attachment RMS-4 FT-2 Demand Rate

12 Attachment RMS-5 Bill Impact Analysis (Proposed GCR Factors Only)

13 Attachment RMS-6 Bill Impact Analysis (All January 1, 2022 Rate Changes)

14

15 III. GCR Factor Development

16 Q. What are the proposed GCR Factors the Company is requesting to implement?

17 A. The Company is requesting approval to increase the current High Load GCR Factor by
18 \$0.0791 per therm and the current Low Load GCR Factor by \$0.0868 per therm.

19 Attachment RMS-1 provides a summary of the proposed GCR Factors reflecting this
20 increase. The Company proposes that these factors become effective on January 1, 2022.

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- 1 **Q. Why is the Company proposing to revise its currently approved GCR Factors?**
- 2 A. The Company is proposing to revise its current GCR Factors to recover the projected
3 deferred gas cost balance at the end of October 2022. Pursuant to the Company's Tariff,
4 Section 2, Schedule A, Part 1.2, if the projected deferred gas cost balance exceeds five
5 percent of the Company's annual gas cost revenue, the Company may request a change to
6 its GCR Factors to eliminate this deferred balance. Currently, the Company is projecting
7 that the deferred gas cost balance will be approximately \$19.2 million, or 11 percent of
8 the total annual gas cost revenue as of October 31, 2022. Because of the size of the
9 estimated deferral balance, the Company believes it is appropriate to increase its current
10 GCR Factors at this time.
- 11
- 12 **Q. Is the Company presenting the projected deferred gas cost balance at the end of**
13 **October 2022 assuming no change to the GCR Factors?**
- 14 A. The Company provides its projected deferred gas cost balance of approximately
15 \$19.2 million at the end of October 2022 in Attachment RMS-2 assuming the current
16 GCR Factors remain in effect for the entire period. The \$19.2 million projected gas cost
17 deferral reflects the updated gas cost forecast for the period November 2021 through
18 October 2022, as presented in the testimony and attachments of the Gas Supply Panel.
- 19

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GCR Component	Increase (decrease) (\$ millions) from Revised GCR Filing
Fixed Gas Costs	\$6.5M
Variable Gas Costs	\$33.2M
Hedging Impact	(-\$23.5M)
Ending Deferral Balance as of October 31, 2021	\$2.8M
Interest on Deferred Balance	\$0.2M
Projected Gas Cost Deferral at October 31, 2022	\$19.2M

The joint testimony of the Company's witnesses for the Gas Supply Panel discuss the reasons for the increases in Fixed and Variable Gas Costs, and Mr. John Protano presents the increased benefit of the Company's hedging strategy that will partially offset the estimated increase in Variable Gas Costs. In addition, the Company has updated its beginning balance on November 1, 2021 to reflect actual GCR costs and GCR revenue for the period August 2021 through October 2021 which were not available at the time of the Company's GCR filing.

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1 **Q. Please provide an overview of the development of the proposed revised GCR**

2 **Factors.**

3 A. The Company has calculated the proposed increase in the current GCR Factors by
4 calculating a fixed cost adder and a variable cost adder to be applied to the fixed and
5 variable cost components of the GCR Factors approved in the Company's Revised GCR
6 Filing. As shown in Attachment RMS-1, Page 2, the fixed and variable cost adders were
7 calculated by dividing the projected fixed and variable cost under-recovery balances
8 assuming no change in the GCR Factors by the forecasted throughput for the period
9 January 1, 2022 through October 31, 2022. This results in a High Load fixed cost factor
10 adder of \$0.0203 per therm, a Low Load fixed cost factor adder of \$0.0278 per therm and
11 a variable cost factor adder of \$0.0573 per therm.

12

13 **Q. What is the impact of the revised GCR Factors on the projected deferred balance at**
14 **October 31, 2022?**

15 A. With the implementation of the revised GCR Factors proposed in this filing for effect
16 January 1, 2022, the Company projects a gas cost deferred over-recovery balance of
17 approximately \$33,000 at the end of October 2022. The actual deferred gas cost balance
18 will be different than this amount as forecasted amounts are replaced with actual
19 amounts.

20

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1 **Q. Why can't the Company carry the increased gas costs in the deferred gas cost**
2 **balance and recover them during the following GCR period of November 2022**
3 **through October 2023?**

4 A. According to the Company's Gas Cost Recovery Clause in its Tariff,¹ in the event that
5 the estimate of the Deferred Gas Cost balance differs by more than five percent of the
6 Company's gas revenues, the Company may make a Gas Charge Recovery filing
7 designed to eliminate the balance. The provision is intended to (1) not burden sales
8 customers with significant deferred gas costs that they would need to pay for in a
9 subsequent year, with significant defined as five percent of gas cost revenue for the year;
10 and (2) recover the incremental gas costs from those customers who were responsible for
11 the increase and not defer recovery to future customers. Also, should the Company incur
12 these higher gas costs and project to incur even higher gas costs than shown in this filing,
13 an increase later this winter will likely be greater than a relatively smaller increase in
14 January followed by a relatively smaller increase in a subsequent month. In addition, if
15 the Company does not recover the projected deferral, sales customers will eventually
16 have to pay for the interest cost of the Company carrying the deferral at the Bank of
17 America prime rate less 200 basis points, pursuant to the Tariff.²

¹ See RIPUC NG-GAS No. 101, Section 2, Gas Charge, Schedule A, Sheet 1, Part 1.2.

² See RIPUC NG-GAS No. 101, Section 2, Gas Charge, Schedule A, Part 6.3.

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1 **Q. Is the Company proposing any other revisions to the proposed rates in this filing?**

2 A. Yes. Consistent with the modifications in Docket No. 4270, the Company is submitting
3 for approval a revision to its FT-2 Marketer Demand rate of \$14.0943 per MDQ in
4 dekatherms per month, as shown in Attachment RMS-4, as well as the storage and
5 peaking charge of \$1.1063 per therm for FT-1 firm transportation customers returning to
6 Transitional Sale Service to reflect the increase in forecasted fixed storage costs
7 described in the Gas Supply Panel's revised testimony and attachments

8

9 **Q. Why is the Company asking for a GCR rate change effective January 1, 2022?**

10 A. The Company is requesting the GCR Factors change effective January 1, 2022 to recover
11 the deferral over a ten-month period. Delaying the implementation of the proposed GCR
12 Factors any further would result in fewer gas deliveries over which the projected deferral
13 could be recovered, which would result in higher GCR Factors and resulting bill impacts.

14

15 **IV. Bill Impacts**

16 **Q. What is the bill impact of the proposed GCR Factors on customer bills as compared
17 to the rates currently in effect?**

18 A. An average residential heating customer using 689 therms for the period January through
19 October will experience a total bill increase of \$61.67,³ or 5.2 percent, compared to the

³ This increase is comprised of \$59.82 resulting from the proposed change in the GCR Factor and \$1.85 in increased Gross Earnings Tax.

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1 bills over this period based on currently effective rates. A summary of seasonal (January
2 through October) bill impacts incorporating only the proposed change in the GCR Factors
3 for rate classes at various levels of usage is provided in Attachment RMS-5.

4

5 **Q. What is the bill impact of the proposed GCR Factors on customer bills if the**
6 **Company were to delay the implementation of rates past the proposed date of**
7 **January 1, 2022?**

8 A. If the Company were to implement the interim adjustment to the GCR Factors, if
9 approved by the PUC, effective February 1, 2022, an average residential heating
10 customer using 546 therms for the period February through October will experience a
11 total bill increase of \$62.09, or 6.5 percent, over their bills at currently effective rates.
12 An effective date of March 1, 2022 would result in a bill increase of \$62.66, or 8.9
13 percent, for an average residential heating customer using 389 therms for the period
14 March through October.

15

16 **Q. The Company has also proposed a change to its Energy Efficiency (“EE”) Program**
17 **Charges effective January 1, 2022 in Docket No. 5189. What is the combined bill**
18 **impact of the interim adjustment to the GCR Factors and the proposed EE**
19 **Program Charges proposed for effect January 1, 2022?**

20 A. An average Residential Heating customer using 698 therms for the period January
21 through October would see a total bill of \$1,279.84 based on the proposed GCR Factors

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1 and EE Program Charges, which is an increase of \$86.55, or 7.3 percent, from the bills
2 based on rates currently in effect. This overall increase is comprised of an increase of
3 \$59.82 as a result of the proposed GCR Factors; an increase of \$24.13 as a result of the
4 proposed EE Program Charges submitted in Docket No. 5189; and an increase of \$2.60 in
5 Gross Earnings Tax. A summary of bill impacts for the period January through October
6 2022 incorporating the proposed change in the GCR Factors and EE Program Charges for
7 rate classes at various levels of usage is provided in Attachment RMS-6.

8

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

10 A. Yes.

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Attachments of Ryan M. Scheib

Attachment RMS-1	Interim Gas Cost Recovery Factors
Attachment RMS-2	Estimated Deferred Gas Cost Balances without Interim GCR
Attachment RMS-3	Estimated Deferred Gas Cost Balances with Interim GCR
Attachment RMS-4	FT-2 Demand Rate
Attachment RMS-5	Bill Impact Analysis (GCR Only)
Attachment RMS-6	Bill Impact Analysis (All January 1, 2022 Rate Changes)

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Attachment RMS-1
Interim Gas Cost Recovery Factors

**National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Factors Effective January 1, 2022**

Description (a)	Source Reference (b)	Line # (c)	High Load ¹ (d)		Low Load ² (e)		FT-2 Mktet ³ (f)
			Approved Factor*				
(1) Fixed Cost Factor - \$/dktherm	Approved Factor*						\$1.9934
(2) Fixed Cost Adder - \$/dktherm	RMS-1, pg 2	Line (7)					\$2.6807
(3) Interim Fixed Cost Factor - \$/dktherm	Line (1) + Line (2)						\$0.2783
(4) Variable Cost Factor - \$/dktherm	Approved Factor*						\$3.1664
(5) Variable Cost Adder - \$/dktherm	RMS-1, pg 2	Line (10)					\$0.5728
(6) Interim Variable Cost Factor - \$/dktherm	Line (4) + Line (5)						\$3.7392
(7) Total Gas Cost Recovery Charge- \$/dktherm	(3) + (6)						\$6.6982
(8) Uncollectible %	Docket 4770						1.91%
(9) Total GCR Charge adjusted for Uncollectibles- \$/dkdtherm	(7) ÷ [1 - (8)]						1.91%
(10) GCR Charge on a per therm basis	(9) ÷ 10						\$6.0513
(11) COVID Deferral Factor per therm	Approved Factor*						\$6.8286
(12) GCR Charge on a per therm basis	[Line (1) & (2)] ÷ 10						\$0.6051
(13) Current rate effective 11/01/21 - \$/therm	(10) + (11)						\$0.6828
(14) Increase / (Decrease) - \$/therm	Docket 5180 (12) - (13)						\$0.0177
							\$0.6204 \$0.7005

*RIPUC Docket 5180, Revised GCR Filing

¹Includes: Residential Non Heating, Large High Load and Extra Large High Load

²Includes: Residential Heating, Small C&I, Medium C&I, Large Low Load, Extra Large Low Load

³See Revised RMS-4 for calculation of FT-2 rate

(10): Truncated to 4 decimals.

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Fixed & Variable Cost Adder Calculation (\$ per Dth)

Description (a)	Reference (b)	Source (c)	Line #		Amount (d)	High Load Factor Total (e)	Low Load Factor Total (f)
				Line #			
(1) Fixed Ending Under Recovery*	RMS-2, pg 1	Line (16) - Line (14)			\$6,538,073		
(2) Increase in FT-2 Storage Demand Costs	RMS-4, pg 1	Line (5)			<u>\$488,673</u>		
(3) Adjusted Fixed Ending Under Recovery	(1) - (2)				\$6,049,399		
(4) Design Winter Sales Percentage	Dk 5180 Revised RMS-1, pg 13	Lines (10) & (11)				1.78%	98.22%
(5) Allocated Fixed Under Recovery	(3) x (4)				\$107,679		
(6) Sales (Dth) Jan 2022 - Oct 2022	RMS-2, pg 9	Line (9)			529,743		
(7) Fixed Factor Adder	(5) ÷ (6)				\$0.2032		\$0.2783
(6) Col (e): Revised RMS-2 page 9, Sum[Lines (1), (6), (8)]							
(6) Col (f): Revised RMS-2 page 9, Sum[Lines (2)-(5), (7)]							
(8) Variable Ending Under Recovery*	RMS-2, pg 1	Line (32) - Line (30)			\$12,531,241		
(9) Sales (Dth) Jan 2022 - Oct 2022	Revised RMS-1, pg 12	Line (9)			21,876,281		
(10) Variable Cost Factor Adder	(8) ÷ (9)				\$0.5728		

* Excludes interest

Attachment RMS-2
Redacted

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Attachment RMS-2
Estimated Deferred Gas Cost Balance without Interim GCR

**National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Projected Gas Cost Deferred Balances Without Interim GCR**

Interim Gas Cost Recovery (GCR) Filing Projected Gas Cost Deferred Balances Without Interim GCR

National Grid - RI Gas Gas Cost Estimate										
Description	Reference	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Supply Fixed Costs - Pipeline Delivery										
(1) Dawn to E Here	GSP-1	\$1,114,233	\$1,114,233	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627
(2) Dawn to WADDY	GSP-1	\$25,501	\$25,501	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488
(3) Dominion SP	GSP-1	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108
(4) Dracut	GSP-1	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936
(5) Everett	GSP-1	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420
(6) Manchester Lateral	GSP-1	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627
(7) Millennium AIM	GSP-1	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234
(8) Niagara	GSP-1	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576
(9) TCO (Pool)	GSP-1	\$703,059	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492
(10) AGT M3	GSP-1	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790
(11) TEFCO SCT Long Haul	GSP-1	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889
(12) TEFCO CDS Long Haul	GSP-1	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079
(13) Transco Leidy	GSP-1	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423
(14) Yankee Interconnect	GSP-1	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961
(15) TGP Long Haul	GSP-1	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663
(16) TGP Connexion	GSP-1	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050
(17) AMA Credits	GSP-1	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155
(18) Less Credits from Mkt Releas*	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(19) Total Supply Fixed Costs - Pipeline	Sum[(1):(18)]	\$4,744,395	\$4,641,828	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209
Storage Fixed Costs - Facilities										
(20) Columbia FSS	GSP-1	\$23,199	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431
(21) Dominion GSS	GSP-1	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342
(22) Providence GSSTE	GSP-1	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702
(23) Providence LNG	GSP-1	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520
(24) Tennessee FSMA	GSP-1	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367
(25) Teteo FSS	GSP-1	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502
(26) Teteo SSI	GSP-1	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098
(27) Total Storage Costs	Sum[(20):(26)]	\$573,730	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963

REDACTED
* Capacity release credits included in forecasted supply costs

Description <u>(a)</u>	Reference <u>(b)</u>	National Grid - RI Gas Gas Cost Recovery (GCR) Filing											
		<u>Nov-21</u> <u>(c)</u>	<u>Dec-21</u> <u>(d)</u>	<u>Jan-22</u> <u>(e)</u>	<u>Feb-22</u> <u>(f)</u>	<u>Mar-22</u> <u>(g)</u>	<u>Apr-22</u> <u>(h)</u>	<u>May-22</u> <u>(i)</u>	<u>Jun-22</u> <u>(j)</u>	<u>Jul-22</u> <u>(k)</u>	<u>Aug-22</u> <u>(l)</u>	<u>Sep-22</u> <u>(m)</u>	<u>Oct-22</u> <u>(n)</u>
Storage Fixed Costs - Delivery													
(28) Storage Delivery	GSP-1	\$460,171	\$452,190	\$452,190	\$452,190	\$452,190	\$452,190	\$445,294	\$445,294	\$445,294	\$445,294	\$445,294	\$5,385,987
(29) LNG	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(30) Proposed CNG/LNG	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(31) Everett Supply Deal	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(32) Dracut Supply Deal	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(33) Everett Supply Deal2	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(34) Summer Liquid Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(35) Summer Trucking	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(36) AGT Citygate	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(37) Winter Trucking	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(38) Proposed Summer Liquid	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(39) Storage Delivery Fixed Cost		Sum[(28):(38)]											
(40) Total Storage Fixed		(27)+(39)											
(41) Total Fixed Costs		(19)+(27)+(39)											

REDACTED

National Grid - RI Gas Gas Cost Estimate										
Description	Reference	Nov-21 (a)	Dec-21 (d)	Jan-22 (e)	Feb-22 (f)	Mar-22 (g)	Apr-22 (h)	May-22 (i)	Jun-22 (j)	Jul-22 (k)
Variable Commodity Costs										
(42) AGT Citygate	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(43) AIM at Ramapo	GSP-1	\$40,413	\$11,507	\$138,647	\$128,881	\$42,210	\$12,066	\$0	\$0	\$0
(44) Const Summer Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(45) Const Winter Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(46) Dawn via IGTS	GSP-1	\$12,464	\$28,121	\$88,103	\$87,966	\$0	\$0	\$0	\$0	\$0
(47) Dawn via PNGTS	GSP-1	\$141,267	\$1,470,444	\$2,844,406	\$2,529,052	\$1,274,553	\$7,596	\$0	\$0	\$0
(48) Dominion SP	GSP-1	\$68,940	\$83,974	\$86,062	\$76,307	\$73,356	\$57,261	\$54,381	\$52,886	\$55,614
(49) Dracut Supply	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(50) Everett Long-Term	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(51) Everett Swing	GSP-1	\$1,104,025	\$1,132,697	\$1,160,865	\$1,029,286	\$1,070,405	\$774,580	\$738,337	\$715,406	\$752,307
(52) Millennium	GSP-1	\$68,784	\$173,259	\$177,329	\$110,169	\$43,489	\$115,170	\$0	\$117,775	\$0
(53) Niagaraum	GSP-1	\$2,711,455	\$5,199,349	\$5,340,758	\$4,731,356	\$4,934,075	\$380,207	\$18,914	\$169,632	\$173,398
(54) TCO Appalachia	GSP-1	\$239,248	\$12,119	\$880,061	\$438,356	\$951,860	\$2,430,583	\$1,402,399	\$0	\$1,791
(55) Teteo M3	GSP-1	\$48,024	\$94,148	\$192,002	\$152,444	\$12,419	\$10,229	\$7,240	\$7,032	\$7,387
(56) Transco Leidy	GSP-1	\$0	\$533	\$1,167	\$383	\$44,253	\$0	\$0	\$0	\$0
(57) Waddington	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(58) Netera Summer Refill	GSP-1	\$6,114,474	\$5,641,272	\$6,088,010	\$5,313,904	\$2,211,939	\$1,634,910	\$1,370,727	\$1,853,252	\$2,513,898
(59) Teteo M2 CDS	GSP-1	\$0	\$59,744	\$158,897	\$207,244	\$10,343	\$6,177	\$0	\$0	\$0
(60) Teteo M2 SCT	GSP-1	\$555,845	\$1,552,101	\$1,594,491	\$1,409,127	\$1,278,364	\$716,686	\$991,144	\$552,993	\$854,172
(61) TGP ZA Cnx	GSP-1	\$702,530	\$3,266,298	\$3,583,410	\$3,134,992	\$2,471,282	\$795,334	\$0	\$0	\$243,29
(62) TGP ZA LH	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(63) Proposed Summer Refill	GSP-1	Sum(42)(63)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(64) Total Variable Commodity Costs		Sum(42)(63)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Variable Storage Costs										
(65) Underground Storage	GSP-1	\$2,027,990	\$1,613,099	\$2,416,055	\$2,220,326	\$1,149,017	\$195,784	\$0	\$0	\$0
(66) LNG Withdrawals and Trucking	GSP-1	\$83,094	\$80,058	\$53,578	\$389,438	\$100,019	\$99,659	\$101,466	\$97,998	\$101,109
(67) Total Variable Storage Costs	(65)+(66)	\$2,111,084	\$1,699,157	\$2,939,633	\$2,609,784	\$1,249,035	\$295,443	\$101,466	\$97,998	\$101,137
Variable Transportation Costs										
(68) Variable Costs for Purchases to City Ga	GSP-1	\$181,269	\$281,514	\$325,563	\$292,091	\$273,805	\$90,516	\$42,603	\$29,602	\$58,665
(69) Variable Cost for Storage Withdrawal	GSP-1	\$84,384	\$70,805	\$97,296	\$92,077	\$39,174	\$5,208	\$81,621	\$0	\$0
(70) Variable Cost for Storage Injection	GSP-1	\$16,248	\$0	\$0	\$0	\$140,488	\$47,958	\$0	\$30,585	\$74,436
(71) Total Variable Transportation Costs	Sum((68)(70)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Injections										
(72) Cost of Injections	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(73) Variable Cost for Storage Injection	GSP-1	\$16,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(74) Refunds	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(75) Total Injections	Sum((72)(74)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hedging Impact										
(76) Hedging Impact	JMP-5	(\$6,448,898)	(\$6,590,513)	(\$7,635,740)	(\$6,540,198)	(\$5,512,513)	(\$2,235,956)	(\$2,107,119)	(\$1,638,829)	(\$1,429,330)
(77) Total Variable Costs		(64)+(67)+(71)+(75)+(76)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(78) Total Supply Costs		(41)+(77)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Storage Costs for FT-2 Calculation										
(79) Storage Fixed Costs - Facilities		\$73,730	\$565,963	\$565,963	\$565,963	\$659,584	\$659,584	\$659,584	\$659,584	\$7,454,666
(80) Storage Fixed Costs - Deliveries		(27)	(39)	(41)	(41)	(41)	(41)	(41)	(41)	\$88,020,289
(81) Total Storage Costs		(79)+(80)								\$182,805,531

REDACTED

National Grid - RI Gas Interim Gas Cost Recovery (GCR) Filing GCR - Gas Cost Revenue Without Interim GCR									
Description	Nov-21 f cst (b)	Dec-21 f cst (c)	Jan-22 f cst (d)	Feb-22 f cst (e)	Mar-22 f cst (f)	Apr-22 f cst (g)	May-22 f cst (h)	Jun-22 f cst (i)	Jul-22 f cst (j)
(1) I_Fixed Cost Revenue									
(2) (a) Low Load dth	2,076,841	3,475,596	4,567,729	4,963,697	3,812,545	3,073,666	1,327,512	811,489	643,701
(3) Fixed Cost Factor	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7	\$2,680,7
(4) Low Load Revenue	\$5,567,388	\$9,317,030	\$12,244,711	\$13,306,181	\$10,220,288	\$8,239,578	\$3,558,660	\$2,175,360	\$1,733,347
(5) (b) High Load dth	56,086	69,723	80,698	81,548	71,399	63,479	44,779	40,352	35,650
(6) Fixed Cost Factor	\$1,9934	\$1,9934	\$1,9934	\$1,9934	\$1,9934	\$1,9934	\$1,9934	\$1,9934	\$1,9934
(7) High Load Revenue	\$111,802	\$138,986	\$160,864	\$162,557	\$142,227	\$126,539	\$89,263	\$80,437	\$71,719
(8) sub-total Dth	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617
(9) FT-2 Storage Revenue from marketers	\$232,957	\$232,957	\$232,957	\$232,957	\$232,957	\$232,957	\$232,957	\$232,957	\$232,957
(10) Total Fixed Revenue	\$5,912,147	\$9,688,973	\$12,638,532	\$13,701,695	\$10,595,572	\$8,599,074	\$3,880,880	\$2,488,754	\$2,030,122
(11) II_Variable Cost Revenue									
(12) (a) Firm Sales dth	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617
(13) Variable Cost Factor	\$3,1664	\$3,1664	\$3,1664	\$3,1664	\$3,1664	\$3,1664	\$3,1664	\$3,1664	\$3,1664
(14) Variable Revenue	\$6,753,702	\$11,225,899	\$14,718,779	\$15,975,262	\$12,298,119	\$9,933,457	\$4,345,222	\$2,697,270	\$2,151,940
(15) Total Variable Revenue	\$6,753,702	\$11,225,899	\$14,718,779	\$15,975,262	\$12,298,119	\$9,933,457	\$4,345,222	\$2,697,270	\$2,151,940
(16) III_COVID Deferral Revenue									
(17) (a) Low Load dth	2,076,841	3,475,596	4,567,729	4,963,697	3,812,545	3,073,666	1,327,512	811,489	643,701
(18) COVID Deferral Factor	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770
(19) Low Load Revenue	\$367,601	\$615,180	\$808,488	\$878,574	\$674,820	\$544,039	\$234,970	\$143,634	\$113,935
(20) (b) High Load dth	56,086	69,723	80,698	81,548	71,399	63,479	44,779	40,352	35,650
(21) COVID Deferral Factor	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535
(22) High Load Revenue	\$8,609	\$10,703	\$12,387	\$12,518	\$10,960	\$9,744	\$6,874	\$6,194	\$5,513
(23) Total COVID Deferral Revenue	\$376,210	\$625,883	\$820,875	\$891,092	\$685,780	\$553,783	\$241,844	\$149,828	\$119,448
(24) Total Gas Cost Revenue	\$13,042,059	\$21,540,755	\$28,178,186	\$30,568,049	\$23,579,471	\$19,086,314	\$8,467,946	\$5,335,852	\$4,301,510
(2) RMS-2, pg 9, Sum [Lines (2)-(5), (7)]									
(3) Dk 5180, Revised RMS-1, pg 1, Line 1, col (e)	(10) Sum [Lines (4), (7), (9)]	(20) RMS-2, pg 9, Sum [Lines (1), (6), (8)]							
(4) Line (2) x Line (3)	(11) Line (8)	(21) Dk 5180, RMS-7, Pg 1, Line 1, col (d)							
(5) RMS-2, pg 9, Sum [Lines (1), (6), (8)]	(12) Line (3)	(22) Line (20) x Line (21)							
(6) Dk 5180, Revised RMS-1, pg 1, Line 1, col (d)	(13) Dk 5180, Revised RMS-1, pg 1, Line (2)	(23) Line (19) + Line (22)							
(7) Line (5) x Line (6)	(14) Line (14)	(24) Line (10) + Line (15)							
(8) Line (2) + Line (5)	(15) Line (14)								
(9) [RMS-4, pg 2, Line (25)] ÷ 12	(16) Line (17) x Line (18)	(17) RMS-2, pg 9, Sum [Lines (2)-(5), (7)]							
		(18) Dk 5180, RMS-7, Pg 1, Line 2, col (d)							
		(19) Line (17) x Line (18)							

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Working Capital Estimate

Description	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(1) Fixed Costs	\$5,881,580	\$11,196,948	\$11,192,329	\$11,192,329	\$11,192,329	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$94,785,243
(2) Capacity Release Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(3) Less System Pressure to DAC	(\$20,484)	(\$2,223,707)	(\$2,223,707)	(\$2,223,707)	(\$2,223,707)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$9,058,699)
(4) Less: Credits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Plus: Supply Related LNG O&M Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6) Allowable Working Capital Costs	\$5,861,096	\$8,973,242	\$8,968,622	\$8,968,622	\$8,968,622	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$85,726,544
(7) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(8) Working Capital Requirement	\$528,623	\$809,313	\$808,896	\$808,896	\$808,896	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744
(9) Weighted Average Cost of Capital	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%
(10) Return on Working Capital Requirement	\$36,528	\$55,924	\$55,895	\$55,895	\$55,895	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162
(11) Cost of Debt (Long Term Debt + Short Term Debt)	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
(12) Interest Expense	\$11,524	\$17,643	\$17,634	\$17,634	\$17,634	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355
(13) Taxable Income	\$25,904	\$38,280	\$38,261	\$38,261	\$38,261	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807
(14) 1 - Combined Tax Rate	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900
(15) Return and Tax Requirement	\$31,650	\$48,456	\$48,431	\$48,431	\$48,431	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933
(16) Fixed Working Capital Requirement	\$43,174	\$66,099	\$66,065	\$66,065	\$66,065	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288
(17) Variable Costs	\$7,195,305	\$14,958,237	\$19,622,642	\$16,957,723	\$13,765,828	\$6,154,847	\$1,382,612	\$1,045,950	\$1,032,028	\$1,109,143	\$1,000,618	\$3,295,355	\$88,020,289
(18) Less: Non-firm Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(19) Less: Supply Refunds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(20) Less: Bal Related Syst Pressure Commodity to DAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(21) Plus: Supply Related LNG O&M Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(22) Allowable Working Capital Costs	\$7,195,305	\$14,958,237	\$19,622,642	\$16,957,723	\$13,765,828	\$6,154,847	\$1,382,612	\$1,045,950	\$1,032,028	\$1,109,143	\$1,000,618	\$3,295,355	\$88,020,289
(23) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(24) Working Capital Requirement	\$648,957	\$1,349,110	\$1,769,801	\$1,529,447	\$1,241,565	\$555,117	\$167,976	\$94,336	\$93,080	\$100,036	\$90,247	\$297,214	
(25) Weighted Average Cost of Capital	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	
(26) Return on Working Capital Requirement	\$44,843	\$93,224	\$122,293	\$105,685	\$85,792	\$38,359	\$11,733	\$6,519	\$6,432	\$6,912	\$6,236	\$20,537	
(27) Cost of Debt (Long Term Debt + Short Term Debt)	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	
(28) Interest Expense	\$14,147	\$29,411	\$38,582	\$33,342	\$27,066	\$12,102	\$3,702	\$2,057	\$2,029	\$2,181	\$1,967	\$6,479	
(29) Taxable Income	\$30,696	\$63,813	\$83,712	\$72,343	\$58,726	\$26,257	\$8,031	\$4,462	\$4,403	\$4,732	\$4,269	\$14,058	
(30) 1 - Combined Tax Rate	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	
(31) Return and Tax Requirement	\$38,855	\$80,776	\$105,964	\$91,573	\$74,337	\$33,237	\$10,166	\$5,648	\$5,573	\$5,589	\$5,403	\$17,795	
(32) Variable Working Capital Requirement	\$53,003	\$110,186	\$144,546	\$124,915	\$101,403	\$45,338	\$13,868	\$7,705	\$7,602	\$8,170	\$7,571	\$24,274	\$648,381
(1) RMS-2, Pg 3, Line (41)													
(3) GSP-1													
(6) Sum[Lines (1)-(5)]													
(7) Dkt 4770													
(8) [Line (6) x Line (7)] ÷ 365													
(9) Dkt 5165													
(10) Line (8) x Line (9)													
(11) Dkt 5165													
(12) Line (8) x Line (11)													
(13) Line (10) - Line (12)													
(14) Tax Law effective Jan 1, 2018													
(15) Line (13) ÷ Line (14)													
(16) Line (12) + Line (15)													
(17) RMS-2, Pg 4, Line (7)													
(20) Sum[Lines (17)(21)]													
(23) Dkt 4770													
(24) [Line (22) x Line (23)] ÷ 365													
(25) Dkt 5165													
(26) Line (24) x Line (25)													
(27) Dkt 4955													
(28) Line (24) x Line (27)													
(29) Line (26) - Line (28)													
(30) Tax Law effective Jan 1, 2018													
(31) Line (29) ÷ Line (30)													
(32) Line (28) + Line (31)													

Storage Fixed Cost Working Capital Calculation for FT-2 Demand Rate (see RMS-5, pg 2)

Description	Nov-21 (b)	Dec-21 (c)	Jan-22 (d)	Feb-22 (e)	Mar-22 (f)	Apr-22 (g)	May-22 (h)	Jun-22 (i)	Jul-22 (j)	Aug-22 (k)	Sep-22 (l)	Oct-22 (m)	Total (n)
(33) Storage Fixed Costs													
(34) Less: System Pressure to DAC													
(35) Less: Credits													
(36) Plus: Supply Related LNG O&M Costs													
(37) Allowable Working Capital Costs													
(38) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(39) Working Capital Requirement													
(40) Weighted Average Cost of Capital													
(41) Return on Working Capital Requirement													
(42) Cost of Debt (Long Term Debt + Short Term Debt)													
(43) Interest Expense													
(44) Taxable Income													
(45) 1 - Combined Tax Rate													
(46) Return and Tax Requirement													
(47) Storage Fixed Working Capital Requirement													

- (33) RMS-2, pg 3, Line(40)
- (34) Line (3)
- (37) Sum[Lines (33) - (36)]
- (38) Dkt 4770
- (39) [Line (37) x Line (38)] ÷ 365
- (40) Dkt 5165
- (41) Line (39) x Line (40)
- (42) Dkt 5165
- (43) Line (39) x Line (42)
- (44) Line (41) - Line (43)
- (45) Tax Law effective Jan 1, 2018
- (46) Line (44) ÷ Line (45)
- (47) Line (43) + Line (46)

REDACTED

**National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Inventory Finance Estimate**

Description (a)	Source (b)	Nov-21 (c)	Dec-21 (d)	Jan-22 (e)	Feb-22 (f)	Mar-22 (g)	Apr-22 (h)	May-22 (i)	Jun-22 (j)	Jul-22 (k)	Aug-22 (l)	Sep-22 (m)	Oct-22 (n)	Total (o)
(1) Storage Inventory Balance	GSP-I	\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(2) Hedging		\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(3) Subtotal	(1) + (2)	\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(4) Weighted Average Cost of Capital	Dkt 5165	\$590,154	\$478,688	\$311,739	\$158,314	\$78,917	\$92,630	\$278,793	\$453,841	\$553,588	\$711,145	\$863,769	\$1,015,545	\$5,587,124
(5) Return on Working Capital Requirement	(3) x (4)													
(6) Cost of Debt (LTD + STD)*	Dkt 5165	\$186,184	\$151,019	\$98,349	\$49,946	\$24,897	\$218%	\$218%	\$218%	\$218%	\$218%	\$218%	\$218%	
(7) Interest Charges Financed	(3) x (6)													
(8) Taxable Income	(5) - (7)	\$403,969	\$327,669	\$213,390	\$108,369	\$54,020	\$63,407	\$190,838	\$310,661	\$378,939	\$486,790	\$591,263	\$695,156	
(9) 1 - Combined Tax Rate		0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	
(10) Return and Tax Requirement	(8) ÷ (9)	\$511,353	\$414,771	\$270,114	\$137,175	\$68,380	\$80,262	\$241,567	\$393,242	\$479,670	\$616,190	\$748,434	\$879,944	\$4,841,102
(11) Working Capital Requirement	(7) + (10)	\$697,538	\$565,790	\$368,463	\$187,121	\$93,277	\$109,485	\$329,523	\$536,422	\$654,318	\$840,545	\$1,020,940	\$1,200,333	\$6,603,755
(12) Storage-Related Inventory Costs	(11) ÷ 12	\$58,128	\$47,149	\$30,705	\$15,593	\$7,773	\$9,124	\$27,460	\$44,702	\$54,527	\$70,045	\$85,078	\$100,028	\$550,313
(13) LNG Inventory Balance	GSP-I													
(14) Weighted Average Cost of Capital	Dkt 5165	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	
(15) Return on Working Capital Requirement	(13) x (14)													
(16) Cost of Debt (LTD + STD)*	Dkt 5165	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	
(17) Interest Charges Financed	(13) x (16)													
(18) Taxable Income	(15) - (17)													
(19) 1 - Combined Tax Rate	(18) ÷ (19)													
(20) Return and Tax Requirement														
(21) Working Capital Requirement	(17) + (20)													
(22) LNG-Related Inventory Costs	(21) ÷ 12													
(23) Total Inventory Financing Costs	(12) + (22)													

*LTD: Long Term Debt
*STD: Short Term Debt

REDACTED

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Forecasted Throughput (Dth)

Rate Class (a)	Nov-21 (b)	Dec-21 (c)	Jan-22 (d)	Feb-22 (e)	Mar-22 (f)	Apr-22 (g)	May-22 (h)	Jun-22 (i)	Jul-22 (j)	Aug-22 (k)	Sep-22 (l)	Oct-22 (m)	Nov-Oct (n)	
(1) Residential Non-Heating	26,077	37,414	47,084	50,236	40,433	33,894	17,716	12,854	8,013	6,392	7,967	12,706	300,785	
(2) Residential Heating	1,528,915	2,589,854	3,439,229	3,811,850	2,887,874	2,339,944	955,323	597,144	477,322	453,942	477,646	644,498	20,203,541	
(3) Small C&I	184,206	298,399	380,743	388,554	311,395	246,807	124,451	70,922	54,679	50,946	55,621	81,581	2,248,302	
(4) Medium C&I	299,010	482,518	614,005	626,797	503,885	400,214	204,019	118,508	92,492	86,514	94,001	135,356	3,657,319	
(5) Large LLF	56,685	91,826	117,165	119,569	95,825	75,950	38,297	21,825	16,826	15,678	17,116	25,105	691,867	
(6) Large HLF	20,518	22,091	22,983	21,409	21,173	20,228	18,504	18,801	19,078	19,543	18,928	19,309	242,567	
(7) Extra Large LLF	8,025	13,000	16,587	16,927	13,566	10,752	5,422	3,090	2,382	2,219	2,423	3,554	97,947	
(8) Extra Large HLF	9,491	10,218	10,631	9,903	9,794	9,357	8,559	8,697	8,825	8,756	8,931	112,201		
(9) Total Sales	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617	644,274	682,458	931,040	27,554,528	
TRANSPORTATION														
(10) FT- Small	14,152	22,925	29,251	29,851	23,923	18,961	9,561	5,449	4,201	3,914	4,273	6,268	172,729	
(11) FT- Medium	219,044	354,834	452,751	462,040	370,288	293,485	147,988	84,336	65,020	60,581	66,140	97,010	2,673,516	
(12) FT- Large LLF	171,796	278,296	355,093	362,378	290,417	230,180	116,067	66,144	50,995	47,514	51,874	76,085	2,096,839	
(13) FT- Large HLF	75,991	81,884	84,666	78,948	78,653	75,148	71,421	72,765	73,741	75,376	73,213	74,253	916,058	
(14) FT- Extra Large LLF	71,514	115,847	147,815	150,847	120,892	95,817	48,315	27,534	21,228	19,779	21,594	31,672	872,853	
(15) FT- Extra Large HLF	506,416	545,221	567,237	528,399	522,566	499,250	456,705	464,036	470,874	482,339	467,172	476,560	5,986,775	
(16) Total FT Transportation	1,058,913	1,399,007	1,636,814	1,612,463	1,406,739	1,212,842	850,056	720,264	686,058	689,503	684,266	761,846	12,718,770	
Total THROUGHPUT														
(17) Residential Non-Heating	26,077	37,414	47,084	50,236	40,433	33,894	17,716	12,854	8,013	6,392	7,967	12,706	300,785	
(18) Residential Heating	1,528,915	2,589,854	3,439,229	3,811,850	2,887,874	2,339,944	955,323	597,144	477,322	453,942	477,646	644,498	20,203,541	
(19) Small C&I	198,358	321,323	409,994	418,405	335,318	265,768	134,012	76,371	58,880	54,860	59,894	87,848	2,421,031	
(20) Medium C&I	518,054	837,351	1,066,756	1,088,836	874,173	693,699	352,007	202,844	157,512	147,095	160,142	232,366	6,330,834	
(21) Large LLF	228,481	370,122	472,258	481,947	386,242	306,130	154,364	87,969	67,821	63,192	68,990	101,189	2,788,706	
(22) Large HLF	96,510	103,975	107,649	100,357	99,826	95,376	89,925	91,567	92,819	94,919	92,141	93,561	1,158,625	
(23) Extra Large LLF	79,539	128,846	164,402	167,775	134,458	106,569	53,737	30,624	23,610	21,998	24,017	35,226	970,800	
(24) Extra Large HLF	515,907	555,440	577,868	538,302	532,360	508,607	465,264	472,732	479,699	491,379	475,928	485,491	6,098,976	
(25) Total Throughput	3,119,840	4,944,326	6,285,240	6,657,707	5,290,682	4,349,987	2,222,347	1,572,105	1,365,675	1,333,777	1,366,725	1,692,886	40,273,298	

REDACTED

Source: Docket No. 5180, Attachment RMS-1, Pg. 12

Attachment RMS-3
Redacted

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
2021 INTERIM GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

Attachment RMS-3
Estimated Deferred Gas Cost Balance with Interim GCR

National Grid - RI Gas Interim Gas Cost Recovery (GCR) Filing Projected Gas Cost Deferred Balances With Interim GCR

Financial Statement Data															
Description		Nov-21 forecast	Dec-21 forecast	Jan-22 forecast	Feb-22 forecast	Mar-22 forecast	Apr-22 forecast	May-22 forecast	Jun-22 forecast	Jul-22 forecast	Aug-22 forecast	Sep-22 forecast	Oct-22 forecast	Nov - Oct	
(1)	# of Days in Month	30	31	31	29	31	30	31	30	31	31	30	31	366 (n)	
(2) L_Fixed Cost Deferred	(a)														
(3) Beginning Under/(Over) Recovery	\$3,599,748	\$2,994,478	\$1,746,581	\$1,745,594	\$10,517,320	\$13,816,301	\$17,619,411	\$16,216,385	\$13,273,914	\$9,822,326	\$26,263,155	\$2,812,582	\$3,599,748		
(4) Fixed Costs (net of capacity release)	\$5,881,580	\$11,196,948	\$11,192,329	\$11,192,329	\$11,192,329	\$11,192,329	\$11,192,329	\$11,192,329	\$11,192,329	\$6,304,247	\$6,304,247	\$6,304,247	\$9,785,543		
(5) Supply Related System Pressure to DAC	\$26,484	\$22,707	\$22,233,707	\$22,233,707	\$22,233,707	\$22,233,707	\$22,233,707	\$22,233,707	\$22,233,707	\$20,484	\$20,484	\$20,484	\$8,058,699		
(6) NGMP Credit	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$669,932	\$8,039,179		
(7) Working Capital	\$33,174	\$66,099	\$66,065	\$66,065	\$66,065	\$66,065	\$66,065	\$66,065	\$66,065	\$46,288	\$46,288	\$46,288	\$631,485		
(8) Supply Related LNG & M	\$99,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152	\$69,152		
(9) Total Supply Fixed Costs	\$5,303,491	\$8,438,561	\$8,433,908	\$8,433,908	\$8,433,908	\$8,433,908	\$8,433,908	\$8,433,908	\$8,433,908	\$5,729,271	\$5,729,271	\$5,729,271	\$79,148,673		
(10) Fixed - Revenue	\$5,912,147	\$9,688,973	\$13,974,996	\$15,148,531	\$11,719,979	\$9,516,242	\$4,308,294	\$2,771,659	\$26,263,430	\$16,156	\$2,274,039	\$3,005,554	\$8,747,406		
(11) Prelim Ending Under/(Over) Recovery	\$2,991,092	\$1,744,666	\$10,510,216	\$13,203,391	\$17,603,073	\$16,198,434	\$13,178,773	\$9,810,073	\$26,263,430	\$2,807,922	\$8,886,744				
(12) Months Average Balance	\$3,295,420	\$2,369,472	\$1,023,963	\$7,152,050	\$12,160,355	\$15,709,786	\$16,908,233	\$14,737,579	\$11,541,993	\$4,535,539	\$1,450,724				
(13) Interest Rate (BOA Prime minus 200 bps)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%		
(14) Interest Applied	\$3,386	\$2,515	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$1,087	\$91,420		
(15) Marketer Reconciliation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(16) Fixed Ending Under/(Over) Recovery	\$2,994,478	\$1,746,581	\$3,795,594	\$10,517,320	\$13,816,301	\$17,619,411	\$16,216,385	\$13,273,914	\$9,822,326	\$2,812,582	\$2,812,582	\$2,812,582	\$90,405		
(17) L_Variable Cost Deferred	(a)														
(18) Beginning Under/(Over) Recovery	\$9,981,529	\$10,591,760	\$14,541,116	\$17,017,138	\$15,306,370	\$14,722,715	\$9,263,562	\$6,114,934	\$4,084,086	\$2,690,775	\$1,522,202	\$115,716	\$9,981,529		
(19) Variable Costs	\$7,195,305	\$14,958,237	\$19,622,642	\$16,957,723	\$13,765,828	\$16,154,847	\$1,882,612	\$1,045,950	\$1,032,028	\$1,09,433	\$1,000,618	\$3,295,555	\$88,120,289		
(20) Supply Related System Pressure to DAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(21) Supply Related LNG & M	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$25,187	\$30,244		
(22) Inventory Financing - LNG	\$21,161	\$21,161	\$17,598	\$14,947	\$23,064	\$24,449	\$25,357	\$25,357	\$25,357	\$24,976	\$25,714	\$26,267	\$277,144		
(23) Inventory Financing - UG	\$38,121	\$47,149	\$30,705	\$15,593	\$27,773	\$12,914	\$24,338	\$13,868	\$27,705	\$70,045	\$85,078	\$85,078	\$50,313		
(24) Working Capital	\$33,003	\$110,186	\$144,546	\$124,915	\$101,403	\$13,923,255	\$26,289,946	\$1,974,484	\$1,49,119	\$1,144,320	\$2,38,260	\$1,445,520	\$3,471,133	\$648,371	
(25) Total Variable Costs	\$7,353,370	\$15,161,921	\$19,840,677	\$17,188,366	\$13,178,366	\$18,865,374	\$11,312,246	\$3,185,204	\$3,185,204	\$3,185,204	\$4,09,068	\$5,481,848	\$5,481,848	\$99,791,391	
(26) Variable - Revenue	\$10,581,197	\$14,527,782	\$17,000,396	\$15,290,327	\$14,706,783	\$19,251,246	\$6,106,775	\$4,078,849	\$2,687,181	\$11,48,967	\$11,48,967	\$11,48,967	\$10,505,505		
(27) Prelim Ending Under/(Over) Recovery	\$10,281,363	\$12,559,771	\$15,770,756	\$16,153,733	\$15,006,577	\$11,986,980	\$7,685,169	\$5,096,892	\$3,385,633	\$2,105,371	\$818,539	\$10,610			
(28) Months Average Balance	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%		
(29) Interest Rate (BOA Prime minus 200 bps)	\$10,563	\$13,334	\$16,743	\$16,043	\$15,332	\$12,315	\$8,159	\$5,237	\$3,594	\$2,235	\$841	\$117	\$105,113		
(30) Gas Procurement Incentive/(penalty)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(31) Gas Procurement Incentive/(penalty)	\$10,501,760	\$14,541,116	\$17,017,138	\$15,306,370	\$14,722,715	\$9,263,562	\$6,114,934	\$4,084,086	\$2,690,775	\$1,522,202	\$115,716	\$105,623	\$105,623		
(32) Variable Ending Under/(Over) Recovery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(33) L_COVID Deferral	(a)														
(34) Beginning Under/(Over) Recovery	\$4,792,618	\$4,421,139	\$3,799,617	\$2,982,340	\$2,093,768	\$1,409,847	\$821,728	\$616,165	\$466,893	\$16,165	\$249,972	\$115,195	\$479,218		
(35) COVID - Revenue	\$4,792,618	\$4,421,139	\$3,799,617	\$2,982,340	\$2,093,768	\$1,409,847	\$821,728	\$616,165	\$466,893	\$16,165	\$249,972	\$115,195	\$48,617,746		
(36) Prelim Ending Under/(Over) Recovery	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420	\$3,795,420		
(37) Months Average Balance	\$4,604,513	\$4,108,197	\$3,389,180	\$2,536,794	\$1,750,878	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$3,32,79		
(38) Interest Rate (BOA Prime minus 200 bps)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%		
(39) Interest Applied	\$4,731	\$4,361	\$3,598	\$2,519	\$1,859	\$782	\$556	\$432	\$309	\$180	\$180	\$180	\$48,601		
(40) COVID Ending Under/(Over) Recovery	\$4,421,139	\$3,799,617	\$2,982,340	\$2,093,768	\$1,409,847	\$821,728	\$616,165	\$466,893	\$16,165	\$249,972	\$115,195	\$48,601			
(41) L_COVID Summary	(a)														
(42) Beginning Under/(Over) Recovery	\$18,373,896	\$18,007,377	\$20,087,314	\$16,203,885	\$22,382,818	\$21,316,261	\$7,498,622	\$9,485,286	\$8,722,935	\$6,783,673	\$2,581,672	\$18,373,896			
(43) Gas Costs	\$13,150,740	\$24,025,818	\$28,685,603	\$28,78,742	\$2,091,248	\$1,407,988	\$8,260,713	\$7,424,052	\$7,410,130	\$7,487,245	\$234,663	\$115,015	\$48,636		
(44) Working Capital	\$4,604,513	\$4,108,197	\$3,389,180	\$2,536,794	\$1,750,878	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$1,32,955	\$3,32,79		
(45) NGMP Creditis	\$99,152	\$69,152	\$16,743	\$16,043	\$15,332	\$12,315	\$8,159	\$5,237	\$3,594	\$2,235	\$841	\$117	\$105,113		
(46) Total Costs	\$12,656,861	\$23,600,482	\$28,74,585	\$25,572,774	\$22,557,163	\$16,988,217	\$7,703,555	\$6,873,590	\$6,967,531	\$5,93,531	\$669,932	\$669,932	\$669,932		
(47) Revenue	\$13,042,097	\$21,540,781	\$32,18,726	\$32,904,800	\$22,928,501	\$21,800	\$11,988,217	\$7,703,555	\$6,873,590	\$6,967,531	\$669,932	\$669,932	\$669,932		
(48) Prelim Ending Under/(Over) Recovery	\$17,988,697	\$20,067,104	\$16,184,631	\$6,871,359	\$2,311,380	\$7,499,961	\$8,713,586	\$6,775,447	\$6,775,447	\$6,775,447	\$49,945,844	\$49,945,844	\$49,945,844		
(49) Interest Applied	\$18,181,297	\$19,037,240	\$18,181,297	\$18,181,297	\$18,181,297	\$15,357,622	\$5,389,099	\$2,589,503	\$8,487,49	\$9,099,436	\$7,749,191	\$55,441,832	\$54,520,007		
(50) Months Average Balance	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%		
(51) Interest Rate (BOA Prime minus 200 bps)	\$18,679	\$20,211	\$19,254	\$11,459	\$4,380	\$2,661	\$9,011	\$9,349	\$8,227	\$3,639	\$1,387	\$34,220			
(52) Gas Purchase Plan Incentives(Penalties)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(53) Ending Under/(Over) Recovery W/ Interest	\$18,007,377	\$20,087,314	\$16,203,885	\$6,882,818	\$2,316,261	\$7,498,622	\$9,485,286	\$8,722,935	\$6,783,673	\$4,505,981	\$2,581,672	\$33,383	\$33,383		
(54) Ending Under/(Over) Recovery W/ Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
(55) October 2021 Monthly Deferred Report, Schedule 1, Col (b), Line (17)	[Line (12) x Line (13)] + 365 x Line (15)														
(56) RMS-3, pg 3, Line (41)	(16) SunLines (1), (14), (15)														
(57) GSP-1	(17) RMS-3, pg 6, Line (16)														
(58) RMS-3, pg 2, Line (42)	(18) October 2021 Monthly Deferred Report, Schedule 1, Col (b), Line (34)														
(59) RMS-3, pg 3, Line (43)	(19) RMS-3, pg 4, Line (17)														
(60) RMS-3, pg 5, Line (44)	(20) RMS-3, pg 6, Line (18) + Line (34)														
(61) RMS-3, pg 7, Line (19)	(21) DR 5180 Revised RMS-3, pg 2, Line (8) + 12														
(62) RMS-3, pg 8, Line (20)	(22) RMS-3, pg 8, Line (22)														
(63) RMS-3, pg 9, Line (21)	(23) RMS-3, pg 8, Line (12)														
(64) RMS-3, pg 10, Line (22)	(24) RMS-3, pg 6, Line (32)														
(65) RMS-3, pg 11, Line (23)	(25) RMS-3, pg 12, Line (33)														
(66) RMS-3, pg 13, Line (24)	(26) RMS-3, pg 5, Line (15)														
(67) RMS-3, pg 14, Line (25)	(27) SunLines (18), (23), (26)														
(68) RMS-3, pg 15, Line (26)	(28) Line (28) x Line (29) + 365 x Line (1)														
(69) RMS-3, pg 16, Line (27)	(29) Line (29) + Line (30) + Line (39)														
(70) RMS-3, pg 17, Line (28)	(30) Line (30) + Line (39) + Line (40)														

National Grid - RI Gas Gas Cost Estimate										
Description	Reference	Nov-21 (c)	Dec-21 (d)	Jan-22 (e)	Feb-22 (f)	Mar-22 (g)	Apr-22 (h)	May-22 (i)	Jun-22 (j)	Jul-22 (k)
Supply Fixed Costs - Pipeline Delivery										
(1) Dawn to E Here	GSP-1	\$1,114,233	\$1,114,233	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627	\$1,113,627
(2) Dawn to WADDY	GSP-1	\$25,501	\$25,501	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488	\$25,488
(3) Dominion SP	GSP-1	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108	\$7,108
(4) Dracut	GSP-1	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936	\$81,936
(5) Everett	GSP-1	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420	\$102,420
(6) Manchester Lateral	GSP-1	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627	\$209,627
(7) Millennium AIM	GSP-1	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234	\$760,234
(8) Niagara	GSP-1	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576	\$6,576
(9) TCO (Pool)	GSP-1	\$703,059	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492	\$600,492
(10) AGT M3	GSP-1	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790	\$126,790
(11) TEFCO SCT Long Haul	GSP-1	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889	\$17,889
(12) TEFCO CDS Long Haul	GSP-1	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079	\$1,000,079
(13) Transco Leidy	GSP-1	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423	\$9,423
(14) Yankee Interconnect	GSP-1	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961	\$46,961
(15) TGP Long Haul	GSP-1	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663	\$441,663
(16) TGP ConnXion	GSP-1	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050	\$216,050
(17) AMA Credits	GSP-1	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155	\$125,155
(18) Less Credits from Mkt Release*	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(19) Total Supply Fixed Costs - Pipeline	Sum[(1):(18)]	\$4,744,395	\$4,641,828	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209	\$4,637,209
Storage Fixed Costs - Facilities										
(20) Columbia FSS	GSP-1	\$23,199	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431	\$15,431
(21) Dominion GSS	GSP-1	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342	\$36,342
(22) Providence GSSTE	GSP-1	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702	\$46,702
(23) Providence LNG	GSP-1	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520	\$290,520
(24) Tennessee FSMA	GSP-1	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367	\$41,367
(25) Teteo FSS1	GSP-1	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502	\$33,502
(26) Teteo SSI	GSP-1	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098	\$132,098
(27) Total Storage Costs	Sum[(20):(26)]	\$573,730	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963	\$565,963

REDACTED

* Capacity release credits included in forecasted supply costs

Description <u>(a)</u>	Reference <u>(b)</u>	National Grid - RI Gas Gas Cost Recovery (GCR) Filing											
		<u>Nov-21</u> <u>(c)</u>	<u>Dec-21</u> <u>(d)</u>	<u>Jan-22</u> <u>(e)</u>	<u>Feb-22</u> <u>(f)</u>	<u>Mar-22</u> <u>(g)</u>	<u>Apr-22</u> <u>(h)</u>	<u>May-22</u> <u>(i)</u>	<u>Jun-22</u> <u>(j)</u>	<u>Jul-22</u> <u>(k)</u>	<u>Aug-22</u> <u>(l)</u>	<u>Sep-22</u> <u>(m)</u>	<u>Oct-22</u> <u>(n)</u>
Storage Fixed Costs - Delivery													
(28) Storage Delivery	GSP-1	\$460,171	\$452,190	\$452,190	\$452,190	\$452,190	\$452,190	\$445,294	\$445,294	\$445,294	\$445,294	\$445,294	\$5,385,987
(29) LNG	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(30) Proposed CNG/LNG	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(31) Everett Supply Deal	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(32) Dracut Supply Deal	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(33) Everett Supply Deal2	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(34) Summer Liquid Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(35) Summer Trucking	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(36) AGT Citygate	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(37) Winter Trucking	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(38) Proposed Summer Liquid	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(39) Storage Delivery Fixed Cost		Sum[(28):(38)]											
(40) Total Storage Fixed		(27)+(39)											
(41) Total Fixed Costs		(19)+(27)+(39)											

REDACTED

National Grid - RI Gas Gas Cost Estimate										
Description	Reference	Nov-21 (a)	Dec-21 (d)	Jan-22 (e)	Feb-22 (f)	Mar-22 (g)	Apr-22 (h)	May-22 (i)	Jun-22 (j)	Jul-22 (k)
Variable Commodity Costs										
(42) AGT Citygate	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(43) AIM at Ramapo	GSP-1	\$40,413	\$11,507	\$138,647	\$128,881	\$42,210	\$12,066	\$0	\$0	\$0
(44) Const Summer Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(45) Const Winter Refill	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(46) Dawn via IGTS	GSP-1	\$12,464	\$28,121	\$88,103	\$87,966	\$0	\$0	\$0	\$0	\$0
(47) Dawn via PNGTS	GSP-1	\$141,267	\$1,470,444	\$2,844,406	\$2,529,052	\$1,274,553	\$7,596	\$0	\$0	\$0
(48) Dominion SP	GSP-1	\$68,940	\$83,974	\$86,062	\$76,307	\$73,356	\$57,261	\$54,381	\$52,886	\$55,614
(49) Dracut Supply	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(50) Everett Long-Term	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(51) Everett Swing	GSP-1	\$1,104,025	\$1,132,697	\$1,160,865	\$1,029,286	\$1,070,405	\$774,580	\$738,337	\$715,406	\$752,307
(52) Millennium	GSP-1	\$68,784	\$173,259	\$177,329	\$110,169	\$43,489	\$115,170	\$0	\$117,775	\$0
(53) Niagaraum	GSP-1	\$2,711,455	\$5,199,349	\$5,340,758	\$4,731,356	\$4,934,075	\$380,207	\$18,914	\$169,632	\$173,398
(54) TCO Appalachia	GSP-1	\$239,248	\$212,119	\$880,061	\$438,356	\$951,860	\$2,430,583	\$1,402,399	\$0	\$1,791
(55) Teteo M3	GSP-1	\$48,024	\$94,148	\$192,002	\$152,444	\$12,419	\$10,229	\$7,240	\$7,032	\$7,387
(56) Transco Leidy	GSP-1	\$0	\$533	\$1,167	\$383	\$44,253	\$0	\$0	\$0	\$0
(57) Waddington	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(58) Netera Summer Refill	GSP-1	\$6,114,474	\$5,641,272	\$6,088,010	\$5,313,904	\$2,660,043	\$221,939	\$1,634,910	\$1,370,727	\$1,853,252
(59) Teteo M2 CDS	GSP-1	\$0	\$59,744	\$158,897	\$207,244	\$10,343	\$6,177	\$0	\$0	\$0
(60) Teteo M2 SCT	GSP-1	\$555,845	\$1,552,101	\$1,594,491	\$1,409,127	\$1,278,364	\$716,686	\$991,144	\$99,419	\$552,993
(61) TGP ZA Cnx	GSP-1	\$702,530	\$3,266,298	\$3,583,410	\$3,134,992	\$2,471,282	\$795,334	\$0	\$0	\$0
(62) TGP ZA LH	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(63) Proposed Summer Refill	GSP-1	Sum(42)(63)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(64) Total Variable Commodity Costs		Sum(42)(63)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Variable Storage Costs										
(65) Underground Storage	GSP-1	\$2,027,990	\$1,613,099	\$2,416,055	\$2,220,326	\$1,149,017	\$195,784	\$0	\$0	\$0
(66) LNG Withdrawals and Trucking	GSP-1	\$83,094	\$80,058	\$53,578	\$389,438	\$100,019	\$99,659	\$101,466	\$97,998	\$101,109
(67) Total Variable Storage Costs	(65)+(66)	\$2,111,084	\$1,699,157	\$2,939,633	\$2,609,784	\$1,249,035	\$295,443	\$101,466	\$97,998	\$101,137
Variable Transportation Costs										
(68) Variable Costs for Purchases to City Ga	GSP-1	\$181,269	\$281,514	\$325,563	\$292,091	\$273,805	\$90,516	\$42,603	\$29,602	\$58,665
(69) Variable Cost for Storage Withdrawal	GSP-1	\$84,384	\$70,805	\$97,296	\$92,077	\$39,174	\$5,208	\$81,621	\$0	\$0
(70) Variable Cost for Storage Injection	GSP-1	\$16,248	\$0	\$0	\$0	\$140,488	\$47,958	\$0	\$0	\$0
(71) Total Variable Transportation Costs	Sum((68)(70)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Injections										
(72) Cost of Injections	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(73) Variable Cost for Storage Injection	GSP-1	\$16,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(74) Refunds	GSP-1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(75) Total Injections	Sum((72)(74)]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hedging Impact										
(76) Hedging Impact	JMP-5	(\$6,448,898)	(\$6,590,513)	(\$7,635,740)	(\$6,540,198)	(\$5,512,513)	(\$2,235,956)	(\$2,107,119)	(\$1,638,829)	(\$1,429,330)
(77) Total Variable Costs		(64)+(67)+(71)+(75)+(76)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(78) Total Supply Costs		(41)+(77)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Storage Costs for FT-2 Calculation										
(79) Storage Fixed Costs - Facilities		\$73,730	\$565,963	\$565,963	\$565,963	\$659,584	\$659,584	\$659,584	\$659,584	\$7,454,666
(80) Storage Fixed Costs - Deliveries		(27)	(39)	(41)	(41)	(41)	(41)	(41)	(41)	\$88,020,289
(81) Total Storage Costs		(79)+(80)								\$182,805,531

REDACTED

National Grid - RI Gas Interim Gas Cost Recovery (GCR) Filing GCR - Gas Cost Revenue With Interim GCR										
Description	Nov-21 f cst (b)	Dec-21 f cst (c)	Jan-22 f cst (d)	Feb-22 f cst (e)	Mar-22 f cst (f)	Apr-22 f cst (g)	May-22 f cst (h)	Jun-22 f cst (i)	Jul-22 f cst (j)	Aug-22 f cst (k)
(1) I_Fixed Cost Revenue										
(2) (a) Low Load dth	2,076,841	3,475,596	4,567,729	4,963,697	3,812,545	3,073,666	1,327,512	811,489	643,701	609,299
(3) Fixed Cost Factor	\$2,680,7	\$2,680,7	\$2,959,0	\$2,959,0	\$2,959,0	\$2,959,0	\$2,959,0	\$2,959,0	\$2,959,0	\$2,959,0
(4) Low Load Revenue	\$5,567,388	\$9,317,030	\$13,515,910	\$14,687,578	\$11,281,319	\$9,094,979	\$5,928,107	\$2,401,197	\$1,904,711	\$1,913,904
(5) (b) High Load dth	56,086	69,723	80,698	81,548	71,399	63,479	44,779	40,352	35,650	40,947
(6) Fixed Cost Factor	\$1,9934	\$1,9934	\$2,1966	\$2,1966	\$2,1966	\$2,1966	\$2,1966	\$2,1966	\$2,1966	\$2,1966
(7) High Load Revenue	\$111,802	\$138,986	\$177,261	\$179,128	\$156,835	\$139,438	\$98,362	\$88,637	\$78,894	\$78,310
(8) sub-total Dth	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617	644,274
(9) FT-2 Storage Revenue from marketers	\$232,957	\$232,957	\$281,825	\$281,825	\$281,825	\$281,825	\$281,825	\$281,825	\$281,825	\$281,825
(10) Total Fixed Revenue	\$5,912,147	\$9,688,973	\$13,974,996	\$15,148,531	\$11,719,979	\$9,516,242	\$4,308,294	\$2,771,659	\$2,265,430	\$2,161,566
(11) II_Variable Cost Revenue										
(12) (a) Firm Sales dth	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617	644,274
(13) Variable Cost Factor	\$3,1664	\$3,1664	\$3,7392	\$3,7392	\$3,7392	\$3,7392	\$3,7392	\$3,7392	\$3,7392	\$3,7392
(14) Variable Revenue	\$6,753,702	\$11,225,899	\$17,381,398	\$18,865,177	\$14,522,842	\$11,730,414	\$5,131,270	\$3,185,204	\$2,541,225	\$2,409,068
(15) Total Variable Revenue	\$6,753,702	\$11,225,899	\$17,381,398	\$18,865,177	\$14,522,842	\$11,730,414	\$5,131,270	\$3,185,204	\$2,541,225	\$2,409,068
(16) III_COVID Deferral Revenue										
(17) (a) Low Load dth	2,076,841	3,475,596	4,567,729	4,963,697	3,812,545	3,073,666	1,327,512	811,489	643,701	609,299
(18) COVID Deferral Factor	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770	\$0,1770
(19) Low Load Revenue	\$367,601	\$615,180	\$808,488	\$878,574	\$674,820	\$544,039	\$234,970	\$143,634	\$113,935	\$107,846
(20) (b) High Load dth	56,086	69,723	80,698	81,548	71,399	63,479	44,779	40,352	35,650	40,947
(21) COVID Deferral Factor	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535	\$0,1535
(22) High Load Revenue	\$8,609	\$10,703	\$12,387	\$12,518	\$10,960	\$9,744	\$6,874	\$6,194	\$5,513	\$5,369
(23) Total COVID Deferral Revenue	\$376,210	\$625,883	\$820,875	\$891,092	\$685,780	\$553,783	\$241,844	\$149,828	\$119,448	\$113,215
(24) Total Gas Cost Revenue	\$13,042,059	\$21,540,755	\$32,177,269	\$34,904,800	\$26,928,601	\$21,800,439	\$9,681,408	\$6,106,691	\$4,683,849	\$4,945,844
(25) (2) RMS-3, pg 9, Sum [Lines (2)-(5), (7)]										
(26) (3) RMS-1, pg 1, Line 3, Col (f)										
(27) (4) Line (2) x Line (3)										
(28) (5) RMS-3, pg 9, Sum [Lines (1), (6), (8)]										
(29) (6) RMS-1, pg 1, Line 3, Col (d)										
(30) (7) Line (5) x Line (6)										
(31) (8) Line (2) + Line (5)										
(32) (9) [RMS-4, pg 2, Line (25)] ÷ 12										
(33) (10) Sum [Lines (4), (7), (9)]										
(34) (11) Line (8)										
(35) (12) RMS-1, pg 1, Line 6										
(36) (13) Line (12) x Line (13)										
(37) (14) Line (14)										
(38) (15) Line (14) + Line (15)										
(39) (16) RMS-3, pg 9, Sum [Lines (2)-(5), (7)]										
(40) (17) RMS-4, pg 2, Line 1, Line 2, col (d)										
(41) (18) Dk 5180, RMS-7, Pg 1, Line 1, col (d)										
(42) (19) Line (17) x Line (18)										

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Working Capital Estimate

Description	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(1) Fixed Costs	\$5,881,580	\$11,196,948	\$11,192,329	\$11,192,329	\$11,192,329	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$6,304,247	\$94,785,243
(2) Capacity Release Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(3) Less System Pressure to DAC	(\$20,484)	(\$2,223,707)	(\$2,223,707)	(\$2,223,707)	(\$2,223,707)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$20,484)	(\$9,058,699)
(4) Less: Credits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Plus: Supply Related LNG O&M Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6) Allowable Working Capital Costs	\$5,861,096	\$8,973,242	\$8,968,622	\$8,968,622	\$8,968,622	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$6,283,763	\$85,726,544
(7) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(8) Working Capital Requirement	\$528,623	\$809,313	\$808,896	\$808,896	\$808,896	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744	\$566,744
(9) Weighted Average Cost of Capital	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%
(10) Return on Working Capital Requirement	\$36,528	\$55,924	\$55,895	\$55,895	\$55,895	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162	\$39,162
(11) Cost of Debt (Long Term Debt + Short Term Debt)	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
(12) Interest Expense	\$11,524	\$17,643	\$17,634	\$17,634	\$17,634	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355	\$12,355
(13) Taxable Income	\$25,904	\$38,280	\$38,261	\$38,261	\$38,261	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807	\$26,807
(14) 1 - Combined Tax Rate	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900
(15) Return and Tax Requirement	\$31,650	\$48,456	\$48,431	\$48,431	\$48,431	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933	\$33,933
(16) Fixed Working Capital Requirement	\$43,174	\$66,099	\$66,065	\$66,065	\$66,065	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288	\$46,288
(17) Variable Costs	\$7,195,305	\$14,958,237	\$19,622,642	\$16,957,723	\$13,765,828	\$6,154,847	\$1,382,612	\$1,045,950	\$1,032,028	\$1,109,143	\$1,000,618	\$3,295,355	\$88,020,289
(18) Less: Non-firm Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(19) Less: Supply Refunds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(20) Less: Bal Related Syst Pressure Commodity to DAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(21) Plus: Supply Related LNG O&M Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(22) Allowable Working Capital Costs	\$7,195,305	\$14,958,237	\$19,622,642	\$16,957,723	\$13,765,828	\$6,154,847	\$1,382,612	\$1,045,950	\$1,032,028	\$1,109,143	\$1,000,618	\$3,295,355	\$88,020,289
(23) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(24) Working Capital Requirement	\$648,957	\$1,349,110	\$1,769,801	\$1,529,447	\$1,241,565	\$555,117	\$167,976	\$94,336	\$93,080	\$100,036	\$90,247	\$297,214	
(25) Weighted Average Cost of Capital	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	
(26) Return on Working Capital Requirement	\$44,843	\$93,224	\$122,293	\$105,685	\$85,792	\$38,359	\$11,733	\$6,519	\$6,432	\$6,912	\$6,236	\$20,537	
(27) Cost of Debt (Long Term Debt + Short Term Debt)	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	
(28) Interest Expense	\$14,147	\$29,411	\$38,582	\$33,342	\$27,066	\$12,102	\$3,702	\$2,057	\$2,029	\$2,181	\$1,967	\$6,479	
(29) Taxable Income	\$30,696	\$63,813	\$83,712	\$72,343	\$58,726	\$26,257	\$8,031	\$4,462	\$4,403	\$4,732	\$4,269	\$14,058	
(30) 1 - Combined Tax Rate	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900	
(31) Return and Tax Requirement	\$38,855	\$80,776	\$105,964	\$91,573	\$74,337	\$33,237	\$10,166	\$5,648	\$5,573	\$5,589	\$5,403	\$17,795	
(32) Variable Working Capital Requirement	\$53,003	\$110,186	\$144,546	\$124,915	\$101,403	\$45,338	\$13,868	\$7,705	\$7,602	\$8,170	\$7,571	\$24,274	\$648,381
(1) RMS-3, Pg 3, Line (41)													
(3) GSP-1													
(6) Sum[Lines (1)-(5)]													
(7) Dkt 4770													
(8) [Line (6) x Line (7)] ÷ 365													
(9) Dkt 5165													
(10) Line (8) x Line (9)													
(11) Dkt 5165													
(12) Line (8) x Line (11)													
(13) Line (10) - Line (12)													
(14) Tax Law effective Jan 1, 2018													
(15) Line (13) ÷ Line (14)													
(16) Line (12) + Line (15)													
(17) RMS-3, Pg 4, Line (7)													
(18) Line (26) - Line (28)													
(19) Tax Law effective Jan 1, 2018													
(20) Sum[Lines (17)(21)]													
(21) Dkt 4770													
(22) Line (28) + Line (31)													
(23) Dkt 4770													
(24) [Line (22) x Line (23)] ÷ 365													
(25) Dkt 5165													
(26) Line (24) x Line (25)													
(27) Dkt 4955													
(28) Line (24) x Line (27)													

Storage Fixed Cost Working Capital Calculation for FT-2 Demand Rate (see RMS-5, pg 2)

Description	Nov-21 (b)	Dec-21 (c)	Jan-22 (d)	Feb-22 (e)	Mar-22 (f)	Apr-22 (g)	May-22 (h)	Jun-22 (i)	Jul-22 (j)	Aug-22 (k)	Sep-22 (l)	Oct-22 (m)	Total (n)
(33) Storage Fixed Costs													
(34) Less: System Pressure to DAC													
(35) Less: Credits													
(36) Plus: Supply Related LNG O&M Costs													
(37) Allowable Working Capital Costs													
(38) Number of Days Lag	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92	32.92
(39) Working Capital Requirement													
(40) Weighted Average Cost of Capital													
(41) Return on Working Capital Requirement													
(42) Cost of Debt (Long Term Debt + Short Term Debt)													
(43) Interest Expense													
(44) Taxable Income													
(45) 1 - Combined Tax Rate													
(46) Return and Tax Requirement													
(47) Storage Fixed Working Capital Requirement													

- (33) RMS-3, pg 3, Line(40)
- (34) Line (3)
- (37) Sum[Lines (33) - (36)]
- (38) Dkt 4770
- (39) [Line (37) x Line (38)] ÷ 365
- (40) Dkt 5165
- (41) Line (39) x Line (40)
- (42) Dkt 5165
- (43) Line (39) x Line (42)
- (44) Line (41) - Line (43)
- (45) Tax Law effective Jan 1, 2018
- (46) Line (44) ÷ Line (45)
- (47) Line (43) + Line (46)

REDACTED

**National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Inventory Finance Estimate**

<u>Description</u> (a)	<u>Source</u> (b)	<u>Nov-21</u> (c)	<u>Dec-21</u> (d)	<u>Jan-22</u> (e)	<u>Feb-22</u> (f)	<u>Mar-22</u> (g)	<u>Apr-22</u> (h)	<u>May-22</u> (i)	<u>Jun-22</u> (j)	<u>Jul-22</u> (k)	<u>Aug-22</u> (l)	<u>Sep-22</u> (m)	<u>Oct-22</u> (n)	<u>Total</u> (o)
(1) Storage Inventory Balance	GSP-I	\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(2) Hedging		\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(3) Subtotal	(1) + (2)	\$8,540,572	\$6,927,473	\$4,511,417	\$2,291,092	\$1,142,075	\$1,340,527	\$4,034,636	\$6,367,885	\$8,011,400	\$10,291,537	\$12,500,270	\$14,696,740	
(4) Weighted Average Cost of Capital	Dkt 5165	\$590,154	\$478,688	\$311,739	\$158,314	\$78,917	\$92,630	\$278,793	\$453,841	\$553,588	\$711,145	\$863,769	\$1,015,545	\$5,587,124
(5) Return on Working Capital Requirement	(3) x (4)													
(6) Cost of Debt (LTD + STD)*	Dkt 5165	\$186,184	\$151,019	\$98,349	\$49,946	\$24,897	\$218%	\$218%	\$218%	\$218%	\$218%	\$218%	\$218%	
(7) Interest Charges Financed	(3) x (6)													
(8) Taxable Income	(5) - (7)	\$403,969	\$327,669	\$213,390	\$108,369	\$54,020	\$63,407	\$190,838	\$310,661	\$378,939	\$486,790	\$591,263	\$695,156	
(9) 1 - Combined Tax Rate		0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	
(10) Return and Tax Requirement	(8) ÷ (9)	\$511,353	\$414,771	\$270,114	\$137,175	\$68,380	\$80,262	\$241,567	\$393,242	\$479,670	\$616,190	\$748,434	\$879,944	\$4,841,102
(11) Working Capital Requirement	(7) + (10)	\$697,538	\$565,790	\$368,463	\$187,121	\$93,277	\$109,485	\$329,523	\$536,422	\$654,318	\$840,545	\$1,020,940	\$1,200,333	\$6,603,755
(12) Storage-Related Inventory Costs	(11) ÷ 12	\$58,128	\$47,149	\$30,705	\$15,593	\$7,773	\$9,124	\$27,460	\$44,702	\$54,527	\$70,045	\$85,078	\$100,028	\$550,313
(13) LNG Inventory Balance	GSP-I													
(14) Weighted Average Cost of Capital	Dkt 5165	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	6.91%	\$2,813,741
(15) Return on Working Capital Requirement	(13) x (14)													
(16) Cost of Debt (LTD + STD)*	Dkt 5165	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%	\$887,693
(17) Interest Charges Financed	(13) x (16)													
(18) Taxable Income	(15) - (17)													
(19) 1 - Combined Tax Rate	(18) ÷ (19)	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	0 7900	\$2,438,036
(20) Return and Tax Requirement														
(21) Working Capital Requirement	(17) + (20)													
(22) LNG-Related Inventory Costs	(21) ÷ 12													
(23) Total Inventory Financing Costs	(12) + (22)													

REDACTED

*LTD: Long Term Debt
*STD: Short Term Debt

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Forecasted Throughput (Dth)

Rate Class (a)	Nov-21 (b)	Dec-21 (c)	Jan-22 (d)	Feb-22 (e)	Mar-22 (f)	Apr-22 (g)	May-22 (h)	Jun-22 (i)	Jul-22 (j)	Aug-22 (k)	Sep-22 (l)	Oct-22 (m)	Nov-Oct (n)
SALES													
(1) Residential Non-Heating	26,077	37,414	47,084	50,236	40,433	33,894	17,716	12,854	8,013	6,392	7,967	12,706	300,785
(2) Residential Heating	1,528,915	2,589,854	3,439,229	3,811,850	2,887,874	2,339,944	955,323	597,144	477,322	453,942	477,646	644,498	20,203,541
(3) Small C&I	184,206	298,399	380,743	388,554	311,395	246,807	124,451	70,922	54,679	50,946	55,621	81,581	2,248,302
(4) Medium C&I	299,010	482,518	614,005	626,797	503,885	400,214	204,019	118,508	92,492	86,514	94,001	135,356	3,657,319
(5) Large LLF	56,685	91,826	117,165	119,569	95,825	75,950	38,297	21,825	16,826	15,678	17,116	25,105	691,867
(6) Large HLF	20,518	22,091	22,983	21,409	21,173	20,228	18,504	18,801	19,078	19,543	18,928	19,309	242,567
(7) Extra Large LLF	8,025	13,000	16,587	16,927	13,566	10,752	5,422	3,090	2,382	2,219	2,423	3,554	97,947
(8) Extra Large HLF	9,491	10,218	10,631	9,903	9,794	9,357	8,559	8,697	8,825	8,756	8,931	112,201	
(9) Total Sales	2,132,927	3,545,319	4,648,427	5,045,244	3,883,944	3,137,145	1,372,291	851,841	679,617	644,274	682,458	931,040	27,554,528
TRANSPORTATION													
(10) FT- Small	14,152	22,925	29,251	29,851	23,923	18,961	9,561	5,449	4,201	3,914	4,273	6,268	172,729
(11) FT- Medium	219,044	354,834	452,751	462,040	370,288	293,485	147,988	84,336	65,020	60,581	66,140	97,010	2,673,516
(12) FT- Large LLF	171,796	278,296	355,093	362,378	290,417	230,180	116,067	66,144	50,995	47,514	51,874	76,085	2,096,839
(13) FT- Large HLF	75,991	81,884	84,666	78,948	78,653	75,148	71,421	72,765	73,741	75,376	73,213	74,253	916,058
(14) FT- Extra Large LLF	71,514	115,847	147,815	150,847	120,892	95,817	48,315	27,534	21,228	19,779	21,594	31,672	872,853
(15) FT- Extra Large HLF	506,416	545,221	567,237	528,399	522,566	499,250	456,705	464,036	470,874	482,339	467,172	476,560	5,986,775
(16) Total FT Transportation	1,058,913	1,399,007	1,636,814	1,612,463	1,406,739	1,212,842	850,056	720,264	686,058	689,503	684,266	761,846	12,718,770
Total THROUGHPUT													
(17) Residential Non-Heating	26,077	37,414	47,084	50,236	40,433	33,894	17,716	12,854	8,013	6,392	7,967	12,706	300,785
(18) Residential Heating	1,528,915	2,589,854	3,439,229	3,811,850	2,887,874	2,339,944	955,323	597,144	477,322	453,942	477,646	644,498	20,203,541
(19) Small C&I	198,358	321,323	409,994	418,405	335,318	265,768	134,012	76,371	58,880	54,860	59,894	87,848	2,421,031
(20) Medium C&I	518,054	837,351	1,066,756	1,088,836	874,173	693,699	352,007	202,844	157,512	147,095	160,142	232,366	6,330,834
(21) Large LLF	228,481	370,122	472,258	481,947	386,242	306,130	154,364	87,969	67,821	63,192	68,990	101,189	2,788,706
(22) Large HLF	96,510	103,975	107,649	100,357	99,826	95,376	89,925	91,567	92,819	94,919	92,141	93,561	1,158,625
(23) Extra Large LLF	79,539	128,846	164,402	167,775	134,458	106,569	53,737	30,624	23,610	21,998	24,017	35,226	970,800
(24) Extra Large HLF	515,907	555,440	577,868	538,302	532,360	508,607	465,264	472,732	479,699	491,379	475,928	485,491	6,098,976
(25) Total Throughput	3,191,840	4,944,326	6,285,240	6,657,707	5,290,682	4,349,987	2,222,347	1,572,105	1,365,675	1,333,777	1,366,725	1,692,886	40,273,298

REDACTED

Attachment RMS-4
Redacted

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
2021 INTERIM GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

Attachment RMS-4
FT-2 Demand Rate

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Summary of Marketer Transportation Factors

	<u>Item</u> (a)	<u>Reference</u> (b)	<u>Proposed</u> (c)	<u>Billing Units</u> (d)
(1)	FT-2 Demand Usage (Dt) Nov 2021 - Oct 2022	Pg 2, Line (21)	\$14.0943	Dth/Mth
(2)	Storage and Peaking charge for FT-1 firm transportation Customers eligible for TSS	Pg 3, Line (5)	\$1.1063	Per Dth

Derivation of Incremental FT-2 Demand Revenue

(3)	FT-2 Demand Revenue	RMS-3, Pg 5	\$3,284,160
(4)	FT-2 Demand Revenue per Docket No. 5180, Revised GCR Filing	RMS-2, Pg 5	<u>\$2,795,486</u>
(5)	Incremental Revenue	(3) - (4)	\$488,673

REDACTED

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Calculation of FT- 2 Demand Rate (per Dth)

<u>Description</u> (a)	<u>Reference</u> (b)	<u>Source</u> Line # (c)	<u>Amount</u> (d)
(1) Storage Fixed Costs	RMS-2 pg 3	Line (40)	[REDACTED]
Less:			
(2) System Pressure to DAC			(\$9,058,699)
(3) Credits			\$0
(4) Refunds			\$0
(5) Total Credits	Sum [(2)-(4)]		(\$9,058,699)
Plus:			
(6) Supply Related LNG O&M Costs	Dk 5180, Revised RMS-1 Pg 2	Line (8)	\$829,823
(7) Working Capital Requirement	RMS-2 pg 7	Line (47)	\$197,569
(8) FT Demand Everett	RMS-2 pg 2	Line (5)	\$1,229,040
(9) Total Additions	Sum [(6)-(8)]		\$2,256,432
(10) Total Storage Fixed Costs	(1) + (5) + (9)		[REDACTED]
Inventory Financing			
(11) Underground	RMS-2 pg 8	Line (12)	\$550,313
(12) LNG	RMS-2 pg 8	Line (22)	\$277,144
(13) Total Storage Fixed Costs	(10) + (11) + (12)		[REDACTED]
(14) LNG Storage MDQ (Dth)	Dk 5180, Revised RMS-1 pg 13	Line (14)	[REDACTED]
(15) AGT	Dk 5180, Revised GSP-1		[REDACTED]
(16) TENN	Dk 5180, Revised GSP-1		[REDACTED]
(17) Total Storage MDQ	Sum [(14)-(16)]		[REDACTED]
(18) Storage MDQ X 12 Months	(17) x 12		[REDACTED] MDCQ Dth
(19) FT- 2 Demand Rate	(13) ÷ (18)		\$13.8251 per MDCQ Dth
(20) Uncollectible %	Docket 4770		1.91%
(21) Total FT-2 Demand Rate adjusted for Uncollectibles	(19) ÷ [(1 - (20))]		\$14.0943 per MDCQ Dth
(22) MDQ-U	Mkter MDQ Forecast		4,612
(23) MDQ-P	Mkter MDQ Forecast		<u>15,384</u>
(24) Marketer MDQs	(22) + (23)		19,996 Dth/Mth
(25) FT-2 Storage Costs	(19) x (24) x 12 Months		\$3,317,301

REDACTED

National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Calculation of FT-1 Storage and Peaking Charge Applied to Firm Transportation Customers Eligible for TSS

<u>Description</u> (a)	<u>Source</u>		
	<u>Reference</u> (b)	<u>Line #</u> (c)	<u>Amount</u> (d)
(1) Total Storage Fixed Costs	Pg 2	Line (13)	[REDACTED]
(2) Usage (Dth) Nov 2021 - Oct 2022	RMS-2, pg 9	Line (15)	\$1.0852
(3) Volumetric Rate	(1) ÷ (2)		1.91%
(4) Uncollectible %	Docket 4770		
(5) Volumetric Rate Including Uncollectible	(3) ÷ [1 - (4)]		\$1.1063 per dth
(6) Storage & Peaking charge applied to FT-1 customers eligible for TSS	(5) ÷ 10		\$0.1106 per therm

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
2021 INTERIM GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

Attachment RMS-5
Bill Impact Analysis
Includes the Proposed GCR Only

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
 January 2022 - October 2022

Residential Heating:

(1)	(2)	Jan 22-Oct 22	Proposed	Current	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(3)	(4)	Consumption (Therms)	Rates	Rates									
(5)	447	\$867.76	\$827.74	\$40.02	4.8%	\$38.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.20	
(6)	496	\$946.20	\$901.80	\$44.40	4.9%	\$43.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.33	
(7)	543	\$1,021.37	\$972.78	\$48.59	5.0%	\$47.13	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.46	
(8)	592	\$1,099.80	\$1,046.83	\$52.97	5.1%	\$51.38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.59	
(9)	640	\$1,176.53	\$1,119.27	\$57.26	5.1%	\$55.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.72	
(10)	689	\$1,254.97	\$1,193.30	\$61.67	5.2%	\$59.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.85	
(11)	738	\$1,333.40	\$1,267.36	\$66.04	5.2%	\$64.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.98	
(12)	786	\$1,410.15	\$1,329.81	\$70.34	5.3%	\$68.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.11	
(13)	835	\$1,488.56	\$1,413.85	\$74.71	5.3%	\$72.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.24	
(14)	882	\$1,563.76	\$1,484.83	\$78.93	5.3%	\$76.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.37	
(15)	931	\$1,642.19	\$1,538.89	\$83.30	5.3%	\$80.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	

Residential Heating Low Income:

(16)	(17)	Jan 22-Oct 22	Proposed	Current	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(18)	(19)	Consumption (Therms)	Rates	Rates									
(20)	447	\$644.23	\$614.21	\$30.02	4.9%	\$38.82	(\$9.71)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.90	
(21)	496	\$702.33	\$669.03	\$33.30	5.0%	\$43.07	(\$10.77)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	
(22)	543	\$758.03	\$721.59	\$36.44	5.1%	\$47.13	(\$11.78)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.09	
(23)	592	\$816.13	\$776.41	\$39.73	5.1%	\$51.38	(\$12.85)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.19	
(24)	640	\$872.94	\$830.00	\$42.94	5.2%	\$55.54	(\$13.89)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.29	
(25)	689	\$931.06	\$884.80	\$46.25	5.2%	\$59.82	(\$14.96)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.39	
(26)	738	\$989.15	\$939.62	\$49.53	5.3%	\$64.06	(\$16.02)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.49	
(27)	786	\$1,046.01	\$993.26	\$52.76	5.3%	\$68.23	(\$17.06)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.58	
(28)	835	\$1,104.10	\$1,048.07	\$56.03	5.3%	\$72.47	(\$18.12)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.68	
(29)	882	\$1,159.80	\$1,100.60	\$59.20	5.4%	\$76.56	(\$19.14)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.78	
(30)	931	\$1,217.89	\$1,155.41	\$62.47	5.4%	\$80.80	(\$20.20)	\$0.00	\$0.00	\$0.00	\$0.00	\$1.87	

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
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Residential Non-Heating:

(31)	(32)	Jan 22-Oct 22	Proposed Rates	Current Rates	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(33)	(34)	Consumption (Therms)	\$331.24	\$321.46	\$9.77	3.0%	\$9.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.29	
(35)	(36)	120	\$347.57	\$36.89	\$10.68	3.2%	\$10.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.32	
(37)	(38)	131	\$365.48	\$33.84	\$11.64	3.3%	\$11.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.35	
(39)	(40)	143	\$386.30	\$373.50	\$12.79	3.4%	\$12.41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.38	
(41)	(42)	157	\$402.66	\$388.95	\$13.70	3.5%	\$13.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.41	
(43)	(44)	168	\$425.01	\$40.12	\$14.90	3.6%	\$14.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.45	
(45)	(46)	183	\$447.35	\$431.21	\$16.14	3.7%	\$15.66	\$0.00	\$0.00	\$0.00	\$0.00	\$0.48	
(47)	(48)	198	\$463.74	\$446.70	\$17.04	3.8%	\$16.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.51	
(49)	(50)	209	\$484.55	\$466.37	\$18.18	3.9%	\$17.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.55	
(51)	(52)	223	\$502.44	\$483.31	\$19.13	4.0%	\$18.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.57	
(53)	(54)	235	\$520.31	\$500.19	\$20.12	4.0%	\$19.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.60	
(55)	(56)	247											

Residential Non-Heating Low Income:

(46)	(47)	Jan 22-Oct 22	Proposed Rates	Current Rates	Difference	% Chg	GCR	Total Bill Discount	Base DAC	DAC	Base DAC	ISR	EE	LIHEAP	GET
(48)	(49)	Consumption (Therms)	\$246.83	\$229.50	\$7.33	3.1%	\$9.48	(\$2.37)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.22	
(50)	(51)	120	\$258.94	\$250.92	\$8.01	3.2%	\$10.36	(\$2.59)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.24	
(52)	(53)	131	\$272.19	\$263.46	\$8.73	3.3%	\$11.29	(\$2.82)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.26	
(54)	(55)	143	\$287.63	\$278.04	\$9.60	3.5%	\$12.41	(\$3.10)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.29	
(56)	(57)	157	\$299.76	\$289.48	\$10.28	3.5%	\$13.29	(\$3.32)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.31	
(58)	(59)	168	\$316.30	\$305.13	\$11.17	3.7%	\$14.45	(\$3.61)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.34	
(60)	(61)	183	\$332.85	\$320.74	\$12.11	3.8%	\$15.66	(\$3.92)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.36	
(62)	(63)	198	\$345.00	\$322.22	\$12.78	3.8%	\$16.53	(\$4.13)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.38	
(64)	(65)	209	\$360.43	\$346.80	\$13.63	3.9%	\$17.63	(\$4.41)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.41	
(66)	(67)	223	\$373.68	\$359.33	\$14.35	4.0%	\$18.56	(\$4.64)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.43	
(68)	(69)	235	\$386.94	\$371.85	\$15.09	4.1%	\$19.52	(\$4.88)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.45	
(70)	(71)	247													

National Grid - RI Gas
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C & I Small:

														Difference due to:	
(61)	(62)	Jan 22-Oct 22		Proposed	Rates	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
Consumption (Therms)															
677	\$1,279.86	\$1,219.28	\$60.58	5.0%	\$58.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.82		
751	\$1,390.66	\$1,323.45	\$67.21	5.1%	\$65.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.02		
825	\$1,501.52	\$1,427.69	\$73.84	5.2%	\$71.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.22		
898	\$1,610.87	\$1,530.51	\$80.36	5.3%	\$77.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.41		
969	\$1,717.26	\$1,630.54	\$86.72	5.3%	\$84.12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.60		
1,043	\$1,827.98	\$1,734.66	\$93.32	5.4%	\$90.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.80		
1,117	\$1,938.81	\$1,838.85	\$99.96	5.4%	\$96.96	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.00		
1,189	\$2,046.59	\$1,940.21	\$106.38	5.5%	\$103.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.19		
1,261	\$2,154.53	\$2,041.70	\$112.84	5.5%	\$109.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.39		
1,335	\$2,265.40	\$2,145.92	\$119.47	5.6%	\$115.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.58		
1,409	\$2,376.17	\$2,250.10	\$126.07	5.6%	\$122.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.78		
(75)															

C & I Medium:

														Difference due to:	
(76)	(77)	Jan 22-Oct 22		Proposed	Rates	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
Consumption (Therms)															
5,573	\$8,244.76	\$7,746.08	\$498.68	6.4%	\$483.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14.96		
6,173	\$9,037.29	\$8,484.90	\$552.39	6.5%	\$535.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.57		
6,770	\$9,825.55	\$9,219.75	\$605.80	6.6%	\$587.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.17		
7,371	\$10,619.30	\$9,959.68	\$659.62	6.6%	\$639.83	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19.79		
7,972	\$11,412.98	\$10,699.61	\$713.37	6.7%	\$691.97	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.40		
8,571	\$12,204.25	\$11,437.27	\$766.98	6.7%	\$743.97	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23.01		
9,170	\$12,995.53	\$12,174.94	\$820.59	6.7%	\$795.97	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.62		
9,772	\$13,790.43	\$12,916.00	\$874.43	6.8%	\$848.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.23		
10,372	\$14,582.95	\$13,654.83	\$928.12	6.8%	\$900.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.84		
10,969	\$15,371.25	\$14,389.70	\$981.55	6.8%	\$952.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.45		
11,569	\$16,163.77	\$15,128.52	\$1,035.25	6.8%	\$1,004.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.06		
(90)															

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
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C & I LLF Large:

												Difference due to:	
(91)	(92)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(93)	(94)	Consumption (Therms)	Rates	Rates									
(95)	29,157	\$40,111.46	\$37,502.37	\$2,609.08	7.0%	\$2,530.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$78.27	
(96)	32,296	\$44,206.73	\$41,316.71	\$2,890.02	7.0%	\$2,803.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$86.70	
(97)	35,437	\$48,304.84	\$45,113.80	\$3,171.03	7.0%	\$3,075.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$95.13	
(98)	38,578	\$52,402.97	\$48,930.82	\$3,452.14	7.1%	\$3,348.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$103.56	
(99)	41,716	\$56,496.99	\$52,764.09	\$3,732.91	7.1%	\$3,620.92	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$111.99	
(100)	44,856	\$60,593.96	\$56,580.05	\$4,013.91	7.1%	\$3,893.49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$120.42	
(101)	47,996	\$64,690.96	\$60,306.06	\$4,294.90	7.1%	\$4,166.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$128.85	
(102)	51,135	\$68,786.21	\$64,204.42	\$4,575.78	7.1%	\$4,438.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$137.27	
(103)	54,275	\$72,883.10	\$68,063.36	\$4,856.73	7.1%	\$4,711.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$145.70	
(104)	57,416	\$76,981.28	\$71,843.41	\$5,137.87	7.2%	\$4,983.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$154.14	
(105)	60,555	\$81,076.49	\$75,637.75	\$5,418.73	7.2%	\$5,256.17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$162.56	

C & I HLF Large:

												Difference due to:	
(106)	(107)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(108)	(109)	Consumption (Therms)	Rates	Rates									
(110)	34,733	\$40,563.26	\$37,730.91	\$2,832.35	7.5%	\$2,747.38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$84.97	
(111)	38,471	\$44,706.06	\$41,588.88	\$3,137.18	7.5%	\$3,043.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$94.12	
(112)	42,213	\$48,852.84	\$45,410.48	\$3,442.36	7.6%	\$3,339.09	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$103.27	
(113)	45,951	\$52,995.66	\$49,285.51	\$3,747.15	7.6%	\$3,634.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$112.41	
(114)	49,694	\$57,143.51	\$53,091.13	\$4,052.38	7.6%	\$3,930.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$121.57	
(115)	53,433	\$61,287.35	\$56,930.09	\$4,357.26	7.7%	\$4,226.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$130.72	
(116)	57,172	\$65,431.12	\$60,768.94	\$4,662.18	7.7%	\$4,522.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$139.87	
(117)	60,915	\$69,579.01	\$64,611.61	\$4,967.40	7.7%	\$4,818.38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$149.02	
(118)	64,653	\$73,721.77	\$68,449.54	\$5,272.23	7.7%	\$5,114.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$158.17	
(119)	68,395	\$77,868.61	\$72,291.26	\$5,577.35	7.7%	\$5,410.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$167.32	
(120)	72,135	\$82,014.22	\$76,31.89	\$5,882.33	7.7%	\$5,705.86	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$176.47	

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
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 January 2022 - October 2022

C & I LLLF Extra-Large:

												Difference due to:	
(121)	(122)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(123)	(124)	Consumption (Therms)	Rates	Rates									
(125)	174,416	\$186,733.19	\$171,125.63	\$15,607.56	9.1%			\$15,139.33	\$0.00	\$0.00	\$0.00	\$468.23	
(126)	193,201	\$206,288.49	\$188,999.95	\$17,288.54	9.1%			\$16,769.88	\$0.00	\$0.00	\$0.00	\$518.66	
(127)	211,980	\$225,838.20	\$206,899.26	\$18,968.94	9.2%			\$18,399.87	\$0.00	\$0.00	\$0.00	\$569.07	
(128)	230,764	\$245,392.52	\$224,742.72	\$20,649.80	9.2%			\$20,030.31	\$0.00	\$0.00	\$0.00	\$619.49	
(129)	249,547	\$264,945.96	\$242,615.36	\$22,330.60	9.2%			\$21,660.68	\$0.00	\$0.00	\$0.00	\$669.92	
(130)	268,331	\$284,500.35	\$260,488.85	\$24,011.49	9.2%			\$23,291.15	\$0.00	\$0.00	\$0.00	\$720.34	
(131)	287,115	\$304,054.68	\$278,362.32	\$25,692.36	9.2%			\$24,921.59	\$0.00	\$0.00	\$0.00	\$770.77	
(132)	305,899	\$323,609.05	\$296,225.82	\$27,373.23	9.2%			\$26,552.03	\$0.00	\$0.00	\$0.00	\$821.20	
(133)	324,682	\$343,162.45	\$314,108.41	\$29,054.03	9.2%			\$28,182.41	\$0.00	\$0.00	\$0.00	\$871.62	
(134)	343,461	\$362,712.17	\$331,977.72	\$30,734.44	9.3%			\$29,812.41	\$0.00	\$0.00	\$0.00	\$922.03	
(135)	362,246	\$382,267.50	\$349,852.09	\$32,415.41	9.3%			\$31,442.95	\$0.00	\$0.00	\$0.00	\$972.46	

C & I HLF Extra-Large:

												Difference due to:	
(136)	(137)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(138)	(139)	Consumption (Therms)	Rates	Rates									
(140)	399,388	\$371,335.76	\$338,767.13	\$32,568.64	9.6%			\$31,591.58	\$0.00	\$0.00	\$0.00	\$977.06	
(141)	442,400	\$410,770.84	\$374,664.74	\$36,076.10	9.6%			\$34,993.82	\$0.00	\$0.00	\$0.00	\$1,082.28	
(142)	485,412	\$450,205.27	\$410,621.65	\$39,583.62	9.6%			\$38,396.11	\$0.00	\$0.00	\$0.00	\$1,187.51	
(143)	528,425	\$489,641.23	\$446,50.07	\$43,091.15	9.6%			\$41,798.42	\$0.00	\$0.00	\$0.00	\$1,292.73	
(144)	571,433	\$529,072.27	\$482,473.98	\$46,598.29	9.7%			\$45,200.34	\$0.00	\$0.00	\$0.00	\$1,397.95	
(145)	614,445	\$568,507.38	\$518,401.60	\$50,105.78	9.7%			\$48,602.61	\$0.00	\$0.00	\$0.00	\$1,503.17	
(146)	657,457	\$607,942.47	\$554,329.23	\$53,613.24	9.7%			\$52,004.84	\$0.00	\$0.00	\$0.00	\$1,608.40	
(147)	700,465	\$647,373.54	\$590,233.12	\$57,120.41	9.7%			\$55,406.80	\$0.00	\$0.00	\$0.00	\$1,713.61	
(148)	743,478	\$686,809.49	\$626,181.53	\$60,627.96	9.7%			\$58,809.12	\$0.00	\$0.00	\$0.00	\$1,818.84	
(149)	786,490	\$726,243.89	\$662,108.47	\$64,135.42	9.7%			\$62,211.36	\$0.00	\$0.00	\$0.00	\$1,924.06	
(150)	829,503	\$765,679.83	\$698,036.88	\$67,642.95	9.7%			\$65,613.66	\$0.00	\$0.00	\$0.00	\$2,029.29	

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
2021 INTERIM GAS COST RECOVERY FILING
WITNESS: RYAN M. SCHEIB
NOVEMBER 19, 2021**

Attachment RMS-6
Bill Impact Analysis
Includes All January 1, 2022 Rate Changes

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
 January 2022 - October 2022

Residential Heating:

(1)	(2)	Jan 22-Oct 22	Proposed	Current	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(3)	(4)	Consumption (Therms)	Rates	Rates									
(5)	447	\$883.91	\$827.74	\$56.16	6.8%	\$38.82	\$0.00	\$0.00	\$15.66	\$0.00	\$1.68		
(6)	496	\$964.12	\$901.80	\$62.32	6.9%	\$43.07	\$0.00	\$0.00	\$17.38	\$0.00	\$1.87		
(7)	543	\$1,040.96	\$972.78	\$68.18	7.0%	\$47.13	\$0.00	\$0.00	\$19.00	\$0.00	\$2.05		
(8)	592	\$1,121.16	\$1,046.83	\$74.33	7.1%	\$51.38	\$0.00	\$0.00	\$20.72	\$0.00	\$2.23		
(9)	640	\$1,199.64	\$1,119.27	\$80.37	7.2%	\$55.54	\$0.00	\$0.00	\$22.42	\$0.00	\$2.41		
(10)	689	\$1,279.84	\$1,193.30	\$86.55	7.3%	\$59.82	\$0.00	\$0.00	\$24.13	\$0.00	\$2.60		
(11)	738	\$1,360.03	\$1,267.36	\$92.67	7.3%	\$64.06	\$0.00	\$0.00	\$25.83	\$0.00	\$2.78		
(12)	786	\$1,438.52	\$1,329.81	\$98.71	7.4%	\$68.23	\$0.00	\$0.00	\$27.52	\$0.00	\$2.96		
(13)	835	\$1,518.70	\$1,413.85	\$104.85	7.4%	\$72.47	\$0.00	\$0.00	\$29.23	\$0.00	\$3.15		
(14)	882	\$1,595.59	\$1,484.83	\$110.76	7.5%	\$76.56	\$0.00	\$0.00	\$30.88	\$0.00	\$3.32		
(15)	931	\$1,675.79	\$1,538.89	\$116.90	7.5%	\$80.80	\$0.00	\$0.00	\$32.59	\$0.00	\$3.51		

Residential Heating Low Income:

(16)	(17)	Jan 22-Oct 22	Proposed	Current	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(18)	(19)	Consumption (Therms)	Rates	Rates									
(20)	447	\$656.33	\$614.21	\$42.12	6.9%	\$38.82	(\$13.62)	\$0.00	\$0.00	\$15.66	\$0.00	\$1.26	
(21)	496	\$715.77	\$669.03	\$46.74	7.0%	\$43.07	(\$15.11)	\$0.00	\$0.00	\$17.38	\$0.00	\$1.40	
(22)	543	\$772.72	\$721.59	\$51.13	7.1%	\$47.13	(\$16.53)	\$0.00	\$0.00	\$19.00	\$0.00	\$1.53	
(23)	592	\$832.16	\$776.41	\$55.75	7.2%	\$51.38	(\$18.02)	\$0.00	\$0.00	\$20.72	\$0.00	\$1.67	
(24)	640	\$890.28	\$830.00	\$60.28	7.3%	\$55.54	(\$19.49)	\$0.00	\$0.00	\$22.42	\$0.00	\$1.81	
(25)	689	\$949.71	\$884.80	\$64.91	7.3%	\$59.82	(\$20.99)	\$0.00	\$0.00	\$24.13	\$0.00	\$1.95	
(26)	738	\$1,009.12	\$939.62	\$69.50	7.4%	\$64.06	(\$22.47)	\$0.00	\$0.00	\$25.83	\$0.00	\$2.09	
(27)	786	\$1,067.29	\$933.26	\$74.03	7.5%	\$68.23	(\$23.94)	\$0.00	\$0.00	\$27.52	\$0.00	\$2.22	
(28)	835	\$1,126.70	\$1,048.07	\$78.63	7.5%	\$72.47	(\$25.42)	\$0.00	\$0.00	\$29.23	\$0.00	\$2.36	
(29)	882	\$1,183.67	\$1,100.60	\$83.07	7.5%	\$76.56	(\$26.86)	\$0.00	\$0.00	\$30.88	\$0.00	\$2.49	
(30)	931	\$1,243.09	\$1,155.41	\$87.67	7.6%	\$80.80	(\$28.35)	\$0.00	\$0.00	\$32.59	\$0.00	\$2.63	

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
 January 2022 - October 2022

Residential Non-Heating:

(31)	(32)	Jan 22-Oct 22	Proposed Rates	Current Rates	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(33)	(34)	Consumption (Therms)	\$335.57	\$321.46	\$14.10	4.4%	\$9.48	\$0.00	\$0.00	\$4.20	\$0.00	\$0.42	
(35)	(36)	120	\$352.31	\$36.89	\$15.42	4.6%	\$10.36	\$0.00	\$0.00	\$4.60	\$0.00	\$0.46	
(37)	(38)	131	\$370.62	\$333.84	\$16.78	4.7%	\$11.29	\$0.00	\$0.00	\$4.99	\$0.00	\$0.50	
(39)	(40)	143	\$391.97	\$373.50	\$18.46	4.9%	\$12.41	\$0.00	\$0.00	\$5.50	\$0.00	\$0.55	
(41)	(42)	157	\$408.72	\$388.95	\$19.76	5.1%	\$13.29	\$0.00	\$0.00	\$5.88	\$0.00	\$0.59	
(43)	(44)	168	\$431.63	\$40.12	\$21.52	5.2%	\$14.45	\$0.00	\$0.00	\$6.42	\$0.00	\$0.65	
(45)	(46)	183	\$454.50	\$431.21	\$23.29	5.4%	\$15.66	\$0.00	\$0.00	\$6.93	\$0.00	\$0.70	
(47)	(48)	198	\$471.29	\$446.70	\$24.59	5.5%	\$16.53	\$0.00	\$0.00	\$7.32	\$0.00	\$0.74	
(49)	(50)	209	\$492.59	\$466.37	\$26.22	5.6%	\$17.63	\$0.00	\$0.00	\$7.80	\$0.00	\$0.79	
(51)	(52)	223	\$510.93	\$483.31	\$27.62	5.7%	\$18.56	\$0.00	\$0.00	\$8.23	\$0.00	\$0.83	
(53)	(54)	235	\$529.21	\$500.19	\$29.02	5.8%	\$19.52	\$0.00	\$0.00	\$8.63	\$0.00	\$0.87	
(55)	(56)	247											

Residential Non-Heating Low Income:

(46)	(47)	Jan 22-Oct 22	Proposed Rates	Current Rates	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(48)	(49)	Consumption (Therms)	\$250.07	\$229.50	\$10.58	4.4%	\$9.48	\$3.42	\$0.00	\$0.00	\$4.20	\$0.00	\$0.32
(50)	(51)	120	\$262.49	\$250.92	\$11.57	4.6%	\$10.36	\$3.74	\$0.00	\$0.00	\$4.60	\$0.00	\$0.35
(52)	(53)	131	\$276.05	\$253.46	\$12.59	4.8%	\$11.29	\$4.07	\$0.00	\$0.00	\$4.99	\$0.00	\$0.38
(54)	(55)	143	\$291.89	\$278.04	\$13.85	5.0%	\$12.41	\$4.48	\$0.00	\$0.00	\$5.50	\$0.00	\$0.42
(56)	(57)	157	\$304.30	\$289.48	\$14.82	5.1%	\$13.29	\$4.79	\$0.00	\$0.00	\$5.88	\$0.00	\$0.44
(58)	(59)	168	\$321.27	\$305.13	\$16.14	5.3%	\$14.45	\$5.22	\$0.00	\$0.00	\$6.42	\$0.00	\$0.48
(60)	(61)	183	\$338.20	\$320.74	\$17.47	5.4%	\$15.66	\$5.65	\$0.00	\$0.00	\$6.93	\$0.00	\$0.52
(62)	(63)	198	\$350.66	\$322.22	\$18.44	5.6%	\$16.53	\$5.96	\$0.00	\$0.00	\$7.32	\$0.00	\$0.55
(64)	(65)	209	\$366.46	\$346.80	\$19.66	5.7%	\$17.63	\$6.36	\$0.00	\$0.00	\$7.80	\$0.00	\$0.59
(66)	(67)	223	\$380.04	\$359.33	\$20.71	5.8%	\$18.56	\$6.70	\$0.00	\$0.00	\$8.23	\$0.00	\$0.62
(68)	(69)	235	\$393.61	\$371.85	\$21.77	5.9%	\$19.52	\$7.04	\$0.00	\$0.00	\$8.63	\$0.00	\$0.65
(70)	(71)	247											

**National Grid - RI Gas
Interim Gas Cost Recovery (GCR) Filing
Bill Impact Analysis with Various Levels of Consumption
January 2022 - October 2022**

C & I Small:

(61)		Jan 22-Oct 22	Proposed Rates	Current Rates	Difference	% Chg	GCR	DAC	Base DAC	ISR	EE	LIHEAP	GET
(62)		Consumption (Therms)											
(63)													
(64)													
(65)	\$677	\$1,296.63	\$1,219.28	\$77.35	6.3%		\$58.76	\$0.00			\$16.27	\$0.00	\$2.32
(66)	751	\$1,409.25	\$1,323.45	\$85.79	6.5%		\$65.19	\$0.00			\$18.03	\$0.00	\$2.57
(67)	825	\$1,521.95	\$1,427.69	\$94.26	6.6%		\$71.62	\$0.00			\$19.81	\$0.00	\$2.83
(68)	898	\$1,633.08	\$1,530.51	\$102.58	6.7%		\$77.95	\$0.00			\$21.55	\$0.00	\$3.08
(69)	969	\$1,741.23	\$1,630.54	\$110.69	6.8%		\$84.12	\$0.00			\$23.25	\$0.00	\$3.32
(70)	1,043	\$1,853.80	\$1,734.66	\$119.14	6.9%		\$90.52	\$0.00			\$25.05	\$0.00	\$3.57
(71)	1,117	\$1,966.44	\$1,838.85	\$127.59	6.9%		\$96.96	\$0.00			\$26.80	\$0.00	\$3.83
(72)	1,189	\$2,076.01	\$1,940.21	\$135.80	7.0%		\$103.19	\$0.00			\$28.54	\$0.00	\$4.07
(73)	1,261	\$2,185.72	\$2,041.70	\$144.02	7.1%		\$109.45	\$0.00			\$30.25	\$0.00	\$4.32
(74)	1,335	\$2,298.41	\$2,145.92	\$152.48	7.1%		\$115.89	\$0.00			\$32.02	\$0.00	\$4.57
(75)	1,409	\$2,411.04	\$2,250.10	\$160.94	7.2%		\$122.29	\$0.00			\$33.82	\$0.00	\$4.83

C & I Medium

		Difference due to:					
		Proposed		Current		Difference	
		<u>Rates</u>		<u>Rates</u>		<u>% Change</u>	
(76)	Jan 22-Oct 22	(77)	Proposed	(78)	Current	(79)	
		Consumption (Ttherms)					
\$5,573	\$8,382.67	\$7,746.08	\$636.59	8.2%	\$483.72	\$0.00	\$133.77
6,173	\$9,190.03	\$8,484.90	\$705.13	8.3%	\$535.82	\$0.00	\$148.16
6,770	\$9,993.07	\$9,219.75	\$773.32	8.4%	\$587.63	\$0.00	\$162.49
7,371	\$10,801.69	\$9,959.68	\$842.01	8.5%	\$639.83	\$0.00	\$176.92
7,972	\$11,610.24	\$10,699.61	\$910.63	8.5%	\$691.97	\$0.00	\$191.34
8,571	\$12,416.34	\$11,437.27	\$979.07	8.6%	\$743.97	\$0.00	\$205.73
9,170	\$13,222.41	\$12,174.94	\$1,047.46	8.6%	\$795.97	\$0.00	\$220.07
9,772	\$14,032.23	\$12,916.00	\$1,116.23	8.6%	\$848.20	\$0.00	\$234.54
10,372	\$14,839.58	\$13,654.83	\$1,184.75	8.7%	\$900.28	\$0.00	\$248.93
10,969	\$15,642.63	\$14,389.70	\$1,252.93	8.7%	\$952.10	\$0.00	\$263.24
11,569	\$16,450.00	\$15,128.52	\$1,321.47	8.7%	\$1,004.19	\$0.00	\$277.64

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
 January 2022 - October 2022

C & I LLF Large:

												Difference due to:	
(91)	(92)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(93)	(94)	Consumption (Therms)	Rates	Rates	Rates								
(95)	29,157	\$40,832.87	\$37,502.37	\$3,330.49	8.9%	\$2,530.81	\$0.00	\$0.00	\$699.77	\$0.00	\$99.91		
(96)	32,296	\$45,005.81	\$41,316.71	\$3,689.10	8.9%	\$2,803.32	\$0.00	\$0.00	\$775.11	\$0.00	\$110.67		
(97)	35,437	\$49,181.62	\$45,113.80	\$4,047.81	9.0%	\$3,075.90	\$0.00	\$0.00	\$850.48	\$0.00	\$121.43		
(98)	38,578	\$53,357.47	\$48,930.82	\$4,406.65	9.0%	\$3,348.58	\$0.00	\$0.00	\$925.87	\$0.00	\$132.20		
(99)	41,716	\$57,529.14	\$52,764.09	\$4,765.05	9.0%	\$3,620.92	\$0.00	\$0.00	\$1,001.18	\$0.00	\$142.95		
(100)	44,856	\$61,703.81	\$56,580.05	\$5,123.76	9.1%	\$3,893.49	\$0.00	\$0.00	\$1,076.56	\$0.00	\$153.71		
(101)	47,996	\$65,878.49	\$60,326.06	\$5,482.43	9.1%	\$4,166.05	\$0.00	\$0.00	\$1,151.91	\$0.00	\$164.47		
(102)	51,135	\$70,051.39	\$64,201.42	\$5,840.97	9.1%	\$4,438.51	\$0.00	\$0.00	\$1,227.23	\$0.00	\$175.23		
(103)	54,275	\$74,225.99	\$68,062.36	\$6,199.63	9.1%	\$4,711.03	\$0.00	\$0.00	\$1,302.61	\$0.00	\$185.99		
(104)	57,416	\$78,401.85	\$71,843.41	\$6,558.44	9.1%	\$4,983.73	\$0.00	\$0.00	\$1,377.96	\$0.00	\$196.75		
(105)	60,555	\$82,574.75	\$75,637.75	\$6,917.00	9.1%	\$5,256.17	\$0.00	\$0.00	\$1,453.32	\$0.00	\$207.51		

C & I HLF Large:

												Difference due to:	
(106)	(107)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(108)	(109)	Consumption (Therms)	Rates	Rates	Rates								
(110)	34,733	\$41,422.62	\$37,730.91	\$3,691.71	9.8%	\$2,747.38	\$0.00	\$0.00	\$833.58	\$0.00	\$110.75		
(111)	38,471	\$45,657.92	\$41,558.88	\$4,089.04	9.8%	\$3,043.06	\$0.00	\$0.00	\$923.31	\$0.00	\$122.67		
(112)	42,213	\$49,897.29	\$45,410.48	\$4,486.81	9.9%	\$3,339.09	\$0.00	\$0.00	\$1,013.12	\$0.00	\$134.60		
(113)	45,951	\$54,132.61	\$49,285.51	\$4,884.10	9.9%	\$3,634.74	\$0.00	\$0.00	\$1,102.84	\$0.00	\$146.52		
(114)	49,694	\$58,373.06	\$53,091.13	\$5,281.93	9.9%	\$3,930.81	\$0.00	\$0.00	\$1,192.66	\$0.00	\$158.46		
(115)	53,433	\$62,609.40	\$56,930.09	\$5,679.31	10.0%	\$4,226.54	\$0.00	\$0.00	\$1,282.39	\$0.00	\$170.38		
(116)	57,172	\$66,845.70	\$60,768.94	\$6,076.75	10.0%	\$4,522.31	\$0.00	\$0.00	\$1,372.14	\$0.00	\$182.30		
(117)	60,915	\$71,086.20	\$64,611.61	\$6,474.60	10.0%	\$4,818.38	\$0.00	\$0.00	\$1,461.98	\$0.00	\$194.24		
(118)	64,653	\$75,321.46	\$68,449.54	\$6,871.92	10.0%	\$5,114.06	\$0.00	\$0.00	\$1,551.70	\$0.00	\$206.16		
(119)	68,395	\$79,560.85	\$72,291.26	\$7,269.59	10.1%	\$5,410.03	\$0.00	\$0.00	\$1,641.47	\$0.00	\$218.09		
(120)	72,135	\$83,799.00	\$76,31.89	\$7,667.10	10.1%	\$5,705.86	\$0.00	\$0.00	\$1,731.23	\$0.00	\$230.01		

National Grid - RI Gas
 Interim Gas Cost Recovery (GCR) Filing
 Bill Impact Analysis with Various Levels of Consumption
 January 2022 - October 2022

C & I LLLF Extra-Large:

												Difference due to:	
(121)	(122)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(123)	(124)	Consumption (Therms)	Rates	Rates	Rates								
(125)	174,416	\$191,048.63	\$171,125.63	\$19,923.00	11.6%	\$15,139.33	\$0.00	\$0.00	\$4,185.98	\$0.00	\$597.69		
(126)	193,201	\$211,068.70	\$188,999.95	\$22,068.75	11.7%	\$16,769.88	\$0.00	\$0.00	\$4,636.81	\$0.00	\$662.06		
(127)	211,980	\$231,083.06	\$206,889.26	\$24,213.80	11.7%	\$18,399.87	\$0.00	\$0.00	\$5,087.52	\$0.00	\$726.41		
(128)	230,764	\$251,102.15	\$224,742.72	\$26,359.43	11.7%	\$20,030.31	\$0.00	\$0.00	\$5,538.34	\$0.00	\$790.78		
(129)	249,547	\$271,120.33	\$242,615.36	\$28,504.97	11.7%	\$21,660.68	\$0.00	\$0.00	\$5,989.14	\$0.00	\$855.15		
(130)	268,331	\$291,139.44	\$260,488.85	\$30,650.59	11.8%	\$23,291.15	\$0.00	\$0.00	\$6,439.92	\$0.00	\$919.52		
(131)	287,115	\$311,158.56	\$278,362.32	\$32,796.24	11.8%	\$24,921.59	\$0.00	\$0.00	\$6,890.76	\$0.00	\$983.89		
(132)	305,899	\$331,177.70	\$296,225.82	\$34,941.88	11.8%	\$26,552.03	\$0.00	\$0.00	\$7,341.59	\$0.00	\$1,048.26		
(133)	324,682	\$351,195.85	\$314,108.41	\$37,087.43	11.8%	\$28,182.41	\$0.00	\$0.00	\$7,792.40	\$0.00	\$1,112.62		
(134)	343,461	\$371,210.18	\$331,977.72	\$39,232.45	11.8%	\$29,812.41	\$0.00	\$0.00	\$8,243.07	\$0.00	\$1,176.97		
(135)	362,246	\$391,230.28	\$349,852.09	\$41,378.19	11.8%	\$31,442.95	\$0.00	\$0.00	\$8,693.89	\$0.00	\$1,241.35		

C & I HLF Extra-Large:

												Difference due to:	
(136)	(137)	Jan 22-Oct 22	Proposed	Current	Rates	Difference	% Chg	GCR	Base DAC	ISR	EE	LHEAP	GET
(138)	(139)	Consumption (Therms)	Rates	Rates	Rates								
(140)	399,388	\$381,217.51	\$338,767.13	\$42,450.38	12.5%	\$31,591.58	\$0.00	\$0.00	\$9,585.29	\$0.00	\$1,273.51		
(141)	442,400	\$421,716.82	\$374,664.74	\$47,022.08	12.5%	\$34,993.82	\$0.00	\$0.00	\$10,617.60	\$0.00	\$1,410.66		
(142)	485,412	\$462,215.48	\$410,621.65	\$51,593.82	12.6%	\$38,396.11	\$0.00	\$0.00	\$11,649.90	\$0.00	\$1,547.81		
(143)	528,425	\$502,715.65	\$446,530.07	\$56,165.58	12.6%	\$41,798.42	\$0.00	\$0.00	\$12,682.19	\$0.00	\$1,684.97		
(144)	571,433	\$543,210.83	\$482,473.98	\$60,736.85	12.6%	\$45,200.34	\$0.00	\$0.00	\$13,714.40	\$0.00	\$1,822.11		
(145)	614,445	\$583,710.17	\$518,401.60	\$65,308.57	12.6%	\$48,602.61	\$0.00	\$0.00	\$14,746.70	\$0.00	\$1,959.26		
(146)	657,457	\$624,209.44	\$554,329.23	\$69,880.21	12.6%	\$52,004.84	\$0.00	\$0.00	\$15,778.96	\$0.00	\$2,096.41		
(147)	700,465	\$664,704.63	\$590,233.12	\$74,451.51	12.6%	\$55,406.80	\$0.00	\$0.00	\$16,811.16	\$0.00	\$2,233.55		
(148)	743,478	\$705,204.81	\$626,181.53	\$79,023.28	12.6%	\$58,809.12	\$0.00	\$0.00	\$17,843.46	\$0.00	\$2,370.70		
(149)	786,490	\$745,703.44	\$662,108.47	\$83,594.97	12.6%	\$62,211.36	\$0.00	\$0.00	\$18,875.76	\$0.00	\$2,507.85		
(150)	829,503	\$786,203.58	\$698,036.88	\$88,166.70	12.6%	\$65,613.66	\$0.00	\$0.00	\$19,908.04	\$0.00	\$2,645.00		

Testimony of
John M. Protano

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 5180
INTERIM 2021 GAS COST RECOVERY FILING
WITNESS: JOHN M. PROTANO
NOVEMBER 19, 2021**

DIRECT TESTIMONY

OF

JOHN M. PROTANO

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
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1 I. Introduction

2 Q. Please state your name and business address.

3 A. My name is John M. Protano. My business address is 100 E. Old Country Road,
4 Hicksville, New York 11801.

5

6 Q. Have you previously submitted joint testimony in this docket?

7 A. Yes. On September 1, 2021 I provided direct testimony to discuss the results of the Gas
8 Procurement Incentive Plan (GPIP) and the Natural Gas Portfolio Management Plan
9 (NGPMP) for the period April 1, 2020 through March 31, 2021 in connection with
10 National Grid's¹annual Gas Cost Recovery ("GCR") filing. My testimony also included
11 an exhibit that illustrated the impact of current financial hedges for the upcoming period
12 of November 2021 through October 2022 in the GPIP.

13

14 Q. What is the purpose of your testimony?

15 A. In this testimony, I provide an update on the performance of the hedge program, also known
16 as the GPIP, related to the Company's GCR

17

18 Q. Are you sponsoring any attachments to your testimony?

19 A. Yes. I am sponsoring the following attachment(s) that accompany my testimony:

- 20 • Attachment JPM-5 Updated Financial hedge (including Storage
21 Deferral) mark-to-market (“MTM”) as of November 2, 2021

¹ The Narragansett Electric Company d/b/a National Grid (“National Grid” or the “Company”).

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1 **II. Performance of Gas Procurement Incentive Plan**

2 **Q. Please describe the objectives of the Gas Procurement Incentive Plan.**

3 A. The objective of the GPIP to is to mitigate the volatility of natural gas costs and to
4 encourage the Company to achieve lower hedged commodity costs for customers.

5 The gas procurement portion of the GPIP is based on the Company's purchasing
6 program, under which the Company locks, or hedges, the variable cost of the natural gas
7 commodity exposure. Mandatory purchases and/or hedges are the purchases of gas
8 volumes and/or hedges made in approximately uniform monthly increments on a
9 mandatory basis beginning 24 months prior to the month of delivery and ending four
10 months prior to the start of delivery month. Mandatory hedges will equal 60 percent of
11 forecasted normal weather gas purchase requirements for the April and October gas
12 supply months and 70 percent of forecasted normal weather gas purchase requirements
13 for the remaining 10 months of the year. The forecasted normal weather natural gas
14 purchase requirements are based on the most recent five-year firm sales forecast.²

15 Hedge volume targets are adjusted each November starting in March of the following
16 year. Discretionary purchases and/or hedges are defined as the purchases and/or hedges
17 established at least six business days prior to the start of the delivery month for delivery
18 to the system or storage in excess of the mandatory hedging requirements in a month.

² Most recently, the Company filed its firm sales forecast in its Gas Long-Range Resource and Requirements Plan for the Forecast Period 2021/22 to 2025/26 in Docket No. 5043.

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1 Under the GPIP, the total financial and physical hedged volume shall not exceed 95% of
2 the forecasted normal weather requirements for a given supply month.

3

4 **Q. Please detail the actual hedge targets of the GPIP for the upcoming winter period,**
5 **as well as the increase in commodity prices.**

6 A. Hedging for the winter peak of November 2021 through March 2022 has concluded. The
7 current hedge target is 76% (70% Mandatory and Accelerated and 6% Discretionary
8 hedges) of forecasted normal weather gas purchase requirements. As of November 2,
9 2021 the NYMEX strip is on average \$1.49, or 36.2 percent higher than it was on
10 August 3, 2021³.

11

12 **Q. Please discuss the update to the Financial Hedge (including Storage Deferral) mark-**
13 **to-market (MTM) in Attachment JMP-5.**

14 A. Attachment JMP-5 illustrates the impact of current financial hedges for the period of
15 November 2021 through October 2022 (including deferred storage). As originally filed,
16 as of August 3, 2021, the benefit to customers was \$20,680,555. As of November 2,
17 2021, the hedging benefit to Rhode Island firm customers increased from \$20,680,555 to
18 \$44,172,426, an increase of 47 percent. For the November through October period, the

³ Please see Attachment GSP-2 NYMEX Strip Comparison & Forward Curves.

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1 NYMEX strip is on average \$1.04, or 28.6 percent higher.⁴ Hedge executions continue to
2 be executed for the April 2022 – October 2022 period.⁵ As in previous years, there is the
3 possibility that commodity prices could settle lower and create a cost to customers;
4 however, at this time, the hedging program is providing the benefits of mitigating
5 commodity price volatility and significantly lowering commodity costs for firm gas
6 customers.

7

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

9 A. Yes.

⁴ This information is as of November 2, 2021. Please see Attachment GSP-2 NYMEX Strip Comparison & Forward Curves.

⁵ May & June 2022 have concluded Mandatory hedge executions due to the latest forecast update.

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Attachment of John M. Protano

Attachment JMP-5 Updated Financial Hedge (including Storage Deferral) mark-to-market (“MTM”) as of November 2, 2021

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ATTACHMENTS**

Attachment JMP-5

Updated Financial hedge (including Storage Deferral) mark-to-market (“MTM”)
as of November 2, 2021

JMP-5: Financial hedge (including Storage Deferral) mark-to-market (MTM) as of November 2, 2021

JMP-5: Financial hedge (including Storage Deferral) mark-to-market (MTM) as of November 2, 2021 *

	Nov-2021	Dec-2021	Jan-2022	Feb-2022	Mar-2022	Apr-2022	May-2022	Jun-2022	Jul-2022	Aug-2022	Sep-2022	Oct-2022	Total
NYMEX Hedge MTM	\$ (7,187,648)	\$ (7,321,835)	\$ (8,344,806)	\$ (7,182,014)	\$ (5,852,782)	\$ (2,235,956)	\$ (2,107,119)	\$ (1,638,829)	\$ (1,226,262)	\$ (1,149,330)	\$ (1,429,837)	\$ (1,657,231)	\$ (47,333,650)
Storage Deferral	\$ 434,890	\$ 946,786	\$ 1,015,039	\$ 932,333	\$ 598,012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,927,059
Basis Hedge MTM	\$ 303,860	\$ (215,464)	\$ (305,973)	\$ (290,517)	\$ (257,143)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (755,836)
Impact of Financial Hedges (includes Storage Deferral)	\$ (6,448,898)	\$ (6,590,513)	\$ (7,635,740)	\$ (6,540,198)	\$ (5,512,513)	\$ (2,235,956)	\$ (2,107,119)	\$ (1,638,829)	\$ (1,226,262)	\$ (1,149,330)	\$ (1,429,837)	\$ (1,657,231)	\$ (44,172,426)

* Positive dollar values denote cost to the customer, while a negative dollar values denote a benefit to the customer at market settlement prices on selected valuation date.