

The Narragansett Electric Company
d/b/a National Grid

2013 GAS COST RECOVERY

Testimony and Attachments of:

Elizabeth D. Arangio
Ann E. Leary

Book 1 of 2

September 3, 2013

Submitted to:

Rhode Island Public Utilities Commission
R.I.P.U.C. Docket No. 4436

Submitted by:

nationalgrid

September 3, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4436 - 2013 Gas Cost Recovery Filing

Dear Ms. Massaro:

Enclosed please find ten (10) copies of the National Grid's¹ Annual Gas Cost Recovery ("GCR") filing, which is being submitted pursuant to the Gas Cost Recovery Clause found in the Company's tariffs at RIPUC NG-Gas No. 101, Section 2, Schedule A. The proposed rates contained in this GCR filing reflect the customer class-specific factors necessary for the Company to collect sufficient revenues to recover projected gas costs for the period November 1, 2013 through October 31, 2014.

This filing consists of the pre-filed testimony and schedules of Elizabeth D. Arangio, Ann E. Leary, and Stephen A. McCauley. Ms. Arangio provides testimony relative to the Company's projected gas costs and in support of the Company's proposed GCR factors. She also discusses the Company's decision to enter into a Precedent Agreement with Algonquin Gas Transmission Company. Ms. Leary's testimony describes the development of the GCR charges proposed for effect November 1, 2013 and provides a bill impact analysis relative to those proposed rates. Mr. McCauley discusses the results of the Gas Procurement Incentive Plan for the period July 1, 2012 through June 30, 2013. He also discusses the results of the Natural Gas Portfolio Management Plan for the period April 1, 2012 through March 31, 2013 and the recommendation to continue with that plan after March 31, 2014.

As described in Ms. Leary's testimony, based on the GCR rates proposed for effect November 1, 2013 through October 31, 2014, an average residential heating customer using 846 therms per year will experience a total bill decrease related to the proposed GCR and Distribution Adjustment Charge ("DAC") rates of approximately \$15, or an annual 1.3 percent decrease from the current existing rates. This decrease is comprised of an \$8 decrease in the GCR-related costs and a \$7 decrease in the DAC-related costs, which were filed today under separate cover.

This filing also contains a Motion for Protective Treatment in accordance with Rule 1.2(g) of the Commission's Rules of Practice and Procedure and R.I.G.L. § 38-2-2(4)(B). The Company seeks protection from public disclosure of certain pricing terms and costs related to its Precedent Agreement with Algonquin Gas Transmission Company and to certain existing contracts, which are set forth on

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

Luly E. Massaro, Commission Clerk
Docket 4436 – Annual GCR 2013
Page 2 of 2

page 21 of the pre-filed testimony of Ms. Arangio. The Company also seeks protective treatment for gas-cost pricing information and forecasts, which are provided in Attachments EDA-1, EDA-2, and EDA-4 to the testimony of Ms. Arangio and in Attachments AEL-1 and AEL-3 to the testimony of Ms. Leary. Accordingly, the Company has provided the Commission with the un-redacted confidential materials for its review, and has included redacted copies of these materials in the filing.

Thank you for your attention to this filing. If you have any questions, please contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Leo Wold, Esq.
Steve Scialabba
Bruce Oliver

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
RHODE ISLAND PUBLIC UTILITIES COMMISSION

Annual Gas Cost Recovery Filing 2013
Docket No. 4436

**NATIONAL GRID'S REQUEST
FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION**

National Grid¹ hereby requests that the Rhode Island Public Utilities Commission (“Commission”) provide confidential treatment and grant protection from public disclosure of certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by Commission Rule 1.2(g) and R.I.G.L. § 38-2-2(4)(B). National Grid also hereby requests that, pending entry of that finding, the Commission preliminarily grant National Grid’s request for confidential treatment pursuant to Rule 1.2 (g)(2).

I. BACKGROUND

On September 3, 2013, National Grid filed with the Commission its Annual Gas Cost Recovery filing in this docket. This filing includes information relative to certain pricing terms and costs related to the Company’s Precedent Agreement with Algonquin Gas Transmission Company, which are set forth on page 21 of the pre-filed testimony of Elizabeth D. Arangio. This filing also includes gas-cost pricing information and forecasts, which are provided in Attachments EDA-1, EDA-2, and EDA-4 to the

testimony of Ms. Arangio and in Attachments AEL-1 and AEL-3 to the testimony of Ms. Leary.

II. LEGAL STANDARD

The Commission's Rule 1.2(g) provides that access to public records shall be granted in accordance with the Access to Public Records Act ("APRA"), R.I.G.L. §38-2-1, *et seq.* Under 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.G.L. §38-2-2(4). Therefore, to the extent that information provided to the Commission falls within one of the designated exceptions to the public records law, the Commission has the authority under the terms of APRA to deem such information to be confidential and to protect that information from public disclosure.

In that regard, R.I.G.L. §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 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

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

was obtained. Providence Journal Company v. Convention Center Authority, 774 A.2d 40 (R.I.2001).

The first prong of the test is satisfied when information is voluntarily 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.

II. BASIS FOR CONFIDENTIALITY

The pricing and information related to the Company's Precedent Agreement with Algonquin Gas Transmission Company and the costs of certain existing contracts, which are set forth on page 21 of the pre-filed testimony of Ms. Arangio and the pricing gas-cost pricing information and forecasts, which are provided in Attachments EDA-1, EDA-2, and EDA-4 to the testimony of Ms. Arangio and in Attachments AEL-1 and AEL-3 to the testimony of Ms. Leary is confidential and privileged information of the type that the Company would ordinarily not make public. The dissemination of this type of information could impact the Company in the future to obtain advantageous pricing.

III. CONCLUSION

Accordingly, the Company requests that the Commission grant protective treatment to those previously identified portions of its GCR filing.

WHEREFORE, the Company respectfully requests that the Commission grant its Motion for Protective Treatment as stated herein.

Respectfully submitted,

NATIONAL GRID

By its attorney,



Thomas R. Teehan, Esq. (RI Bar #4698)
National Grid
280 Melrose Street
Providence, RI 02907
(401) 784-7667

Dated: September 3, 2013

**Testimony of
Elizabeth D. Arangio**

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013**

DIRECT TESTIMONY

OF

ELIZABETH D. ARANGIO

September 3, 2013

Table of Contents

I. Introduction..... 1

II. Projected Gas Costs 4

III. Marketer Capacity Assignment 8

IV. Gas Supply Portfolio..... 10

1 **I. Introduction**

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

3 A. My name is Elizabeth Danehy Arangio. My business address is 40 Sylvan Road,
4 Waltham, Massachusetts 02451.

6 **Q. What is your position with National Grid?**

7 A. I am the Director of Gas Supply Planning with responsibility for the resource
8 portfolio of the New England local gas distribution companies (“LDC’s”) that operate
9 as Boston Gas Company (“Boston Gas”), Colonial Gas Company (“Colonial”) and
10 The Narragansett Electric Company (“Narragansett”) each d/b/a National Grid. In
11 addition to the New England portfolios, I am also responsible for gas supply planning
12 for the resource portfolios of The Brooklyn Union Gas Company, KeySpan Gas East
13 Corporation and Niagara Mohawk Power Corporation, all in New York. For
14 purposes of this testimony, references to “National Grid” or the “Company” relate
15 solely to The Narragansett Electric Company.

16
17 **Q. Please summarize your educational background and your professional
18 experience.**

19 A. I graduated from the University of Massachusetts in 1991 with a Bachelor of
20 Business Administration. In 1995, I graduated from Bentley College with a Master of
21 Business Administration. From 1991 to 1994, I worked as a Gas Accounting Analyst

1 in the Marketing Operations Department at Algonquin Gas Transmission Company.
2 In 1994, I joined Boston Gas Company as a Gas Supply Analyst. In 1997, I was
3 promoted to Group Leader Transportation Services, with responsibility for managing
4 all activities associated with the Customer-Choice program. In 1998, I was promoted
5 to Director of Gas Acquisition and Transportation Services with responsibility for the
6 administration of the Company's gas-resource portfolio and Customer-Choice
7 program in Massachusetts and, as of 2000, the resource portfolio of EnergyNorth
8 Natural Gas, Inc in New Hampshire. In February 2004, I assumed the additional
9 responsibility of gas supply planning for the former KeySpan Corporation New York
10 and Long Island resource portfolios. Following the acquisition of KeySpan
11 Corporation by National Grid, plc, I was named to my current position with the added
12 responsibility for the National Grid gas resource portfolios in upstate New York and
13 in Rhode Island.

14
15 **Q. Are you a member of any professional organizations?**

16 A. I am a member of the Northeast Gas Association and the New England-Canada
17 Business Council.

18
19 **Q. Have you previously testified in regulatory proceedings?**

20 A. Yes. I have recently testified before the Rhode Island Public Utilities Commission
21 ("Commission") in support of National Grid's Annual Gas Cost Recovery ("GCR")

1 Docket No. 4346, the Natural Gas Portfolio Management Plan (“NGPMP”) Docket
2 No. 4038 and the Long Range Gas Supply plan. In the past, I have testified numerous
3 times before the Massachusetts Department of Public Utilities, and the New
4 Hampshire Public Utilities Commission. In addition, I have also presented
5 information to the State of New York Department of Public Service Commission.
6

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

8 A. My testimony provides support for the estimated gas costs, assignments of pipeline
9 capacity to marketers and other issues relating to the Company’s proposed Gas Cost
10 Recovery (“GCR”) factors. In addition, my testimony provides a summary of the
11 Company’s decision to enter into a Precedent Agreement (“PA”) with Algonquin Gas
12 Transmission Company (“Algonquin”) for interstate pipeline capacity delivered to
13 Rhode Island as part of the Algonquin Incremental Market Expansion Project (“AIM
14 Project”).
15

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

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

18	EDA-1	Summary of Projected Gas Costs - CONFIDENTIAL Information
19		Redacted
20		
21	EDA-2	Gas Cost Details - CONFIDENTIAL Information Redacted
22	EDA-3	NYMEX Strip Comparison

1 EDA-4 Assignment of Pipeline Capacity – CONFIDENTIAL Information
2 Redacted

3
4 EDA-5 FT-2 Operational Parameters

5 EDA-6 FT-2 Storage Variable Costs

6

7 **II. Projected Gas Costs**

8 **Q. What commodity prices were used to develop the proposed GCR factors?**

9 A. In terms of commodity prices, the proposed GCR factors are based on the following:

10 (1) the NYMEX strip as of the close of trading on July 15, 2013, and (2) the
11 difference between the futures contract purchases under the Gas Procurement
12 Incentive Plan (“GPIP”) as of July 2013 and the July 15, 2013 NYMEX strip. The
13 GCR factors also reflect storage and inventory costs as of July 31, 2013, as well as
14 the projected cost of purchasing gas ratably through the remainder of the injection
15 season, as provided for in the NGPMP. Attachment EDA-1 provides a summary of
16 gas costs by major cost categories. Attachment EDA-2 shows the details of the
17 calculations including the cost detail by supply source and the cost impact of
18 financial hedges.

19

20 **Q. Overall what are the NYMEX prices for gas supplies projected to be purchased**
21 **in the GCR year and how do they compare to last year’s prices?**

1 A. Attachment EDA-3 is a graph that compares NYMEX pricing from August 1, 2012
2 utilized in the Company's filing last year to NYMEX pricing from July 15, 2013 used
3 in this instant filing. The July 15, 2013 NYMEX strip is on average \$0.315, or 8.7%,
4 higher each month compared to the August 1, 2012 NYMEX strip.

5
6 **Q. Please describe how gas costs are calculated.**

7 A. Consistent with prior filings, projected gas costs are calculated using the SENDOUT
8 model to perform a dispatch optimization of the entire Rhode Island portfolio of gas
9 supply, pipeline transportation, underground storage and peaking supplies. The
10 model uses commodity price, pipeline contract and storage information to determine
11 the dispatch of supplies to minimize the cost of supply over the year. The pricing of
12 various pipeline services is based directly on the pipeline tariffs and the rates in effect
13 as of August 1, 2013. For Company purchases at locations other than the Henry Hub,
14 the model uses the expected basis differential to the Henry Hub prices to determine
15 the expected difference or "basis."

16
17 **Q. How did the Company categorize the projected gas cost components?**

18 A. For the purpose of this filing Gas costs are disaggregated into two components: (1)
19 the Supply Fixed Cost Component and (2) the Supply Variable Cost Component.
20 Each is described below.

1 1. The Supply Fixed Cost Component includes all fixed costs related to the
2 purchase, storage, or delivery of firm gas, including, but not limited to,
3 pipeline and supplier fixed reservation costs, demand charges, and
4 transportation fees.

5 2. The Supply Variable Cost Component includes all variable costs of firm gas,
6 including, but not limited to, commodity costs, taxes on commodity and other
7 gas supply expense incurred to transport supplies, transportation fees, storage
8 commodity costs, taxes on storage commodity and other gas storage expense
9 incurred to transport supplies, transportation fees, and inventory commodity
10 costs.

11 A summary of gas costs included in the GCR and disaggregated into these cost
12 components by month for the period November 2013 through October 2014 is shown
13 on Attachment EDA-1.

14
15 **Q. Please describe Attachment EDA-2, pages 1 through 17.**

16 A. Attachment EDA-2 shows the supporting detail for gas costs included in the filing for
17 the period November 2013 through October 2014. The first two pages show the
18 optimized, forecasted sendout by supply source under normal weather from the
19 SENDOUT model, as well as the detailed makeup of supply by pipeline source,
20 storage contract and peaking facility. The next section, pages 3 through 6, shows the
21 calculation of the per unit delivered cost for each pipeline path based on the July 15,

1 2013 NYMEX strip, including both pipeline variable charges and pipeline fuel losses.
2 Pages 7 through 9 show the calculation of the delivered cost for each path (the price
3 times the quantity). Pages 10 through 14 show the detailed calculation of total fixed
4 costs.

5 The cost details for gas injected into and withdrawn from underground storage are
6 shown on pages 15 and 16, while all costs associated with LNG injected into and
7 withdrawn from storage are detailed on page 17. As the Company has yet to contract
8 for LNG supplies for the upcoming 2013/14 year, pricing included in this filing
9 reflects indicative pricing and terms based on the Company's current contracts with
10 GDF Suez. Charges for the GDF Suez Gas NA contracts have been redacted in the
11 public version of the filing in order to comply with confidentiality terms.

12

13 **Q. How do you calculate the delivered cost for a particular gas supply?**

14 A. On Attachment EDA-2, page 3, the second supply source shown is gas purchased on
15 Tennessee Pipeline in Zone 0, located in South Texas. The calculation for November
16 begins with the \$3.761 NYMEX price which is then adjusted for basis by, in this
17 case, subtracting \$0.083. This reflects the forward basis strip for gas supply in South
18 Texas delivered into Tennessee Pipeline. Next the price is adjusted to reflect the fuel
19 retention percentage of the pipeline, 4.49%, to bring the price to \$3.851. That
20 adjustment is made by dividing the price by one minus the loss factor, .9551,
21 effectively adjusting the commodity price to incorporate the fact that only 95.51% of

1 the supply delivered from the pipeline in South Texas will be delivered to Rhode
2 Island. The pipeline usage fee of 35.32 cents is then added to reflect the cost of
3 transportation on the pipeline, resulting in a delivered cost of \$4.2041 per Dth.

4

5 **III. Marketer Capacity Assignment**

6 **Q. What transportation paths will be available for assignment to marketers?**

7 A. Attachment EDA-4, page 1 shows the paths and corresponding quantities available
8 for assignment to marketers. In total, the Company has made available 32,758 Dth
9 per day of capacity on six different pipeline paths. The volume allocated to the
10 marketers remains the same as provided in the 2012/13 GCR filing.

11

12 **Q. Please explain the surcharge/credit calculation for each assigned pipeline path?**

13 A. The first step in calculating the adjustment charge for each path starts with
14 calculating the system-average cost. The derivation of the weighted-average pipeline
15 path cost of \$0.9383 per Dth is shown at Attachment EDA-4, Page 10. This cost is
16 equal to the sum of the 100% load factor fixed-cost unit value, the system-average
17 unit variable cost and one (1) year of marketer reconciliation represented as a 100%
18 load factor per unit cost. The 100% load factor fixed-cost unit value is \$0.5573 per
19 Dth. The system-average pipeline unit variable cost is \$0.3802 per Dth. The sum of
20 these components results in a weighted average pipeline cost of \$0.9375 per Dth. The

1 100% load factor per unit cost of \$0.0008 for marketer reconciliation is then added to
2 get the total weighted-average pipeline cost of \$0.9383 per Dth.

3
4 **Q. How are the delivered costs for each path released to marketers developed in**
5 **EDA-4?**

6 A. The calculations for the delivered cost for each path are similar to those described for
7 the system average. For illustration, the calculation for the first path (Tennessee
8 Zone 1, shown on Attachment EDA-4, page 6) is comprised of a single contract
9 originating in Zone 1 and terminating in Zone 6. Total fixed costs of \$2,570,951 and
10 total variable costs of \$15,173,011 are shown in the far right column of page 6 of
11 EDA-4. Commodity gas costs of \$13,699,665 are subtracted from the total variable
12 costs to arrive at the non-gas variable costs, which include pipeline variable charges
13 and any basis differential associated with the path. The cost of the path equals the
14 sum of the fixed unit cost of \$0.7414 per Dth at 100% load factor plus the non-gas
15 variable unit cost of \$0.4249 per Dth, or \$1.1663 per Dth. The unit cost of \$1.1663
16 per Dth represents the direct costs incurred by the marketer, which are paid directly to
17 the pipeline by the marketer. Since this cost is \$0.2280 per Dth greater than the
18 system-average, marketers electing this path would be credited \$0.2280 per Dth per
19 day on their monthly invoice from the Company. A summary of the individual path
20 costs and associated credits or surcharges, for which approval is sought, is shown on
21 Page 1 of EDA-4.

1 **IV. Gas Supply Portfolio**

2 **Q. Have there been any changes to the Company's interstate pipeline capacity?**

3 A. No.

4

5 **Q. How did the Company supply the Dawn capacity for the 2013/14 year?**

6 A. The Company has a total firm capacity entitlement of 1,025 MMBtus/day on the
7 Union Gas pipeline system. The capacity path originates at Dawn, Ontario Canada
8 and delivers into TransCanada at Parkway. In addition, the Company has firm
9 capacity entitlements of 1,012 MMBtus/day on the TransCanada pipeline system.
10 The capacity path originates at the interconnection with Union Gas at Parkway and
11 delivers into Iroquois Gas Transmission ("Iroquois") at Waddington, New York.
12 This supply is delivered to the Company's distribution system on Company's existing
13 transportation contracts on Iroquois and Tennessee Gas Pipeline ("Tennessee").
14 The Company issued an RFP on August 12, 2013 for an Asset Management and Gas
15 Supply Agreement ("AMA"), similar to the RFP issued last year, to be effective
16 November 1, 2013 for a term of one year. The RFP requested a maximum daily
17 quantity ("MDQ") of 1,025 MMBtu/day of baseload for the months of November
18 2013 through March 2014.
19 Emera Energy ("Emera") was awarded the bid to manage the Canadian assets and
20 provide the Company with deliveries at the Canadian-US border at Waddington, New

1 York. The Company will then transport these volumes on Iroquois and Tennessee to
2 the Company's citygates.

3

4 **Q. What are the Company's plans to supply the East-to-West Capacity for 2013/14**
5 **year?**

6 A. The Company issued an RFP on July 10, 2013 for an Asset Management and Gas
7 Supply Agreement ("AMA"), similar to the RFP issued last year, to be effective
8 November 1, 2013 for a term of one year. Utilizing the SENDOUT® Model, the
9 Company determined the appropriate resource mix and established the baseload and
10 swing volume requirements by month.

11 The RFP requested a maximum daily quantity ("MDQ") of 10,000 MMBtu/day, the
12 contractual volume under the Algonquin agreement, with both a baseload and swing
13 component for the months of November 2013 through May 2014 and for the month of
14 October 2014.

15 Please see Table 1 below for a description of the monthly baseload and swing
16 quantities requested.

1

TABLE 1

Month	Daily Base-Load Quantity (dt/Day)	Maximum Daily Call Quantity (dt/Day)	Maximum Monthly Quantity (dt)
November 2013		10,000	200,000
December 2013	3,000	7,000	177,000
January 2014	3,000	7,000	191,000
February 2014	3,000	7,000	182,000
March 2014		10,000	200,000
April 2014		10,000	200,000
May 2014		3,000	39,000
June 2014		0	0
July 2014		0	0
August 2014		0	0
September 2014		0	0
October 2014		10,000	200,000

2

3

Subject to satisfying the gas supply requirements associated with the AMA, the Seller

4

has the right to utilize and optimize the transportation agreement for its own account.

1 In exchange for such right, the Seller pays the Company an optimization fee. EDF
2 Trading North America, LLC (“EDF”) was awarded the bid to manage the assets and
3 provide the asset management services for the 2013/14 season.

4

5 **Q. Why did the Company issue a request for proposal (“RFP”) for supply for the**
6 **Algonquin HubLine path for 2013/14 peak season?**

7 A. The Company issued an RFP for supply for the Algonquin HubLine path for the
8 2013/14 peak season for two reasons. First, sources of supply traditionally available
9 to the Company at the interconnect between Algonquin and the Maritimes and
10 Northeast Pipeline (“Maritimes”) located in Beverly, Massachusetts have declined
11 significantly (i.e. Sable Island, Deep Panuke and Canadian LNG Imports). For
12 example, during the month of January 2013 the Company experienced an extended
13 period of cold weather. The Company approached the market to procure supply at
14 Beverly and found no sellers willing or able to sell gas at that point. Second, the
15 Company needed to secure additional supplies to replace volumes historically met by
16 LNG, due to the uncertainty surrounding the availability of LNG, as discussed further
17 below. Therefore, given the need for supply at this point in order to meet customer
18 requirements, the Company issued an RFP on July 10, 2013 to purchase gas for a
19 term of three months (December, January and February). Utilizing the SENDOUT®
20 Model, the Company determined the appropriate resource mix and established the
21 required volume for the term in the event of design weather. The RFP requested a

1 maximum daily quantity (“MDQ”) of 8,000 MMBtu/day, the maximum daily
2 quantity (“MDQ”) of the Algonquin transportation agreement, with a maximum
3 seasonal quantity 160,000 MMBtus. Hess Corporation. (“Hess”) was awarded the
4 bid to provide the Company with supply at Beverly. The supply agreement also
5 provides for an alternate delivery point at the Company’s city gates.

6

7 **Q. Why did the Company issue a request for proposal (“RFP”) for supply for the**
8 **Dracut Tennessee path for 2013/14 peak season?**

9 A. The Company issued an RFP for supply for the Dracut Tennessee path for the
10 2013/14 peak season for two reasons. First, similar to supplies at Beverly discussed
11 above, sources of supply traditionally available to the Company at the interconnect
12 between Tennessee and the Maritimes located in Dracut, Massachusetts have decline
13 significantly. In January 2013, as was the case at Beverly, supplies were not
14 available for purchase at Dracut. Second, the Company needed to secure additional
15 supplies to replace volumes historically met by LNG, due to the uncertainty
16 surrounding the availability of LNG. Therefore, given the need for supply at this
17 point in order to meet customer requirements, the Company issued another RFP on
18 July 10, 2013 to purchase supply at Dracut for a term of four months (December,
19 January, February and March). Utilizing the SENDOUT® Model, the Company
20 determined the appropriate resource mix and established the required volume for the
21 term in the event of design weather. The RFP requested a maximum daily quantity

1 (“MDQ”) of 15,000 MMBtu/day, the MDQ of the Algonquin transportation
2 agreement, with a maximum seasonal quantity of 975,000 MMBtus. The Company
3 accepted and awarded two bids for the total supply package. The winning bidders
4 were Hess Corporation (“Hess”) and Repsol Energy North America (“Repsol”) in
5 portions of 675,000 Dths and 300,000 Dths respectively. The supply agreement with
6 Hess also provides for an alternate delivery point at the Company’s city gates.

7

8 **Q. Has the Company entered into an arrangement for firm liquid service for the**
9 **2013 off-peak refill season?**

10 A. Yes, to date, the Company has entered into two arrangements for liquid service for
11 the summer of 2013.

12 On March 1, 2013, the Company received an RFP from GDF Suez Gas NA LLC
13 (“GDF Suez”). The purpose of the RFP was to solicit proposals from market
14 participants interested in purchasing LNG in liquid form at its truck loading station at
15 Everett, MA, for all or a portion of 4 Bcf to be delivered during the 2013 off peak
16 refill season. The delivery was offered on a firm basis and there was no minimum
17 volume requirement to be eligible to purchase LNG. The RFP requested that bids be
18 submitted by 5:00 pm on March 15, 2013.

19 On March 15, 2013, the Company submitted bids for 4 Bcf on behalf of National
20 Grid’s New England companies: Boston Gas Company, Colonial Gas Company, and
21 The Narragansett Electric Company and was ultimately awarded the full quantity for

1 delivery during the months of April 2013 through and including November 2013.

2 GDF Suez allocated the 4 Bcf among the three companies to avoid any credit triggers,
3 thereby, avoiding the need for any one of the companies to post collateral. The
4 purchase price is identical in each of the agreements with GDF Suez. Following the
5 execution of the agreements with GDF Suez, the three companies executed affiliate
6 agreements which allow each LDC to buy and sell liquid amongst the three entities at
7 the same cost as in the underlying GDF Suez agreement.

8 The 4 BCF from GDF Suez was allocated between the MA and RI companies based
9 upon design season operating requirements for the upcoming winter season of
10 2013/14. The allocation provides for 89 percent of LNG volumes to MA and 11
11 percent of LNG volumes to RI.

12 Because the Company's RI refill requirement (475,000 MMBtu) exceeded the
13 amount of liquid allocated to RI from GDF Suez, and because to date, GDF Suez will
14 not guaranty the delivery of any additional volumes during the 2013 off-peak refill
15 season, the Company implemented a contingency plan for securing additional
16 supplies.

17 On April 30, 2013, the Company submitted a bid to Transcontinental Gas Pipe Line
18 Company, LLC ("Transco"), for LNG volumes available at its Carlstadt, New Jersey
19 facility. The Company was awarded up to 300,000 MMBtus from the facility
20 effective May 1, 2013. Deliveries commenced the week of May 20, 2013 with
21 primary delivery to the National Grid Providence LNG facility on behalf of MA and

1 RI using the same allocation method as the GDF Suez volumes. Although service is
2 provided under Transco's interruptible tariff, Transco, after considering its firm
3 obligations, has determined that the 300,000 dt will be available to National Grid
4 prior to November 1, 2013.

5 The Company is also in discussions with other companies in the Northeast that have
6 liquefaction capabilities to meet the remaining refill requirements. Traditionally, the
7 Company has entered into a peak season LNG refill agreement with an annual
8 contract quantity of 125,000 MMBtus. At this time, GDF Suez will not guaranty the
9 delivery of any additional volumes during the 2013/14 peak season.

10 As it has in previous years, the Company issued an RFP on March 20, 2013 for
11 dedicated trucking arrangements in order to guarantee the availability of both trailers
12 and drivers to truck the LNG from the GDF Suez terminal to the Company's facilities
13 during the off peak season. In addition, the Company issued an additional RFP on
14 May 8, 2013 for a dedicated trucking arrangement in order to guarantee availability
15 of both trailers and drivers to truck the LNG from Transco, for LNG volumes
16 available at its Carlstadt, New Jersey facility to the National Grid LNG facilities
17 located in Rhode Island.

18

19 **Q. Describe the changes to the domestic supply and global LNG markets affecting**
20 **the Company.**

1 A. In order to serve our customers' firm gas supply requirements the Company relies on
2 a combination of interstate pipeline capacity and imported LNG.
3 There are just two interstate pipelines Algonquin Gas Transmission ("Algonquin")
4 and Tennessee Gas Pipeline ("Tennessee") that deliver into the Company's gas
5 distribution system and both of these interstate pipelines are fully subscribed. Much
6 of the pipeline capacity on Algonquin and Tennessee provides access to sources of
7 supply from the south and west (on-shore and off-shore Gulf coast, mid-continent,
8 Marcellus shale, western Canada, etc.). However, 15 percent of the Company's peak
9 day pipeline capacity provides access only to sources of supply from the north and
10 east (Sable Island, Deep Panuke, imported LNG, etc.).
11 Historically, National Grid has relied on LNG to satisfy 38 percent of its peak day
12 requirements. The Company has relied on GDF Suez as the sole supplier of LNG in
13 liquid form. Typically, LNG is purchased at the outlet of GDF Suez's facility in
14 Everett, MA and trucking services are contracted for to transport the liquid to the
15 Company's storage facilities where it is vaporized and injected into the gas
16 distribution systems during periods of peak demand. The Company also relies on
17 LNG imports to feed some of its pipeline capacity with receipt points in the
18 Northeast, Beverly and Dracut as discussed above, as well as direct deliveries of
19 vaporized LNG into Algonquin from the Neptune and Excelerate offshore facilities.
20 At this time, US LNG imports are at their lowest levels in thirteen years. Higher
21 global prices, ranging from \$10–20/Dth, are attracting cargos away from the US. The

1 table below provides a summary of the March 2013 price of gas at various global
2 market locations.

Location	Price/dt	Spread (as compared to Henry Hub)
Henry Hub (U.S.)	\$3.54	-
UK	\$9.94	\$6.41
Spain	\$15.25	\$11.72
Rio De Janeiro	\$16.84	\$13.31
China	\$19.35	\$15.82
Japan	\$19.75	\$16.22

3
4 As such, it is becoming more difficult and more expensive to acquire LNG to (1) fill
5 our storage tanks and (2) fill our short-haul transportation capacity with receipt points
6 at Beverly and Dracut.

7 Meanwhile, while LNG imports have been declining, domestic production levels
8 continue to increase. Horizontal drilling and well completion techniques continue to
9 improve, enabling increased economic extraction of natural gas from shale
10 formations. Pipeline infrastructure continues to be built in order to move the gas
11 closer to the market. However, the Company will not fully realize the benefits of
12 these inexpensive supplies without sufficient pipeline capacity to transport the gas to
13 the distribution system.

1 **Q. What is the Company doing to address these long-term portfolio risks?**

2 A. To address the changing gas supply landscape and to ensure the Companies' ability to
3 continue to reliably serve its existing customer requirements as well as anticipated
4 growth, National Grid has elected to participate in the Algonquin Incremental Market
5 Expansion ("AIM Project").

6 In September 2012, Algonquin commenced an Open Season for its AIM Project,
7 designed to expand Algonquin's existing pipeline by approximately 342,000 dth/day,
8 providing firm transportation from Algonquin's interconnection with Millennium
9 Pipeline Company, LLC ("Millennium") at Ramapo, New Jersey to markets located
10 in New England. Access to Ramapo provides customers on Algonquin the ability to
11 access to abundant inexpensive domestic supplies of natural gas. The AIM Project
12 also provides access to supplies available at the interconnection with Iroquois Gas
13 Transmission ("Iroquois") at Brookfield, Connecticut.

14 The Company participated in the Open Season and has entered into a Precedent
15 Agreement with Algonquin for 18,000 MMBtu/day for an initial term of fifteen years
16 with service commencing on November 1, 2016. The Agreement provides that
17 Algonquin shall proceed with the due diligence to obtain all approvals necessary to
18 construct the Project. In addition, the Company shall proceed with due diligence to
19 obtain internal approval and receipt of no negative indication from the Company's
20 Rhode Island regulators by December 1, 2013. Along with the Precedent Agreement,
21 the Company has executed a Negotiated Rate Agreement. This agreement sets forth

1 an estimated reservation rate of \$ [REDACTED] per dth based on expected cost and billing
2 determinants. This rate was subject to adjustment on or before August 1, 2013 and
3 will be subject to additional adjustments on or before December 31, 2013 if the
4 expected cost and/or billing determinants change as a result of one or more parties
5 withdrawing from the Project or Pipeline's receipt of additional turn-back capacity.
6 The Company was, in fact, notified in August by Algonquin that the billing
7 determinants for the Project did change and commensurately the cost and rate as well.
8 The adjusted rate reservation rate is now \$ [REDACTED] per dth.
9 As stated above, the Company has contracted for 18,000 dth/day of AIM capacity,
10 which is the sum of the Company's existing HubLine and East-to-West capacity. As
11 of the in-service date of the AIM project, these existing contracts will terminate.
12 Thus, the Company is not acquiring incremental capacity but rather is, in effect,
13 replacing an illiquid receipt point at Beverly with a more liquid receipt point at
14 Ramapo. The cost of Narragansett's AIM capacity will be partially mitigated, in the
15 amount of \$ [REDACTED] per year, by termination of the existing contracts.
16 The Company is also considering participation in the Tennessee Northeast Expansion
17 Project to alleviate supply concerns at the Dracut. Tennessee is proposing an upgrade
18 to its existing 300 line combined with a greenfield pipeline build with a capacity of
19 up to 1.2 Bcf/day originating at Wright, NY and delivering to Dracut, and then on to
20 existing citygates.

1 In summary, as the market continues to evolve, the Company is constantly looking to
2 maintain a reliable, least-cost portfolio, and will continue to explore all opportunities
3 to do so.

4 **Q. Are there any other contract changes affecting the supply portfolio and gas**
5 **costs?**

6 A. No.

7

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

9 A. Yes.

**Attachments of
Elizabeth D. Arangio**

Attachments of Elizabeth D. Arangio

- Attachment EDA-1 Summary of Projected Gas Costs - CONFIDENTIAL Information Redacted
- Attachment EDA-2 Gas Cost Details - CONFIDENTIAL Information Redacted
- Attachment EDA-3 NYMEX Strip Comparison
- Attachment EDA-4 Assignment of Pipeline Capacity – CONFIDENTIAL Information Redacted
- Attachment EDA-5 FT-2 Operational Parameters
- Attachment EDA-6 FT-2 Storage Variable Costs

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-1
Summary of Projected Gas Costs - CONFIDENTIAL Information Redacted

REDACTED

SUMMARY OF ESTIMATED GAS COSTS FOR 2013-2014 GCR Estimate

07/15/2013 NYMEX

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	GCR TOTAL
Variable Costs													
Total Pipeline Supply Costs	\$8,142,036												\$4,829,902
Total Storage Product Costs	\$0	\$331,837	\$4,405,354	\$3,880,653	\$633,428	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,251,272
Total Storage Delivery Costs	\$0	\$13,373	\$191,095	\$169,123	\$26,405	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$399,996
Total LNG Costs	\$107,113	\$111,101	\$1,228,951	\$100,276	\$111,101	\$107,113	\$111,101	\$104,824	\$108,727	\$108,727	\$104,824	\$107,531	\$2,411,391
Total All Variable Gas Costs	\$8,249,149					\$8,458,754	\$5,224,887	\$2,910,252	\$2,514,688	\$2,616,451	\$2,599,204	\$4,937,433	\$115,846,905
Fixed Costs													
Total Pipeline Demands													
Total Storage Facilities													
Total Storage Delivery	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$5,227,215
Total Supplier Demands													
Total All Fixed Costs	\$3,750,236	\$4,105,893	\$4,104,542	\$4,091,321	\$4,104,542	\$4,377,456	\$4,378,113	\$4,377,456	\$4,378,113	\$4,378,113	\$4,377,456	\$4,378,113	\$50,801,357
Capacity Release Credits	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$5,922,744
NGPMP Credit	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$6,900,000
Net Fixed Costs	\$2,681,674	\$3,037,331	\$3,035,980	\$3,022,759	\$3,035,980	\$3,308,894	\$3,309,551	\$3,308,894	\$3,309,551	\$3,309,551	\$3,308,894	\$3,309,551	\$37,978,613
Total All Gas Costs	\$10,930,824					\$11,767,649	\$8,534,438	\$6,219,146	\$5,824,239	\$5,926,003	\$5,908,099	\$8,246,984	\$153,825,518

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-2
Gas Cost Details - CONFIDENTIAL Information Redacted

National Grid
 2013 Estimated GCR
 Normal Weather Scenario

Ventyx
 SENDOUT@ Version 12.5.5

25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
07/15/2013 NYMEX	\$3.761	\$3.925	\$4.000	\$4.002	\$3.966	\$3.895	\$3.912	\$3.945	\$3.980	\$3.999	\$4.002	\$4.022	
TENNESSEE CONNEXION													
Basis	(\$0.083)	(\$0.085)	(\$0.082)	(\$0.092)	(\$0.085)	(\$0.100)	(\$0.102)	(\$0.090)	(\$0.078)	(\$0.075)	(\$0.088)	(\$0.110)	
usage to Zn 6	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	
fuel to Zn 6	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	
Total Delivered	\$3.8527	\$4.0223	\$4.1040	\$4.0956	\$4.0652	\$3.9752	\$3.9909	\$4.0380	\$4.0872	\$4.1103	\$4.0998	\$4.0977	
TENNESSEE ZN 0													
Basis	(\$0.083)	(\$0.085)	(\$0.082)	(\$0.092)	(\$0.085)	(\$0.100)	(\$0.102)	(\$0.090)	(\$0.078)	(\$0.075)	(\$0.088)	(\$0.110)	
usage	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	
fuel	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	
Total Delivered	\$4.2041	\$4.3737	\$4.4554	\$4.4470	\$4.4166	\$4.3266	\$4.3423	\$4.3894	\$4.4386	\$4.4617	\$4.4512	\$4.4491	
TENNESSEE ZN 1													
Basis	(\$0.057)	(\$0.069)	(\$0.018)	(\$0.022)	(\$0.028)	(\$0.061)	(\$0.021)	(\$0.041)	(\$0.030)	(\$0.048)	(\$0.049)	(\$0.078)	
usage to Zn 6	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	
fuel to Zn 6	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	
Total Delivered	\$4.1641	\$4.3224	\$4.4536	\$4.4515	\$4.4077	\$4.2995	\$4.3588	\$4.3723	\$4.4202	\$4.4213	\$4.4234	\$4.4140	
TENNESSEE DRACUT													
Basis	\$1.277	\$4.548	\$6.701	\$5.786	\$1.818	\$0.255	\$0.122	\$0.047	\$0.344	\$0.311	\$0.136	\$0.176	
usage	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	
fuel	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	
Total Delivered	\$5.0852	\$8.5274	\$10.7601	\$9.8452	\$5.8328	\$4.1953	\$4.0791	\$4.0370	\$4.3697	\$4.3557	\$4.1833	\$4.2434	
TETCO --A													
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
Usage to M3	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel to M3	5.59%	6.35%	6.35%	6.35%	6.35%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.0162	\$4.2434	\$4.3319	\$4.3201	\$4.3093	\$4.1584	\$4.1765	\$4.2300	\$4.2599	\$4.2909	\$4.3016	\$4.2973	
TETCO ETX													
Basis	(\$0.099)	(\$0.064)	(\$0.082)	(\$0.112)	(\$0.110)	(\$0.104)	(\$0.160)	(\$0.101)	(\$0.055)	(\$0.099)	(\$0.118)	(\$0.078)	
Usage to M3	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel to M3	5.45%	6.18%	6.18%	6.18%	6.18%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$3.9794	\$4.2315	\$4.2930	\$4.2628	\$4.2261	\$4.1171	\$4.0754	\$4.1737	\$4.2601	\$4.2334	\$4.2164	\$4.2804	

National Grid
 2013 Estimated GCR
 Normal Weather Scenario

Ventyx
 SENDOUT@ Version 12.5.5
 25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
TETCO STX													
Basis	(\$0.073)	(\$0.087)	(\$0.092)	(\$0.092)	(\$0.080)	(\$0.087)	(\$0.090)	(\$0.077)	(\$0.065)	(\$0.063)	(\$0.075)	(\$0.098)	
Usage to M3	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel to M3	5.41%	6.28%	6.28%	6.28%	6.28%	5.41%	5.41%	5.41%	5.41%	5.41%	5.41%	5.41%	5.41%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$4.0113	\$4.2170	\$4.2925	\$4.2947	\$4.2688	\$4.1394	\$4.1543	\$4.2034	\$4.2535	\$4.2759	\$4.2663	\$4.2631	
TETCO WLA													
Basis	(\$0.065)	(\$0.009)	(\$0.056)	(\$0.067)	(\$0.035)	(\$0.055)	(\$0.072)	(\$0.122)	(\$0.087)	(\$0.088)	(\$0.030)	(\$0.045)	
Usage to M3	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel to M3	5.59%	6.35%	6.35%	6.35%	6.35%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$4.0227	\$4.2997	\$4.3299	\$4.3202	\$4.3159	\$4.1767	\$4.1767	\$4.1585	\$4.2333	\$4.3552	\$4.3178	\$4.3231	
TETCO -> NF -> TRANSCO													
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
Usage to M2	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072
Usage on NF	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166
Usage on Transco	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099
Usage on AGT	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291
Fuel to M2	4.77%	5.38%	5.38%	5.38%	5.38%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%
Fuel on NF	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Fuel on Transco	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Delivered to NF	\$4.2831	\$4.4920	\$4.5786	\$4.5670	\$4.5564	\$4.4227	\$4.4406	\$4.4931	\$4.5225	\$4.5530	\$4.5635	\$4.5593	\$4.5593
Delivered to Transco	\$4.3229	\$4.5329	\$4.6201	\$4.6084	\$4.5978	\$4.4634	\$4.4813	\$4.5341	\$4.5637	\$4.5943	\$4.6048	\$4.6006	\$4.6006
Delivered to Algonquin	\$4.3589	\$4.5702	\$4.6579	\$4.6461	\$4.6354	\$4.5002	\$4.5183	\$4.5714	\$4.6011	\$4.6319	\$4.6425	\$4.6383	\$4.6383
Total Delivered	\$4.6285	\$4.8502	\$4.9388	\$4.9269	\$4.9161	\$4.7711	\$4.7893	\$4.8429	\$4.8729	\$4.9040	\$4.9147	\$4.9105	
M3 DELIVERED													
Basis	(\$0.027)	\$0.283	\$0.595	\$0.538	\$0.015	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.128)	(\$0.127)	(\$0.248)	(\$0.228)	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.7817	\$4.2678	\$4.6591	\$4.6035	\$4.0383	\$3.7857	\$3.7615	\$3.8362	\$3.9008	\$3.9210	\$3.8019	\$3.8422	
COLUMBIA MAUMEE													
Basis	(\$0.083)	(\$0.083)	(\$0.088)	(\$0.092)	(\$0.105)	(\$0.093)	(\$0.112)	(\$0.183)	(\$0.198)	(\$0.207)	(\$0.232)	(\$0.250)	
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8184	\$3.9945	\$4.0667	\$4.0646	\$4.0141	\$3.9461	\$3.9440	\$3.9049	\$3.9255	\$3.9358	\$3.9131	\$3.9152	

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventyx
SENDOUT@ Version 12.5.5

25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH Total/Average

COLUMBIA BROADRUN

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Basis	(\$0.063)	(\$0.083)	(\$0.088)	(\$0.092)	(\$0.105)	(\$0.093)	(\$0.112)	(\$0.183)	(\$0.198)	(\$0.207)	(\$0.232)	(\$0.250)
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8184	\$3.9945	\$4.0667	\$4.0646	\$4.0141	\$3.9461	\$3.9440	\$3.9049	\$3.9255	\$3.9358	\$3.9131	\$3.9152

COLUMBIA EAGLE

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Basis	(\$0.027)	\$0.283	\$0.595	\$0.538	\$0.015	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.128)	(\$0.127)	(\$0.248)	(\$0.228)
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8761	\$4.3719	\$4.7711	\$4.7143	\$4.1378	\$3.8802	\$3.8555	\$3.9317	\$3.9975	\$4.0181	\$3.8967	\$3.9378

COLUMBIA DOWNINGTOWN

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Basis	(\$0.014)	\$0.363	\$0.862	\$0.758	\$0.045	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.091)	(\$0.114)	(\$0.251)	(\$0.231)
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8895	\$4.4544	\$5.0464	\$4.9412	\$4.1688	\$3.8802	\$3.8555	\$3.9317	\$4.0356	\$4.0315	\$3.8936	\$3.9348

TETCO -> DTI -> TETCO

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)
Usage to M2	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072
Usage on Dominion	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234
Usage on Tetco	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Usage on AGT	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291
Fuel to M2	4.77%	5.38%	5.38%	5.38%	5.38%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%
Fuel on Dominion	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%
Fuel on Tetco	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Delivered to Dominion	\$4.2831	\$4.4920	\$4.5786	\$4.5670	\$4.5564	\$4.4227	\$4.4406	\$4.4931	\$4.5225	\$4.5530	\$4.5635	\$4.5593
Delivered to Tetco	\$4.4321	\$4.6471	\$4.7363	\$4.7244	\$4.7135	\$4.5759	\$4.5943	\$4.6483	\$4.6786	\$4.7099	\$4.7207	\$4.7164
Delivered to Algonquin	\$4.4918	\$4.7097	\$4.8000	\$4.7879	\$4.7769	\$4.6375	\$4.6561	\$4.7109	\$4.7415	\$4.7733	\$4.7842	\$4.7798
Total Delivered	\$4.7627	\$4.9912	\$5.0825	\$5.0703	\$5.0591	\$4.9096	\$4.9284	\$4.9837	\$5.0146	\$5.0467	\$5.0577	\$5.0533

TRANSCO ZONE 2

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Basis	(\$0.023)	(\$0.021)	(\$0.004)	(\$0.018)	(\$0.008)	(\$0.033)	(\$0.026)	(\$0.016)	(\$0.009)	(\$0.026)	(\$0.033)	(\$0.053)
Usage on Transco	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944
Usage on Tetco	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Transco	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%
Fuel on Tetco	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$4.0437	\$4.2281	\$4.3262	\$4.3134	\$4.2856	\$4.1757	\$4.2012	\$4.2470	\$4.2917	\$4.2938	\$4.2896	\$4.2896

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventyx
SENDOUT@Version 12.5.5

25-Jul-2013

		Units: DTH												Total/Average
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
Natural Gas Supply VS. Requirements														
TRANSCO ZONE 3														
Basis		\$0.002	\$0.001	\$0.005	\$0.003	\$0.003	\$0.013	\$0.020	\$0.003	\$0.003	\$0.016	(\$0.010)	(\$0.027)	
Usage on Transco		\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478
Usage on Telco		\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Usage on AGT		\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Transco		3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%
Fuel on Telco		1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%
Fuel on AGT		0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered		\$4.0481	\$4.2285	\$4.3124	\$4.3124	\$4.2742	\$4.2018	\$4.2272	\$4.2442	\$4.2813	\$4.3152	\$4.2908	\$4.2940	\$4.2940
DAWN TO TENNESSEE - ANE II														
Basis		\$0.390	\$0.270	\$0.210	\$0.240	\$0.290	\$0.227	\$0.220	\$0.193	\$0.127	\$0.114	\$0.154	\$0.161	\$0.161
Transcanada usage		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Transcanada pressure chg		\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147
Iroquois usage		\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048
Tenn usage		\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896
Fuel on Union		0.840%	0.945%	1.086%	1.033%	0.972%	0.802%	0.567%	0.463%	0.451%	0.355%	0.352%	0.189%	0.189%
Fuel on TCP/L		0.460%	0.510%	0.780%	0.720%	0.970%	0.520%	0.340%	0.230%	0.200%	0.130%	0.130%	0.130%	0.130%
Fuel on Iroquois		0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Fuel on Tenn		1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%
Total Delivered		\$4.3770	\$4.4290	\$4.4624	\$4.4905	\$4.5133	\$4.3481	\$4.3407	\$4.3377	\$4.3043	\$4.3034	\$4.3472	\$4.3916	\$4.3916
NIAGARA TO TENNESSEE														
Basis		\$0.290	\$0.170	\$0.110	\$0.140	\$0.190	\$0.127	\$0.120	\$0.093	\$0.042	\$0.043	\$0.040	\$0.057	\$0.057
Tenn usage		\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896
Tenn Fuel		1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%
Total Delivered		\$4.1840	\$4.2285	\$4.2436	\$4.2760	\$4.2901	\$4.1547	\$4.1648	\$4.1709	\$4.1547	\$4.1749	\$4.1749	\$4.2123	\$4.2123
Tetco to B&W - SCT														
Basis		(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	(\$0.068)
usage on Telco		\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028
usage on AGT		\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291
fuel to ZN 3		5.54%	6.32%	6.32%	6.32%	6.32%	5.54%	5.54%	5.54%	5.54%	5.54%	5.54%	5.54%	5.54%
Fuel on AGT		0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered		\$4.6803	\$4.9091	\$4.9976	\$4.9858	\$4.9750	\$4.8224	\$4.8406	\$4.8940	\$4.9239	\$4.9549	\$4.9656	\$4.9613	\$4.9613
Hubline														
Basis		\$1.2570	\$4.4850	\$6.7480	\$5.8420	\$1.8680	\$0.2950	\$0.1250	\$0.2770	\$0.3100	\$0.2850	\$0.1520	\$0.1620	\$0.1620
usage		\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
fuel		0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered		\$5.0776	\$8.5165	\$10.8805	\$9.9665	\$5.9119	\$4.2419	\$4.0875	\$4.2742	\$4.3428	\$4.3368	\$4.2056	\$4.2359	\$4.2359

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventyx
SENDOUT@Version 12.5.5
25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH

Total Delivered to the City Gate Gas Supply Costs

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
TENN CONNEXION													
Delivered Mmbtu	348,000	359,600	359,600	324,800	359,600	348,000	332,700	285,700	353,800	189,100	195,200	359,600	
NYMEX \$/Mmbtu Del	\$3,853	\$4,022	\$4,104	\$4,096	\$4,065	\$3,975	\$3,991	\$4,038	\$4,087	\$4,110	\$4,100	\$4,098	
Total Delivered Cost	\$1,340,742	\$1,446,427	\$1,475,794	\$1,330,255	\$1,461,863	\$1,383,372	\$1,327,776	\$1,153,664	\$1,446,064	\$777,252	\$800,281	\$1,473,535	
Tennessee Zn 0													
Delivered Mmbtu	0	139,933	179,793	126,592	77,481	17,788	0	0	0	0	0	0	0
NYMEX \$/Mmbtu Del	\$4,204	\$4,374	\$4,455	\$4,447	\$4,417	\$4,327	\$4,342	\$4,389	\$4,439	\$4,462	\$4,451	\$4,449	
Total Delivered Cost	\$0	\$612,028	\$801,049	\$562,957	\$342,206	\$76,961	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TENN ZONE 1													
Delivered Mmbtu	0	291,167	374,107	263,408	161,219	37,012	0	0	0	0	0	0	0
NYMEX \$/Mmbtu Del	\$4,164	\$4,322	\$4,454	\$4,451	\$4,408	\$4,299	\$4,359	\$4,372	\$4,420	\$4,421	\$4,423	\$4,414	
Total Delivered Cost	\$0	\$1,258,533	\$1,666,106	\$1,172,554	\$710,613	\$159,133	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TENN DRACUT													
Delivered Mmbtu	0	95,000	134,000	44,000	27,000	141,500	132,600	89,200	0	0	0	25,200	
NYMEX \$/Mmbtu Del	\$5,09					\$4,20	\$4,08	\$4,04	\$4,37	\$4,36	\$4,18	\$4,24	
Total Delivered Cost	\$0					\$593,640	\$540,887	\$360,100	\$0	\$0	\$0	\$106,935	
TETCO ELA													
Delivered Mmbtu	0	301,952	296,962	268,206	0	161,557	88,843	5,986	6,177	143,216	27,682	6,177	
NYMEX \$/Mmbtu Del	\$4,0162	\$4,2434	\$4,3319	\$4,3201	\$4,3093	\$4,1584	\$4,1765	\$4,2300	\$4,2599	\$4,2909	\$4,3016	\$4,2973	
Total Delivered Cost	\$0	\$1,281,302	\$1,286,419	\$1,158,668	\$0	\$671,811	\$371,055	\$25,322	\$26,314	\$614,529	\$119,079	\$26,545	
TETCO ETX													
Delivered Mmbtu	0	90,457	88,960	80,348	0	48,398	26,615	1,793	1,850	42,904	8,293	1,850	
NYMEX \$/Mmbtu Del	\$3,9794	\$4,2315	\$4,2930	\$4,2628	\$4,2261	\$4,1171	\$4,0754	\$4,1737	\$4,2601	\$4,2334	\$4,2164	\$4,2804	
Total Delivered Cost	\$0	\$382,770	\$381,903	\$342,504	\$0	\$199,259	\$108,468	\$7,485	\$7,883	\$181,630	\$34,966	\$7,921	
TETCO STX													
Delivered Mmbtu	0	134,823	132,593	119,756	0	72,136	39,669	2,673	2,758	63,947	12,360	2,758	
NYMEX \$/Mmbtu Del	\$4,011	\$4,217	\$4,293	\$4,295	\$4,269	\$4,139	\$4,154	\$4,203	\$4,254	\$4,276	\$4,266	\$4,263	
Total Delivered Cost	\$0	\$568,553	\$569,162	\$514,316	\$0	\$298,598	\$164,797	\$11,236	\$11,732	\$273,434	\$52,733	\$11,758	
TETCO WLA													
Delivered Mmbtu	0	207,516	204,083	184,324	0	111,030	61,057	4,114	4,245	98,425	19,025	4,245	
NYMEX \$/Mmbtu Del	\$4,0227	\$4,2997	\$4,3299	\$4,3202	\$4,3159	\$4,1767	\$4,1767	\$4,1585	\$4,2333	\$4,3552	\$4,3178	\$4,3231	
Total Delivered Cost	\$0	\$892,251	\$883,661	\$796,317	\$0	\$463,734	\$255,016	\$17,109	\$17,971	\$428,661	\$82,144	\$18,352	

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventyx
SEDOUIT@Version 12.5.5
25-Jul-2013

Natural Gas Supply VS. Requirements		Units: DTH												Total/Average
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT		
TRANSCO ZONE 3														
Delivered Mmbtu	0	85	85	77	0	0	0	0	0	0	0	0	0	
Delivered \$/Mmbtu	\$4,0481	\$4,2285	\$4,3124	\$4,3124	\$4,2742	\$4,2018	\$4,2272	\$4,2442	\$4,2813	\$4,3152	\$4,2908	\$4,2940	\$0	
Delivered Cost	\$0	\$361	\$368	\$332	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
DAWN TO TENNESSEE - ANE II														
Delivered Mmbtu	30,000	31,000	31,000	28,000	31,000	32,000	2,100	0	0	0	0	0	0	
Delivered \$/Mmbtu	\$4,3770	\$4,4290	\$4,4624	\$4,4905	\$4,5133	\$4,3481	\$4,3407	\$4,3377	\$4,3043	\$4,3034	\$4,3472	\$4,3916	\$0	
Total Delivered Cost	\$131,310	\$137,298	\$138,334	\$125,734	\$139,913	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
NIAGARA TO TENNESSEE														
Delivered Mmbtu	15,400	33,100	33,100	29,900	33,100	32,000	2,100	0	0	0	0	0	0	
Delivered \$/Mmbtu	\$4,1840	\$4,2285	\$4,2436	\$4,2760	\$4,2901	\$4,1547	\$4,1648	\$4,1709	\$4,1547	\$4,1749	\$4,1749	\$4,2123	\$0	
Total Delivered Cost	\$64,434	\$139,962	\$140,464	\$127,852	\$142,003	\$132,950	\$8,746	\$0	\$0	\$0	\$0	\$75,400	\$0	
Tetco to B&W - SCT														
Delivered Mmbtu	0	33,575	33,020	29,823	0	17,964	9,879	666	687	15,925	3,078	687	687	
Delivered \$/Mmbtu	\$4,6803	\$4,9091	\$4,9976	\$4,9858	\$4,9750	\$4,8224	\$4,8406	\$4,8940	\$4,9239	\$4,9549	\$4,9656	\$4,9613	\$4,9613	
Total Delivered Cost	\$0	\$164,824	\$165,020	\$148,689	\$0	\$86,630	\$47,819	\$3,258	\$3,382	\$78,906	\$15,285	\$3,408	\$3,408	
HUBLINE														
Total Delivered Vol	0	92,000	92,100	83,200	0	0	0	0	0	0	0	0	0	
Delivered \$/Mmbtu	\$5,0776	\$8,5165	\$10,8805	\$9,9665	\$5,9119	\$4,2419	\$4,0875	\$4,2742	\$4,3428	\$4,3368	\$4,2056	\$4,2359	\$0	
Total Delivered Cost	\$0	\$783,522	\$1,002,098	\$829,212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Financial Hedges as of July 2013														
Quantity	1,320,000	3,160,000	2,840,000	2,430,000	2,490,000	1,160,516	852,511	578,146	417,935	222,493	467,003	524,420	16,463,025	
Average Price	\$4,419	\$4,245	\$4,197	\$4,117	\$4,021	\$3,788	\$3,862	\$3,803	\$4,000	\$4,015	\$3,997	\$4,171	\$4,171	
07/15/2013 NYMEX	\$3,761	\$3,925	\$4,000	\$4,002	\$3,966	\$3,895	\$3,912	\$3,945	\$3,980	\$3,999	\$4,002	\$4,022	\$4,022	
Impact of Financial Hedges	\$868,208	\$1,011,138	\$559,853	\$280,403	\$136,263	-\$123,771	-\$42,440	-\$81,827	\$8,432	\$3,572	-\$2,387	\$78,281	\$2,695,725.40	
Total Pipeline Costs (Incl Inj)	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	
Total Delivered Pipeline Vol	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	
WACOG (Cost/Volume)	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	\$4,262	
Injections	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cost of Injections	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total GCR Cost Including Financial Hedges, Excluding Injections														
Total Pipeline Costs	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	\$8,142,036	
Total Pipeline Purchase Volumes	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	1,910,400	

Injections

Cost of Injections

Total GCR Cost Including Financial Hedges, Excluding Injections

Total Pipeline Costs

Total Pipeline Purchase Volumes

REDACTED

	NOV	DEC	JAN-13	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Dth	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545
Dth	203,957	203,957	203,957	203,957	203,957	203,957	203,957	203,957	203,957	203,957	203,957	203,957
Dth	11,403	11,403	11,403	11,403	11,403	11,403	11,403	11,403	11,403	11,403	11,403	11,403
Dth	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304	1,039,304
Dth	14,337	14,337	14,337	14,337	14,337	14,337	14,337	14,337	14,337	14,337	14,337	14,337
Dth	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324	1,376,324
Dth	21,169	21,169	21,169	21,169	21,169	21,169	21,169	21,169	21,169	21,169	21,169	21,169
Dth	815,343	815,343	815,343	815,343	815,343	815,343	815,343	815,343	815,343	815,343	815,343	815,343
Dth	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802	14,802
Dth	103,336	103,336	103,336	103,336	103,336	103,336	103,336	103,336	103,336	103,336	103,336	103,336
Dth	944	944	944	944	944	944	944	944	944	944	944	944
Dth	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720
Dth	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137	14,137
Dth	944	944	944	944	944	944	944	944	944	944	944	944
Dth	665	665	665	665	665	665	665	665	665	665	665	665
Dth	11,739	11,739	11,739	11,739	11,739	11,739	11,739	11,739	11,739	11,739	11,739	11,739
Dth	187	187	187	187	187	187	187	187	187	187	187	187
Dth	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061
Dth	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545
Dth	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545
Dth	5,324	5,324	5,324	5,324	5,324	5,324	5,324	5,324	5,324	5,324	5,324	5,324
Dth	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061
Dth	6,725	6,725	6,725	6,725	6,725	6,725	6,725	6,725	6,725	6,725	6,725	6,725
Dth	4,111	4,111	4,111	4,111	4,111	4,111	4,111	4,111	4,111	4,111	4,111	4,111
Dth	944	944	944	944	944	944	944	944	944	944	944	944
Dth	6,377	6,377	6,377	6,377	6,377	6,377	6,377	6,377	6,377	6,377	6,377	6,377
Dth	538	538	538	538	538	538	538	538	538	538	538	538
Dth	5,011	5,011	5,011	5,011	5,011	5,011	5,011	5,011	5,011	5,011	5,011	5,011
Dth	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061	2,061

0
 550,000
 160,000
 675,000
 1,815,000

STORAGE FIXED COST BILLING UNITS

- COLUMBIA FSS DEMAND
- COLUMBIA FSS CAPACITY
- DOM NION GSS DEMAND
- DOM NION GSS CAPACITY
- DOM NION GSS-TE DEMAND
- DOM NION GSS-TE CAPACITY
- TENNESSEE FSMA DEMAND
- TENNESSEE FSMA CAPACITY
- TEXAS EASTERN SS-1 DEMAND
- TEXAS EASTERN SS-1 CAPACITY
- TEXAS EASTERN FSS-1 DEMAND
- TEXAS EASTERN FSS-1 CAPACITY

STORAGE DELIVERY BILLING UNITS (DTH)

- ALGONQU N FOR TETCO SS-1
- ALGONQU N DELIVERY FOR FSS-1
- ALGONQU N SCT FOR SS-1
- ALGONQU N DELIVERY FOR GSS, GSS-TE,
- ALGONQU N DELIVERY FOR GSS-TE
- ALGONQU N DELIVERY FOR GSS CONV
- COLUMBIA DELIVERY FOR FSS
- COLUMBIA DELIVERY FOR GSS
- DOMINION DELIVERY FOR GSS CONV
- TENNESSEE DELIVERY FOR GSS
- TENNESSEE DELIVERY FOR FSMA
- TETCO DELIVERY FOR FSS-1
- TETCO DELIVERY FOR GSS/GSS-TE
- TETCO DELIVERY FOR GSS-TE
- TETCO DELIVERY FOR GSS-TE
- TETCO DELIVERY FOR GSS CONV

SUPPLIER FIXED COST BILLING UNITS

- DISTRIGAS NSB CALL PAYMENT Winter
- DISTRIGAS NSB CALL PAYMENT Summer
- HESS PEAK NG SUPPLY AT SALEM
- HESS PEAK NG SUPPLY AT DRACUT
- REPSOL PEAK NG SUPPLY AT DRACUT



	NOV	DEC	JAN-13	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total
STORAGE DELIVERY FIXED COSTS													
ALGONQUIN FOR TETCO SS-1	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778	\$90,778
ALGONQUIN DELIVERY FOR FSS-1	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062	\$6,062
ALGONQUIN DELIVERY FOR SS-1	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708	\$1,708
ALGONQUIN DELIVERY FOR GSS	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380	\$75,380
ALGONQUIN DELIVERY FOR GSS-TE	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480	\$480
ALGONQUIN DELIVERY FOR GSS CONV	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168	\$20,168
ALGONQUIN DELIVERY FOR FSS	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342	\$16,342
COLUMBIA DELIVERY FOR FSS	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145	\$14,145
DOM NION DELIVERY FOR GSS	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382	\$22,382
DOM NION DELIVERY FOR GSS CONV	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664	\$8,664
TENNESSEE DELIVERY FOR GSS	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093	\$57,093
TENNESSEE DELIVERY FOR FSMA	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901	\$34,901
TETCO DELIVERY FOR FSS-1	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768	\$4,768
TETCO DELIVERY FOR GSS/GSS-TE	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123	\$34,123
TETCO DELIVERY FOR GSS-TE	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538	\$3,538
TETCO DELIVERY FOR GSS	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396	\$34,396
TETCO DELIVERY FOR GSS CONV	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674	\$10,674
TOTAL STORAGE DELIVERY DEMAND COSTS	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601	\$435,601
DISTRIGAS NSB CALL PAYMENT Winter													
DISTRIGAS NSB CALL PAYMENT Summer													
HESS PEAKING SUPPLY AT SALEM													
HESS PEAKING SUPPLY AT DRACUT													
REPSOL PEAKING SUPPLY AT DRACUT													
TOTAL SUPPLIER DEMAND COSTS													
TOTAL ALL DEMAND COSTS	\$3,750,236	\$4,105,893	\$4,104,542	\$4,091,321	\$4,104,542	\$4,377,456	\$4,378,113	\$4,377,456	\$4,378,113	\$4,378,113	\$4,377,456	\$4,378,113	\$50,801,357

	NOV	DEC	JAN-13	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total
Capacity Release Volumes as of August 1, 2013													
Tennessee	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499
Algonquin	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568
Tetco STX/AGT	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324
Tetco WLA/AGT	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425
Tetco ELA/AGT	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271
Columbia/AGT	31	31	31	31	31	31	31	31	31	31	31	31	31
Total	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118
Stem We Limited Average cost, er MMBtu	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504
Total Demand Charge Credit	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$5,922,744
Demand Costs Net of Releases to Marketers	\$3,256,674	\$3,612,331	\$3,610,980	\$3,597,759	\$3,610,980	\$3,883,894	\$3,884,551	\$3,883,894	\$3,884,551	\$3,884,551	\$3,883,894	\$3,884,551	\$44,878,613
TOTAL PIPELINE DEMANDS													
TOTAL STORAGE FACILITIES DEMANDS													
TOTAL STORAGE DELIVERY DEMANDS													
TOTAL SUPPLIER DEMANDS													
Total All Demands	\$3,750,236	\$4,105,893	\$4,104,542	\$4,091,321	\$4,104,542	\$4,377,456	\$4,378,113	\$4,377,456	\$4,378,113	\$4,378,113	\$4,377,456	\$4,378,113	\$50,801,357
Marketer Release Credits	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$5,922,744
NGPMP Credit	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$6,900,000
Demand Net of Releases	\$2,881,674	\$3,037,331	\$3,035,980	\$3,022,759	\$3,035,980	\$3,308,894	\$3,309,551	\$3,308,894	\$3,309,551	\$3,308,894	\$3,309,551	\$3,308,894	\$37,978,613

	NOV	DEC	JAN-13	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total
Capacity Release Volumes as of August 1, 2013													
Tennessee	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499	9,499
Algonquin	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568
Tetco STX/AGT	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324	3,324
Tetco WLA/AGT	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425	8,425
Tetco ELA/AGT	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271	6,271
Columbia/AGT	31	31	31	31	31	31	31	31	31	31	31	31	31
Total	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118	29,118
Stem We Limited Average cost, er MMBtu	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504	\$16,9504
Total Demand Charge Credit	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$5,922,744
Demand Costs Net of Releases to Marketers	\$3,256,674	\$3,612,331	\$3,610,980	\$3,597,759	\$3,610,980	\$3,883,894	\$3,884,551	\$3,883,894	\$3,884,551	\$3,884,551	\$3,883,894	\$3,884,551	\$44,878,613
TOTAL PIPELINE DEMANDS													
TOTAL STORAGE FACILITIES DEMANDS													
TOTAL STORAGE DELIVERY DEMANDS													
TOTAL SUPPLIER DEMANDS													
Total All Demands	\$3,750,236	\$4,105,893	\$4,104,542	\$4,091,321	\$4,104,542	\$4,377,456	\$4,378,113	\$4,377,456	\$4,378,113	\$4,378,113	\$4,377,456	\$4,378,113	\$50,801,357
Marketer Release Credits	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$493,562	\$5,922,744
NGPMP Credit	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$575,000	\$6,900,000
Demand Net of Releases	\$2,881,674	\$3,037,331	\$3,035,980	\$3,022,759	\$3,035,980	\$3,308,894	\$3,309,551	\$3,308,894	\$3,309,551	\$3,308,894	\$3,309,551	\$3,308,894	\$37,978,613

**NATIONAL GRID - RI SERVICE AREA
NOVEMBER 2013 - OCTOBER 2014**

LNG Estimate for 2013 - 2014

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
07/15/2013 NYMEX	\$3,761	\$3,925	\$4,000	\$4,002	\$3,966	\$3,895	\$3,912	\$3,945	\$3,980	\$3,999	\$4,002	\$4,022	

Trucking

--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Basis NSB contract - Winter
Delivered Cost NSB - Winter**

--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Basis NSB contract - Summer
Delivered Cost NSB - Summer**

--	--	--	--	--	--	--	--	--	--	--	--	--	--

Combined LNG Inv

Beginning Inv Vol	888,000	869,200	849,700	634,000	616,400	596,900	578,100	713,600	694,800	675,300	655,800	787,000	
Vol Injected - winter	0	0	0	0	0	0	0	0	0	0	0	0	0
Vol Injected - summer	0	0	0	0	0	0	155,000	0	0	0	150,000	120,500	425,500
Vol Withdrawn	18,800	19,500	215,700	17,600	19,500	18,800	19,500	18,800	19,500	19,500	18,800	19,500	425,500

\$ Beginning Inv 11/1/13 = \$5.6975

\$ Injected	\$0	\$0	\$0	\$0	\$0	\$0	\$796,235	\$0	\$0	\$0	\$788,100	\$636,722	\$2,221,057
\$ Withdrawn	\$107,113	\$111,101	\$1,228,951	\$100,276	\$111,101	\$107,113	\$111,101	\$104,824	\$108,727	\$108,727	\$104,824	\$107,531	\$2,411,391

Ending Vol

Ending \$	869,200	849,700	634,000	616,400	596,900	578,100	713,600	694,800	675,300	655,800	787,000	888,000	
-----------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	--

Avg \$/Dth

Ending \$	\$4,952,267	\$4,841,166	\$3,612,215	\$3,511,939	\$3,400,838	\$3,293,725	\$3,978,859	\$3,874,034	\$3,765,307	\$3,656,580	\$4,339,856	\$4,869,046	
-----------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--

Newport

Newport LNG Vol Vapor

Avg \$/Dth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

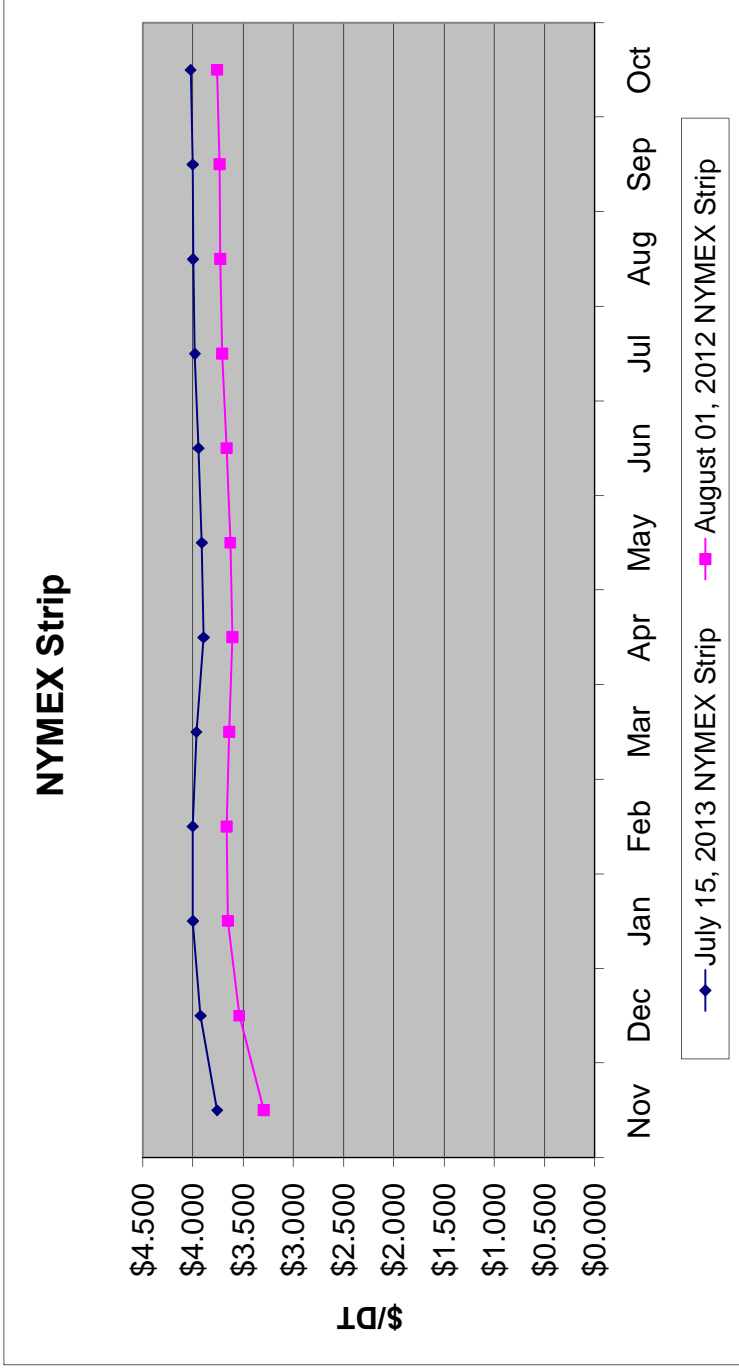
Total All LNG Costs

	\$107,113	\$111,101	\$1,228,951	\$100,276	\$111,101	\$107,113	\$111,101	\$104,824	\$108,727	\$108,727	\$104,824	\$107,531	\$2,411,391
--	-----------	-----------	-------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-------------

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-3
NYMEX Strip Comparison

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
August 01, 2012 NYMEX Strip	\$3.297	\$3.540	\$3.653	\$3.664	\$3.637	\$3.607	\$3.629	\$3.665	\$3.708	\$3.729	\$3.734	\$3.762
July 15, 2013 NYMEX Strip	\$3.761	\$3.925	\$4.000	\$4.002	\$3.966	\$3.895	\$3.912	\$3.945	\$3.980	\$3.999	\$4.002	\$4.022



THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-4
Assignment of Pipeline Capacity – CONFIDENTIAL Information Redacted

PRELIMINARY

**National Grid
Summary of Transportation Capacity Release
Pipeline Path Availability and Pricing
November 2013 - October 2014**

PRELIMINARY

12 Month Forward Pricing

Path to City Gate	As of 8/1/13 Existing Releases	Total Available	Remaining Available	Cost per Dth	New Credit or Surcharge	Old Credit or Surcharge
Company Weighted Average						
				\$0.9383		
Tennessee Zone 1	9,499	9,500	1	\$1.1663	(\$0.2280)	(\$0.2866)
Algonquin @ Lambertville, NJ	1,568	2,714	1,146	\$0.2744	\$0.6639	\$0.3042
Texas Eastern - South Texas Algonquin @ Lambertville, NJ	3,324	4,044	720	\$1.2195	(\$0.2812)	(\$0.4758)
Texas Eastern - West La Algonquin @ Lambertville, NJ	8,425	8,500	75	\$1.0264	(\$0.0881)	(\$0.2696)
Texas Eastern - East La Algonquin @ Lambertville, NJ	6,271	6,500	229	\$0.9245	\$0.0138	(\$0.1583)
Columbia (Maumee/Dowington) at 5:1 ratio*	31	1,500	1,469	\$0.3702	\$0.5681	\$0.3270
Totals:	29,118	32,758	3,640			

* Note: Marketers selecting this path are assigned 5/6 of the amount selected at the Maumee, Ohio receipt point into Columbia and 1/6 at the Dowington, Pa. Receipt into Columbia.

Natural Gas Supply VS. Requirements Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total(Average)
Non LNG Liquid take	1,910,400	3,713,998	3,819,603	2,971,598	3,665,700	2,788,500	1,784,500	947,900	819,500	983,600	733,100	1,363,200	25,501,600
LNG Liquid take	0	0	0	0	0	0	0	0	0	0	150,000	120,100	425,100
Total take	1,910,400	3,713,998	3,819,603	2,971,598	3,665,700	2,788,500	1,939,500	947,900	819,500	983,600	883,100	1,483,300	25,926,700
Storage Withdrawals													
TENN 501	0	27,400	278,500	167,800	93,600	0	0	0	0	0	0	0	567,300
GSS 300170	0	0	0	0	0	0	0	0	0	0	0	0	0
GSS 300168	0	9,800	26,600	4,200	1,500	0	0	0	0	0	0	0	42,100
GSS 300171	0	0	68,300	41,200	0	0	0	0	0	0	0	0	109,500
GSSTE 600045	0	0	166,400	150,300	0	0	0	0	0	0	0	0	316,700
TETCO 400515	0	0	13,300	0	0	0	0	0	0	0	0	0	13,300
TETCO 400221	0	0	285,000	285,000	0	0	0	0	0	0	0	0	570,000
TETCO 400185	0	0	0	0	0	0	0	0	0	0	0	0	0
GSS 300169	0	0	53,500	50,300	0	0	0	0	0	0	0	0	103,800
COL FSS 9630	0	34,800	76,600	52,100	15,400	0	0	0	0	0	0	0	178,900
TENN 62918	0	3,300	30,900	129,200	33,300	0	0	0	0	0	0	0	196,700
LNG PROV	11,700	12,100	180,500	10,900	12,100	11,700	12,100	11,700	12,100	12,100	11,700	12,100	310,800
LNG VALLEY	3,100	3,200	15,400	2,900	3,200	3,100	3,200	3,100	3,200	3,200	3,100	3,200	49,900
LNG EXETER	4,000	4,200	19,800	3,800	4,200	4,000	4,200	4,000	4,200	4,200	4,000	4,200	64,800
Total Withdrawal Delivered	18,800	94,800	1,214,800	897,700	163,300	18,800	19,500	18,800	19,500	19,500	18,800	19,500	2,523,800
Total Storage withdrawal	0	75,300	999,100	880,100	143,800	0	0	0	0	0	0	0	2,098,300
Total Peaking withdrawal	18,800	19,500	215,700	17,600	19,500	18,800	19,500	18,800	19,500	19,500	18,800	19,500	425,500
Total Supply	1,929,200	3,808,798	5,034,403	3,869,298	3,829,000	2,807,300	1,804,000	966,700	839,000	1,003,100	751,900	1,382,700	28,025,400

REDACTED

Storage withdrawals at Storage Facility

TENN 501	0	27,700	282,400	170,100	94,900	0	0	0	0	0	0	0	575,100
GSS 300170	0	0	0	0	0	0	0	0	0	0	0	0	0
GSS 300168	0	9,900	27,000	4,300	1,500	0	0	0	0	0	0	0	42,700
GSS 300171	0	0	68,900	42,100	0	0	0	0	0	0	0	0	112,000
GSSTE 600045	0	0	170,700	154,200	0	0	0	0	0	0	0	0	324,900
TETCO 400515	0	0	14,200	0	0	0	0	0	0	0	0	0	14,200
TETCO 400221	0	0	297,000	297,000	0	0	0	0	0	0	0	0	594,000
TETCO 400185	0	0	0	0	0	0	0	0	0	0	0	0	0
GSS 300169	0	0	55,600	52,300	0	0	0	0	0	0	0	0	107,900
COL FSS 9630	0	35,900	78,900	53,700	15,900	0	0	0	0	0	0	0	184,400
TENN 62918	0	3,400	31,300	131,000	33,800	0	0	0	0	0	0	0	199,500
	0	76,900	1,027,000	904,700	146,100	0	0	0	0	0	0	0	2,154,700

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventyx
SENDOUT@Version 12.5.5

25-Jul-2013

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
07/15/2013 NYMEX	\$3.761	\$3.925	\$4.000	\$4.002	\$3.966	\$3.895	\$3.912	\$3.945	\$3.980	\$3.999	\$4.002	\$4.022	

TENNESSEE CONNEXION

Basis
usage to Zn 6
fuel to Zn 6
Total Delivered

Basis	(\$0.083)	(\$0.085)	(\$0.082)	(\$0.092)	(\$0.085)	(\$0.100)	(\$0.102)	(\$0.090)	(\$0.078)	(\$0.075)	(\$0.088)	(\$0.110)	
usage to Zn 6	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	
fuel to Zn 6	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	
Total Delivered	\$3.8527	\$4.0223	\$4.1040	\$4.0956	\$4.0652	\$3.9752	\$3.9909	\$4.0380	\$4.0872	\$4.1103	\$4.0998	\$4.0977	

TENNESSEE ZN 0

Basis
usage
fuel
Total Delivered

Basis	(\$0.083)	(\$0.085)	(\$0.082)	(\$0.092)	(\$0.085)	(\$0.100)	(\$0.102)	(\$0.090)	(\$0.078)	(\$0.075)	(\$0.088)	(\$0.110)	
usage	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	\$0.3532	
fuel	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	
Total Delivered	\$4.2041	\$4.3737	\$4.4554	\$4.4470	\$4.4166	\$4.3266	\$4.3423	\$4.3894	\$4.4386	\$4.4617	\$4.4512	\$4.4491	

TENNESSEE ZN 1

Basis
usage to Zn 6
fuel to Zn 6
Total Delivered

Basis	(\$0.057)	(\$0.069)	(\$0.018)	(\$0.022)	(\$0.028)	(\$0.061)	(\$0.021)	(\$0.041)	(\$0.030)	(\$0.048)	(\$0.049)	(\$0.078)	
usage to Zn 6	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	\$0.3078	
fuel to Zn 6	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	
Total Delivered	\$4.1641	\$4.3224	\$4.4536	\$4.4515	\$4.4077	\$4.2995	\$4.3588	\$4.3723	\$4.4202	\$4.4213	\$4.4234	\$4.4140	

TENNESSEE DRACUT

Basis
usage
fuel
Total Delivered

Basis	\$0.846	\$5.531	\$9.286	\$8.486	\$2.699	\$0.255	\$0.122	\$0.047	\$0.344	\$0.311	\$0.136	\$0.176	
usage	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	\$0.0366	
fuel	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	
Total Delivered	\$4.6533	\$9.5125	\$13.3506	\$12.5509	\$6.7156	\$4.1953	\$4.0791	\$4.0370	\$4.3697	\$4.3557	\$4.1833	\$4.2434	

TETCO ELA

Basis
Usage to M3
Usage on AGT
Fuel to M3
Fuel on AGT
Total Delivered

Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
Usage to M3	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel to M3	5.59%	6.35%	6.35%	6.35%	6.35%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.0162	\$4.2434	\$4.3319	\$4.3201	\$4.3093	\$4.1584	\$4.1765	\$4.2300	\$4.2599	\$4.2909	\$4.3016	\$4.2973	

TETCO ETX

Basis
Usage to M3
Usage on AGT
Fuel to M3
Fuel on AGT
Total Delivered

Basis	(\$0.099)	(\$0.064)	(\$0.082)	(\$0.112)	(\$0.110)	(\$0.104)	(\$0.160)	(\$0.101)	(\$0.055)	(\$0.099)	(\$0.118)	(\$0.078)	
Usage to M3	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	\$0.0568	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel to M3	5.45%	6.18%	6.18%	6.18%	6.18%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$3.9794	\$4.2315	\$4.2930	\$4.2628	\$4.2261	\$4.1171	\$4.0754	\$4.1737	\$4.2601	\$4.2334	\$4.2164	\$4.2804	

TETCO STX

Basis
Usage to M3
Usage on AGT
Fuel to M3
Fuel on AGT
Total Delivered

Basis	(\$0.073)	(\$0.087)	(\$0.092)	(\$0.092)	(\$0.080)	(\$0.087)	(\$0.090)	(\$0.077)	(\$0.065)	(\$0.063)	(\$0.075)	(\$0.098)	
Usage to M3	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	\$0.0626	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel to M3	5.41%	6.28%	6.28%	6.28%	6.28%	5.41%	5.41%	5.41%	5.41%	5.41%	5.41%	5.41%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.0113	\$4.2170	\$4.2925	\$4.2947	\$4.2688	\$4.1394	\$4.1543	\$4.2034	\$4.2535	\$4.2759	\$4.2663	\$4.2631	

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventux
SENDOUT@Version 12.5.5

25-Jul-2013

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
TETCO WLA													
Basis	(\$0.065)	(\$0.009)	(\$0.056)	(\$0.067)	(\$0.035)	(\$0.055)	(\$0.072)	(\$0.122)	(\$0.087)	\$0.008	(\$0.030)	(\$0.045)	
Usage to M3	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580	\$0.0580
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel to M3	5.59%	6.35%	6.35%	6.35%	6.35%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$4.0227	\$4.2997	\$4.3299	\$4.3202	\$4.3159	\$4.1767	\$4.1767	\$4.1585	\$4.2333	\$4.3552	\$4.3178	\$4.3231	
TETCO -> NF -> TRANSCO													
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
Usage to M2	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072
Usage on NF	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166	\$0.0166
Usage on Transco	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099	\$0.0099
Usage on AGT	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291
Fuel to M2	4.77%	5.38%	5.38%	5.38%	5.38%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%
Fuel on NF	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%	0.54%
Fuel on Transco	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Delivered to NF	\$4.2831	\$4.4920	\$4.5786	\$4.5670	\$4.5564	\$4.4406	\$4.4406	\$4.4931	\$4.5225	\$4.5530	\$4.5635	\$4.5593	\$4.5593
Delivered to Transco	\$4.3229	\$4.5329	\$4.6201	\$4.6084	\$4.5978	\$4.4634	\$4.4634	\$4.5343	\$4.5637	\$4.5943	\$4.6048	\$4.6006	\$4.6006
Delivered to Algonquin	\$4.3589	\$4.5702	\$4.6579	\$4.6461	\$4.6354	\$4.5002	\$4.5183	\$4.5714	\$4.6011	\$4.6319	\$4.6425	\$4.6383	\$4.6383
Total Delivered	\$4.6285	\$4.8502	\$4.9388	\$4.9269	\$4.9161	\$4.7711	\$4.7893	\$4.8429	\$4.8729	\$4.9040	\$4.9147	\$4.9105	
M3 DELIVERED													
Basis	(\$0.027)	\$0.283	\$0.595	\$0.538	\$0.015	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.128)	(\$0.127)	(\$0.248)	(\$0.228)	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.7817	\$4.2678	\$4.6591	\$4.6035	\$4.0383	\$3.7857	\$3.7615	\$3.8362	\$3.9008	\$3.9210	\$3.8019	\$3.8422	
COLUMBIA MAUMEE													
Basis	(\$0.083)	(\$0.083)	(\$0.088)	(\$0.092)	(\$0.105)	(\$0.093)	(\$0.112)	(\$0.183)	(\$0.198)	(\$0.207)	(\$0.232)	(\$0.250)	
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8184	\$3.9945	\$4.0667	\$4.0646	\$4.0141	\$3.9461	\$3.9440	\$3.9049	\$3.9255	\$3.9358	\$3.9131	\$3.9152	
COLUMBIA BROADRUN													
Basis	(\$0.083)	(\$0.083)	(\$0.088)	(\$0.092)	(\$0.105)	(\$0.093)	(\$0.112)	(\$0.183)	(\$0.198)	(\$0.207)	(\$0.232)	(\$0.250)	
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8184	\$3.9945	\$4.0667	\$4.0646	\$4.0141	\$3.9461	\$3.9440	\$3.9049	\$3.9255	\$3.9358	\$3.9131	\$3.9152	
COLUMBIA EAGLE													
Basis	(\$0.027)	\$0.283	\$0.595	\$0.538	\$0.015	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.128)	(\$0.127)	(\$0.248)	(\$0.228)	
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Total Delivered	\$3.8761	\$4.3719	\$4.7711	\$4.7143	\$4.1378	\$3.8802	\$3.8555	\$3.9317	\$3.9975	\$4.0181	\$3.8967	\$3.9378	

Ventux
SENDOUT@Version 12.5.5
25-Jul-2013

National Grid
2013 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

COLUMBIA DOWNINGTOWN

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	(\$0.014)	\$0.363	\$0.862	\$0.758	\$0.045	(\$0.157)	(\$0.198)	(\$0.157)	(\$0.091)	(\$0.114)	(\$0.251)	(\$0.231)	
Usage on Columbia	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	\$0.0190	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel on Columbia	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	1.957%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$3.8895	\$4.4544	\$5.0464	\$4.9412	\$4.1688	\$3.8802	\$3.8555	\$3.9317	\$4.0356	\$4.0315	\$3.8936	\$3.9348	

TETCO -> DTI -> TETCO

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
Usage on M2	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	\$0.4072	
Usage on Dominion	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	\$0.0234	
Usage on Tetco	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	
Usage on AGT	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	
Fuel to M2	4.77%	5.38%	5.38%	5.38%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	
Fuel on Dominion	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	
Fuel on Tetco	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Delivered to Dominion	\$4.2831	\$4.4920	\$4.5786	\$4.5670	\$4.5564	\$4.4227	\$4.4406	\$4.4931	\$4.5225	\$4.5530	\$4.5225	\$4.5593	
Delivered to Tetco	\$4.4321	\$4.6471	\$4.7363	\$4.7244	\$4.7135	\$4.5759	\$4.5943	\$4.6483	\$4.6786	\$4.7099	\$4.7207	\$4.7164	
Delivered to Algonquin	\$4.4918	\$4.7097	\$4.8000	\$4.7879	\$4.7769	\$4.6375	\$4.6561	\$4.7109	\$4.7415	\$4.7733	\$4.7842	\$4.7798	
Total Delivered	\$4.7627	\$4.9912	\$5.0825	\$5.0703	\$5.0591	\$4.9096	\$4.9284	\$4.9837	\$5.0146	\$5.0467	\$5.0577	\$5.0533	

TRANSCO ZONE 2

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	(\$0.023)	(\$0.021)	(\$0.004)	(\$0.018)	(\$0.008)	(\$0.033)	(\$0.026)	(\$0.016)	(\$0.009)	(\$0.026)	(\$0.033)	(\$0.053)	
Usage on Transco	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	\$0.04944	
Usage on Tetco	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel on Transco	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	3.93%	
Fuel on Tetco	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.0437	\$4.2281	\$4.3262	\$4.3134	\$4.2856	\$4.1757	\$4.2012	\$4.2470	\$4.2917	\$4.2938	\$4.2896	\$4.2896	

TRANSCO ZONE 3

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	\$0.002	\$0.001	\$0.005	\$0.003	\$0.003	\$0.013	\$0.020	\$0.003	\$0.003	\$0.016	(\$0.010)	(\$0.027)	
Usage on Transco	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	\$0.04478	
Usage on Tetco	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018	
Usage on AGT	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
Fuel on Transco	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	
Fuel on Tetco	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.0481	\$4.2285	\$4.3124	\$4.3124	\$4.2742	\$4.2018	\$4.2272	\$4.2442	\$4.2813	\$4.3152	\$4.2908	\$4.2940	

DAWN TO TENNESSEE - ANE II

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	\$0.390	\$0.270	\$0.210	\$0.240	\$0.290	\$0.227	\$0.220	\$0.193	\$0.127	\$0.114	\$0.154	\$0.161	
Transcanada usage	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
Transcanada pressure chg	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	\$0.0147	
Iroquois usage	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	\$0.0048	
Tenn usage	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	
Fuel on Union	0.840%	0.945%	1.086%	1.033%	0.972%	0.802%	0.567%	0.463%	0.451%	0.355%	0.352%	0.697%	
Fuel on TCPL	0.460%	0.510%	0.780%	0.720%	0.970%	0.520%	0.340%	0.230%	0.200%	0.130%	0.130%	0.180%	
Fuel on Iroquois	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	
Fuel on Tenn	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	
Total Delivered	\$4.3770	\$4.4290	\$4.4624	\$4.4905	\$4.5133	\$4.3481	\$4.3407	\$4.3377	\$4.3043	\$4.3034	\$4.3472	\$4.3916	

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventrx
SENDOUT@Version 12.5.5

25-Jul-2013

Natural Gas Supply VS. Requirements

Units: DTH

NIAGARA TO TENNESSEE

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total/Average
Basis	\$0.290	\$0.170	\$0.110	\$0.140	\$0.190	\$0.127	\$0.120	\$0.093	\$0.042	\$0.043	\$0.040	\$0.057	
Tenn usage	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	\$0.0896	
Tenn Fuel	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	
Total Delivered	\$4.1840	\$4.2285	\$4.2436	\$4.2760	\$4.2901	\$4.1547	\$4.1648	\$4.1709	\$4.1547	\$4.1749	\$4.1749	\$4.2123	
Tetco to B&W - SCT													
Basis	(\$0.070)	(\$0.060)	(\$0.053)	(\$0.066)	(\$0.040)	(\$0.071)	(\$0.071)	(\$0.054)	(\$0.061)	(\$0.051)	(\$0.044)	(\$0.068)	
usage on Tetco	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	\$0.5028	
usage on AGT	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	\$0.2291	
fuel to ZN 3	5.54%	6.32%	6.32%	6.32%	6.32%	5.54%	5.54%	5.54%	5.54%	5.54%	5.54%	5.54%	
Fuel on AGT	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$4.6803	\$4.9091	\$4.9976	\$4.9858	\$4.9750	\$4.8224	\$4.8406	\$4.8940	\$4.9239	\$4.9549	\$4.9656	\$4.9613	

Hubline

Basis	\$1.2570	\$4.4850	\$6.7480	\$5.8420	\$1.8680	\$0.2950	\$0.1250	\$0.2770	\$0.3100	\$0.2850	\$0.1520	\$0.1620	
usage	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	\$0.0130	
fuel	0.92%	1.10%	1.10%	1.10%	1.10%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Total Delivered	\$5.0776	\$8.5165	\$10.8805	\$9.9665	\$5.9119	\$4.2419	\$4.0875	\$4.2742	\$4.3428	\$4.3368	\$4.2056	\$4.2359	

Total Delivered to the City Gate Gas Supply Costs

TENN CONNEXION	348,000	359,600	359,600	324,800	359,600	348,000	332,700	285,700	353,800	189,100	195,200	359,600	
Delivered Mmbtu	\$3.853	\$4.022	\$4.104	\$4.096	\$4.065	\$3.975	\$3.991	\$4.038	\$4.087	\$4.110	\$4.100	\$4.098	
NYMEX \$/Mmbtu Del	\$1,340,742	\$1,446,427	\$1,475,794	\$1,330,255	\$1,461,863	\$1,383,372	\$1,327,776	\$1,153,664	\$1,446,064	\$777,252	\$800,281	\$1,473,535	
Total Delivered Cost	0	139,933	179,793	126,592	77,481	17,788	0	0	0	0	0	0	
Tennessee Zn 0	\$4.204	\$4.374	\$4.455	\$4.447	\$4.417	\$4.327	\$4.342	\$4.389	\$4.439	\$4.462	\$4.451	\$4.449	
Delivered Mmbtu	\$0	\$612,028	\$801,049	\$562,957	\$342,206	\$76,961	\$0	\$0	\$0	\$0	\$0	\$0	
NYMEX \$/Mmbtu Del	0	291,167	374,107	263,408	161,219	37,012	0	0	0	0	0	0	
Total Delivered Cost	\$4.164	\$4.322	\$4.454	\$4.451	\$4.408	\$4.299	\$4.359	\$4.372	\$4.420	\$4.421	\$4.423	\$4.414	
Total Delivered Cost	\$0	\$1,258,533	\$1,666,106	\$1,172,554	\$710,613	\$159,133	\$0	\$0	\$0	\$0	\$0	\$0	

TENN DRACUT

Delivered Mmbtu	0	95,000	134,000	44,000	27,000	141,500	132,600	89,200	0	0	0	25,200	
NYMEX \$/Mmbtu Del	\$4.65	\$4.322	\$4.454	\$4.451	\$4.408	\$4.299	\$4.359	\$4.372	\$4.420	\$4.421	\$4.423	\$4.414	
Total Delivered Cost	\$0	\$411,000	\$593,640	\$193,800	\$118,800	\$593,640	\$580,887	\$386,100	\$0	\$0	\$0	\$106,935	

TETCO ELA

Delivered Mmbtu	0	301,952	296,962	268,206	0	161,557	88,843	5,986	6,177	143,216	27,682	6,177	
NYMEX \$/Mmbtu Del	\$4.0162	\$4.2434	\$4.3319	\$4.3201	\$4.3093	\$4.1584	\$4.1765	\$4.2300	\$4.2599	\$4.2909	\$4.3016	\$4.2973	
Total Delivered Cost	\$0	\$1,281,302	\$1,286,419	\$1,158,668	\$0	\$671,811	\$371,055	\$25,322	\$26,314	\$614,529	\$119,079	\$26,545	

REDACTED

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventix
SENDOUT@Version 12.5.5
25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total(Average)
TETCO ETX													
Delivered Mmbtu	0	90,457	88,960	80,348	0	48,398	26,615	1,793	1,850	42,904	12,360	8,293	1,850
NYMEX \$/Mmbtu Del	\$3,9794	\$4,2315	\$4,2930	\$4,2628	\$4,2261	\$4,1171	\$4,0754	\$4,1737	\$4,2601	\$4,2334	\$4,2164	\$4,2804	\$4,2804
Total Delivered Cost	\$0	\$382,770	\$381,903	\$342,504	\$0	\$199,259	\$108,468	\$7,485	\$7,883	\$181,630	\$34,966	\$7,921	\$7,921
TETCO STX													
Delivered Mmbtu	0	134,823	132,593	119,756	0	72,136	39,669	2,673	2,758	63,947	12,360	2,758	2,758
NYMEX \$/Mmbtu Del	\$4,011	\$4,217	\$4,293	\$4,295	\$4,269	\$4,139	\$4,154	\$4,203	\$4,254	\$4,276	\$4,266	\$4,263	\$4,263
Total Delivered Cost	\$0	\$568,553	\$569,162	\$514,316	\$0	\$298,598	\$164,797	\$11,236	\$11,732	\$273,434	\$52,733	\$11,758	\$11,758
TETCO WLA													
Delivered Mmbtu	0	207,516	204,083	184,324	0	111,030	61,057	4,114	4,245	98,425	19,025	4,245	4,245
\$/Mmbtu Del	\$4,0227	\$4,2997	\$4,3299	\$4,3202	\$4,3159	\$4,1767	\$4,1767	\$4,1585	\$4,2333	\$4,3552	\$4,3178	\$4,3231	\$4,3231
Total Delivered Cost	\$0	\$892,251	\$883,661	\$796,317	\$0	\$463,734	\$255,016	\$17,109	\$17,971	\$428,661	\$82,144	\$18,352	\$18,352
TETCO -> NF -> TRANSCO													
Delivered Mmbtu	0	14,796	14,551	13,142	0	7,917	4,353	293	303	7,018	1,356	303	303
Delivered \$/Mmbtu	\$4,6285	\$4,8502	\$4,9388	\$4,9269	\$4,9161	\$4,7711	\$4,7893	\$4,8429	\$4,8729	\$4,9040	\$4,9147	\$4,9105	\$4,9105
Delivered Cost	\$0	\$71,763	\$71,866	\$64,752	\$0	\$37,770	\$20,850	\$1,421	\$1,475	\$34,415	\$6,667	\$1,486	\$1,486
M3 DELIVERED													
Delivered Mmbtu	1,502,100	704,400	508,400	300,100	1,759,200	1,613,800	1,035,100	516,500	301,000	306,700	438,800	930,000	930,000
Delivered \$/Mmbtu	\$3,7817	\$4,2678	\$4,6591	\$4,6035	\$4,0383	\$3,7857	\$3,7615	\$3,8362	\$3,9008	\$3,9210	\$3,8019	\$3,8422	\$3,8422
Delivered Cost	\$5,680,449	\$3,006,240	\$2,368,690	\$1,381,509	\$7,104,139	\$6,109,377	\$3,893,514	\$1,981,383	\$1,174,131	\$1,202,556	\$1,668,255	\$3,573,273	\$3,573,273
COLUMBIA MAUMEE													
Delivered Mmbtu	14,900	871,200	872,200	787,600	872,300	36,600	0	40,800	148,500	108,600	0	14,300	14,300
Delivered \$/Mmbtu	\$3,8184	\$3,9945	\$4,0667	\$4,0646	\$4,0141	\$3,9461	\$3,9440	\$3,9049	\$3,9255	\$3,9358	\$3,9131	\$3,9152	\$3,9152
Total Delivered Cost	\$56,895	\$3,479,995	\$3,546,955	\$3,201,290	\$3,501,482	\$144,426	\$0	\$159,320	\$582,935	\$427,426	\$0	\$55,987	\$55,987
COLUMBIA BROADRUN													
Delivered Mmbtu	0	300,600	300,900	271,800	300,900	29,100	0	0	0	3,600	0	0	0
Delivered \$/Mmbtu	\$3,8184	\$3,9945	\$4,0667	\$4,0646	\$4,0141	\$3,9461	\$3,9440	\$3,9049	\$3,9255	\$3,9358	\$3,9131	\$3,9152	\$3,9152
Total Delivered Cost	\$0	\$1,200,742	\$1,223,663	\$1,104,762	\$1,207,837	\$114,831	\$0	\$0	\$0	\$14,169	\$0	\$0	\$0
COLUMBIA EAGLE													
Delivered Mmbtu	0	0	80,600	5,100	24,600	69,400	45,500	0	0	0	0	0	0
Delivered \$/Mmbtu	\$3,8761	\$4,3719	\$4,7711	\$4,7143	\$4,1378	\$3,8002	\$3,8555	\$3,9317	\$3,9975	\$4,0181	\$3,8967	\$3,9378	\$3,9378
Delivered Cost	\$0	\$0	\$384,547	\$24,043	\$101,791	\$269,285	\$175,425	\$0	\$0	\$0	\$0	\$0	\$0
COLUMBIA DOWNINGTOWN													
Delivered Mmbtu	0	0	70,900	0	19,300	39,600	3,500	0	0	0	26,500	0	0
Delivered \$/Mmbtu	\$3,8895	\$4,4544	\$5,0464	\$4,9412	\$4,1688	\$3,8002	\$3,8555	\$3,9317	\$4,0356	\$4,0315	\$3,8936	\$3,9348	\$3,9348
Delivered Cost	\$0	\$0	\$357,791	\$0	\$80,457	\$153,656	\$13,494	\$0	\$0	\$0	\$103,180	\$0	\$0

REDACTED

National Grid
2013 Estimated GCR
Normal Weather Scenario

Ventix
SENDOUT@Version 12.5.5
25-Jul-2013

Natural Gas Supply VS. Requirements Units: DTH

TETCO -> DTI -> TETCO

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	Total(Average)
Delivered Mmbtu	0	8,782	8,636	7,800	0	4,699	2,584	174	180	4,165	805	180	180
Delivered \$/Mmbtu	\$4,7627	\$4,9912	\$5,0825	\$5,0703	\$5,0591	\$4,9096	\$4,9284	\$4,9837	\$5,0146	\$5,0467	\$5,0577	\$5,0533	\$5,0533
Delivered Cost	\$0	\$43,831	\$43,895	\$39,549	\$0	\$23,068	\$12,734	\$868	\$901	\$21,020	\$4,072	\$908	\$908

TRANSCO ZONE 2

Delivered Mmbtu	0	4,013	4,013	3,621	0	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$4,0437	\$4,2281	\$4,3262	\$4,3134	\$4,2856	\$4,1757	\$4,2012	\$4,2470	\$4,2917	\$4,2938	\$4,2896	\$4,2896	\$4,2896
Delivered Cost	\$0	\$16,966	\$17,360	\$15,620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TRANSCO ZONE 3

Delivered Mmbtu	0	85	85	77	0	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$4,0481	\$4,2285	\$4,3124	\$4,3124	\$4,2742	\$4,2018	\$4,2272	\$4,2442	\$4,2813	\$4,3152	\$4,2908	\$4,2940	\$4,2940
Delivered Cost	\$0	\$361	\$368	\$332	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

DAWN TO TENNESSEE - ANE II

Delivered Mmbtu	30,000	31,000	31,000	28,000	31,000	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$4,3770	\$4,4290	\$4,4624	\$4,4905	\$4,5133	\$4,3481	\$4,3407	\$4,3377	\$4,3043	\$4,3034	\$4,3472	\$4,3916	\$4,3916
Total Delivered Cost	\$131,310	\$137,298	\$138,334	\$125,734	\$139,913	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

NIAGARA TO TENNESSEE

Delivered Mmbtu	15,400	33,100	33,100	29,900	33,100	32,000	2,100	0	0	0	0	17,900	17,900
Delivered \$/Mmbtu	\$4,1840	\$4,2285	\$4,2436	\$4,2760	\$4,2901	\$4,1547	\$4,1648	\$4,1709	\$4,1547	\$4,1749	\$4,1749	\$4,2123	\$4,2123
Total Delivered Cost	\$64,434	\$139,962	\$140,464	\$127,852	\$142,003	\$132,950	\$8,746	\$0	\$0	\$0	\$0	\$75,400	\$75,400

Tetco to B&W - SCT

Delivered Mmbtu	0	33,575	33,020	29,823	0	17,964	9,879	666	687	15,925	3,078	687	687
Delivered \$/Mmbtu	\$4,6803	\$4,9091	\$4,9976	\$4,9858	\$4,9750	\$4,8224	\$4,8406	\$4,8940	\$4,9239	\$4,9549	\$4,9656	\$4,9613	\$4,9613
Total Delivered Cost	\$0	\$164,824	\$165,020	\$148,689	\$0	\$86,630	\$47,819	\$3,258	\$3,382	\$78,906	\$15,285	\$3,408	\$3,408

HUBLINE

Total Delivered Vol	0	92,000	92,100	83,200	0	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$5,0776	\$8,5165	\$10,8805	\$9,9665	\$5,9119	\$4,2419	\$4,0875	\$4,2742	\$4,3428	\$4,3368	\$4,2056	\$4,2359	\$4,2359
Total Delivered Cost	\$0	\$783,522	\$1,002,098	\$829,212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Total Pipeline Costs

Total Pipeline Costs	\$7,273,828	\$10,918,501	\$6,940,581	\$3,721,165	\$3,272,788	\$4,053,999	\$2,886,662	\$5,355,508	\$5,355,508	\$109,568,764	\$5,355,508	\$5,355,508	\$5,355,508
Total Pipeline Volumes	1,910,400	2,788,500	1,784,500	947,900	819,500	983,600	733,100	1,363,200	1,363,200	25,501,600	1,363,200	1,363,200	25,501,600
WACOG	\$3,8075	\$3,9155	\$3,8894	\$3,9257	\$3,9936	\$4,1216	\$3,9376	\$3,9286	\$3,9286	\$4,2965	\$3,9286	\$3,9286	\$4,2965

Injections

Value at WACOG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Pipeline Costs less Injections

Pipeline Costs less Injections	\$7,273,828	\$8,447,400	\$5,145,248	\$2,868,505	\$2,399,778	\$2,505,516	\$2,496,444	\$4,760,321	\$4,760,321	\$101,042,772	\$4,760,321	\$4,760,321	\$4,760,321
Pipeline Volumes less Injections	1,910,400	2,157,400	1,322,900	730,700	600,900	607,900	634,000	1,211,700	1,211,700	23,346,800	1,211,700	1,211,700	23,346,800

NYMEX cost of Supplies

Non-gas cost of delivered supplies	\$7,185,014	\$8,403,073	\$5,175,185	\$2,882,612	\$2,391,582	\$2,430,992	\$2,537,268	\$4,873,457	\$4,873,457	\$92,165,541	\$4,873,457	\$4,873,457	\$4,873,457
------------------------------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------------	-------------	-------------	-------------

\$0.3802

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-5
FT-2 Operational Parameters

Operational Parameters
Non-Daily Metered FT-2 Storage and Peaking Resources

The following Operational Parameters are pursuant to RIPUC NG No. 101, Section 6, Schedule C:

Effective Period: November 1, 2013 through October 31, 2014

Underground Storage:

Maximum Inventory Level at any time is 100% of MSQ-U
Injections are not allowed.

Minimum Inventory Levels:

November 1	95%
November 15	95%
December 1	95%
December 15	92%
January 1	88%
January 15	77%
February 1	64%
February 15	54%
March 1	44%
March 15	41%
April 1	38%

Peaking Inventory:

Inventory Level allocated on November 1, 2012 = MSQ-P
Injections are not allowed.

Minimum Inventory Levels:

November 1	100%
January 1	92%
February 1	30%
March 1	25%
April 1	5%

MSQ-U Maximum Storage Quantity - Underground
MDQ-U Maximum Daily Quantity - Underground
MSQ-P Maximum Storage Quantity - Peaking
MDQ-P Maximum Daily Quantity - Peaking

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ELIZABETH D. ARANGIO
SEPTEMBER 3, 2013

Attachment EDA-6
FT-2 Storage Variable Costs

FT-2 Storage Variable Costs

SLF - Weighted Average Loss Factor on Storage Withdrawals

Storage	Withdrawals	Fuel %	Fuel Vol.	Fuel Avg.
TENN 501	575,100	0.00%	0	
GSS 300170	0	0.00%	0	
GSS 300168	42,700	0.00%	0	
GSS 300171	112,000	0.00%	0	
GSS-TE 600045	324,900	0.00%	0	
TETCO 400515	14,200	0.86%	122	
TETCO 400221	594,000	3.20%	19,008	
TETCO 400185	0	3.20%	0	
GSS 300169	107,900	0.00%	0	
COL FSS 9630	184,400	0.00%	0	
TENN 62918	<u>199,500</u>	0.00%	<u>0</u>	
	2,154,700		19,130	0.8878%

WWCC - Weighted Average Commodity Cost of Storage Withdrawals

Storage	Withdrawals	Unit Cost	Cost	Average
TENN 501	575,100	\$0.0087	\$5,003	
GSS 300170	0	\$0.0188	\$0	
GSS 300168	42,700	\$0.0188	\$803	
GSS 300171	112,000	\$0.0188	\$2,106	
GSS-TE 600045	324,900	\$0.0248	\$8,058	
TETCO 400515	14,078	\$0.0357	\$503	
TETCO 400221	574,992	\$0.0520	\$29,900	
TETCO 400185	0	\$0.0520	\$0	
GSS 300169	107,900	\$0.0188	\$2,029	
COL FSS 9630	184,400	\$0.0153	\$2,821	
TENN 62918	<u>199,500</u>	\$0.0087	<u>\$1,736</u>	
	2,135,570		\$52,957	\$0.0248

PLF - Weighted Average Loss Factor on Pipeline Contracts Used to Deliver Storage Withdrawals

Storage	Transported	Fuel %	Fuel Vol.	Fuel Avg.
TENN 501	575,100		1.38%	7,936
GSS 300170	0	2.85%	1.38%	0
GSS 300168	42,700		1.38%	589
GSS 300171	112,000	1.29%	1.10%	2,661
GSS-TE 600045	324,900	1.50%	1.10%	8,394
TETCO 400515	14,078	3.35%	1.10%	621
TETCO 400221	574,992		1.10%	6,325
TETCO 400185	0		1.10%	0
GSS 300169	107,900	2.85%	1.10%	4,228
COL FSS 9630	184,400	1.957%	1.10%	5,597
TENN 62918	<u>199,500</u>		1.38%	<u>2,753</u>
	2,135,570			39,105
				1.8311%

PCC - Weighted Average Commodity Cost on Pipeline Contracts Used to Deliver Storage Withdrawals

Storage	Withdrawals	Unit Cost	Cost	Average
TENN 501	567,300		\$0.1188	\$67,395
GSS 300170	0	\$0.0234	\$0.1188	\$0
GSS 300168	42,100		\$0.1188	\$5,001
GSS 300171	109,500	\$0.0018	\$0.0130	\$1,621
GSS-TE 600045	316,700	\$0.0018	\$0.0130	\$4,687
TETCO 400515	13,300	\$0.0304	\$0.0130	\$577
TETCO 400221	570,000		\$0.0130	\$7,410
TETCO 400185	0		\$0.0130	\$0
GSS 300169	103,800	\$0.0234	\$0.0018	\$3,965
COL FSS 9630	178,900	\$0.0188	\$0.0130	\$5,689
TENN 62918	<u>196,700</u>		\$0.1188	<u>\$23,368</u>
	2,098,300			\$119,714
				\$0.0571

DIRECT TESTIMONY

OF

ANN E. LEARY

September 3, 2013

Table of Contents

I. Introduction..... 1

II. GCR Rate Development Overview..... 3

III. GCR rate development details 4

IV. Bill Impacts..... 11

1 **I. Introduction**

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

3 A. My name is Ann E. Leary. My business address is 40 Sylvan Road, Waltham,
4 Massachusetts, 02451.

5

6 **Q. What is your position and responsibilities?**

7 A. I am the Manager of New England Gas Pricing for National Grid USA Service
8 Company, Inc. As such, I am responsible for preparing and submitting various
9 regulatory filings with the Rhode Island Public Utilities Commission
10 (“Commission”) on behalf of The Narragansett Electric Company d/b/a National
11 Grid (“Company”), and the Massachusetts Department of Public Utilities on
12 behalf of Boston Gas Company and Colonial Gas Company each d/b/a National
13 Grid.

14

15 **Q. Please describe your educational and professional background.**

16 A. I received a Bachelor of Science in Mechanical Engineering from Cornell
17 University in 1983. In 1985, I joined the Essex County Gas Company as Staff
18 Engineer. In 1987, I became a planning analyst and later accepted the position of
19 Manager of Rates. Following the merger with Eastern Enterprises in 1998, I
20 became Manager of Pricing for Boston Gas Company. After the merger with

1 KeySpan Energy Delivery, subsequently National Grid, I became the Manager of
2 New England Gas Pricing, the position I hold today.

3
4 **Q. Have you previously testified or appeared before this Commission?**

5 A. I have not testified previously before this Commission. However, I have
6 submitted pre-filed testimony in the Company's 2012 Rate Case Filing,
7 Docket No. 4323 and last year's Gas Cost Recovery ("GCR") Filing, Docket No.
8 4346. In addition, I have testified extensively in several ratemaking and
9 regulatory proceedings before the Massachusetts Department of Public Utilities
10 and the New Hampshire Public Utilities Commission.

11
12 **Q. What is the purpose of your testimony?**

13 A. The purpose of this testimony is to explain the GCR charges to be effective on
14 November 1, 2013 for the following services: (1) Firm sales service customers in
15 the Residential Non-Heating and Heating rate classes as well as Commercial and
16 Industrial ("C&I") firm sales customers in the Small, Medium, Large and Extra
17 Large rate classes and (2) Gas Marketer Fixed Charges and factors associated
18 with transportation services billed to Gas Marketers.

1 **Q. How is your testimony organized?**

2 A. My testimony is composed of four general sections:

3 I. Introduction; II. GCR Rate Development Overview; III. GCR Rate

4 Development Details; and IV. Bill Impacts.

5

6 **Q. Are you including any Attachments with your testimony?**

7 A. Yes. I am sponsoring the following Attachments:

8 Attachment AEL-1 Gas Cost Recovery Factors

9 Attachment AEL-2 Annual GCR Reconciliation Filing

10 Attachment AEL-3 Projected Gas Cost Balances

11 Attachment AEL-4 Bill Impact Analysis

12 Attachment AEL-5 FT-2 Demand Rate

13 Attachment AEL-6 FT-2 Capacity Allocator Percentages

14 Attachment AEL-7 Marketer Reconciliation

15

16 **II. GCR Rate Development Overview**

17 **Q. Please provide an overview of the development of the proposed GCR rates.**

18 A. The proposed GCR rates reflect the load specific (high load and low load) factors
19 necessary for the Company to collect the projected gas costs allocated to firm
20 customers for the period November 1, 2013 through October 31, 2014. As shown
21 in the testimony of Ms. Arangio on Attachment EDA-1, firm customers' gas costs

1 for the period are projected to be approximately \$153.8 million for the twelve
2 months ended October 2014. In addition to these projected costs, the GCR factors
3 also reflect Working Capital Costs of approximately \$0.9 million (Attachment
4 AEL-1, page 2, line 9 and page 3, line 5), Inventory Financing Costs of
5 approximately \$1.9 million (Attachment AEL-1, page 3, lines 8-9), a prior period
6 Deferred Balance of approximately \$11.9 million including the Marketer Fixed
7 Cost Reconciliation (Attachment AEL-1, page 2, line 10-11 and page 3, line 6)
8 based on actual data through July 2013 and forecast data for the period August
9 2013 through October 2013, LNG Operation and Maintenance (“O&M”) Costs of
10 approximately \$1.1 million (Docket No. 4323) (Attachment AEL-1, page 2, line 8
11 and page 3, line 7), a \$1.5 million credit associated with FT-2 Marketer Storage
12 Demand costs (Attachment AEL-1, page 2, line 4), and a credit of approximately
13 \$1.5 million associated with LNG Costs (Attachment AEL-1, page 2, line 5)
14 which will be collected via the Distribution Adjustment Clause (“DAC”) factor.
15 Thus, the GCR factors are intended to recover approximately \$166.6 million in
16 costs over the period November 2013 through October 2014.

17
18 **III. GCR Rate Development Details**

19 **Q. At a high level, please explain how the proposed GCR Rates were derived.**

20 A. The proposed GCR rates were developed utilizing Fixed and Variable cost
21 components. Attachment AEL-1 provides a summary of the GCR fixed and

1 variable gas cost components used to derive the rates for which the Company
2 seeks approval in this filing for effect November 1, 2013.

3
4 **Q. Please describe how the fixed cost component of the proposed GCR was**
5 **developed.**

6 A. The fixed cost component includes all of the fixed costs related to the purchase,
7 storage, and delivery of firm gas for both the high load factor and low load factor
8 customers. As shown on Attachment AEL-1, page 2, the fixed cost component is
9 derived by taking the total fixed costs (net of Capacity Release), less any credits
10 such as Natural Gas Portfolio Management Plan (“NGPMP”) customer credits,
11 LNG Demand costs allocated to the DAC, and storage demand costs billed to FT-
12 2 Marketers. The FT-2 storage demand costs are calculated by multiplying the
13 FT-2 Demand Charge rate by the forecast of storage and peaking Maximum Daily
14 Quantity (“MDQ”) to be billed to FT-2 Marketers. Adjustments are also made for
15 Supply-related LNG costs, working capital costs, and prior period Deferred Fixed
16 Gas Costs under/over-collection balances, including an adjustment for the
17 Marketer Fixed Cost Reconciliation as stipulated in the settlement agreement
18 between the Company and the Division in Docket No. 4199. This results in total
19 Fixed Gas Costs of \$31,530,147 that are to be collected over the period November
20 2013 through October 2014. Finally, because the Company’s gas-supply
21 resources are planned so that there is sufficient capacity to meet the needs of firm

1 sales customers under design winter conditions, the total Fixed Gas Costs are
2 allocated to the various rate classes based on their proportion of design-winter
3 use. The factor rates are derived using the allocated supply fixed costs and
4 dividing them by the projected throughput for the upcoming year for each class.
5 In this case the High Load classes would be expected to use 4.07 percent of the
6 total throughput or 1,301,599 Dths, while the Low Load classes would use the
7 remaining 95.93 percent or 24,718,392 Dths. Accordingly, the GCR Fixed Low
8 Load Factor of \$1.2236 per dekatherm while the GCR Fixed High Load Factor is
9 \$0.9861 per dekatherm.

10

11 **Q. Please describe how the Company calculated the Marketer Fixed Cost**
12 **Reconciliation Balance?**

13 A. In accordance with the Settlement Agreement approved in Docket No. 4199, the
14 Company includes an annual reconciliation of Marketer Fixed Costs. The
15 Company calculated the Marketer Reconciliation by updating the 2012/2013
16 pipeline surcharge/credit for each path based on actual instead of projected
17 pipeline capacity costs. The Company then compared the pipeline
18 surcharge/credit approved in Docket No. 4346 for each path with the updated
19 actual pipeline surcharge/credit and multiplied this variance by the Marketer's
20 actual monthly capacity for the months of November 2012 through July 2013 and
21 forecasted monthly capacity for the months of August 2013 through October

1 2013. This resulted in a Marketer Credit of \$78,323. The Company also included
2 an update to the 2011/2012 Marketer Reconciliation to replace the Marketers'
3 forecasted monthly capacity for the months of September and October 2012 with
4 their actual monthly capacity and to recalculate the 2011/2012 Marketer
5 Reconciliation. In addition, the Company reconciled the actual revenues billed to
6 Marketers during the period November 2012 through October 2013 with the
7 actual 2011/2012 Marketer reconciliation. This resulted in a Marketer Surcharge
8 of \$86,528 for the 2011/2012 period. Therefore, the overall total Marketer
9 Reconciliation for the two year period netted to \$8,205. Attachment AEL-7
10 shows the calculation of the Marketer reconciliation adjustment for both the
11 2011/2012 and 2012/2013 periods. In addition to crediting firm sales customers
12 fixed costs for this amount, the Company included this reconciliation in its
13 calculation of the 2013/2014 pipeline surcharge/credits detailed in Ms. Arangio's
14 testimony. See Attachment EDA-4.

15

16 **Q. How did the Company develop its design winter calculations?**

17 A. The Company developed its design winter calculation using calendar month
18 degree days consistent with Commission's finding in Docket No. 4097.

1 **Q. Please describe how the variable cost component was derived.**

2 A. The variable cost component includes all variable costs of gas such as commodity
3 costs, supply-related LNG O&M, working capital, inventory finance costs,
4 pipeline refunds, and deferred cost balances. As shown on Attachment AEL-1,
5 page 3, line 11, the total Variable Costs for the period November 2013 through
6 October 2014 is \$135,102,948. The variable costs are divided by the projected
7 period throughput of 26,019,992 Dths to obtain a variable cost factor of \$5.1922
8 per Dth.

9

10 **Q. What is the Company's estimate of the deferred gas cost balance at the end**
11 **of the current GCR period?**

12 A. Based on actual data through July 2013 and forecasted data for the period August
13 2013 through October 2013, the total estimated deferred balance at October 31,
14 2013 is an under collection of \$11,859,371 as shown in Attachment AEL-1,
15 page 6. This balance is incorporated into the development of the GCR rates for
16 the period November 1, 2013 to October 31, 2014. In addition, the projected
17 deferred gas cost balances for the November 2013 through October 2014 period
18 are shown on Attachment AEL-3.

19

1 **Q. Is the Company proposing any changes to the GCR deferral balance for the**
2 **period April 2012 through March 2013 filed with the Commission on July 1,**
3 **2013?**

4 A. Yes. During the preparation of the July 2013 Monthly Deferred Gas Cost Report
5 the Company determined that Off System capacity credits had been added back to
6 the variable category instead of the fixed category. Consequently in Attachment
7 AEL-2, the Company has reallocated gas costs between the fixed and variable
8 categories for the period April 2012 through October 2012 causing the balance in
9 the Supply Fixed Cost Deferred (the fixed category) to increase by \$847,011 and
10 the balance in the Supply Variable Cost Deferred (the variable category) to
11 decrease by \$847,011. However, the total deferred balance at the end of October
12 2012 remained the same (a credit of \$148,383).

13
14 **Q. Are there other rates the Company is proposing in this filing?**

15 A. Yes. Consistent with the modifications in Docket No. 4270, the Company is
16 submitting for approval its FT-2 marketer demand rate of \$9.7373 per MDQ in
17 Dth/month as shown in Attachment AEL-5. In addition, the Company is also
18 submitting for approval the capacity assignment percentages for the high load and
19 low load factors to be used in the determination of pipeline, underground storage,
20 and peaking capacity for Marketers. These percentages are set forth in
21 Attachment AEL-6.

1 **Q. Please describe how the proposed FT-2 marketer demand rate is calculated.**

2 A. It is worth noting that the FT-2 rate design approved in Docket No.4270 separates
3 storage costs into two components: (1) the FT-2 Demand rate designed to recover
4 the fixed costs associated with storage and peaking, which the Company is
5 submitting for approval in this filing, and (2) the FT-2 variable rate that is
6 designed to recover variable underground storage costs as well as the associated
7 commodity costs and loss factors associated with pipeline contracts to bring the
8 gas from storage to the city gate. In addition, marketers may purchase peaking
9 inventory at the Company's cost of LNG inventory.

10

11 The FT-2 storage demand rate is derived by adding the total fixed storage costs,
12 associated inventory finance, working capital charges, and supply-related LNG
13 O&M costs less any LNG demand credits assigned to the DAC and refunds, if
14 applicable. That total is then divided by the total storage and peaking MDQ for
15 the year to derive a monthly per dekatherm rate to be charged to Marketers. As
16 shown in Attachment AEL-5, the proposed FT-2 marketer demand rate is \$9.7373
17 per Dth and will be applied to the Marketers' storage and peaking MDQ.

1 **IV. Bill Impacts**

2 **Q. What is the combined bill impact of the proposed DAC and GCR rates on**
3 **customer bills as compared to the rates currently in effect?**

4 A. An average residential heating customer using 846 therms per year will
5 experience a total bill decrease related to the proposed GCR and DAC rates of
6 approximately \$15 or an annual 1.3 percent decrease over the current existing
7 rates. This decrease is comprised of an \$8 decrease in GCR-related costs and an
8 \$7 decrease in the DAC-related costs filed today under separate cover, Docket
9 No. 4431. A summary of annual bill impacts for customers with various levels of
10 usage is provided on Attachment AEL-4.

11

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

13 A. Yes.

**Attachments of
Ann E. Leary**

Attachments of Ann E. Leary

- Attachment AEL-1 Gas Cost Recovery Factors
- Attachment AEL-2 Annual GCR Reconciliation Filing
- Attachment AEL-3 Projected Gas Cost Balances
- Attachment AEL-4 Bill Impact Analysis
- Attachment AEL-5 FT-2 Demand Rate
- Attachment AEL-6 FT-2 Capacity Allocator Percentages
- Attachment AEL-7 Marketer Reconciliation

**Attachment AEL-1
REDACTED**

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANNE E. LEARY
SEPTEMBER 3, 2013

Attachment AEL-1
Gas Cost Recovery Factors

**National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Factors Effective November 1, 2013**

Line No.	Description (a)	Source		High Load ¹ (d)	Low Load ² (e)	FT-2 Mktet ³ (f)
		Reference (b)	Line # (c)			
(1)	Fixed Cost Factor	AEL-1 pg 2	Line (17)	\$0.9861	\$1.2236	
(2)	Variable Cost Factor	AEL-1 pg 3	Line (13)	\$5.1922	\$5.1922	
(3)	Total Gas Cost Recovery Charge	(1) + (2)		\$6.1783	\$6.4158	
(4)	Uncollectible %	Docket 4323		3.18%	3.18%	
(5)	Total GCR Charge adjusted for Uncollectibles	(3) / [1 - (4)]		\$6.3812	\$6.6265	
(6)	GCR Charge on a per therm basis	(5) / 10		\$0.6381	\$0.6626	
(7)	Current rate effective 02/01/13*			\$0.6240	\$0.6725	
(8)	Increase (Decrease)	(6) - (7)		\$0.0141	(\$0.0099)	
(9)	Percent Increase (Decrease)	(8) / (7)		2.3%	-1.5%	

* GCR rates approved with the rate case changes per Dkt 4323 Compliance Filing filed on January 24, 2013

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

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

³ See AEL-5 for calculation of FT-2 rate

REDACTED

**National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Fixed Cost Calculation (\$ per Dth)**

Line No.	Description	Source		Amount	High Load Factor Total	Low Load Factor Total
		Reference	Line #			
(a)		(b)	(c)	(d)	(e)	(f)
(1)	Fixed Costs (net of Cap Rel to marketers)	AEL-1 pg 4	Line (59)	\$44,878,613		
	Less:					
(2)	NGPMP Customer Benefit	EDA-1		(\$6,900,000)		
(3)	Interruptible Costs			\$0		
(4)	FT-2 Storage Demand Costs	AEL-5 pg 3	Line (5)	(\$1,542,334)		
(5)	LNG Demand to DAC*			(\$1,488,790)		
(6)	Refunds			\$0		
(7)	Total Credits	sum[(2):(6)]		(\$9,931,124)		
	Plus:					
(8)	Supply Related LNG O&M Costs	Dkt 4323	Compliance Attachment 6 Schedule MDL-3-GAS	\$575,581		
(9)	Working Capital Requirement	AEL-1 pg 8	Line (16)	\$260,649		
(10)	Deferred Fixed Cost Under/(Over)-recovered	AEL-1 pg 6	Line (17)	(\$4,245,368)		
(11)	Reconciliation Amount from Fixed costs- Marketers	AEL-7 pg 2	Line (51)	(\$8,205)		
(12)	Total Additions	sum[(8):(11)]		(\$3,417,343)		
(13)	Total Fixed Costs	(1) + (7) + (12)		\$31,530,147		
(14)	Design Winter Sales Percentage	AEL-1 pg 12	Lines (10) & (11)		4.07%	95.93%
(15)	Allocated Supply Fixed Costs	(13) x (14)		\$1,283,585		\$30,246,561
(16)	Sales (Dt) Nov 2013 - Oct 2014	AEL-1 pg 11	Line (9)	26,019,992	1,301,599	24,718,392
(17)	Fixed Factor	(15) / (16)		\$0.9861	\$0.9861	\$1.2236

* System Balancing Factor (Dkt 4339)
Line (16)
Col (e): AEL-1, page 11, Line 9, Sum of Line (1), (6), (8)
Col (f): AEL-1, page 11, Line 9, Sum of Line (2)-(5) and (7)

**National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Variable Cost Calculation (\$ per Dth)**

Line No.	Description	Source		
		Reference (b)	Line # (c)	Amount (d)
(1)	Variable Costs, excluding Refunds	AEL-1 pg 5	Line (90) - Line (84)	\$115,846,905
Less:				
(2)	Non-Firm Sales			\$0
(3)	Refunds	AEL-1 pg 5	Line (84)	\$0
(4)	Total Credits	sum [(2):(3)]		\$0
Plus:				
(5)	Working Capital	AEL-1 pg 8	Line (32)	\$690,195
6)	Deferred Variable Cost Under/(Over)-recovered	AEL-1 pg 6	Line (34)	\$16,104,739
7)	Supply Related LNG O&M	Docket 4323	Compliance Attachment 6 Schedule MDL-3-GAS	\$572,694
(8)	Inventory Financing - LNG	AEL-1 pg 10	Line (22)	\$403,203
(9)	Inventory Financing - Storage	AEL-1 pg 10	Line (12)	\$1,485,211
(10)	Total Additions	sum [(5):(9)]		\$19,256,043
(11)	Total Variable Supply Costs	(1) + (4) + (10)		\$135,102,948
(12)	Sales (Dt) Nov 2013 - Oct 2014	AEL-1 pg 11	Line (9)	26,019,992
(13)	Variable Cost Factor	(11) / (12)		\$5.1922

National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
GCR - Gas Cost Revenue

Line No.	Description	Reference	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Total Nov-Oct
(a)	(g)	(b)	EST (c)	EST (d)	EST (e)	EST (f)	EST (g)	EST (h)	EST (i)	EST (j)	EST (k)	EST (l)	EST (m)	EST (n)	(o)
(1)	Fixed Cost Revenue --														
(2)	(a) Low Load db	AEL-1 pg 11, sum[Line (2)-(5), (7)]	1,418,075	2,758,290	4,396,501	4,355,280	3,931,818	2,754,413	1,736,273	913,242	593,740	540,693	607,899	712,167	24,718,392
(3)	Fixed Cost Factor	AEL-1 pg 1, (e)	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236	\$1,2236
(4)	Low Load Revenue	(2) * (3)	\$1,735,156	\$3,375,044	\$5,379,559	\$5,329,121	\$4,810,973	\$3,370,300	\$2,124,504	\$1,117,443	\$726,501	\$661,593	\$743,825	\$871,407	\$30,245,426
(5)	(b) High Load db	AEL-1 pg 11, sum[Line (1), (6), (8)]	87,874	137,873	180,931	183,806	154,146	121,689	103,050	82,002	58,819	59,053	66,328	66,029	1,301,599
(6)	Fixed Cost Factor	AEL-1 pg 1, (d)	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861	\$0,9861
(7)	High Load Revenue	(5) * (6)	\$86,652	\$135,956	\$178,416	\$181,251	\$152,003	\$119,997	\$101,618	\$80,863	\$58,002	\$58,232	\$65,406	\$65,111	\$1,283,507
(8)	sub-total Db	(2) + (5)	1,505,949	2,896,163	4,577,432	4,539,086	4,085,964	2,876,102	1,839,323	995,244	652,559	599,747	674,227	778,196	26,019,992
(9)	FT-2 Storage Revenue from marketers	[AEL-5 pg 3, Line (5)] / 12	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$128,528	\$1,542,334
(10)	TOTAL Fixed Revenue	(4) + (7) + (9)	\$1,950,336	\$3,639,528	\$5,686,503	\$5,638,900	\$5,091,504	\$3,618,825	\$2,354,650	\$1,326,834	\$913,031	\$848,353	\$937,759	\$1,065,046	\$33,071,267
(11)	Variable Cost Revenue --														
(12)	(a) Firms Sales db	(8)	1,505,949	2,896,163	4,577,432	4,539,086	4,085,964	2,876,102	1,839,323	995,244	652,559	599,747	674,227	778,196	26,019,992
(13)	Variable Cost Factor	AEL-1 pg 1, Line (2)	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922	\$5,1922
(14)	Variable Revenue	(12) * (13)	\$7,819,186	\$15,037,460	\$23,766,942	\$23,567,844	\$21,215,141	\$14,933,295	\$9,550,155	\$5,167,506	\$3,388,219	\$3,114,005	\$3,500,719	\$4,040,549	\$135,101,001
(15)	TOTAL Variable Revenue	(14)	\$7,819,186	\$15,037,460	\$23,766,942	\$23,567,844	\$21,215,141	\$14,933,295	\$9,550,155	\$5,167,506	\$3,388,219	\$3,114,005	\$3,500,719	\$4,040,549	\$135,101,001
(16)	Total Gas Cost Revenue	(10) + (15)	\$9,769,522	\$18,676,988	\$29,453,445	\$29,206,744	\$26,306,645	\$18,552,120	\$11,904,785	\$6,494,340	\$4,301,250	\$3,962,358	\$4,438,478	\$5,105,595	\$168,172,268

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

Line No.	Description	Source	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	
(1)	Fixed Costs														
(2)	Capacity Release Revenue		\$3,612,331	\$3,610,980	\$3,597,759	\$3,610,980	\$3,883,894	\$3,883,894	\$3,883,894	\$3,883,894	\$3,883,894	\$3,883,894	\$3,883,894	\$3,883,894	\$44,878,613
(3)	Less LNG Demand to DAC														\$0
(4)	Less Credits														\$0
(5)	Plus Supply Related LNG O&M Costs														\$0
(6)	Allowable Working Capital Costs		\$3,536,230	\$3,534,879	\$3,521,659	\$3,534,879	\$3,807,794	\$3,807,794	\$3,807,794	\$3,807,794	\$3,807,794	\$3,807,794	\$3,807,794	\$3,807,794	\$43,965,405
(7)	Number of Days Lag		21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	
(8)	Working Capital Requirement		\$187,436	\$208,395	\$208,316	\$207,537	\$208,316	\$224,399	\$224,438	\$224,399	\$224,438	\$224,438	\$224,399	\$224,438	
(9)	Cost of Capital		7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	
(10)	Return on Working Capital Requirement		\$14,133	\$15,713	\$15,707	\$15,648	\$15,707	\$16,920	\$16,923	\$16,920	\$16,923	\$16,923	\$16,920	\$16,923	
(11)	Weighted Cost of Debt		2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	
(12)	Interest Expense		\$5,361	\$5,960	\$5,958	\$5,936	\$5,958	\$6,418	\$6,419	\$6,418	\$6,419	\$6,419	\$6,418	\$6,419	
(13)	Taxable Income		\$8,772	\$9,753	\$9,749	\$9,713	\$9,749	\$10,502	\$10,504	\$10,502	\$10,504	\$10,504	\$10,502	\$10,504	
(14)	1- Combined Tax Rate		0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(15)	Return and Tax Requirement		\$1,495	\$15,004	\$14,999	\$14,943	\$14,999	\$16,157	\$16,160	\$16,157	\$16,160	\$16,160	\$16,157	\$16,160	
(16)	Fixed Working Capital Requirement		\$18,856	\$20,965	\$20,957	\$20,878	\$20,957	\$22,575	\$22,578	\$22,575	\$22,578	\$22,578	\$22,575	\$22,578	\$260,649
(17)	Variable Costs														
(18)	Less Non-firm Sales		\$8,249,149	\$18,664,818	\$25,322,396	\$18,163,370	\$16,185,502	\$8,458,754	\$5,224,887	\$2,910,252	\$2,514,688	\$2,616,451	\$2,599,204	\$4,937,433	\$115,846,905
(19)	Less Supply Refunds		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(20)	Less Balancing Related LNG Commodity to DAC		\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$47,725	\$572,694
(21)	Plus Supply Related LNG O&M Costs		\$8,296,874	\$18,712,543	\$25,370,121	\$18,211,095	\$16,233,227	\$8,506,479	\$5,272,611	\$2,957,976	\$2,562,412	\$2,664,176	\$2,646,929	\$4,985,158	\$116,419,600
(22)	Allowable Working Capital Costs														\$0
(23)	Number of Days Lag		21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	
(24)	Working Capital Requirement		\$488,947	\$1,102,758	\$1,495,099	\$1,073,207	\$956,649	\$501,300	\$310,723	\$174,318	\$151,007	\$157,004	\$155,988	\$293,783	
(25)	Cost of Capital		7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	
(26)	Return on Working Capital Requirement		\$36,867	\$83,148	\$112,730	\$80,920	\$72,131	\$37,798	\$23,429	\$13,144	\$11,386	\$11,838	\$11,761	\$22,151	
(27)	Weighted Cost of Debt		2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	
(28)	Interest Expense		\$13,984	\$31,539	\$42,760	\$30,604	\$27,360	\$14,337	\$8,887	\$4,985	\$4,319	\$4,490	\$4,461	\$8,402	
(29)	Taxable Income		\$22,883	\$51,609	\$69,971	\$50,226	\$44,771	\$23,461	\$14,542	\$8,158	\$7,067	\$7,348	\$7,300	\$13,749	
(30)	1- Combined Tax Rate		0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(31)	Return and Tax Requirement		\$3,204	\$79,399	\$107,647	\$77,271	\$68,879	\$36,094	\$22,372	\$12,551	\$10,872	\$11,304	\$11,231	\$21,152	
(32)	Variable Working Capital Requirement		\$49,188	\$110,937	\$150,407	\$107,965	\$96,239	\$50,431	\$31,259	\$17,536	\$15,191	\$15,795	\$15,692	\$29,555	\$690,195

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

Line No.	Description (a)	Source (b)	Nov-13 (c)	Dec-13 (d)	Jan-14 (e)	Feb-14 (f)	Mar-14 (g)	Apr-14 (h)	May-14 (i)	Jun-14 (j)	Jul-14 (k)	Aug-14 (l)	Sep-14 (m)	Oct-14 (n)	Total (o)
(1)	Storage Inventory Balance	EDA-2 pg 15	\$18,117,591	\$17,807,638	\$13,668,212	\$10,021,728	\$9,432,858	\$11,918,109	\$13,723,792	\$14,581,322	\$15,459,233	\$17,016,140	\$17,408,579	\$18,007,163	
(2)	Hedging														
(3)	Subtotal	(1) + (2)	\$18,117,591	\$17,807,638	\$13,668,212	\$10,021,728	\$9,432,858	\$11,918,109	\$13,723,792	\$14,581,322	\$15,459,233	\$17,016,140	\$17,408,579	\$18,007,163	
(4)	Cost of Capital	Dkt 4323	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	
(5)	Return on Working Capital Requirement	(3) * (4)	\$1,366,066	\$1,342,696	\$1,030,583	\$755,638	\$711,237	\$898,625	\$1,034,774	\$1,099,432	\$1,165,626	\$1,283,017	\$1,312,607	\$1,357,740	\$13,358,042
(6)	Weighted Cost of Debt	Dkt 4323	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	
(7)	Interest Charges Financed	(3) * (6)	\$518,163	\$509,298	\$390,911	\$286,621	\$269,780	\$340,858	\$392,500	\$417,026	\$442,134	\$486,662	\$497,885	\$515,005	\$5,066,844
(8)	Taxable Income	(5) - (7)	\$847,903	\$833,397	\$639,672	\$469,017	\$441,458	\$557,767	\$642,273	\$682,406	\$723,492	\$796,355	\$814,721	\$842,735	
(9)	1 - Combined Tax Rate	Dkt 4323	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(10)	Return and Tax Requirement	(8) / (9)	\$1,304,467	\$1,282,150	\$984,111	\$721,564	\$679,166	\$858,104	\$988,113	\$1,049,855	\$1,113,065	\$1,225,162	\$1,253,418	\$1,296,516	\$12,755,690
(11)	Working Capital Requirement	(7) + (10)	\$1,822,630	\$1,791,448	\$1,375,022	\$1,008,186	\$948,945	\$1,198,962	\$1,380,613	\$1,466,881	\$1,555,199	\$1,711,824	\$1,751,303	\$1,811,521	\$17,822,534
(12)	Storage-Related Inventory Costs	(11) / 12	\$151,886	\$149,287	\$114,585	\$84,015	\$79,079	\$99,913	\$115,051	\$122,240	\$129,600	\$142,652	\$145,942	\$150,960	\$1,485,211
(13)	LNG Inventory Balance	EDA-2 pg 17	\$4,952,267	\$4,841,166	\$3,612,215	\$3,511,939	\$3,400,838	\$3,293,725	\$3,978,859	\$3,874,034	\$3,765,307	\$3,656,580	\$4,339,856	\$4,869,046	
(14)	Cost of Capital	Dkt 4323	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	7.54%	
(15)	Return on Working Capital Requirement	(13) * (14)	\$373,401	\$365,024	\$272,361	\$264,800	\$256,423	\$248,347	\$300,006	\$292,102	\$283,904	\$275,706	\$327,225	\$367,126	\$3,626,426
(16)	Weighted Cost of Debt	Dkt 4323	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	2.86%	
(17)	Interest Charges Financed	(13) * (16)	\$141,635	\$138,457	\$103,309	\$100,441	\$97,264	\$94,201	\$113,795	\$110,797	\$107,688	\$104,578	\$124,120	\$139,255	\$1,375,541
(18)	Taxable Income	(15) - (17)	\$231,766	\$226,567	\$169,052	\$164,359	\$159,159	\$154,146	\$186,211	\$181,305	\$176,216	\$171,128	\$203,105	\$227,871	
(19)	1 - Combined Tax Rate	Dkt 4323	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(20)	Return and Tax Requirement	(18) / (19)	\$356,563	\$348,564	\$260,079	\$252,860	\$244,860	\$237,148	\$286,478	\$278,930	\$271,102	\$263,274	\$312,470	\$350,571	\$3,462,900
(21)	Working Capital Requirement	(17) + (20)	\$498,198	\$487,021	\$363,389	\$353,301	\$342,124	\$331,349	\$400,273	\$389,728	\$378,790	\$367,852	\$436,589	\$489,826	\$4,838,441
(22)	LNG-Related Inventory Costs	(21) / 12	\$41,517	\$40,585	\$30,282	\$29,442	\$28,510	\$27,612	\$33,356	\$32,477	\$31,566	\$30,654	\$36,382	\$40,819	\$403,203
(23)	Total Inventory Financing Costs	(12) + (22)	\$193,402	\$189,872	\$144,868	\$113,457	\$107,589	\$127,526	\$148,407	\$154,717	\$161,166	\$173,306	\$182,324	\$191,779	\$1,888,415

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

Line No.	Rate Class	Nov-13 (b)	Dec-13 (c)	Jan-14 (d)	Feb-14 (e)	Mar-14 (f)	Apr-14 (g)	May-14 (h)	Jun-14 (i)	Jul-14 (j)	Aug-14 (k)	Sep-14 (l)	Oct-14 (m)	Nov-Oct (n)
SALES														
(1)	Residential Non-Heating	48,298	78,202	111,021	119,337	79,602	64,567	56,216	40,932	31,123	28,396	28,939	35,495	722,127
(2)	Residential Heating	1,055,948	2,069,091	3,227,307	3,227,172	2,949,996	2,054,509	1,275,453	688,829	437,527	393,560	433,919	517,838	18,331,149
(3)	Small C&I	124,881	233,848	444,412	414,368	376,672	269,937	159,601	84,920	59,686	56,067	66,038	65,130	2,355,561
(4)	Medium C&I	186,170	370,627	562,298	543,651	458,524	333,691	238,327	114,110	85,700	82,463	96,679	110,387	3,182,627
(5)	Large LLF	42,606	72,572	138,611	120,494	113,482	81,281	51,268	20,793	8,108	6,150	8,860	15,368	679,593
(6)	Large HLF	19,549	27,341	33,329	30,838	40,345	32,335	29,078	24,298	15,985	17,362	22,925	17,302	310,688
(7)	Extra Large LLF	8,471	12,152	23,873	49,595	33,144	14,996	11,624	4,590	2,719	2,454	2,402	3,444	169,463
(8)	Extra Large HLF	20,026	32,330	36,881	33,631	34,199	24,786	17,756	16,773	11,712	13,295	14,464	13,231	268,785
(9)	Total Sales	1,505,949	2,896,163	4,577,432	4,539,086	4,085,964	2,876,102	1,839,323	995,244	652,559	599,747	674,227	778,196	26,019,992
FT-2 TRANSPORTATION														
(10)	FT-2 Small	2,250	1,677	1,644	2,553	592	301	349	0	334	1,686	1,713	2,024	15,122
(11)	FT-2 Medium	99,416	182,756	229,232	249,175	209,203	148,289	104,886	57,962	44,096	39,692	40,531	58,730	1,463,968
(12)	FT-2 Large LLF	71,916	147,025	210,595	203,883	190,357	133,483	83,410	31,997	14,511	11,871	15,623	33,531	1,148,201
(13)	FT-2 Large HLF	27,348	36,880	43,227	43,445	45,947	35,891	30,471	26,027	20,370	18,515	26,819	21,522	376,461
(14)	FT-2 Extra Large LLF	2,178	5,869	5,957	5,318	5,607	3,892	2,519	580	271	165	307	1,080	33,744
(15)	FT-2 Extra Large HLF	15,340	21,701	21,601	21,564	29,303	20,129	19,681	17,236	14,412	15,764	16,308	15,293	228,331
(16)	Total FT-2 Transportation	218,449	395,907	512,256	525,938	481,008	341,986	241,317	133,802	93,993	87,693	101,298	132,180	3,265,827
FT-1 TRANSPORTATION														
(17)	FT-1 Medium	75,961	89,799	104,946	88,940	67,379	47,458	34,458	26,220	23,512	24,654	28,213	43,268	654,810
(18)	FT-1 Large LLF	112,508	175,072	195,903	164,513	147,152	88,741	51,055	20,787	15,816	15,832	22,628	58,022	1,068,028
(19)	FT-1 Large HLF	47,894	51,467	60,893	53,292	43,961	36,491	33,824	32,265	28,372	32,098	32,029	36,828	489,413
(20)	FT-1 Extra Large LLF	156,341	229,787	253,708	218,727	242,805	113,410	57,857	13,905	10,422	10,486	18,510	75,864	1,401,823
(21)	FT-1 Extra Large HLF	488,352	567,299	608,160	525,332	567,501	445,859	408,806	389,972	393,779	394,024	381,336	430,343	5,600,761
(22)	Total FT-1 Transportation	881,056	1,113,424	1,223,610	1,050,804	1,068,798	731,959	586,000	483,150	471,900	477,094	482,716	644,325	9,214,835
Total THROUGHPUT														
(23)	Residential Non-Heating	48,298	78,202	111,021	119,337	79,602	64,567	56,216	40,932	31,123	28,396	28,939	35,495	722,127
(24)	Residential Heating	1,055,948	2,069,091	3,227,307	3,227,172	2,949,996	2,054,509	1,275,453	688,829	437,527	393,560	433,919	517,838	18,331,149
(25)	Small C&I	127,131	235,525	446,056	416,921	377,264	270,238	159,950	84,920	60,020	57,753	67,751	67,154	2,370,683
(26)	Medium C&I	361,547	643,182	896,477	881,766	755,106	529,439	377,672	198,292	153,309	146,809	165,423	212,386	5,301,406
(27)	Large LLF	227,029	394,669	545,109	488,890	450,991	303,505	185,732	73,578	38,435	33,853	47,110	106,920	2,895,821
(28)	Large HLF	94,792	115,687	137,449	127,574	130,253	104,717	63,744	82,589	64,726	67,975	81,772	75,653	1,176,561
(29)	Extra Large LLF	166,990	247,809	283,538	273,641	281,556	132,298	72,001	19,075	13,411	13,105	21,219	80,389	1,605,030
(30)	Extra Large HLF	523,718	621,329	666,342	580,527	631,002	490,774	446,243	423,981	419,902	423,083	412,107	458,867	6,097,877
(31)	Total Throughput	2,605,454	4,405,494	6,313,298	6,115,828	5,653,770	3,950,046	2,666,640	1,612,196	1,218,453	1,164,534	1,258,241	1,554,701	38,500,653

**National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Design Winter Period and Design Day Throughput (Dth)**

Line No.	Rate Class	Nov-13 (b)	Dec-13 (c)	Jan-14 (d)	Feb-14 (e)	Mar-14 (f)	Total (g)	% (h)
<u>SALES (dth)</u>								
(1)	Residential Non-Heating	70,781	110,056	112,404	104,621	94,489	492,351	2.42%
(2)	Residential Heating	1,917,520	3,306,255	3,390,536	3,173,499	2,747,592	14,535,402	71.34%
(3)	Small C&I	245,845	418,267	428,715	400,996	349,014	1,842,836	9.04%
(4)	Medium C&I	329,189	553,915	567,513	530,515	463,778	2,444,910	12.00%
(5)	Large LLF	72,302	131,721	135,348	127,030	107,681	574,081	2.82%
(6)	Large HLF	26,850	35,228	35,704	32,877	32,073	162,733	0.80%
(7)	Extra Large LLF	18,999	34,182	35,107	32,930	28,046	149,264	0.73%
(8)	Extra Large HLF	26,114	38,643	39,384	36,550	33,727	174,418	0.86%
(9)	Total Sales	2,707,601	4,628,266	4,744,712	4,439,018	3,856,399	20,375,996	100.00%
(10)	Low Load Factor	2,583,855	4,444,340	4,557,219	4,264,970	3,696,111	19,546,494	95.93%
(11)	High Load Factor	123,746	183,927	187,493	174,048	160,288	829,502	4.07%

2013/2014 Design Day Sendout

(12)	Pipeline	179,129	Dktherm
(13)	Underground Storage	42,414	Dktherm
(14)	LNG	106,911	Dktherm
(15)	Total Projected 2013/2014 Design Day	328,454	Dktherm

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013

Attachment AEL-2
Annual GCR Reconciliation Filing

Attachment I

Deferred Gas Cost Balances

Line No.	Description	Reference	Apr-12		May-12		Jun-12		Jul-12		Aug-12		Sep-12		Oct-12		Apr-Oct-12		
			actual	30	31	actual	30	31	actual	30	31	actual	30	31	actual	30	31	actual	30
(1)	# of Days in Month	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)
(2)	I Supply Fixed Cost Deferred																		
(3)	Beginning Balance ¹		\$3,622,411	\$3,020,019	\$3,892,081	\$5,481,140	\$6,810,786	\$9,415,840	\$9,415,840	\$3,622,411	\$9,415,840	\$3,622,411	\$9,415,840	\$3,622,411	\$9,415,840	\$3,622,411	\$9,415,840	\$3,622,411	\$9,415,840
(4)	Supply Fixed Costs (net of cap rel)	Sch 2, line (27)	\$2,432,548	\$2,367,266	\$2,621,717	\$2,220,707	\$2,432,620	\$2,479,734	\$2,432,620	\$2,479,734	\$2,432,620	\$2,479,734	\$2,432,620	\$2,479,734	\$2,432,620	\$2,479,734	\$2,432,620	\$2,479,734	\$2,432,620
(5)	Capacity Release		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6)	NGPMP Credits ²		(\$1,040,994)	(\$326,667)	(\$326,667)	(\$326,667)	(\$1,000,942)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)
(7)	Working Capital		\$1,407,698	\$2,066,310	\$1,739,399	\$1,908,779	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822
(8)	Total Supply Fixed Costs	sum(4)-(7)	\$2,013,501	\$1,879,053	\$1,412,712	\$1,808,112	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822	\$2,169,524	\$1,447,822
(9)	Supply Fixed - Revenue	Sch 3, line (9)	\$3,016,608	\$3,888,414	\$5,476,328	\$6,804,265	\$7,732,163	\$9,407,032	\$7,732,163	\$9,407,032	\$7,732,163	\$9,407,032	\$7,732,163	\$9,407,032	\$7,732,163	\$9,407,032	\$7,732,163	\$9,407,032	\$7,732,163
(10)	Prelim Ending Balance	(3) + (8) - (9)	\$3,319,510	\$3,464,216	\$4,684,204	\$6,142,703	\$7,271,475	\$8,573,457	\$6,142,703	\$8,573,457	\$6,142,703	\$8,573,457	\$6,142,703	\$8,573,457	\$6,142,703	\$8,573,457	\$6,142,703	\$8,573,457	\$6,142,703
(11)	Month's Average Balance	[(3) + (10)] / 2	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%	1.25%	1.25%	1.25%	1.25%
(12)	Interest Rate (BOA Prime minus 200 bps)		\$3,410	\$3,667	\$4,813	\$6,521	\$7,720	\$8,808	\$6,521	\$8,808	\$6,521	\$8,808	\$6,521	\$8,808	\$6,521	\$8,808	\$6,521	\$8,808	\$6,521
(13)	Interest Applied	[(11) * (12)] / 365 * (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(14)	GPIP		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(15)	Marketer Reconciliation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(16)	Supply Fixed Ending Balance	(10)+(13)+(14)+(15)	\$3,020,019	\$3,892,081	\$5,481,140	\$6,810,786	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840	\$9,415,840
(17)	II Storage Fixed Cost Deferred																		
(18)	Beginning Balance ¹		(\$3,655,954)	(\$782,521)	(\$774,727)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)
(19)	Storage Fixed Costs	Sch 2, line (67)	\$782,521	\$774,727	\$436,007	\$727,807	\$854,264	\$693,819	\$727,807	\$854,264	\$693,819	\$727,807	\$854,264	\$693,819	\$727,807	\$854,264	\$693,819	\$727,807	\$854,264
(20)	LNG Demand to DAC	Dkt 4269	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)	(\$52,389)
(21)	Supply Related LNG O & M	Rate Case	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549
(22)	Working Capital		\$5,188	\$5,136	\$2,888	\$4,825	\$5,664	\$4,825	\$4,825	\$5,664	\$4,825	\$4,825	\$5,664	\$4,825	\$4,825	\$5,664	\$4,825	\$4,825	\$5,664
(23)	Total Storage Fixed Costs	sum(19)-(22)	\$786,869	\$779,023	\$438,055	\$731,792	\$859,088	\$697,578	\$731,792	\$859,088	\$697,578	\$731,792	\$859,088	\$697,578	\$731,792	\$859,088	\$697,578	\$731,792	\$859,088
(24)	Storage Fixed - Revenue	Sch 3, line (21)	\$833,736	\$503,208	\$319,134	\$251,493	\$213,051	\$206,487	\$251,493	\$213,051	\$206,487	\$251,493	\$213,051	\$206,487	\$251,493	\$213,051	\$206,487	\$251,493	\$213,051
(25)	Prelim Ending Balance	(18) + (23) - (24)	(\$3,702,821)	(\$3,430,786)	(\$3,315,653)	(\$2,838,822)	(\$2,196,054)	(\$1,707,637)	(\$2,838,822)	(\$2,196,054)	(\$1,707,637)	(\$2,838,822)	(\$2,196,054)	(\$1,707,637)	(\$2,838,822)	(\$2,196,054)	(\$1,707,637)	(\$2,838,822)	(\$2,196,054)
(26)	Month's Average Balance	[(18) + (25)] / 2	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%	1.25%	1.25%	1.25%	1.25%
(27)	Interest Rate (BOA Prime minus 200 bps)		(\$3,780)	(\$3,789)	(\$3,789)	(\$3,269)	(\$2,674)	(\$2,007)	(\$3,269)	(\$2,674)	(\$2,007)	(\$3,269)	(\$2,674)	(\$2,007)	(\$3,269)	(\$2,674)	(\$2,007)	(\$3,269)	(\$2,674)
(28)	Interest Applied	[(26) * (27)] / 365 * (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(29)	Storage Fixed Ending Balance	(25)+(28)	(\$3,706,601)	(\$3,434,575)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)	(\$3,319,121)	(\$2,842,091)	(\$2,198,728)
(30)	III Supply Variable Cost Deferred																		
(31)	Beginning Balance ¹		(\$8,665,808)	(\$8,531,790)	(\$8,942,935)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)
(32)	Variable Supply Costs	Sch 2, line (120)	\$8,531,790	\$8,942,935	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485	\$11,848,485
(33)	Variable Delivery Storage	Sch 2, line (105)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)	(\$1,764)
(34)	Variable Injections Storage	Sch 2, line (106)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)	(\$6,359)
(35)	Fuel Cost Allocated to Storage	Sch 2, line (107)	(\$10,078)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)	(\$14,899)
(36)	Working Capital	Sch 5, line (43)	\$56,501	\$39,267	\$21,140	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449	\$20,449
(37)	Total Supply Variable Costs	sum(32)-(36)	\$8,570,090	\$9,955,975	\$13,206,576	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676	\$13,101,676
(38)	Supply Variable - Revenue	Sch 3, line (36)	\$11,743,654	\$7,026,260	\$4,262,652	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510	\$3,457,510
(39)	Deferred Responsibility		(\$1,420)	(\$1,629)	(\$471)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)
(40)	Prelim Ending Balance	(31) + (37) - (38) - (39)	(\$11,837,952)	(\$12,917,141)	(\$13,985,893)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)	(\$14,355,509)
(41)	Month's Average Balance	[(31) + (40)] / 2	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%	1.25%	1.25%	1.25%	1.25%
(42)	Interest Rate (BOA Prime minus 200 bps)		(\$10,251,880)	(\$12,382,813)	(\$13,458,090)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)	(\$14,177,614)
(43)	Interest Applied	[(41) * (42)] / 365 * (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(44)	Gas Procurement Incentive/(penalty) ³	(40) + (43) + (44)	(\$11,848,485)	(\$12,930,287)	(\$13,999,720)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)	(\$14,370,561)
(45)	Supply Variable Ending Balance		(\$8,665,808)	(\$8,531,790)	(\$8,942,935)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)	(\$11,848,485)

Attachment I

Deferred Gas Cost Balances

Line No.	Description	Reference	Apr-12		May-12		Jun-12		Jul-12		Aug-12		Sep-12		Oct-12		Apr-Oct-12	
			actual	30	actual	31	actual	31	actual	31	actual	31	actual	31	actual	31	actual	31
(46)	IV. Storage Variable Product Cost Deferred																	
(47)	Beginning Balance ¹		\$7,189,013	\$5,581,359	\$6,314,234	\$4,703,516	\$4,795,321	\$4,748,538	\$4,663,393	\$86,177	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,189,013
(48)	Storage Variable Prod. Costs - LNG	Sch 2, line (98)	\$81,388	\$73,019	\$96,291	\$117,174	\$95,605	\$84,405	\$86,177	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$634,059
(49)	Storage Variable Prod. Costs - LP		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(50)	Storage Variable Prod. Costs - UG		\$317,500	\$1,751,151	(\$1,117,579)	\$390,861	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$201,916	\$1,936,307
(51)	Supply Related LNG to DAC	Dkt 4269	(\$14,747)	(\$13,231)	(\$17,448)	(\$21,232)	(\$17,324)	(\$15,294)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$15,615)	(\$14,891)
(52)	Supply Related LNG O & M	Rate Case	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$35,844	\$250,909
(53)	Inventory Financing - LNG	Sch 4, line (25)	\$22,626	\$22,303	\$25,323	\$26,583	\$29,052	\$28,930	\$28,870	\$28,870	\$28,870	\$28,870	\$28,870	\$28,870	\$28,870	\$28,870	\$28,870	\$183,687
(54)	Inventory Financing - UG	Sch 4, line (12)	\$137,160	\$147,763	\$174,044	\$181,249	\$184,096	\$193,361	\$196,039	\$196,039	\$196,039	\$196,039	\$196,039	\$196,039	\$196,039	\$196,039	\$196,039	\$1,213,711
(55)	Inventory Financing - LP		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(56)	Working Capital	Sch 5, line (57)	\$2,787	\$12,256	(\$6,656)	\$3,469	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$2,097	\$17,961
(57)	Total Storage Variable Product Costs	sum(48)-(56)]	\$582,557	\$2,029,106	(\$810,181)	\$733,948	\$531,287	\$468,106	\$586,920	\$586,920	\$586,920	\$586,920	\$586,920	\$586,920	\$586,920	\$586,920	\$586,920	\$4,121,742
(58)	Storage Variable Product Revenue	Sch 3, line (40)	\$2,196,768	\$1,302,541	\$806,194	\$647,183	\$583,134	\$558,083	\$583,134	\$583,134	\$583,134	\$583,134	\$583,134	\$583,134	\$583,134	\$583,134	\$583,134	\$6,831,768
(59)	Prelim. Ending Balance	(47) + (57) - (58)	\$5,574,802	\$6,307,923	\$4,697,860	\$4,790,282	\$4,743,474	\$4,658,561	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,512,447	\$4,478,987
(60)	Month's Average Balance	[(47) + (59)] / 2	\$6,381,907	\$5,944,641	\$5,506,047	\$4,746,899	\$4,769,398	\$4,703,516	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920	\$4,587,920
(61)	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%	1.25%	1.25%	1.25%	\$38,331
(62)	Interest Applied	[(60) * (61)] / 365 * (1)	\$6,557	\$6,311	\$5,657	\$5,040	\$5,063	\$4,832	\$4,871	\$4,871	\$4,871	\$4,871	\$4,871	\$4,871	\$4,871	\$4,871	\$4,871	\$4,517,318
(63)	Storage Variable Product Ending Bal	(59) + (62)	\$5,581,359	\$6,314,234	\$4,703,516	\$4,795,321	\$4,748,538	\$4,663,393	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318	\$4,517,318

IV. Storage Variable Non-Product Cost Deferred

(64)	Beginning Balance ¹		\$29,222	(\$21,676)	(\$32,647)	(\$29,422)	(\$25,209)	(\$24,826)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	\$29,222
(65)	Storage Variable Non-product Costs		\$8,386	\$7,661	\$12,060	\$9,495	\$4,700	\$3,892	\$5,614	\$5,614	\$5,614	\$5,614	\$5,614	\$5,614	\$5,614	\$5,614	\$5,614	\$11,808
(66)	Variable Delivery Storage Costs	(33)	\$1,764	\$1,716	\$2,756	\$2,196	\$1,093	\$916	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$11,761
(67)	Variable Injection Storage Costs	(34)	\$6,359	\$9,612	\$5,558	\$4,822	\$4,514	\$5,065	\$4,883	\$4,883	\$4,883	\$4,883	\$4,883	\$4,883	\$4,883	\$4,883	\$4,883	\$40,812
(68)	Fuel Costs Allocated to Storage	(35)	\$10,078	\$14,899	\$9,989	\$9,500	\$9,821	\$9,742	\$9,521	\$9,521	\$9,521	\$9,521	\$9,521	\$9,521	\$9,521	\$9,521	\$9,521	\$73,551
(69)	Working Capital	Sch 5, line (70)	\$176	\$225	\$202	\$173	\$134	\$130	\$142	\$142	\$142	\$142	\$142	\$142	\$142	\$142	\$142	\$1,181
(70)	Total Storage Var Non-product Costs	sum(66)-(70)]	\$26,763	\$34,113	\$30,565	\$26,185	\$20,262	\$19,746	\$21,479	\$21,479	\$21,479	\$21,479	\$21,479	\$21,479	\$21,479	\$21,479	\$21,479	\$179,113
(71)	Storage Var Non-Product Revenue	Sch 3, line (49)	\$77,664	\$45,055	\$27,309	\$21,943	\$19,852	\$19,295	\$25,963	\$25,963	\$25,963	\$25,963	\$25,963	\$25,963	\$25,963	\$25,963	\$25,963	\$237,080
(72)	Prelim. Ending Balance	(65) + (71) - (72)	(\$21,679)	(\$32,618)	(\$29,300)	(\$25,180)	(\$24,799)	(\$24,374)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$24,883)	(\$28,746)
(73)	Month's Average Balance	[(65) + (73)] / 2	\$3,771	\$27,147	(\$27,301)	(\$27,301)	(\$25,004)	(\$24,600)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$26,641)	(\$28,746)
(74)	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%	1.25%	1.25%	1.25%	\$166
(75)	Interest Applied	[(74) * (75)] / 365 * (1)	\$4	(\$29)	(\$32)	(\$29)	(\$27)	(\$25)	(\$28)	(\$28)	(\$28)	(\$28)	(\$28)	(\$28)	(\$28)	(\$28)	(\$28)	(\$166)
(76)	Storage Var Non-Product Ending Bal	(73) + (76)	(\$21,676)	(\$32,647)	(\$29,422)	(\$25,209)	(\$24,826)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$24,399)	(\$28,911)

GCR Deferred Summary

(78)	Beginning Balance		(\$1,481,116)	(\$6,975,384)	(\$6,191,194)	(\$7,163,606)	(\$5,631,754)	(\$3,602,078)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,481,116)
(79)	Gas Costs	sum((4),(5),(15),(19),(21),(32),(35),(48),(55),(66),(69))	\$12,334,175	\$11,108,598	\$5,469,158	\$6,785,393	\$7,450,998	\$6,193,486	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$7,387,181	\$56,728,989
(80)	NGPMP Credits ²	(6)	(\$1,040,994)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$326,667)	(\$3,675,270)
(81)	Working Capital	(7)+(22)+(36)+(56)+(70)	\$80,796	\$72,595	\$34,973	\$43,653	\$48,035	\$39,628	\$47,533	\$47,533	\$47,533	\$47,533	\$47,533	\$47,533	\$47,533	\$47,533	\$47,533	\$367,213
(82)	Total Costs	sum(80)-(82)]	\$11,373,977	\$10,854,526	\$5,177,465	\$6,502,379	\$6,498,091	\$5,906,447	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$7,108,407	\$53,420,932
(83)	Revenue	Sch 3, line (51)	\$16,863,904	\$10,063,350	\$6,143,020	\$4,963,738	\$4,463,516	\$4,270,540	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$5,641,971	\$52,410,039
(84)	Prelim. Ending Balance	(79) + (83) - (84)	(\$6,971,043)	(\$6,184,208)	(\$7,156,749)	(\$5,624,965)	(\$5,597,179)	(\$5,624,965)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$5,902,955)	(\$470,223)
(85)	Month's Average Balance	[(79) + (85)] / 2	(\$4,226,079)	(\$6,579,796)	(\$6,673,971)	(\$6,394,286)	(\$4,614,466)	(\$4,784,125)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$5,255,993)	(\$470,223)
(86)	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%	1.25%	1.25%	1.25%	(\$34,044)
(87)	Interest Applied	[(86) * (87)] / 365 * (1)	(\$4,342)	(\$6,985)	(\$6,857)	(\$6,788)	(\$4,899)	(\$2,860)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$1,312)	(\$34,044)
(88)	Gas Procurement Incentive/penalty ³	(44)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$355,884
(89)	Ending Bal. W/ Interest ⁴	(85) + (88) + (89)	(\$6,975,384)	(\$6,191,194)	(\$5,163,606)	(\$5,631,754)	(\$3,602,078)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$1,969,031)	(\$148,383)

¹ Ending balances in Attachment I of Annual Gas Cost Recovery Reconciliation Report filed on August 1, 2012
² Based on Docket No. 4038 National Grid Natural Gas Portfolio Management Plan quarterly and annual filings
³ As approved in Docket No. 4346 Gas Cost Recovery Filing
⁴ Represents under/(over)-recovery

Attachment I

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct-12 (i)
(1)	SUPPLY FIXED COSTS - Pipeline Delivery									
(2)	Algonquin		\$854,731	\$714,262	\$213,577	\$902,244	\$871,178	\$870,363	\$874,052	\$5,300,408
(3)	Alberta Northeast		\$539	\$516	\$495	\$499	\$541	\$592	\$552	\$3,734
(4)	Texas Eastern		\$762,149	\$781,929	\$940,981	\$716,124	\$854,450	\$857,131	\$859,519	\$5,772,282
(5)	TETCO		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6)	Tennessee		\$984,807	\$1,116,884	\$530,724	\$976,370	\$1,016,446	\$1,016,219	\$1,015,024	\$6,656,473
(7)	NETNE		\$6,676	\$0	\$6,066	\$6,676	\$6,686	\$6,686	\$6,676	\$0
(8)	Iroquois		\$2,528	\$2,529	\$2,485	\$2,444	\$2,470	\$2,460	\$2,566	\$39,468
(9)	Union									\$17,482
(10)	Transcanada									\$0
(11)	Dominion		\$2,311	\$2,311	\$85,698	\$0	\$4,623	\$2,311	\$2,311	\$99,566
(12)	Transco		\$22,766	(\$9,708)	\$6,552	\$6,432	\$6,618	\$6,404	\$6,404	\$45,468
(13)	National Fuel		\$4,182	\$4,182	\$4,663	\$5,143	\$4,182	\$5,139	\$4,663	\$32,156
(14)	Columbia		\$306,213	\$302,680	\$203,707	\$288,676	\$262,468	\$319,659	\$305,438	\$1,988,842
(15)	Hubline									\$0
(16)	Westerly Lateral		\$56,324	\$56,324	\$53,326	\$56,326	\$56,324	\$56,324	\$56,324	\$391,271
(17)	BG LNG Energy		\$38,924	\$11,475	\$38,924	(\$27,045)	\$269	(\$327)	\$0	\$62,219
(18)	NJR Energy				\$208,759	\$0	\$0	\$0	\$0	\$208,759
(19)	Louis Dreyfus Energy				\$1,063,471	\$0	\$0	\$0	\$0	\$1,063,471
(20)	GDF Suez		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(21)	East to West									\$0
(22)	Less Credits from Mkter Releases		(\$609,603)	(\$616,118)	(\$737,711)	(\$713,183)	(\$653,633)	(\$663,227)	(\$662,587)	(\$4,656,062)
(23)	TOTAL SUPPLY FIXED COSTS - Pipeline	sum[(2):(22)]	2,432,548	2,367,266	2,621,717	2,220,707	2,432,620	2,479,734	2,470,943	\$17,025,536
(24)	Supplier									
(25)	Distrigas FCS	(25)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(26)	Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(27)	Total Supply Fixed (Pipeline & Supplier)	(23) + (26)	\$2,432,548	\$2,367,266	\$2,621,717	\$2,220,707	\$2,432,620	\$2,479,734	\$2,470,943	\$17,025,536
(28)	STORAGE FIXED COSTS - Facilities									
(29)	Texas Eastern SS-1 Demand		\$88,182	(\$296)	\$0	\$87,781	\$97,176	(\$9,205)	\$0	\$263,637
(30)	Texas Eastern SS-1 Capacity									\$0
(31)	Texas Eastern FSS-1 Demand									\$0
(32)	Texas Eastern FSS-1 Capacity									\$0
(33)	Dominion GSS Demand		\$83,283	\$100,500	\$0	\$83,387	\$83,387	\$83,387	\$83,387	\$517,330
(34)	Dominion GSS Capacity									\$0
(35)	Dominion GSS-TE Demand									\$0
(36)	Dominion GSS-TE Capacity									\$0
(37)	Tennessee FSMA Demand		\$49,804	\$43,128	\$54,891	\$49,804	\$49,804	\$54,496	\$49,804	\$351,730
(38)	Tennessee FSMA Capacity		\$0	\$0	\$0	\$8,775	\$19,459	\$10	\$0	\$0
(39)	Columbia FSS Demand		\$0	(\$11,046)	\$0	(\$614)	\$0	\$0	\$0	\$28,244
(40)	Columbia FSS Capacity		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(41)	Iroquois		\$163,740	\$163,740	\$163,740	\$163,740	\$163,740	\$163,740	\$163,740	\$1,146,180
(42)	Repsol		\$385,009	\$296,024	\$218,631	\$392,872	\$413,566	\$292,428	\$296,931	\$2,295,462
(43)	Keyspan LNG Tank Lease Payment									
(44)	STORAGE FACILITIES FIXED COST \$	sum[(29):(43)]	\$1,026,936	\$1,026,936	\$1,026,936	\$1,026,936	\$1,026,936	\$1,026,936	\$1,026,936	\$1,026,936

Attachment I

Supply Estimate and Actuals for Filing

Line No	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct'12 (j)
(45)	STORAGE FIXED COSTS - Delivery									
(46)	Algonquin for TETCO SS-1		\$137,174	\$197,016	\$0	\$67,083	\$136,721	\$136,808	\$138,133	\$812,935
(47)	Algonquin delivery for FSS									\$0
(48)	TETCO delivery for FSS									\$0
(49)	Algonquin SCT for SS-1									\$0
(50)	Algonquin delivery for GSS, GSS-TE,									\$0
(51)	Algonquin SCT delivery for GSS-TE									\$0
(52)	Algonquin delivery for GSS Conv		\$91,993	\$91,993	\$91,993	\$91,993	\$91,993	\$91,993	\$91,993	\$643,953
(53)	Tennessee delivery for GSS									\$0
(54)	Tennessee delivery for FSMA									\$0
(55)	TETCO delivery for GSS		\$42,962	\$64,310	\$0	\$42,962	\$64,244	\$53,571	\$53,571	\$321,620
(56)	TETCO delivery for GSS-TE									\$0
(57)	TETCO delivery for GSS-TE									\$0
(58)	TETCO delivery for GSS Conv									\$0
(59)	Dominion delivery for GSS Conv									\$0
(60)	Dominion delivery for GSS									\$0
(61)	Algonquin delivery for FSS					\$7,514	\$22,356	(\$6,364)	\$0	\$23,506
(62)	Columbia Delivery for FSS					\$125,383	\$125,383	\$125,383	\$125,383	\$877,680
(63)	Distrigas FLS call payment									\$0
(64)	National Fuel									\$0
(65)	VPEM									\$0
(66)	STORAGE DELIVERY FIXED COST \$	sum[(46):(65)]	\$397,512	\$478,702	\$217,376	\$334,935	\$440,698	\$401,391	\$409,080	\$2,679,694
(67)	TOTAL STORAGE FIXED	(44) + (66)	\$782,521	\$774,727	\$436,007	\$727,807	\$854,264	\$693,819	\$706,011	\$4,975,156
(68)	TOTAL FIXED COSTS	(27) + (67)	\$3,215,069	\$3,141,993	\$3,057,724	\$2,948,514	\$3,286,884	\$3,173,552	\$3,176,954	\$22,000,691

Attachment I

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct'12 (j)
(69)	SUPPLY VARIABLE COSTS (Includes Injections)									
(70)	Tennessee Zone 0									\$0
(71)	Tennessee Zone 1									\$0
(72)	Tennessee Connexion									\$0
(73)	Tennessee Dtrcut									\$0
(74)	TETCO STX									\$0
(75)	TETCO ELA									\$0
(76)	TETCO WLA									\$0
(77)	TETCO ETX									\$0
(78)	TETCO NF									\$0
(79)	M3 Delivered									\$0
(80)	Maume									\$0
(81)	Broadrun Col									\$0
(82)	Columbia Eagle and Downingtown									\$0
(83)	Transco Zone 2									\$0
(84)	Dominion to TETCO FTS									\$0
(85)	Transco Zone 3									\$0
(86)	ANE to Tennessee									\$0
(87)	Niagara to Tennessee									\$0
(88)	TETCO to B & W									\$0
(89)	DistrGas FCS									\$0
(90)	Hubline									\$0
(91)	Total Pipeline Commodity Charges		\$3,216,941	\$2,076,973	\$1,264,482	\$1,442,334	\$1,922,137	\$1,872,555	\$1,885,191	\$13,680,613
(92)	Hedging		\$5,188,071	\$3,003,155	\$1,626,411	\$1,325,002	\$1,572,942	\$1,041,775	\$1,473,520	\$15,230,876
(93)	Costs of Injections									\$0
(94)	Refunds (Tennessee)									\$0
(95)	TOTAL SUPPLY VARIABLE COSTS		\$8,405,011	\$5,080,129	\$2,890,893	\$2,767,336	\$3,495,078	\$2,914,331	\$3,358,712	\$28,911,489
		sum[(70):(90)]								
		sum[(91):(94)]								

Attachment I

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct-12 actual (j)
(96)	STORAGE VARIABLE COSTS									
(97)	Underground Storage		\$325,885	\$1,758,812	(\$1,105,519)	\$400,356	\$206,616	\$143,132	\$253,218	\$1,982,500
(98)	LNG Withdrawals and Trucking		\$81,388	\$73,019	\$96,291	\$117,174	\$95,605	\$84,405	\$86,177	\$634,059
(99)	TOTAL STORAGE VARIABLE COSTS	(97) + (98)	\$407,273	\$1,831,831	(\$1,009,228)	\$517,530	\$302,221	\$227,537	\$339,395	\$2,616,559
(100)	TOTAL VARIABLE COSTS	(95) + (99)	\$8,812,284	\$6,911,960	\$1,881,664	\$3,284,866	\$3,797,300	\$3,141,868	\$3,698,106	\$31,528,048
(101)	TOTAL SUPPLY COSTS	(68) + (100)	\$12,027,354	\$10,053,953	\$4,939,388	\$6,233,380	\$7,084,184	\$6,315,420	\$6,875,061	\$53,528,739
(102)	Storage Costs for FT-2 Calculation									
(103)	Storage Fixed Costs - Facilities		\$385,009	\$296,024	\$218,631	\$392,872	\$413,566	\$292,428	\$296,931	\$2,295,462
(104)	Storage Fixed Costs - Deliveries		\$397,512	\$478,702	\$217,376	\$334,935	\$440,698	\$401,391	\$409,080	\$2,679,694
(105)	Variable Delivery Costs		\$1,764	\$1,716	\$2,756	\$2,196	\$1,093	\$916	\$1,320	\$11,761
(106)	Variable Injection/withdrawal Costs		\$6,359	\$9,612	\$5,558	\$4,822	\$4,514	\$5,065	\$4,883	\$40,812
(107)	Fuel Costs Allocated to Storage		\$10,078	\$14,899	\$9,989	\$9,500	\$9,821	\$9,742	\$9,521	\$73,551
(108)	Total Storage Costs	sum[(103):(107)]	\$800,722	\$800,954	\$454,311	\$744,325	\$869,692	\$709,342	\$721,735	\$5,101,280
(109)	Pipeline Variable		\$8,405,011	\$5,080,129	\$2,890,893	\$2,767,336	\$3,495,078	\$2,914,331	\$3,358,712	\$28,911,489
(110)	Less Non-firm Gas Costs ¹	(95)	\$95,772	\$64,990	\$57,189	\$51,245	\$39,678	\$33,049	\$48,056	\$389,978
(111)	Less Company Use ¹		\$21,768	\$10,900	\$20,735	\$4,074	\$4,436	\$9,259	\$7,614	\$78,784
(112)	Less Manchester St Balancing ¹		\$36,338	\$12,562	\$9,044	\$9,100	\$9,298	\$8,512	\$5,852	\$90,706
(113)	Plus Cashout ¹		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(114)	Less Mkter Over-takes ¹		(\$69,479)	(\$552,280)	(\$181,095)	(\$202,999)	\$4,601	\$523,769	(\$154,784)	(\$632,268)
(115)	Less Mkter Withdrawals ¹		\$31,598	\$227,657	\$42,380	\$21,460	\$18,739	\$38,365	(\$630)	\$379,568
(116)	Plus Mkter Undertakes ¹		\$179,580	\$171,321	\$176,338	\$170,369	\$175,259	\$172,289	\$169,575	\$1,214,731
(117)	Plus Mkter Injections ¹		\$8,531,790	\$5,942,935	\$3,203,739	\$3,097,745	\$3,631,064	\$2,550,396	\$3,620,919	\$30,578,587
(118)	Storage Service Charge ¹									
(119)	Plus Pipeline Srchg/Credit ¹									
(120)	TOTAL FIRM COMMODITY COSTS	sum[(109):(119)]	\$8,531,790	\$5,942,935	\$3,203,739	\$3,097,745	\$3,631,064	\$2,550,396	\$3,620,919	\$30,578,587

¹ Derived from Company's billing system

National Grid
Rhode Island - Gas

Attachment I

Schedule 3
Page 1 of 1

GCR Revenue

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct'12 (j)
(1) I. Supply Fixed Cost Revenue --										
(2)	(a) Low Load dth	Sch 6, line 4-8, 10, 14, 15, 17	2,073,483	1,210,889	726,222	585,253	524,843	502,819	667,468	6,290,976
(3)	Supply Fixed Cost Factor	(4) / (2)	\$0 9404	\$0 9397	\$0 9399	\$0 9419	\$0 9391	\$0 9292	\$0 9407	
(4)	Low Load Revenue ¹		\$1,949,920	\$1,137,839	\$682,577	\$551,269	\$492,871	\$467,221	\$627,861	\$5,909,558
(5)	(b) High Load dth	Sch 6, line 2, 3, 9, 11, 16, 18	100,294	78,782	71,896	52,151	52,917	55,399	60,837	472,276
(6)	Supply Fixed Cost Factor	(7) / (5)	\$0 6339	\$0 6356	\$0 6346	\$0 6593	\$0 6345	\$0 6346	\$0 6516	
(7)	High Load Revenue ¹		\$63,581	\$50,076	\$45,626	\$34,385	\$33,575	\$35,154	\$39,643	\$302,039
(8)	sub-total Dth	(2) + (5)	2,173,777	1,289,670	798,118	637,404	577,761	558,218	728,304	6,763,251
(9)	TOTAL Supply Fixed Revenue	(4) + (7)	\$2,013,501	\$1,187,915	\$728,203	\$585,654	\$526,446	\$502,375	\$667,503	\$6,211,597
(10) II. Storage Fixed Cost Revenue --										
(11)	(a) Low Load dth	(2)	2,073,483	1,210,889	726,222	585,253	524,843	502,819	667,468	6,290,976
(12)	Storage Fixed Cost Factor	(13) / (11)	\$0 3363	\$0 3361	\$0 3362	\$0 3369	\$0 3359	\$0 3323	\$0 3364	
(13)	Low Load Revenue ¹		\$697,407	\$406,960	\$244,130	\$197,167	\$176,280	\$167,106	\$224,560	\$2,113,610
(14)	(b) High Load dth	(5)	100,294	78,782	71,896	52,151	52,917	55,399	60,837	472,276
(15)	Storage Fixed Cost Factor	(16) / (14)	\$0 2204	\$0 2210	\$0 2206	\$0 2292	\$0 2206	\$0 2206	\$0 2266	
(16)	High Load Revenue ¹		\$22,106	\$17,409	\$15,863	\$11,955	\$11,673	\$12,222	\$13,783	\$105,011
(17)	(c) FT-2 dth	Sch 6, line 26	338,790	168,735	85,720	69,474	65,209	71,966	109,807	909,702
(18)	Storage Fixed Cost Factor	(19) / (17)	\$0 3372	\$0 4672	\$0 6899	\$0 6099	\$0 3849	\$0 3774	\$0 2466	
(19)	FT-2 Revenue ¹		\$114,223	\$78,839	\$59,141	\$42,372	\$25,097	\$27,159	\$27,076	\$373,906
(20)	sub-total Dth	(11) + (14) + (17)	2,512,567	1,458,405	883,838	706,878	642,970	630,184	838,112	7,672,954
(21)	TOTAL Storage Fixed Revenue	(13) + (16) + (19)	\$833,736	\$503,208	\$319,134	\$251,493	\$213,051	\$206,487	\$265,419	\$2,592,527
(22) III. Variable Supply Cost Revenue --										
(23)	(a) Firm Sales dth	(8)	2,173,777	1,289,670	798,118	637,404	577,761	558,218	728,304	6,763,251
(24)	Variable Supply Cost Factor	(25) / (23)	\$5 3862	\$5 3830	\$5 3838	\$5 4116	\$5 3794	\$5 3285	\$5 3998	
(25)	Variable Supply Revenue ¹		\$11,708,417	\$6,942,323	\$4,296,881	\$3,449,378	\$3,108,008	\$2,974,491	\$3,932,704	\$36,412,201
(26)	(b) TSS Sales dth	Sch 6, line 19	8,457	8,600	(106)	926	492	469	6,320	25,156
(27)	TSS Surcharge Factor		\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	
(28)	TSS Surcharge Revenue	(26) * (27)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(29)	(c) NGV Sales dth		0	0	0	0	0	0	0	0
(30)	Variable Supply Cost Factor		\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	
(31)	Variable Supply Revenue	(29) * (30)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(32)	(d) Default Sales dth	Sch 6, line 56	4,187	11,286	(4,444)	1,056	1,283	1,076	1,687	16,131
(33)	Variable Supply Cost Factor		\$7 7018	\$7 4371	\$7 7019	\$7 7029	\$7 7022	\$7 7026	\$7 7020	
(34)	Variable Supply Revenue	(32) * (33)	\$35,237	\$83,937	(\$34,229)	\$8,132	\$9,884	\$8,284	\$12,993	\$124,239
(35)	(e) Peaking Gas Revenue									\$0
(36)	TOTAL Variable Supply Revenue	(25)+(28)+(31)+(34)+(35)	\$11,743,654	\$7,026,260	\$4,262,652	\$3,457,510	\$3,117,892	\$2,982,775	\$3,945,697	\$36,536,441
(37) IV. Storage Variable Product Cost Revenue --										
(38)	(a) Firm Sales dth	(8)	2,173,777	1,289,670	798,118	637,404	577,761	558,218	728,304	6,763,251
(39)	Variable Supply Cost Factor	(40) / (38)	\$1 0106	\$1 0100	\$1 0101	\$1 0153	\$1 0093	\$0 9998	\$1 0131	
(40)	TOTAL Stor Var Product Revenue¹		\$2,196,768	\$1,302,541	\$806,194	\$647,183	\$583,134	\$558,083	\$737,866	\$6,831,768
(41) V. Storage Variable Non-product Cost Revenue --										
(42)	(a) Firm Sales dth	(8)	2,173,777	1,289,670	798,118	637,404	577,761	558,218	728,304	6,763,251
(43)	Variable Supply Cost Factor	(44) / (42)	\$0 0309	\$0 0309	\$0 0309	\$0 0311	\$0 0309	\$0 0306	\$0 0310	
(44)	Stor Var Non-Product Revenue ¹		\$67,195	\$39,841	\$24,660	\$19,796	\$17,837	\$17,071	\$22,570	\$208,970
(45)	(b) FT-2 dth	(17)	338,790	168,735	85,720	69,474	65,209	71,966	109,807	909,702
(46)	Variable Supply Cost Factor	(47) / (45)	\$0 0309	\$0 0309	\$0 0309	\$0 0309	\$0 0309	\$0 0309	\$0 0309	
(47)	Stor Var Non-Product Revenue ¹		\$10,469	\$5,214	\$2,649	\$2,147	\$2,015	\$2,224	\$3,393	\$28,110
(48)	sub-total Dth	(42) + (45)	2,512,567	1,458,405	883,838	706,878	642,970	630,184	838,112	7,672,954
(49)	TOTAL Stor Var Non-Product Revenue	(44) + (47)	\$77,664	\$45,055	\$27,309	\$21,943	\$19,852	\$19,295	\$25,963	\$237,080
(50)	Deferred Responsibility ¹		(\$1,420)	(\$1,629)	(\$471)	(\$45)	\$3,142	\$1,527	(\$477)	\$626
(51)	Total Gas Cost Revenue	(9)+(21)+(36)+(40)+(49)+(50)	\$16,863,904	\$10,063,350	\$6,143,020	\$4,963,738	\$4,463,516	\$4,270,540	\$5,641,971	\$52,410,039

¹ Derived from Company's billing system

Attachment I

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct'12 actual (i)
(1)	I. Supply Fixed Costs	Sch 1, line 4	\$2,432,548	\$2,367,266	\$2,621,717	\$2,220,707	\$2,432,620	\$2,479,734	\$2,470,943	\$17,025,536
(2)	Capacity Release Revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(3)	Allowable Working Capital Costs	(1) - (2)	\$2,432,548	\$2,367,266	\$2,621,717	\$2,220,707	\$2,432,620	\$2,479,734	\$2,470,943	\$17,025,536
(4)	Number of Days Lag	Rate Case	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
(5)	Working Capital Requirement	[(3) * (4)] / 365	\$162,614	\$158,250	\$175,260	\$148,453	\$162,619	\$165,769	\$165,181	\$1,651,181
(6)	Cost of Capital	Rate Case	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
(7)	Return on Working Capital Requirement	(5) * (6)	\$11,757	\$11,441	\$12,671	\$10,733	\$11,757	\$11,985	\$11,943	\$111,943
(8)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%
(9)	Interest Expense	(5) * (8)	\$3,610	\$3,513	\$3,891	\$3,296	\$3,610	\$3,680	\$3,667	\$36,667
(10)	Taxable Income	(7) - (9)	\$8,147	\$7,928	\$8,781	\$7,437	\$8,147	\$8,305	\$8,276	\$82,776
(11)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
(12)	Return and Tax Requirement	(10) / (11)	\$12,534	\$12,197	\$13,509	\$11,442	\$12,534	\$12,777	\$12,732	\$127,732
(13)	Supply Fixed Working Capital Requirement	(9) + (12)	\$16,144	\$15,711	\$17,399	\$14,738	\$16,144	\$16,457	\$16,399	\$162,992
(14)	II. Storage Fixed Costs	Sch 1, line 19	\$782,521	\$774,727	\$436,007	\$727,807	\$854,264	\$693,819	\$706,011	\$4,975,156
(15)	Less: LNG Demand to DAC	Sch 1, line 20	\$52,389	\$52,389	\$52,389	\$52,389	\$52,389	\$52,389	\$52,389	\$366,723
(16)	Plus: Supply Related LNG O&M Costs	Sch 1, line 21	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$51,549	\$360,845
(17)	Allowable Working Capital Costs	(14) - (15) + (16)	\$781,682	\$773,887	\$435,167	\$726,967	\$853,424	\$692,979	\$705,171	\$4,969,277
(18)	Number of Days Lag	Rate Case	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
(19)	Working Capital Requirement	[(17) * (18)] / 365	\$52,255	\$51,734	\$29,091	\$48,597	\$57,051	\$46,325	\$47,140	\$471,440
(20)	Cost of Capital	Rate Case	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
(21)	Return on Working Capital Requirement	(19) * (20)	\$3,778	\$3,740	\$2,103	\$3,514	\$4,125	\$3,349	\$3,408	\$34,088
(22)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%
(23)	Interest Expense	(19) * (22)	\$1,160	\$1,148	\$646	\$1,079	\$1,267	\$1,028	\$1,047	\$10,479
(24)	Taxable Income	(21) - (23)	\$2,618	\$2,592	\$1,457	\$2,435	\$2,858	\$2,321	\$2,362	\$23,621
(25)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
(26)	Return and Tax Requirement	(24) / (25)	\$4,028	\$3,987	\$2,242	\$3,746	\$4,397	\$3,571	\$3,653	\$36,533
(27)	Storage Fixed Working Capital Requirement	(23) + (26)	\$5,188	\$5,136	\$2,888	\$4,825	\$5,664	\$4,599	\$4,680	\$46,820
(28)	III. Supply Variable Costs	Sch 1, line 32	\$8,531,790	\$5,942,935	\$3,203,739	\$3,097,745	\$3,631,064	\$2,550,396	\$3,620,919	\$30,578,587
(29)	Less: Variable Delivery Storage Costs	Sch 1, line 33	\$1,764	\$1,716	\$2,756	\$2,196	\$1,093	\$916	\$1,320	\$11,761
(30)	Less: Variable Injection Storage Costs	Sch 1, line 34	\$63,599	\$9,612	\$5,558	\$4,822	\$4,514	\$5,065	\$4,883	\$40,812
(31)	Less: Fuel Costs Allocated to Storage	Sch 1, line 35	\$10,078	\$14,899	\$9,989	\$9,821	\$9,742	\$9,521	\$9,521	\$73,551
(32)	Total Credits	sum[(29) - (31)]	\$18,201	\$26,227	\$18,304	\$16,518	\$15,428	\$15,724	\$15,723	\$126,124
(33)	Allowable Working Capital Costs	(28) - (32)	\$8,513,589	\$5,916,708	\$3,185,435	\$3,081,227	\$3,615,636	\$2,534,672	\$3,605,196	\$30,452,463
(34)	Number of Days Lag	Rate Case	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
(35)	Working Capital Requirement	[(33) * (34)] / 365	\$569,128	\$395,528	\$212,944	\$205,978	\$241,703	\$169,441	\$241,005	\$2,410,005
(36)	Cost of Capital	Rate Case	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
(37)	Return on Working Capital Requirement	(35) * (36)	\$41,148	\$28,597	\$15,396	\$14,892	\$17,475	\$12,251	\$17,425	\$174,251
(38)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%
(39)	Interest Expense	(35) * (38)	\$12,635	\$8,781	\$4,727	\$4,573	\$5,366	\$3,762	\$5,350	\$53,566
(40)	Taxable Income	(37) - (39)	\$28,513	\$19,816	\$10,669	\$10,319	\$12,109	\$8,489	\$12,074	\$84,899
(41)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
(42)	Return and Tax Requirement	(40) / (41)	\$43,867	\$30,486	\$16,413	\$15,876	\$18,630	\$13,060	\$18,576	\$130,630
(43)	Supply Variable Working Capital Requirement	(39) + (42)	\$56,501	\$39,267	\$21,140	\$20,449	\$23,996	\$16,822	\$23,926	\$202,101

Attachment I

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct-12 actual (i)
(44)	IV. Storage Variable Product Costs									
(45)	Less: Balancing Related LNG Commodity (to DAC)	Sch 1, line 48-50	\$398,887	\$1,824,170	(\$1,021,288)	\$508,036	\$297,521	\$223,644	\$339,395	\$2,570,366
(46)	Plus: Supply Related LNG O&M Costs	Sch 1, line 51	(\$14,747)	(\$13,231)	(\$17,448)	(\$21,232)	(\$17,324)	(\$15,294)	(\$15,615)	(\$114,891)
(47)	Allowable Working Capital Costs	Sch 1, line 52 (44) + (45) + (46)	\$35,844 \$419,984	\$35,844 \$1,846,783	\$35,844 (\$1,002,892)	\$35,844 \$522,648	\$35,844 \$316,042	\$35,844 \$244,194	\$35,844 \$359,624	\$250,909 \$2,706,383
(48)	Number of Days Lag	Rate Case	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
(49)	Working Capital Requirement	[(47) * (48)] / 365	\$28,076	\$123,456	(\$67,043)	\$34,939	\$21,127	\$16,324	\$24,041	\$24,041
(50)	Cost of Capital	Rate Case	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
(51)	Return on Working Capital Requirement	(49) * (50)	\$2,030	\$8,926	(\$4,847)	\$2,526	\$1,527	\$1,180	\$1,738	\$1,738
(52)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%
(53)	Interest Expense	(49) * (52)	\$623	\$2,741	(\$1,488)	\$776	\$469	\$362	\$534	\$534
(54)	Taxable Income	(51) - (53)	\$1,407	\$6,185	(\$3,359)	\$1,750	\$1,058	\$818	\$1,204	\$1,204
(55)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
(56)	Return and Tax Requirement	(54) / (55)	\$2,164	\$9,516	(\$5,167)	\$2,693	\$1,628	\$1,258	\$1,853	\$1,853
(57)	Storage Var. Product Working Capital Requirement	(53) + (56)	\$2,787	\$12,256	(\$6,656)	\$3,469	\$2,097	\$1,621	\$2,387	\$17,961
(58)	V. Storage Variable Non-Product Costs									
(59)	Credits	Sch 1, line 66-69	\$26,586	\$33,888	\$30,364	\$26,012	\$20,129	\$19,616	\$21,337	\$177,932
(60)	Allowable Working Capital Costs	(58) - (59)	\$26,586	\$33,888	\$30,364	\$26,012	\$20,129	\$19,616	\$21,337	\$177,932
(61)	Number of Days Lag	Rate Case	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
(62)	Working Capital Requirement	[(60) * (61)] / 365	\$1,777	\$2,265	\$2,030	\$1,739	\$1,346	\$1,311	\$1,426	\$1,426
(63)	Cost of Capital	Rate Case	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
(64)	Return on Working Capital Requirement	(62) * (63)	\$128	\$164	\$147	\$126	\$97	\$95	\$103	\$103
(65)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%
(66)	Interest Expense	(62) * (65)	\$39	\$50	\$45	\$39	\$30	\$29	\$32	\$32
(67)	Taxable Income	(64) - (66)	\$89	\$113	\$102	\$87	\$67	\$66	\$71	\$71
(68)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
(69)	Return and Tax Requirement	(67) / (68)	\$137	\$175	\$156	\$134	\$104	\$101	\$110	\$110
(70)	Storage Variable Non-product WC Requirement	(66) + (69)	\$176	\$225	\$202	\$173	\$134	\$130	\$142	\$1,181

Attachment I

INVENTORY FINANCE

Line No.	Description (a)	Reference (b)	Apr-12 actual (c)	May-12 actual (d)	Jun-12 actual (e)	Jul-12 actual (f)	Aug-12 actual (g)	Sep-12 actual (h)	Oct-12 actual (i)	Apr-Oct 12 (j)
(1)	Storage Inventory Balance									
(2)	Hedging	(1) + (2)	\$14,800,525	\$14,078,661	\$15,668,503	\$15,823,556	\$16,087,137	\$16,496,403	\$16,800,974	\$146,706,121
(3)	Subtotal	Rate Case	\$1,778,525	\$3,782,057	\$5,368,854	\$6,084,691	\$6,165,333	\$6,875,866	\$6,895,035	
(4)	Cost of Capital	(3) * (4)	\$16,579,050	\$17,860,718	\$21,037,358	\$21,908,246	\$22,252,470	\$23,372,270	\$23,696,009	
(5)	Return on Working Capital Requirement		7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	
(6)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	
(7)	Interest Charges Financed	(3) * (6)	\$368,055	\$396,508	\$467,029	\$486,363	\$494,005	\$518,864	\$526,051	\$3,256,876
(8)	Taxable Income	(5) - (7)	\$830,610	\$894,822	\$1,053,972	\$1,097,603	\$1,114,849	\$1,170,951	\$1,187,170	\$7,349,977
(9)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(10)	Return and Tax Requirement	(8) / (9)	\$1,277,862	\$1,376,649	\$1,621,495	\$1,688,620	\$1,715,152	\$1,801,463	\$1,826,415	\$11,307,656
(11)	Working Capital Requirement	(7) + (10)	\$1,645,917	\$1,773,157	\$2,088,524	\$2,174,983	\$2,209,157	\$2,320,327	\$2,352,467	\$14,564,532
(12)	Storage-Related Inventory Costs	(11) / 12	\$137,160	\$147,763	\$174,044	\$181,249	\$184,096	\$193,361	\$196,039	\$1,213,711
(13)	LNG Inventory Balance									
(14)	Cost of Capital	Rate Case	\$3,340,132	\$3,292,429	\$3,738,317	\$3,924,258	\$4,288,717	\$4,270,769	\$4,261,927	\$1,960,526
(15)	Return on Working Capital Requirement	(13) * (14)	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	
(16)	Weighted Cost of Debt	Rate Case	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	2.22%	
(17)	Interest Charges Financed	(13) * (16)	\$74,151	\$73,092	\$82,991	\$87,119	\$95,210	\$94,811	\$94,615	\$601,987
(18)	Taxable Income	(15) - (17)	\$167,341	\$164,951	\$187,290	\$196,605	\$214,865	\$213,966	\$213,523	\$1,358,539
(19)	1 - Combined Tax Rate	Rate Case	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500	
(20)	Return and Tax Requirement	(18) / (19)	\$257,447	\$253,770	\$288,138	\$302,470	\$330,561	\$329,178	\$328,496	\$2,090,060
(21)	Working Capital Requirement	(17) + (20)	\$331,598	\$326,862	\$371,129	\$389,588	\$425,771	\$423,989	\$423,111	\$2,692,048
(22)	Monthly Average	(21) / 12	\$27,633	\$27,239	\$30,927	\$32,466	\$35,481	\$35,332	\$35,259	\$224,337
(23)	System Balancing Factor	Rate Case	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	
(24)	Balancing Related Inventory Costs	(22) * (23)	\$5,007	\$4,936	\$5,604	\$5,883	\$6,429	\$6,402	\$6,389	\$40,650
(25)	LNG-Related Inventory Costs	(22) - (24)	\$22,626	\$22,303	\$25,323	\$26,583	\$29,052	\$28,930	\$28,870	\$183,687

National Grid
Rhode Island - Gas

Attachment I

Schedule 6
Page 1 of 1

Actual Dth Usage for Filing

Line No	Rate Class (a)	Apr-12 actual (b)	May-12 actual (c)	Jun-12 actual (d)	Jul-12 actual (e)	Aug-12 actual (f)	Sep-12 actual (g)	Oct-12 actual (h)	Apr-Oct'12 (i)
(1)	<u>SALES (dth)</u>								
(2)	Residential Non-Heating	58,071	44,656	34,394	28,068	26,163	26,022	30,065	247,438
(3)	Residential Non-Heating Low Income	1,917	1,163	778	656	736	661	872	6,782
(4)	Residential Heating	1,370,734	837,999	497,026	368,362	341,313	331,780	434,145	4,181,360
(5)	Residential Heating Low Income	142,168	85,332	55,790	41,653	39,722	37,547	48,823	451,035
(6)	Small C&I	190,004	104,113	55,623	47,044	43,411	37,395	47,403	524,992
(7)	Medium C&I	295,566	141,422	80,363	107,306	88,038	81,943	118,250	912,888
(8)	Large LLF	60,118	29,927	28,680	6,774	9,744	11,352	9,335	155,931
(9)	Large HLF	21,314	14,063	19,566	11,632	13,917	17,404	17,173	115,069
(10)	Extra Large LLF	6,804	5,222	9,144	13,387	2,304	2,333	4,166	43,360
(11)	Extra Large HLF	18,624	17,174	16,860	11,596	11,922	11,313	11,754	99,242
(12)	Total Sales	2,165,320	1,281,071	798,224	636,478	577,269	557,749	721,985	6,738,095
(13)	<u>TSS</u>								
(14)	Medium	4,438	2,442	(404)	726	312	469	2,766	10,748
(15)	Large LLF	3,651	4,432	0	0	0	0	2,580	10,663
(16)	Large HLF	369	1,726	298	199	180	0	973	3,745
(17)	Extra Large LLF	0	0	0	0	0	0	0	0
(18)	Extra Large HLF	0	0	0	0	0	0	0	0
(19)	Total TSS	8,457	8,600	(106)	926	492	469	6,320	25,156
(20)	<u>FT-2 TRANSPORTATION</u>								
(21)	FT-2 Medium	114,839	89,616	41,491	40,610	40,743	41,839	48,576	417,714
(22)	FT-2 Large LLF	76,051	48,891	27,401	16,212	12,438	15,255	25,295	221,543
(23)	FT-2 Large HLF	21,696	16,877	14,579	11,436	10,761	14,873	18,490	108,711
(24)	FT-2 Extra Large LLF	114,345	3,806	2,249	1,217	1,267	0	17,447	140,331
(25)	FT-2 Extra Large HLF	11,859	9,545	0	0	0	0	0	21,404
(26)	Total FT-2 Transportation	338,790	168,735	85,720	69,474	65,209	71,966	109,807	909,702
(27)	<u>Sales & FT-2 THROUGHPUT</u>								
(28)	Residential Non-Heating	58,071	44,656	34,394	28,068	26,163	26,022	30,065	247,438
(29)	Residential Non-Heating Low Income	1,917	1,163	778	656	736	661	872	6,782
(30)	Residential Heating	1,370,734	837,999	497,026	368,362	341,313	331,780	434,145	4,181,360
(31)	Residential Heating Low Income	142,168	85,332	55,790	41,653	39,722	37,547	48,823	451,035
(32)	Small C&I	190,004	104,113	55,623	47,044	43,411	37,395	47,403	524,992
(33)	Medium C&I	414,843	233,479	121,450	148,642	129,093	124,251	169,593	1,341,351
(34)	Large LLF	139,819	83,250	56,081	22,987	22,182	26,607	37,210	388,136
(35)	Large HLF	43,379	32,666	34,443	23,267	24,858	32,277	36,636	227,525
(36)	Extra Large LLF	121,149	9,029	11,393	14,604	3,571	2,333	21,612	183,691
(37)	Extra Large HLF	30,483	26,719	16,860	11,596	11,922	11,313	11,754	120,646
(38)	Total Sales & FT-2 Throughput	2,512,567	1,458,405	883,838	706,878	642,970	630,184	838,112	7,672,954
(39)	<u>FT-1 TRANSPORTATION</u>								
(40)	FT-1 Medium	53,487	28,627	22,765	26,227	23,120	27,405	31,080	212,711
(41)	FT-1 Large LLF	77,621	28,599	7,967	5,513	15,875	14,820	27,287	177,681
(42)	FT-1 Large HLF	33,708	31,826	27,843	30,123	22,578	35,581	30,479	212,137
(43)	FT-1 Extra Large LLF	(34,984)	51,273	8,829	(8,934)	11,986	11,555	4,205	43,931
(44)	FT-1 Extra Large HLF	391,892	350,261	359,011	368,732	368,022	398,999	351,699	2,588,615
(45)	Default	4,187	11,286	(4,444)	1,056	1,283	1,076	1,687	16,131
(46)	Total FT-1 Transportation	525,911	501,872	421,971	422,717	442,863	489,436	446,436	3,251,206
(47)	<u>Total THROUGHPUT</u>								
(48)	Residential Non-Heating	58,071	44,656	34,394	28,068	26,163	26,022	30,065	247,438
(49)	Residential Non-Heating Low Income	1,917	1,163	778	656	736	661	872	6,782
(50)	Residential Heating	1,370,734	837,999	497,026	368,362	341,313	331,780	434,145	4,181,360
(51)	Residential Heating Low Income	142,168	85,332	55,790	41,653	39,722	37,547	48,823	451,035
(52)	Small C&I	190,004	104,113	55,623	47,044	43,411	37,395	47,403	524,992
(53)	Medium C&I	468,331	262,106	144,216	174,869	152,213	151,656	200,672	1,554,061
(54)	Large LLF	217,441	111,848	64,048	28,500	38,057	41,427	64,497	565,817
(55)	Large HLF	77,086	64,492	62,286	53,390	47,435	67,858	67,115	439,662
(56)	Extra Large LLF	86,165	60,302	20,222	5,670	15,557	13,889	25,817	227,622
(57)	Extra Large HLF	422,375	376,980	375,871	380,328	379,943	410,312	363,453	2,709,261
(58)	Default	4,187	11,286	(4,444)	1,056	1,283	1,076	1,687	16,131
(59)	Total Throughput	3,038,478	1,960,277	1,305,809	1,129,595	1,085,833	1,119,620	1,284,548	10,924,160

Attachment II

Deferred Gas Cost Balances

Line No.	Description	Reference	Nov-12 actual	Dec-12 actual	Jan-13 actual	Feb-13 actual	Mar-13 actual	Nov-12-Mar-13
(1)	(a)	(b)	30 (c)	31 (d)	31 (e)	28 (f)	31 (g)	(h)
(2)	<u>I Fixed Cost Deferred</u>							
(3)	Beginning Balance ¹		\$9,653,010	\$9,225,100	\$6,523,415	\$988,203	(\$4,496,567)	\$9,653,010
(4)	Adjustment- Tennessee Refund Reallocation	Dkt 4346	(\$1,141,713)					(\$1,141,713)
(5)	Supply Fixed Costs (net of cap rel)	Sch 2, line (81)	\$3,481,283	\$3,170,537	\$3,427,815	\$3,519,974	\$3,464,261	\$17,063,871
(6)	LNG Demand to DAC	Dkt 4339	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$620,329)
(7)	Supply Related LNG O & M	Nov-12-Jan-13: Dkt 3943 Feb-13-Mar-13: Dkt 4323	\$51,549	\$51,549	\$51,549	\$47,965	\$47,965	\$250,578
(8)	NGPMP Credits ²		(\$383,333)	(\$383,333)	(\$1,778,347)	(\$383,333)	(\$1,040,996)	(\$3,969,343)
(9)	Working Capital	Sch 4, line (15)	\$20,540	\$20,540	\$22,245	\$20,417	\$19,518	\$105,320
(10)	Total Supply Fixed Costs	sum(4) (9)	\$1,906,321	\$2,735,227	\$1,599,197	\$3,080,957	\$2,366,682	\$11,688,384
(11)	Supply Fixed - Revenue	Sch 3, line (11)	\$1,969,654	\$5,445,267	\$7,138,394	\$8,564,047	\$7,229,192	\$30,346,553
(12)	Prelim Ending Balance	(3) + (10) - (11)	\$9,589,677	\$6,515,060	\$9,842,218	(\$4,494,886)	(\$9,359,077)	(\$9,005,159)
(13)	Month's Average Balance	[(3) + (12)] / 2	\$9,621,343	\$7,870,080	\$3,753,816	(\$1,753,342)	(\$6,927,822)	
(14)	Interest Rate (BOA Prime minus 200 bps)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
(15)	Interest Applied	[(13) * (14)] / 365 * (1)	\$9,885	\$8,355	\$3,985	(\$1,681)	(\$7,355)	\$13,189
(16)	Marketer Reconciliation	Dkt 4346	(\$374,462)					(\$374,462)
(17)	Fixed Ending Balance	(12) + (15) + (16)	\$9,225,100	\$6,523,415	\$988,203	(\$4,496,567)	(\$9,366,432)	(\$9,366,432)
II. Variable Cost Deferred								
(18)	<u>Variable Cost Deferred</u>							
(19)	Beginning Balance ³		(\$9,801,393)	(\$11,805)	\$5,871,912	\$15,388,373	\$21,124,084	(\$9,801,393)
(20)	Adjustment- Tennessee Refund Reallocation	Dkt 4346	\$1,141,713					\$1,141,713
(21)	Variable Supply Costs	Sch 2, line (137)	\$16,520,419	\$19,511,989	\$28,143,528	\$26,828,501	\$18,984,291	\$109,988,729
(22)	Supply Related LNG to DAC	Dkt 4339	(\$55,845)	(\$458)	(\$534,407)	(\$165,050)	(\$31,563)	(\$787,323)
(23)	Supply Related LNG O & M	Nov-12-Jan-13: Dkt 3943 Feb-13-Mar-13: Dkt 4323	\$35,844	\$35,844	\$35,844	\$47,725	\$47,725	\$202,981
(24)	Inventory Financing - LNG	Sch 5, line (22)	\$34,208	\$34,176	\$22,928	\$19,960	\$20,542	\$131,813
(25)	Inventory Financing - UG	Sch 5, line (12)	\$184,635	\$166,868	\$133,183	\$103,888	\$101,921	\$690,495
(26)	Working Capital	Sch 4, line (30)	\$109,396	\$129,597	\$183,284	\$158,357	\$112,078	\$692,713
(27)	Total Supply Variable Costs	sum(20)(26)	\$17,970,370	\$19,878,017	\$27,984,360	\$26,993,380	\$19,234,994	\$112,061,121
(28)	Supply Variable - Revenue	Sch 3, line (25)	\$8,175,744	\$13,997,409	\$18,479,178	\$21,275,167	\$18,309,495	\$80,236,993
(29)	Prelim Ending Balance	(19) + (27) - (28)	(\$6,766)	\$5,868,803	\$15,377,094	\$21,106,586	\$22,049,582	\$22,022,735
(30)	Month's Average Balance	[(19) + (29)] / 2	(\$4,904,080)	\$2,928,499	\$10,624,503	\$18,247,480	\$21,586,833	
(31)	Interest Rate (BOA Prime minus 200 bps)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
(32)	Interest Applied	[(30) * (31)] / 365 * (1)	(\$5,038)	\$3,109	\$11,279	\$17,498	\$22,918	\$49,765
(33)	Gas Procurement Incentive/penalty		\$0	\$0	\$0	\$0	\$0	\$0
(34)	Variable Ending Balance	(29) + (32) + (33)	(\$11,805)	\$5,871,912	\$15,388,373	\$21,124,084	\$22,072,500	\$22,072,500
GCR Deferred Summary								
(35)	<u>GCR Deferred Summary</u>							
(36)	Beginning Balance		(\$148,383)	\$9,213,295	\$12,395,327	\$16,376,576	\$16,627,517	(\$148,383)
(37)	Gas Costs	sum[(4)-(7)]-(16)-(20)-(23)	\$19,534,723	\$22,645,396	\$31,000,264	\$30,155,049	\$22,388,613	\$125,724,045
(38)	Inventory Finance	(24) + (25)	\$218,843	\$201,044	\$156,111	\$123,848	\$122,463	\$822,308
(39)	Working Capital	(9) + (26)	\$131,996	\$150,137	\$205,529	\$178,774	\$131,597	\$798,033
(40)	NGPMP Credits ²	(8)	(\$383,333)	(\$383,333)	(\$1,778,347)	(\$383,333)	(\$1,040,996)	(\$3,969,343)
(41)	Total Costs	sum(37)(40)	\$19,502,229	\$22,613,244	\$29,583,557	\$30,074,338	\$21,601,676	\$123,375,043
(42)	Revenue	(11) + (28)	\$10,145,397	\$19,442,676	\$25,617,572	\$29,839,214	\$25,538,687	\$110,583,547
(43)	Prelim Ending Balance	(36) + (41) - (42)	\$9,208,449	\$12,383,863	\$16,361,312	\$16,611,700	\$12,690,505	\$10,583,547
(44)	Month's Average Balance	[(36) + (43)] / 2	\$4,550,033	\$10,798,579	\$14,378,319	\$16,494,138	\$14,659,011	\$12,643,114
(45)	Interest Rate (BOA Prime minus 200 bps)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
(46)	Interest Applied	(15) + (32)	\$4,847	\$11,464	\$15,265	\$15,816	\$15,563	\$62,954
(47)	Gas Purchase Plan Incentives/Penalties	(33)	\$0	\$0	\$0	\$0	\$0	\$0
(48)								
(49)	Ending Bal. W/ Interest⁴	(43) + (46) + (47)	\$9,213,295	\$12,395,327	\$16,376,576	\$16,627,517	\$12,706,068	\$12,706,068

¹ Sum of Supply Fixed Cost and Storage Fixed Costs ending balances on October 31, 2012

² Based on Docket 4038 National Grid Natural Gas Portfolio Management Plan quarterly and annual filings

³ Sum of Supply Variable Cost, Storage Variable Product Cost, and Storage Variable Non-Product Cost's ending balances on October 31, 2012

⁴ Represents under/(over)-recovery

Attachment II

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	actual (c)	actual (d)	actual (e)	actual (f)	actual (g)	(h)
(1)	SUPPLY FIXED COSTS - Pipeline Delivery							
(2)	Algonquin		\$1,071,837	\$906,694	\$902,282	\$905,856	\$909,685	\$4,696,353
(3)	Alberta Northeast		\$637	\$578	\$373	\$352	\$315	\$2,255
(4)	Texas Eastern		\$0	\$0	\$0	\$0	\$0	\$0
(5)	TETCO		\$775,893	\$706,289	\$883,053	\$636,532	\$826,245	\$3,828,012
(6)	Tennessee		\$1,016,202	\$1,015,024	\$993,149	\$1,036,899	\$1,015,024	\$5,076,298
(7)	NETNE		\$0	\$0	\$0	\$0	\$0	\$0
(8)	Iroquois		\$610	(\$6,676)	\$6,676	(\$6,676)	\$0	(\$6,066)
(9)	Union		\$2,497	(\$2,388)	\$0	\$0	\$0	\$108
(10)	Transcanada		\$0	\$0	\$0	\$0	\$0	\$0
(11)	Dominion		\$34,096	\$32,512	\$33,304	\$33,304	\$33,304	\$166,520
(12)	Transco		\$6,618	\$6,404	\$6,831	\$5,977	\$8,394	\$34,224
(13)	National Fuel		\$4,663	\$4,663	\$4,663	\$4,754	\$4,754	\$23,496
(14)	Columbia		\$303,060	\$295,275	\$295,823	\$270,283	\$286,497	\$1,450,939
(15)	Hubline		\$0	\$0	\$0	\$0	\$0	\$0
(16)	Westerly Lateral		\$56,324	\$56,324	\$57,256	\$54,984	\$54,984	\$279,871
(17)	East to West		\$0	\$0	\$0	\$0	\$0	\$0
(18)	BG LNG Energy		\$303	(\$2,388)	\$2,388	\$0	\$0	\$303
(19)	Shell Energy		\$0	(\$3,125)	(\$3,125)	(\$3,125)	(\$3,125)	(\$12,500)
(20)	EDF Trading N Am		\$0	(\$18,750)	(\$18,750)	(\$18,750)	(\$18,750)	(\$75,000)
(21)	Coral Energy		\$0	\$0	\$0	\$0	\$0	(\$3,125)
(22)	DB Energy Trading		\$0	\$0	\$0	(\$18,750)	\$0	(\$18,750)
(23)			\$0	\$0	\$0	\$0	\$0	\$0
(24)			\$0	\$0	\$0	\$0	\$0	\$0
(25)	Less Credits from Mktr Releases		(\$631,266)	(\$631,266)	(\$588,784)	(\$588,462)	(\$619,438)	(\$3,059,216)
(26)	TOTAL SUPPLY FIXED COSTS - Pipeline	sum[(2)-(25)]	\$2,641,473	\$2,359,169	\$2,575,139	\$2,310,053	\$2,497,890	\$12,383,724
(27)	Supply Fixed - Supplier		\$0	\$0	\$0	\$0	\$0	\$0
(28)	Distrigas FCS	(28)	\$0	\$0	\$0	\$0	\$0	\$0
(29)	Supply Fixed Total		\$2,641,473	\$2,359,169	\$2,575,139	\$2,310,053	\$2,497,890	\$12,383,724
(30)	Total Supply Fixed (Pipeline & Supplier)	(26) + (29)	\$2,641,473	\$2,359,169	\$2,575,139	\$2,310,053	\$2,497,890	\$12,383,724
(31)	STORAGE FIXED COSTS - Facilities							
(32)	Texas Eastern SS-1 Demand		\$87,103	\$87,620	\$87,610	\$183,997	(\$10,779)	\$435,550
(33)	Texas Eastern SS-1 Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(34)	Texas Eastern FSS-1 Demand		\$0	\$0	\$0	\$0	\$0	\$0
(35)	Texas Eastern FSS-1 Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(36)	Dominion GSS Demand		\$83,387	\$81,585	\$82,486	\$82,486	\$82,486	\$412,430
(37)	Dominion GSS Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(38)	Dominion GSS-TE Demand		\$0	\$0	\$0	\$0	\$0	\$0
(39)	Dominion GSS-TE Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(40)	Tennessee FSMA Demand		\$49,804	\$56,480	\$43,128	\$49,804	\$49,804	\$249,020
(41)	Tennessee FSMA Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(42)	Columbia FSS Demand		\$9,735	\$9,735	\$9,735	\$34,528	(\$944)	\$62,788
(43)	Columbia FSS Capacity		\$0	\$0	\$0	\$0	\$0	\$0
(44)	Keyspan LNG Tank Lease Payment		\$163,740	\$163,740	\$163,740	\$163,740	\$163,740	\$818,700
(45)	Iroquois		\$6,066	\$6,822	\$6,825	\$13,353	\$6,811	\$39,876
(46)			\$0	\$0	\$0	\$0	\$0	\$0
(47)			\$0	\$0	\$0	\$0	\$0	\$0
(48)			\$0	\$0	\$0	\$0	\$0	\$0
(49)			\$0	\$0	\$0	\$0	\$0	\$0
(50)			\$0	\$0	\$0	\$0	\$0	\$0
(51)			\$0	\$0	\$0	\$0	\$0	\$0
(52)			\$0	\$0	\$0	\$0	\$0	\$0
(53)	TOTAL FIXED STORAGE COSTS	sum[(32)-(52)]	\$399,835	\$405,982	\$393,523	\$527,908	\$291,117	\$2,018,365

Attachment II

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	actual (c)	actual (d)	actual (e)	actual (f)	actual (g)	(h)
(54)	STORAGE FIXED COSTS - Delivery							
(55)	Algonquin for TETCO SS-1		\$152,655	\$153,746	\$149,123	\$154,824	\$151,136	\$761,483
(56)	Algonquin delivery for FSS		\$0	\$0	\$0	\$0	\$0	\$0
(57)	TETCO delivery for FSS		\$0	\$0	\$0	\$0	\$0	\$0
(58)	Algonquin SCT for SS-1		\$0	\$0	\$0	\$0	\$0	\$0
(59)	Algonquin delivery for GSS, GSS-TE,		\$0	\$0	\$0	\$0	\$0	\$0
(60)	Algonquin SCT delivery for GSS-TE		\$0	\$0	\$0	\$0	\$0	\$0
(61)	Algonquin delivery for GSS Conv		\$0	\$0	\$0	\$0	\$0	\$0
(62)	Tennessee delivery for GSS		\$92,970	\$183,036	\$15,137	\$106,881	\$104,108	\$502,133
(63)	Tennessee delivery for FSMA		\$0	\$0	\$0	\$0	\$0	\$0
(64)	TETCO delivery for GSS		\$53,571	\$53,571	\$53,575	\$53,573	\$53,269	\$267,558
(65)	TETCO delivery for GSS-TE		\$0	\$0	\$0	\$0	\$0	\$0
(66)	TETCO delivery for GSS-TE		\$0	\$0	\$0	\$0	\$0	\$0
(67)	TETCO delivery for GSS Conv		\$0	\$0	\$0	\$0	\$0	\$0
(68)	Dominion delivery for GSS Conv		\$0	\$0	\$0	\$0	\$0	\$0
(69)	Dominion delivery for GSS		\$0	\$0	\$0	\$0	\$0	\$0
(70)	Algonquin delivery for FSS		\$0	\$0	\$0	\$0	\$0	\$0
(71)	Columbia Delivery for FSS		\$15,396	\$15,033	\$15,033	\$15,069	\$15,074	\$75,605
(72)	Distrigas FLS call payment		\$125,383	\$0	\$226,285	\$351,668	\$351,668	\$1,055,003
(73)			\$0	\$0	\$0	\$0	\$0	\$0
(74)			\$0	\$0	\$0	\$0	\$0	\$0
(75)			\$0	\$0	\$0	\$0	\$0	\$0
(76)			\$0	\$0	\$0	\$0	\$0	\$0
(77)			\$0	\$0	\$0	\$0	\$0	\$0
(78)			\$0	\$0	\$0	\$0	\$0	\$0
(79)	STORAGE DELIVERY FIXED COST \$	sum[(55):(78)]	\$439,975	\$405,386	\$459,153	\$682,014	\$675,254	\$2,661,782
(80)	TOTAL STORAGE FIXED	(53) + (79)	\$839,810	\$811,368	\$852,676	\$1,209,922	\$966,371	\$4,680,147
(81)	TOTAL FIXED COSTS	(30) + (80)	\$3,481,283	\$3,170,537	\$3,427,815	\$3,519,974	\$3,464,261	\$17,063,871

Attachment II

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	actual (c)	actual (d)	actual (e)	actual (f)	actual (g)	(h)
(82)	SUPPLY VARIABLE COSTS (Includes Injections)							
(83)	Tennessee Zone 0		\$10,650,649	\$13,545,834	\$17,697,401	\$17,560,095	\$13,437,755	\$72,891,734
(84)	Tennessee Zone 1		\$2,541,311	\$2,828,363	\$4,450,506	\$3,838,165	\$3,509,913	\$17,168,258
(85)	Tennessee Connexion		\$6,123	\$5,893	\$4,963	\$2,704	\$1,680	\$21,363
(86)	Tennessee Dracut		\$634	\$622	\$29,566	\$6,898	\$2,738	\$40,457
(87)	TETCO STX		\$0	\$0	\$0	\$0	\$0	\$0
(88)	TETCO ELA		\$0	\$0	\$0	\$0	\$0	\$0
(89)	TETCO WLA		\$0	\$0	\$0	\$0	\$0	\$0
(90)	TETCO ETX		\$0	\$0	\$0	\$0	\$0	\$0
(91)	TETCO NF		\$0	\$0	\$0	\$0	\$0	\$0
(92)	M3 Delivered		\$0	\$0	\$0	\$0	\$0	\$0
(93)	Maumee		\$0	\$0	\$0	\$0	\$0	\$0
(94)	Broadrun Col		\$0	\$0	\$0	\$0	\$0	\$0
(95)	Columbia Eagle and Downingtown		\$0	\$0	\$0	\$0	\$0	\$0
(96)	Transco Zone 2		\$0	\$0	\$0	\$0	\$0	\$0
(97)	Dominion to TETCO FTS		\$0	\$0	\$0	\$0	\$0	\$0
(98)	Transco Zone 3		\$0	\$0	\$0	\$0	\$0	\$0
(99)	ANE to Tennessee		\$0	\$0	\$0	\$0	\$0	\$0
(100)	Niagara to Tennessee		\$0	\$0	\$0	\$0	\$0	\$0
(101)	TETCO to B & W		\$0	\$0	\$0	\$0	\$0	\$0
(102)	DistriGas FCS		\$0	\$0	\$0	\$0	\$0	\$0
(103)	Hubline		\$0	\$0	\$0	\$0	\$0	\$0
(104)	Total Pipeline Commodity Charges	sum[(83):(103)]	\$13,198,717	\$16,380,712	\$22,182,435	\$21,407,862	\$16,952,086	\$90,121,811
(105)	Hedging Settlements and Amortization		\$1,623,493	\$2,704,582	\$4,566,551	\$4,351,008	\$2,151,453	\$15,397,087
(106)	Hedging Contracts - Commission & Other Fees		\$160,767	\$107,865	\$1,413,858	\$441,567	\$139,972	\$2,264,028
(107)	Hedging Contracts - Net Carry of Collateral		\$0	\$0	\$0	\$0	\$0	\$0
(108)	Refunds (Columbia)		\$1,784,260	\$2,812,447	\$5,980,409	\$4,792,575	\$2,291,426	\$17,661,116
(109)	Less: Costs of Injections		\$0	\$0	\$0	\$0	\$0	\$0
(110)	TOTAL SUPPLY VARIABLE COSTS	sum[(104):(109)]	\$14,982,977	\$19,193,158	\$28,162,844	\$26,200,436	\$19,243,512	\$107,782,927
(111)	Underground Storage		\$0	\$0	\$0	\$0	\$0	\$0
(112)	LNG Withdrawals and Trucking		\$0	\$0	\$0	\$0	\$0	\$0
(113)	Storage Delivery Costs		\$0	\$0	\$0	\$0	\$0	\$0
(114)	TOTAL STORAGE VARIABLE COSTS	sum[(111):(113)]	\$0	\$0	\$0	\$0	\$0	\$0
(115)	TOTAL VARIABLE COSTS	(110) + (114)	\$14,982,977	\$19,193,158	\$28,162,844	\$26,200,436	\$19,243,512	\$107,782,927
(116)	TOTAL SUPPLY COSTS	(81) + (115)	\$18,464,260	\$22,363,696	\$31,590,659	\$29,720,411	\$22,707,773	\$124,846,798

Attachment II

Supply Estimate and Actuals for Filing

Line No.	Description (a)	Reference (b)	actual (c)	actual (d)	actual (e)	actual (f)	actual (g)	actual (h)
(117)	Storage Costs for FT-2 Calculation		\$0	\$0	\$0	\$0	\$0	\$0
(118)	Storage Fixed Costs - Facilities	(53)	\$399,835	\$405,982	\$393,523	\$527,908	\$291,117	\$2,018,365
(119)	Storage Fixed Costs - Deliveries	(79)	\$439,975	\$405,386	\$459,153	\$682,014	\$675,254	\$2,661,782
(120)	sub-total Storage Costs	sum[(118):(119)]	\$839,810	\$811,368	\$852,676	\$1,209,922	\$966,371	\$4,680,147
(121)	LNG Demand to DAC	Sch 1, line (6)	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$620,329)
(122)	Inventory Financing	Sch 5, line (23)	\$218,843	\$201,044	\$156,111	\$123,848	\$122,463	\$822,308
(123)	Supply related LNG O&M Costs	Sch 1, line (7)	\$51,549	\$51,549	\$51,549	\$47,965	\$47,965	\$250,578
(124)	Working Capital Requirement	Sch 4, line (15)	\$22,600	\$20,540	\$22,245	\$20,417	\$19,518	\$105,320
(125)	Total FT-2 Storage Fixed Costs	sum[(120):(124)]	\$1,008,736	\$960,435	\$958,516	\$1,278,086	\$1,032,251	\$5,238,024
(126)	System Storage MDQ (Dth)		154,334	154,334	154,334	154,334	154,334	771,670
(127)	FT-2 Storage Cost per MDQ (Dth)	(125) / (126)	\$6.5361	\$6.2231	\$6.2107	\$8.2813	\$6.6884	\$6.7879
(128)	Pipeline Variable	(115)	\$14,982,977	\$19,193,158	\$28,162,844	\$26,200,436	\$19,243,512	\$107,782,927
(129)	Less Non-firm Gas Costs ¹		(\$79,475)	(\$232,644)	(\$294,473)	(\$194,769)	(\$195,469)	(\$996,829)
(130)	Less Company Use ¹		(\$15,192)	(\$28,566)	(\$32,122)	\$0	\$0	(\$75,879)
(131)	Less Manchester St Balancing ¹		\$1,636,590	\$0	\$0	\$0	\$0	\$1,636,590
(132)	Plus Cashout ¹		\$0	\$0	\$0	\$0	\$0	\$0
(133)	Less Mkter Withdrawals/Injections ¹		(\$297,365)	\$326,447	\$0	\$0	\$0	\$29,082
(134)	Mkter Over-takes/Undertakes ¹		\$118,183	\$22,093	\$104,470	\$500,963	(\$258,839)	\$486,869
(135)	Plus Pipeline Srchg/Credit ¹		\$174,700	\$232,602	\$245,069	\$246,276	\$222,940	\$1,121,587
(136)	Less Mkter FT-2 Daily weather true-up ¹		(\$1,101)	(\$1,101)	(\$42,260)	\$75,594	(\$27,852)	\$4,381
(137)	TOTAL FIRM COMMODITY COSTS	sum[(128):(136)]	\$16,520,419	\$19,511,989	\$28,143,528	\$26,828,501	\$18,984,291	\$109,988,729

¹ Derived from Company's billing system

National Grid
Rhode Island - Gas

Attachment II

Schedule 3
Page 1 of 1

GCR Revenue

Line No.	Description (a)	Reference (b)	Nov-12 actual (c)	Dec-12 actual (d)	Jan-13 actual (e)	Feb-13 actual (f)	Mar-13 actual (g)	Nov'12-Mar'13 (h)
(1)	<u>I. Fixed Cost Revenue --</u>							
(2)	(a) Low Load dth	Sch 6, line (24)-(28), (30)	1,309,186	2,815,334	3,745,030	4,357,685	3,724,867	15,952,101
(3)	Storage Fixed Cost Factor	(4) / (2)	\$1 3853	\$1 8316	\$1 8208	\$1 8108	\$1 8180	
(4)	Low Load Revenue ¹		\$1,813,559	\$5,156,680	\$6,818,771	\$7,890,727	\$6,771,708	\$28,451,445
(5)	(b) High Load dth	Sch 6, line (22), (23), (29), (31)	87,767	140,682	166,507	171,296	161,489	727,741
(6)	Storage Fixed Cost Factor	(7) / (5)	\$1 3298	\$1 3623	\$1 3520	\$1 3436	\$1 3489	
(7)	High Load Revenue ¹		\$116,714	\$191,651	\$225,115	\$230,146	\$217,835	\$981,460
(8)	sub-total throughput Dth	(2) + (5)	1,396,953	2,956,016	3,911,537	4,528,981	3,886,355	16,679,842
(9)	FT-2 for activity in Oct-12- Fixed ¹		\$39,381					\$39,381
(10)	FT-2 Storage Revenue from marketers ¹			\$96,937	\$94,508	\$443,174	\$239,648	\$874,267
(11)	TOTAL Fixed Revenue	(4) + (7) + (9) + (10)	\$1,969,654	\$5,445,267	\$7,138,394	\$8,564,047	\$7,229,192	\$30,346,553
(12)	<u>II. Variable Cost Revenue --</u>							
(13)	(a) Firm Sales dth	(8)	1,396,953	2,956,016	3,911,537	4,528,981	3,886,355	16,679,842
(14)	Variable Supply Cost Factor	(15) / (13)	\$5 8398	\$4 7188	\$4 6903	\$4 6697	\$4 6935	
(15)	Variable Supply Revenue ¹		\$8,157,898	\$13,948,757	\$18,346,419	\$21,148,907	\$18,240,787	\$79,842,769
(16)	(b) TSS Sales dth	Sch 6, line (20)	12,045	18,849	9,002	12,300	11,097	63,291
(17)	TSS Variable Supply Cost Factor		\$0 0000	\$0 0000	\$0 0000	\$0 0000	\$0 0000	
(18)	TSS Surcharge Revenue	(16) * (17)	\$0	\$0	\$0	\$0	\$0	\$0
(19)	(c) Default Sales dth	Sch 6, line (60)	1,820	8,109	7,008	9,834	5,832	32,603
(20)	Variable Supply Cost Factor	(21) / (19)	\$7 7013	\$6 2701	\$18 9392	\$12 8070	\$11 1861	
(21)	Variable Supply Revenue ¹		\$14,017	\$50,845	\$132,731	\$125,938	\$65,236	\$388,768
(22)	(d) Peaking Gas Revenue ¹		\$0	\$0	\$0	\$0	\$0	\$0
(23)	(e) Deferred Responsibility ¹		\$130	(\$2,194)	\$27	\$322	\$3,472	\$1,758
(24)	FT-2 for activity in Oct-12- Variable ¹		\$3,699					\$3,699
(25)	TOTAL Variable Revenue	(15)+(18)+(21)+(22)+(23)+(24)	\$8,175,744	\$13,997,409	\$18,479,178	\$21,275,167	\$18,309,495	\$80,236,993
(26)	Total Gas Cost Revenue	(11) + (25)	\$10,145,397	\$19,442,676	\$25,617,572	\$29,839,214	\$25,538,687	\$110,583,547

¹ Derived from Company's billing system

Attachment II

WORKING CAPITAL

Line No.	Description (a)	Reference (b)	actual (c)	actual (d)	actual (e)	actual (f)	actual (g)	(h)
(1)	Supply Fixed Costs	Sch 1, line (5)	\$3,481,283	\$3,170,537	\$3,427,815	\$3,519,974	\$3,464,261	\$17,063,871
(2)	Less: LNG Demand to DAC	Sch 1, line (6)	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$124,066)	(\$620,329)
(3)	Plus: Supply Related LNG O&M Costs	Sch 1, line (7)	\$51,549	\$51,549	\$51,549	\$47,965	(\$47,965)	\$154,648
(4)	Total Adjustments	(2) + (3)	(\$72,517)	(\$72,517)	(\$72,517)	(\$76,101)	(\$172,031)	(\$465,681)
(5)	Allowable Working Capital Costs	(1) + (4)	\$3,408,767	\$3,098,021	\$3,355,299	\$3,443,874	\$3,292,230	\$16,598,190
(6)	Number of Days Lag	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	24.40	24.40	24.40	21.51	21.51	
(7)	Working Capital Requirement	(5) * (6) / 365	\$227,874	\$207,101	\$224,299	\$202,953	\$194,016	
(8)	Cost of Capital	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	7.22%	7.22%	7.22%	7.54%	7.54%	
(9)	Return on Working Capital Requirement	(7) * (8)	\$16,452	\$14,953	\$16,194	\$15,303	\$14,629	
(10)	Weighted Cost of Debt	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	2.21%	2.21%	2.21%	2.86%	2.86%	
(11)	Interest Expense	(7) * (10)	\$5,036	\$4,577	\$4,957	\$5,804	\$5,549	
(12)	Taxable Income	(9) - (11)	\$11,416	\$10,376	\$11,237	\$9,498	\$9,080	
(13)	1 - Combined Tax Rate	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	0.65	0.65	0.65	0.65	0.65	
(14)	Return and Tax Requirement	(12) / (13)	\$17,564	\$15,963	\$17,288	\$14,613	\$13,969	
(15)	Supply Fixed Working Capital Requirement	(11) + (14)	\$22,600	\$20,540	\$22,245	\$20,417	\$19,518	\$105,320
(16)	Supply Variable Costs	Sch 1, line (21)	\$16,520,419	\$19,511,989	\$28,143,528	\$26,828,501	\$18,984,291	\$109,988,729
(17)	Less: Balancing Related LNG Commodity (to DAC)	Sch 1, line (22)	(55,845)	(458)	(534,407)	(165,050)	(31,563)	(\$787,323)
(18)	Plus: Supply Related LNG O&M Costs	Sch 1, line (23)	35,844	35,844	47,725	47,725	(47,725)	\$107,532
(19)	Total Adjustments	(17) + (18)	(\$20,001)	\$35,386	(\$498,563)	(\$117,326)	(\$79,288)	(\$679,791)
(20)	Allowable Working Capital Costs	(16) + (19)	\$16,500,418	\$19,547,376	\$27,644,965	\$26,711,175	\$18,905,004	\$109,308,938
(21)	Number of Days Lag	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	24.40	24.40	24.40	21.51	21.51	
(22)	Working Capital Requirement	[(20) * (21)] / 365	\$1,103,042	\$1,306,729	\$1,848,047	\$1,574,130	\$1,114,100	
(23)	Cost of Capital	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	7.22%	7.22%	7.22%	7.54%	7.54%	
(24)	Return on Working Capital Requirement	(22) * (23)	\$79,640	\$94,346	\$133,429	\$118,689	\$84,003	
(25)	Weighted Cost of Debt	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	2.21%	2.21%	2.21%	2.86%	2.86%	
(26)	Interest Expense	(22) * (25)	\$24,377	\$28,879	\$40,842	\$45,020	\$31,863	
(27)	Taxable Income	(24) - (26)	\$55,262	\$65,467	\$92,587	\$73,669	\$52,140	
(28)	1 - Combined Tax Rate	Nov'12-Jan'13: Dkt 3943 Feb'13-Mar'13: Dkt 4323	0.65	0.65	0.65	0.65	0.65	
(29)	Return and Tax Requirement	(27) / (28)	\$85,019	\$100,719	\$142,442	\$113,337	\$80,215	
(30)	Supply Variable Working Capital Requirement	(26) + (29)	\$109,396	\$129,597	\$183,284	\$158,357	\$112,078	\$692,713

Attachment II

INVENTORY FINANCE

Line No.	Description	Reference	Nov-12 actual (c)	Dec-12 actual (d)	Jan-13 actual (e)	Feb-13 actual (f)	Mar-13 actual (g)	Nov-12-Mar-13 (h)
(1)	Storage Inventory Balance	(b)						
(2)	Monthly Storage Deferral/Amortization		\$15,445,080	\$14,881,176	\$13,425,529	\$11,840,616	\$12,157,529	
(3)	Subtotal	(1) + (2)	\$6,895,035	\$5,309,177	\$2,689,064	\$551,603	\$0	
(4)	Cost of Capital	Nov'12-Jan'13: Dkt 3943	7.22%	7.22%	7.22%	7.54%	7.54%	
(5)	Return on Working Capital Requirement	Feb'13-Mar'13: Dkt 4323 (3) * (4)	\$1,612,956	\$1,457,744	\$1,163,474	\$934,373	\$916,678	\$6,085,224
(6)	Weighted Cost of Debt	Nov'12-Jan'13: Dkt 3943	2.21%	2.21%	2.21%	2.86%	2.86%	
(7)	Interest Charges Financed	Feb'13-Mar'13: Dkt 4323 (3) * (6)	\$493,717	\$446,207	\$356,132	\$354,417	\$347,705	\$1,998,179
(8)	Taxable Income	(5) - (7)	\$1,119,240	\$1,011,537	\$807,341	\$579,956	\$568,972	
(9)	1 - Combined Tax Rate	Nov'12-Jan'13: Dkt 3943	0.65	0.65	0.65	0.65	0.65	
(10)	Return and Tax Requirement	Feb'13-Mar'13: Dkt 4323 (8) / (9)	\$1,721,907	\$1,556,210	\$1,242,063	\$892,240	\$875,342	\$6,287,763
(11)	Working Capital Requirement	(7) + (10)	\$2,215,624	\$2,002,417	\$1,598,196	\$1,246,657	\$1,223,047	\$8,285,941
(12)	Storage-Related Inventory Costs	(11) / 12	\$184,635	\$166,868	\$133,183	\$103,888	\$101,921	\$690,495
(13)	LNG Inventory Balance							
(14)	Cost of Capital	Nov'12-Jan'13: Dkt 3943	7.22%	7.22%	7.22%	7.54%	7.54%	
(15)	Return on Working Capital Requirement	Feb'13-Mar'13: Dkt 4323 (13) * (14)	\$4,139,002	\$4,135,110	\$2,774,173	\$2,380,897	\$2,450,336	
(16)	Weighted Cost of Debt	Nov'12-Jan'13: Dkt 3943	2.21%	2.21%	2.21%	2.86%	2.86%	
(17)	Interest Charges Financed	Feb'13-Mar'13: Dkt 4323 (13) * (16)	\$91,472	\$91,386	\$61,309	\$68,094	\$70,080	\$382,340
(18)	Taxable Income	(15) - (17)	\$207,364	\$207,169	\$138,986	\$111,426	\$114,676	
(19)	1 - Combined Tax Rate	Nov'12-Jan'13: Dkt 3943	0.65	0.65	0.65	0.65	0.65	
(20)	Return and Tax Requirement	Feb'13-Mar'13: Dkt 4323 (18) / (19)	\$319,022	\$318,722	\$213,825	\$171,425	\$176,424	\$1,199,417
(21)	Working Capital Requirement	(17) + (20)	\$410,494	\$410,107	\$275,134	\$239,518	\$246,504	\$1,581,757
(22)	LNG-Related Inventory Costs	(21) / 12	\$34,208	\$34,176	\$22,928	\$19,960	\$20,542	\$131,813
(23)	Total Inventory Financing Costs	(12) + (22)	\$218,843	\$201,044	\$156,111	\$123,848	\$122,463	\$822,308

Attachment II

Actual Dth Usage for Filing

<u>THROUGHPUT (Dth)</u>		<u>Nov-12</u>	<u>Dec-12</u>	<u>Jan-13</u>	<u>Feb-13</u>	<u>Mar-13</u>	<u>Nov'12-Mar'13</u>
Line No	Rate Class (a)	actual (b)	actual (c)	actual (d)	actual (e)	actual (f)	(g)
(1)	<u>SALES (dth)</u>						
(2)	Residential Non-Heating	45,986	78,983	98,907	109,290	100,574	433,741
(3)	Residential Non-Heating Low Income	1,703	3,229	4,277	4,875	3,978	18,062
(4)	Residential Heating	902,551	1,903,463	2,537,878	2,912,936	2,519,777	10,776,605
(5)	Residential Heating Low Income	94,997	190,048	248,229	279,036	237,030	1,049,341
(6)	Small C&I	106,317	269,726	399,055	480,777	383,696	1,639,571
(7)	Medium C&I	157,402	353,174	445,472	519,825	464,259	1,940,132
(8)	Large LLF	32,445	71,925	92,532	100,071	92,433	389,407
(9)	Large HLF	19,644	27,483	34,578	30,406	30,759	142,871
(10)	Extra Large LLF	6,035	10,809	13,483	52,746	16,577	99,651
(11)	Extra Large HLF	17,828	28,328	28,122	26,719	26,175	127,171
(12)	Total Sales	1,384,909	2,937,167	3,902,535	4,516,681	3,875,259	16,616,551
(13)	<u>TSS</u>						
(14)	Small	0	0	0	0	128	128
(15)	Medium	4,389	7,361	5,297	6,713	7,281	31,041
(16)	Large LLF	5,050	8,828	3,082	5,581	3,685	26,227
(17)	Large HLF	2,606	617	622	6	3	3,854
(18)	Extra Large LLF	0	0	0	0	0	0
(19)	Extra Large HLF	0	2,042	0	0	0	2,042
(20)	Total TSS	12,045	18,849	9,002	12,300	11,097	63,291
(21)	<u>Sales & TSS THROUGHPUT</u>						
(22)	Residential Non-Heating	45,986	78,983	98,907	109,290	100,574	433,741
(23)	Residential Non-Heating Low Income	1,703	3,229	4,277	4,875	3,978	18,062
(24)	Residential Heating	902,551	1,903,463	2,537,878	2,912,936	2,519,777	10,776,605
(25)	Residential Heating Low Income	94,997	190,048	248,229	279,036	237,030	1,049,341
(26)	Small C&I	106,317	269,726	399,055	480,777	383,824	1,639,699
(27)	Medium C&I	161,791	360,535	450,770	526,537	471,539	1,971,172
(28)	Large LLF	37,495	80,754	95,614	105,653	96,118	415,634
(29)	Large HLF	22,250	28,100	35,201	30,412	30,762	146,725
(30)	Extra Large LLF	6,035	10,809	13,483	52,746	16,577	99,651
(31)	Extra Large HLF	17,828	30,370	28,122	26,719	26,175	129,213
(32)	Total Sales & TSS Throughput	1,396,953	2,956,016	3,911,537	4,528,981	3,886,355	16,679,842
(33)	<u>FT-1 TRANSPORTATION</u>						
(34)	FT-1 Medium	50,249	112,569	95,414	123,862	86,589	468,683
(35)	FT-1 Large LLF	73,300	188,138	170,378	215,449	135,159	782,424
(36)	FT-1 Large HLF	38,036	56,075	50,686	66,624	49,168	260,588
(37)	FT-1 Extra Large LLF	89,466	187,747	168,411	258,174	75,874	779,672
(38)	FT-1 Extra Large HLF	404,407	506,893	470,541	590,059	417,887	2,389,788
(39)	Default	1,820	8,109	7,008	9,834	5,832	32,603
(40)	Total FT-1 Transportation	657,279	1,059,531	962,438	1,264,001	770,509	4,713,758
(41)	<u>FT-2 TRANSPORTATION</u>						
(42)	FT-2 Small	0	808	1,364	2,595	2,320	7,087
(43)	FT-2 Medium	78,225	178,409	216,523	252,674	224,775	950,605
(44)	FT-2 Large LLF	55,167	174,242	127,016	203,820	166,189	726,433
(45)	FT-2 Large HLF	19,673	31,380	35,172	37,007	33,651	156,882
(46)	FT-2 Extra Large LLF	381	2,458	5,351	5,409	5,267	18,866
(47)	FT-2 Extra Large HLF	15,003	13,056	19,572	17,219	16,570	81,420
(48)	Total FT-2 Transportation	168,448	399,545	403,634	516,129	446,451	1,934,207
(49)	<u>Total THROUGHPUT</u>						
(50)	Residential Non-Heating	45,986	78,983	98,907	109,290	100,574	433,741
(51)	Residential Non-Heating Low Income	1,703	3,229	4,277	4,875	3,978	18,062
(52)	Residential Heating	902,551	1,903,463	2,537,878	2,912,936	2,519,777	10,776,605
(53)	Residential Heating Low Income	94,997	190,048	248,229	279,036	237,030	1,049,341
(54)	Small C&I	106,317	269,726	399,055	480,777	383,824	1,639,699
(55)	Medium C&I	290,265	651,514	762,706	903,074	782,902	3,390,460
(56)	Large LLF	165,962	443,134	393,008	524,921	397,466	1,924,491
(57)	Large HLF	79,960	115,555	121,058	134,042	113,580	564,195
(58)	Extra Large LLF	95,882	201,014	187,246	316,328	97,718	898,189
(59)	Extra Large HLF	437,237	550,319	518,236	633,997	460,632	2,600,421
(60)	Default	1,820	8,109	7,008	9,834	5,832	32,603
(61)	Total Throughput	2,222,680	4,415,092	5,277,609	6,309,110	5,103,315	23,327,807

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013**

Attachment AEL-3
Projected Gas Cost Balances

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

Table with columns: Line No., Description, Reference, Nov-13 Forecast, Dec-13 Forecast, Jan-14 Forecast, Feb-14 Forecast, Mar-14 Forecast, Apr-14 Forecast, May-14 Forecast, Jun-14 Forecast, Jul-14 Forecast, Aug-14 Forecast, Sep-14 Forecast, Oct-14 Forecast, Nov - Oct. Rows include (1) # of Days in Month, (2) Fixed Cost Deferred, (3) Beginning Balance, (4) Fixed Costs (net of cap rel), (5) NGPMP Credits, (6) Working Capital, (7) LNG Demand to DAC, (8) Supply Related LNG O & M, (9) Total Supply Fixed Costs, (10) Fixed - Revenue, (11) Prelim. Ending Balance, (12) Month's Average Balance, (13) Interest Rate (BOA Prime minus 200 bps), (14) Interest Applied, (15) Market Reconciliation, (16) Fixed Ending Balance, (17) II. Variable Cost Deferred, (18) Beginning Balance, (19) Variable Costs, (20) Supply Related LNG to DAC, (21) Inventory Financing - LNG, (22) Inventory Financing - LNG, (23) Working Capital, (24) Working Capital, (25) Total Variable Costs, (26) Variable - Revenue, (27) Prelim. Ending Balance, (28) Month's Average Balance, (29) Interest Rate (BOA Prime minus 200 bps), (30) Interest Applied, (31) Gas Procurement Incentive (penalty), (32) Variable Ending Balance, (33) GCR Deferred Summary, (34) Beginning Balance, (35) Gas Costs, (36) Inventory Finance, (37) Working Capital, (38) NGPMP Credits, (39) Total Costs, (40) Revenue, (41) Prelim. Ending Balance, (42) Month's Average Balance, (43) Interest Rate (BOA Prime minus 200 bps), (44) Interest Applied, (45) Gas Purchase Plan Incentives (Penalties), (46) Ending Bal. W/ Interest.

\$2,676

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013**

Attachment AEL-4
Bill Impact Analysis

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

Line No.

GCR

Residential Non-Heating:

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(31)	140	\$315	\$319	(\$3)	-1.0%	\$2	(\$5)	\$0
(32)	155	\$332	\$336	(\$4)	-1.0%	\$2	(\$6)	\$0
(33)	171	\$351	\$354	(\$4)	-1.1%	\$2	(\$6)	\$0
(34)	184	\$365	\$370	(\$4)	-1.1%	\$3	(\$7)	\$0
(35)	198	\$381	\$386	(\$5)	-1.2%	\$3	(\$7)	\$0
(36)	214	\$399	\$404	(\$5)	-1.2%	\$3	(\$8)	\$0
(37)	228	\$415	\$421	(\$5)	-1.2%	\$3	(\$8)	\$0
(38)	244	\$434	\$439	(\$5)	-1.2%	\$3	(\$9)	\$0
(39)	258	\$450	\$455	(\$6)	-1.3%	\$4	(\$9)	\$0
(40)	275	\$469	\$475	(\$6)	-1.3%	\$4	(\$10)	\$0
(41)	288	\$484	\$490	(\$7)	-1.3%	\$4	(\$11)	\$0

Residential Non-Heating Low Income:

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(46)	140	\$294	\$297	(\$3)	-1.1%	\$2	(\$5)	\$0
(47)	155	\$310	\$313	(\$4)	-1.1%	\$2	(\$6)	\$0
(48)	171	\$328	\$331	(\$4)	-1.2%	\$2	(\$6)	\$0
(49)	184	\$342	\$346	(\$4)	-1.2%	\$3	(\$7)	\$0
(50)	198	\$357	\$362	(\$5)	-1.2%	\$3	(\$7)	\$0
(51)	214	\$374	\$379	(\$5)	-1.3%	\$3	(\$8)	\$0
(52)	228	\$390	\$395	(\$5)	-1.3%	\$3	(\$8)	\$0
(53)	244	\$407	\$413	(\$5)	-1.3%	\$3	(\$9)	\$0
(54)	258	\$423	\$429	(\$6)	-1.4%	\$4	(\$9)	\$0
(55)	275	\$441	\$448	(\$6)	-1.4%	\$4	(\$10)	\$0
(56)	288	\$456	\$462	(\$7)	-1.4%	\$4	(\$11)	\$0

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

Line No.

GCR

C & I Small:

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(61)								EE
(62)	880	\$1,358	\$1,372	(\$14)	-1.0%	(\$9)	(\$5)	\$0
(63)	973	\$1,460	\$1,476	(\$16)	-1.1%	(\$10)	(\$6)	\$0
(64)	1,067	\$1,563	\$1,580	(\$17)	-1.1%	(\$11)	(\$7)	\$0
(65)	1,162	\$1,664	\$1,683	(\$19)	-1.1%	(\$11)	(\$7)	\$0
(66)	1,258	\$1,761	\$1,782	(\$20)	-1.1%	(\$12)	(\$8)	\$0
(67)	1,352	\$1,855	\$1,877	(\$22)	-1.2%	(\$13)	(\$8)	\$0
(68)	1,446	\$1,950	\$1,973	(\$23)	-1.2%	(\$14)	(\$9)	\$0
(69)	1,542	\$2,045	\$2,070	(\$25)	-1.2%	(\$15)	(\$10)	\$0
(70)	1,635	\$2,139	\$2,165	(\$26)	-1.2%	(\$16)	(\$10)	\$0
(71)	1,730	\$2,232	\$2,260	(\$28)	-1.2%	(\$17)	(\$11)	\$0
(72)	1,825	\$2,326	\$2,356	(\$29)	-1.2%	(\$18)	(\$11)	\$0

C & I Medium:

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(76)								EE
(77)	7,941	\$8,970	\$9,101	(\$130)	-1.4%	(\$79)	(\$52)	\$0
(78)	8,796	\$9,846	\$9,990	(\$144)	-1.4%	(\$87)	(\$57)	\$0
(79)	9,650	\$10,720	\$10,879	(\$158)	-1.5%	(\$96)	(\$63)	\$0
(80)	10,505	\$11,596	\$11,768	(\$172)	-1.5%	(\$104)	(\$68)	\$0
(81)	11,361	\$12,472	\$12,659	(\$186)	-1.5%	(\$113)	(\$74)	\$0
(82)	12,217	\$13,349	\$13,549	(\$200)	-1.5%	(\$121)	(\$79)	\$0
(83)	13,073	\$14,225	\$14,440	(\$214)	-1.5%	(\$129)	(\$85)	\$0
(84)	13,928	\$15,100	\$15,329	(\$228)	-1.5%	(\$138)	(\$91)	\$0
(85)	14,782	\$15,975	\$16,218	(\$242)	-1.5%	(\$146)	(\$96)	\$0
(86)	15,637	\$16,850	\$17,107	(\$256)	-1.5%	(\$155)	(\$102)	\$0
(87)	16,492	\$17,726	\$17,997	(\$270)	-1.5%	(\$163)	(\$107)	\$0

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

Line No.

GCR

C & IHLF Large:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(91)								EE
(92)								
(93)								
(94)								
(95)	41,066	\$42,600	\$42,912	(\$312)	-0.7%	(\$407)	\$94	\$0
(96)	45,488	\$46,961	\$47,307	(\$346)	-0.7%	(\$450)	\$105	\$0
(97)	49,910	\$51,322	\$51,702	(\$379)	-0.7%	(\$494)	\$115	\$0
(98)	54,334	\$55,685	\$56,098	(\$413)	-0.7%	(\$538)	\$125	\$0
(99)	58,757	\$60,047	\$60,494	(\$447)	-0.7%	(\$582)	\$135	\$0
(100)	63,179	\$64,409	\$64,889	(\$480)	-0.7%	(\$625)	\$145	\$0
(101)	67,600	\$68,769	\$69,282	(\$514)	-0.7%	(\$669)	\$156	\$0
(102)	72,023	\$73,131	\$73,678	(\$547)	-0.7%	(\$713)	\$166	\$0
(103)	76,447	\$77,494	\$78,075	(\$581)	-0.7%	(\$757)	\$176	\$0
(104)	80,870	\$81,856	\$82,471	(\$615)	-0.7%	(\$801)	\$186	\$0
(105)	85,292	\$86,217	\$86,865	(\$648)	-0.7%	(\$844)	\$196	\$0

C & IHLF Large:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(106)								EE
(107)								
(108)								
(109)								
(110)	50,411	\$128,014	\$127,096	\$918	0.7%	\$711	\$207	\$0
(111)	55,841	\$141,576	\$140,560	\$1,016	0.7%	\$787	\$229	\$0
(112)	61,273	\$155,144	\$154,029	\$1,115	0.7%	\$864	\$251	\$0
(113)	66,699	\$168,697	\$167,483	\$1,214	0.7%	\$940	\$273	\$0
(114)	72,129	\$182,260	\$180,947	\$1,313	0.7%	\$1,017	\$296	\$0
(115)	77,558	\$195,821	\$194,409	\$1,412	0.7%	\$1,094	\$318	\$0
(116)	82,989	\$209,385	\$207,875	\$1,510	0.7%	\$1,170	\$340	\$0
(117)	88,416	\$222,940	\$221,331	\$1,609	0.7%	\$1,247	\$362	\$0
(118)	93,847	\$236,505	\$234,797	\$1,708	0.7%	\$1,323	\$385	\$0
(119)	99,275	\$250,063	\$248,256	\$1,807	0.7%	\$1,400	\$407	\$0
(120)	104,705	\$263,626	\$261,720	\$1,906	0.7%	\$1,476	\$429	\$0

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

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(121)								EE
(122)								
(123)								
(124)								
(125)	174,357	\$151,172	\$152,637	(\$1,465)	-1.0%	\$711	\$262	\$0
(126)	193,136	\$166,904	\$168,527	(\$1,622)	-1.0%	\$787	\$290	\$0
(127)	211,912	\$182,634	\$184,414	(\$1,780)	-1.0%	\$864	\$318	\$0
(128)	230,688	\$198,365	\$200,303	(\$1,938)	-1.0%	\$940	\$346	\$0
(129)	249,466	\$214,096	\$216,192	(\$2,096)	-1.0%	\$1,017	\$374	\$0
(130)	Average Customer	\$229,827	\$232,080	(\$2,253)	-1.0%	\$1,094	\$402	\$0
(131)	287,018	\$245,557	\$247,968	(\$2,411)	-1.0%	\$1,170	\$431	\$0
(132)	305,796	\$261,289	\$263,857	(\$2,569)	-1.0%	\$1,247	\$459	\$0
(133)	324,573	\$277,019	\$279,746	(\$2,726)	-1.0%	\$1,323	\$487	\$0
(134)	343,350	\$292,750	\$295,634	(\$2,884)	-1.0%	\$1,400	\$515	\$0
(135)	362,127	\$308,481	\$311,523	(\$3,042)	-1.0%	\$1,476	\$543	\$0

GCR

C & IHLF Extra-Large:

Line No.	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to:		
						GCR	Base DAC	ISR
(136)								EE
(137)								
(138)								
(139)								
(140)	447,421	\$358,846	\$351,285	\$7,561	2.2%	\$6,309	\$1,253	\$0
(141)	495,605	\$396,942	\$388,566	\$8,376	2.2%	\$6,988	\$1,388	\$0
(142)	543,789	\$435,038	\$425,848	\$9,190	2.2%	\$7,667	\$1,523	\$0
(143)	591,972	\$473,133	\$463,129	\$10,004	2.2%	\$8,347	\$1,658	\$0
(144)	640,155	\$511,228	\$500,409	\$10,819	2.2%	\$9,026	\$1,792	\$0
(145)	Average Customer	\$549,325	\$537,692	\$11,633	2.2%	\$9,706	\$1,927	\$0
(146)	736,523	\$587,420	\$574,973	\$12,447	2.2%	\$10,385	\$2,062	\$0
(147)	784,708	\$625,516	\$612,255	\$13,262	2.2%	\$11,064	\$2,197	\$0
(148)	832,891	\$663,612	\$649,536	\$14,076	2.2%	\$11,744	\$2,332	\$0
(149)	881,074	\$701,707	\$686,817	\$14,890	2.2%	\$12,423	\$2,467	\$0
(150)	929,259	\$739,804	\$724,099	\$15,704	2.2%	\$13,103	\$2,602	\$0

C & IHLF Extra-Large:

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013**

Attachment AEL-5
FT-2 Demand Rate

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

Line

<u>No.</u>	<u>Item</u>	<u>Reference</u>	<u>Proposed</u>	<u>Billing Units</u>
(a)		(b)	(c)	(d)
(1)	FT-2 Demand	AEL-5 pg 2, Line (20)	\$9.7373	Dth/Mth
(2)	Weighted Average Upstream Pipeline Transportation Cost	EDA - 4	\$0.9383	Per Dth of capacity

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

Line No. Description	Reference	Source Line #	Amount
(a)	(b)	(c)	(d)
(1) Storage Fixed Costs	AEL-1 pg 4	Line (58)	\$15,830,032
Less:			
(2) LNG Demand to DAC	AEL-1 pg 2	Line (5)	(\$1,488,790)
(3) Credits			\$0
(4) Refunds			\$0
(5) Total Credits	sum [(2):(4)]		<u>(\$1,488,790)</u>
Plus:			
(6) Supply Related LNG O&M Costs	Dkt 4323		\$575,581
(7) Working Capital Requirement	AEL-1 pg 9	Line (47)	<u>\$88,435</u>
(8) Total Additions	sum [(6):(7)]		<u>\$664,016</u>
(9) Total Storage Fixed Costs	(1) + (5) + (8)		<u>\$15,005,258</u>
Inventory Financing			
(10) Underground	AEL-1 pg 10	Line (12)	\$1,485,211
(11) LNG	AEL-1 pg 10	Line (22)	\$403,203
(12) Total Storage Fixed Costs	(9) + (10) + (11)		<u>\$16,893,673</u>
(13) LNG Storage MDQ (Dth)	AEL-1 pg 12	Line (14)	106,911
(14) AGT	EDA-4		31,578
(15) TENN	EDA-4		<u>10,836</u>
(16) Total Storage MDQ	sum [(13):(15)]		149,325
(17) Storage MDQ X 12 Months	(16) *12		1,791,900 MDCQ Dth
(18) FT- 2 Demand Rate	(12) / (17)		<u>\$9.4277</u> per MDCQ Dth
(19) Uncollectible %	Docket 4323		3.18%
(20) Total FT-2 Demand Rate adjusted for Uncollectibles	(18) / [(1 - (19))]		\$9.7373 per MDCQ Dth

**National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Calculation of FT-2 Demand Costs**

Line No. <u>Description</u>	Source		<u>Amount</u>
	<u>Reference</u>	<u>Line #</u>	
(a)	(b)	(c)	(d)
(1) FT- 2 Demand Rate	AEL-5 pg 2	Line (18)	<u>\$9.4277</u> per MDCQ Dth
(2) MDQ-U	Mkter MDQ Forecast		3,852
(3) MDQ-P	Mkter MDQ Forecast		<u>9,781</u>
(4) Marketer MDQs	(2) + (3)		13,633 Dth/Mth
(5) FT-2 Storage Costs	(1) x (4) x 12 Months		\$1,542,334

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013

Attachment AEL-6
FT-2 Capacity Allocator Percentages

**RI Gas Company
Capacity Assignment Table**

Line No.	Load (a)	Rate Class (b)	<u>% of Peak Day Requirement</u>				<u>% of Total Capacity</u>		
			Pipeline (c)	Storage (d)	Peaking (e)	Total (f)	Pipeline (g)	Storage (h)	Peaking (i)
(1)	HLF	Res - Non-Heating	62.0%	11.0%	27.0%	100.0%	2.1%	1.8%	1.8%
(2)	HLF	Res - Non-Heating LI	62.0%	11.0%	27.0%	100.0%			
(3)	LLF	Res - Heating	54.0%	13.0%	33.0%	100.0%	57.3%	58.5%	58.5%
(4)	LLF	Res - Heating LI	54.0%	13.0%	33.0%	100.0%			
(5)	LLF	Small	54.0%	13.0%	33.0%	100.0%	8.6%	9.1%	9.1%
(6)	LLF	Med	54.0%	13.0%	33.0%	100.0%	9.5%	9.1%	9.1%
(7)	LLF	Large Low Load	54.0%	13.0%	33.0%	100.0%	1.9%	2.0%	2.0%
(8)	HLF	Large High Load	62.0%	11.0%	27.0%	100.0%	0.6%	0.3%	0.3%
(9)	LLF	XL Low Load	54.0%	13.0%	33.0%	100.0%	0.3%	0.3%	0.3%
(10)	HLF	XL High Load	62.0%	11.0%	27.0%	100.0%	0.5%	0.3%	0.3%

(11)	HLF	High Load Factor	62.0%	11.0%	27.0%	100.0%
(12)	LLF	Low Load Factor	54.0%	13.0%	33.0%	100.0%
(13)		Total	55.0%	13.0%	32.0%	100.0%

7.4%	5.4%	5.4%
92.6%	94.6%	94.6%
100.0%	100.0%	100.0%

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4436
GAS COST RECOVERY FILING
WITNESS: ANN E. LEARY
SEPTEMBER 3, 2013**

Attachment AEL-7
Marketer Reconciliation

2011-12 & 2012-13 Annual Marketer Reconciliation

Line No.	Description	# of days	Reference	Tetco ELA /Algonquin	Tetco WLA /Algonquin	Tennessee Zone 1 to NEECC	Tetco STX /Algonquin	Algonquin @ Lambertville, NJ	Columbia (Maumee/Downington)	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(i)	(i)
2012-2013 Marketer Reconciliation										
MDCQ by Month										
(1)	Nov-12	30		184,920	251,310	285,030	84,150	41,640	1,140	848,190
(2)	Dec-12	31		192,200	260,741	294,531	95,356	43,555	961	887,344
(3)	Jan-13	31		193,657	261,020	294,500	99,541	48,174	992	897,884
(4)	Feb-13	28		174,972	235,620	265,972	91,028	43,596	924	812,112
(5)	Mar-13	31		193,719	260,648	294,469	100,440	47,368	1,116	897,760
(6)	Apr-13	30		188,070	252,360	285,000	97,860	46,230	1,080	870,600
(7)	May-13	31		194,432	260,741	294,500	101,742	48,112	1,116	900,643
(8)	Jun-13	30		188,280	252,510	284,970	99,540	47,400	1,020	873,720
(9)	Jul-13	31		194,463	261,020	294,469	102,734	48,577	1,023	902,286
(10)	Aug-13	31		194,401	261,175	294,469	103,044	48,608	961	902,658
(11)	Sep-13	30		188,130	252,750	284,970	99,720	47,040	930	873,540
(12)	Oct-13	31		194,401	261,175	294,469	103,044	48,608	961	902,658
(13)	Total		sum[(1):(12)]	2,281,645	3,071,070	3,467,349	1,178,199	558,908	12,224	10,569,395
Approved										
(14)	System Average		Dkt 4346 EDA-4	\$0 8601	\$0 8601	\$0 8601	\$0 8601	\$0 8601	\$0 8601	
(15)	Path		Dkt 4346 EDA-4	\$1,0184	\$1,1297	\$1,1467	\$1,3359	\$0,5559	\$0,5331	
(16)	Credit/Surcharge		(14) - (15)	(\$0 1583)	(\$0 2696)	(\$0 2866)	(\$0 4758)	\$0 3042	\$0 3270	
Revised										
(17)	System Average			\$0 8625	\$0 8625	\$0 8625	\$0 8625	\$0 8625	\$0 8625	
(18)	Path			\$1,0330	\$1,1443	\$1,1467	\$1,3505	\$0,5705	\$0,5477	
(19)	Credit/Surcharge		(17) - (18)	(\$0 1705)	(\$0 2818)	(\$0 2842)	(\$0 4880)	\$0 2920	\$0 3148	
(20)	Variance- approved Surcharge/Credit vs Revised Surcharge/Credit		(19) - (16)	(\$0 0122)	(\$0 0122)	\$0 0024	(\$0 0122)	(\$0 0122)	(\$0 0122)	
(21)	Annual MDCQ		(13)	2,281,645	3,071,070	3,467,349	1,178,199	558,908	12,224	10,569,395
(22)	2012-13 Marketer Reconciliation Adjustment		(20) * (21)	(\$27,836)	(\$37,467)	\$8,322	(\$14,374)	(\$6,819)	(\$149)	(\$78,323)

2011-12 & 2012-13 Annual Marketer Reconciliation

Line No.	Description	# of days	Reference	Tetco ELA /Algonquin	Tetco WLA /Algonquin	Tennessee Zone I to NIECC	Tetco STX /Algonquin	Algonquin @ Lambertville, NJ	Columbia (Maumee/Downington)	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(i)	
2011-2012 Marketer Reconciliation										
	MDCQ by Month									
(23)	Nov-11	30		195,000	255,000	285,000	115,826	81,420	6,424	938,670
(24)	Dec-11	31		201,531	263,500	294,531	120,869	84,134	15,314	979,879
(25)	Jan-12	31		201,526	263,513	294,460	121,614	84,105	20,521	985,738
(26)	Feb-12	29		188,500	246,500	275,471	114,840	78,735	26,825	930,871
(27)	Mar-12	31		201,461	263,500	294,500	120,807	84,086	15,318	979,672
(28)	Apr-12	30		195,000	254,970	285,030	117,600	81,450	18,840	952,890
(29)	May-12	31		201,500	263,469	294,500	122,109	84,165	22,599	988,342
(30)	Jun-12	30		195,030	255,000	285,030	118,320	81,450	22,680	957,510
(31)	Jul-12	31		201,500	263,500	294,469	122,636	84,134	26,288	992,527
(32)	Aug-12	31		201,469	263,469	294,469	124,062	84,134	37,231	1,004,834
(33)	Sep-12	30		194,970	254,970	284,970	118,590	81,420	25,410	960,330
(34)	Oct-12	31		201,500	263,500	294,500	122,574	84,134	27,993	994,201
(35)	Total		sum[(23) (34)]	2,378,988	3,110,891	3,476,930	1,439,847	993,367	265,442	11,665,464
Approved										
(36)	System Average		Dkt 4283 EDA-4	\$0 9617	\$0 9617	\$0 9617	\$0 9617	\$0 9617	\$0 9617	\$0 9617
(37)	Path		Dkt 4283 EDA-4	\$0 9584	\$1 1556	\$1 2849	\$1 3372	\$0 8669	\$0 6419	\$0 8669
(38)	Credit/Surcharge		(36) - (37)	\$0 0033	(\$0 1939)	(\$0 3232)	(\$0 3755)	\$0 0949	\$0 3198	\$0 3198
Revised										
(39)	System Average			\$0 9252	\$0 9252	\$0 9252	\$0 9252	\$0 9252	\$0 9252	\$0 9252
(40)	Path			\$0 9584	\$1 1556	\$1 0205	\$1 3372	\$0 8669	\$0 6419	\$0 8669
(41)	Credit/Surcharge		(39) - (40)	(\$0 0332)	(\$0 2304)	(\$0 0952)	(\$0 4119)	\$0 0584	\$0 2833	\$0 2833
(42)	Variance- approved Surcharge/Credit vs Revised Surcharge/Credit		(41) - (38)	(\$0 0365)	(\$0 0365)	\$0 2279	(\$0 0365)	(\$0 0365)	(\$0 0365)	(\$0 0365)
(43)	Annual MDCQ		(35)	2,378,988	3,110,891	3,476,930	1,439,847	993,367	265,442	11,665,464
(44)	Updated 2011-12 Marketer Reconciliation Adjustment		(42) * (43)	(\$86,812)	(\$113,520)	\$792,541	(\$52,542)	(\$36,249)	(\$9,686)	\$493,733
(45)	2010-11 Marketer Reconciliation Adjustment									(\$102,587)
(46)	Total updated 2010-11 & 2011-12 Marketer Reconciliation with 2011-12 updated		(44) + (45)							\$391,146
(47)	Prior Year Total 2010-11 & 2011-12 Marketer Reconciliation in Docket 4346									\$374,462
(48)	Already Collected from Marketers									\$304,618
(49)	Under/(Over)-collections for 2010-11 & 2011-12 Marketer Reconciliation		(46) - (48)							\$86,528
(50)	Total 2011-12 & 2012-13 Marketer Reconciliation- Surcharge to Marketers		(22) + (49)							\$8,205
(51)	Total 2011-12 & 2012-13 Marketer Reconciliation- Surcharge credited to Firm Sales Customers		- (50)							(\$8,205)

Line (45) Docket No. 4346 Attachment AEL-7, Line 32, filed on September 1, 2012
Line (47) Docket No. 4346 Attachment AEL-7, Line 67, filed on September 1, 2012
Line (48) Nov-12-July-13 as reflected in GCR Monthly Deferred Report filed on August 20, 2013 Schedule 2, Line 135 Aug-13-Oct-13 are projected collections