Robert J. Humm
Senior Counsel

October 23, 2017

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4719 – 2017 Gas Cost Recovery Filing
National Grid's Reply Comments

Dear Ms. Massaro:

In connection with the above-referenced docket, enclosed please find National Grid's[1] reply comments to the written comments submitted by the Division of Public Utilities and Carriers (the Division) on October 16, 2017 (the Division's Comments) regarding National Grid's 2017 Gas Cost Recovery (GCR) filing. In these reply comments, National Grid addresses the following points made by the Division:

1. Allocation of System Pressure Related Costs to the Distribution Adjustment Charge

The Division's Comments recommend that the System Pressure Factor in National Grid's Distribution Adjustment Charge (DAC) filing reflect 100% of the demand costs associated with gas deliveries to the Crary Street Gate Station in Providence. *See* Division's Comments at 6. As a result, the Division recommends that $764,118 in costs be transferred from National Grid's GCR filing to the DAC filing. *See* Division's Comments at 13.

National Grid agrees to allocate 100% of the demand costs associated with Crary Street deliveries to the DAC. As the Division points out in its comments to National Grid's DAC filing in Docket No. 4708, the transfer decreases National Grid's projected 2017-18 GCR factors and increases the 2017-18 DAC factors, but the total costs recovered by National Grid through its combined GCR and DAC factors are unaffected. In addition, as requested by the Division, prior to next year's DAC filing National Grid will provide the Division with further clarification of costs incurred to maintain system pressure to other parts the Rhode Island distribution system, to determine the extent to which such costs warrant incorporation in the System Pressure Factor.

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

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2. National Grid's Portable Liquefied Natural Gas (LNG) Proposal

The Division's Comments recommend that any GCR factors approved by the Public Utilities Commission (PUC) at the October 30, 2017 hearing exclude the incremental costs of National Grid's portable LNG proposal set forth in National Grid's supplemental GCR filing on September 29, 2017. *See* Division's Comments at 13-14. Under the Division's recommendation, the understanding would be that once the appropriate treatment of such costs is determined through further development within this docket, the PUC could reflect an appropriate portion of those costs in National Grid's GCR deferred cost balance through the GCR reconciliation. *See id.* at 7, 13-14.

National Grid agrees with the Division's recommendation to exclude from its proposed 2017-18 GCR factors the costs associated with leasing third party portable LNG equipment and services in Cumberland. Instead, National Grid agrees to reflect such costs in the reconciliation of GCR costs and revenue and, ultimately, in the annual GCR reconciliation report and deferred balance at October 2018 after the Division has sufficient time to review National Grid's proposal in this docket. National Grid and the Division will work together after the October 30, 2017 GCR hearing so that the PUC can approve the portable LNG proposal after a limited follow up hearing and/or Open Meeting within this docket before National Grid submits its GCR reconciliation filing by July 1, 2018. The costs for leasing the portable LNG equipment and services in Cumberland are expected to be temporary. Accordingly, National Grid does not plan to address the costs for leasing temporary portable LNG units in its upcoming rate case.

3. Adjustments to Projected Billing Data in Monthly Deferred Balance Reports

The Division's Comments question certain adjustments National Grid has made to its normal weather sales forecast in the GCR monthly deferred balance reports. *See* Division's Comments at 8-12. In response to the Division's data request Division 2-6, National Grid discusses the reasons it adjusted the projected billing data in its monthly deferred balance report. A copy of National Grid's response to Division 2-6 is attached hereto for the PUC's convenience. The primary reason National Grid adjusts the projected billings units in its monthly deferred balance reports is to better estimate the projected reconciliation balance at the end of the annual GCR year (October 31), which would result in a more reasonable balance, thereby helping to avoid unnecessary interim GCR filings requesting changes in the GCR factors. According to National Grid's gas tariff,[2] in the event of any change subsequent to the November effective date that would cause the estimate of the deferred gas cost balance to differ from zero by an amount greater than 5% of National Grid's gas revenues, National Grid may make an interim gas charge filing designed to eliminate the non-zero balance. National Grid is concerned that by not adjusting projected sales in its monthly deferred balance reports to recognize billing lags, the resulting estimated reconciliation balance could exceed the 5% threshold. In turn, this would cause National Grid to submit an interim GCR filing to change the GCR factors charged to customers when, in hindsight, a filing was not needed.

[2] RIPUC NG-GAS No. 101, Section 2, Schedule A, Part 1.2 (the Tariff).

National Grid believes it is important to identify the drivers that cause changes to the projected monthly reconciliation balances, but National Grid recognizes that the monthly deferred balance report does not currently provide the Division with all the information needed to determine if such adjustments are reasonable. Therefore, National Grid will no longer include such adjustments in future monthly deferred balance reports. However, National Grid will continue to analyze drivers of a projected deferred balance that exceeds the 5% threshold and, if National Grid is of the opinion that a lag in sales volume will offset increased commodity costs to a balance less than the 5% threshold, National Grid will include in its monthly deferred balance report an explanation as to why it is not proposing to submit an interim filing to propose new GCR factors even though the projected deferred balance reflected in the monthly deferred reports exceeds the 5% threshold.

4. <u>GCR Reconciliation</u>

The Division raises the following two comments regarding National Grid's GCR Reconciliation that require clarification.

a. <u>Increase in March 2017 Gas Costs</u>

The Division's Comments indicate that National Grid should provide more information to explain a $5.5 million increase in the March 2017 gas costs compared to the prior month's forecast. *See* Division's Comments at 12. The $5.5 million increase in commodity costs for March 2017 was driven primarily by a 46% increase in the actual March 2017 volumes and a 56% increase in actual March 2017 commodity prices as compared to the forecasted volume and price for March 2017 reflected in the February 2017 monthly deferred balance report. Attached to these reply comments is Attachment AEL-8, which identifies the increase in volume and price resulting in the overall $5.5 million increase in commodity costs.

b. <u>November 2016 FT-1 Extra Large High Load Factor Throughput Volume</u>

The Division's Comments note that the November 2016 FT-1 Extra Large High Load Factor indicates "extremely low" throughput volumes. *See* Division's Comments at 12. Prior to November 2016, for customers who were billed on a calendar month basis, such as FT-1 Extra Large High Load Factor customers, Attachment AEL-2, page 7, reflected volumes delivered but not yet billed (i.e., accrued volumes). Therefore, each month reflected (1) the reversal of the prior month's accrued volumes; (2) the prior month's actual volumes; and (3) the current month's accrued volumes. In November 2016, National Grid began reporting only the actual volumes in Attachment AEL-2, page 7, thereby excluding the impact of accruals and their reversals, in an effort to avoid confusion from instances where the actual volumes differed from the accrued volumes (FT-1 rate classes only). As such, volumes for November 2016 reflect (1) the reversal of October 2016 volumes and (2) actual volumes for November 2016. There are no accrued volumes for November 2016. Accordingly, the November 2016 volumes are lower due to the exclusion of accrued volumes. However, this information has no impact on the proposed GCR or the DAC factors, as the data is provided for informational purposes only. Attachment AEL-9 provides the actual November 2016 volumes for the FT-1 rate class, excluding the October 2016 reversal.

5. Proposed GCR Factors in Division's Comments at Attachment DIV GCR-3, Page 1

While reviewing the Division's calculations, National Grid recognized that it calculated the FT-2 Demand rate incorrectly in both the initial GCR filing on September 1 and the supplemental GCR filing on September 29. The Storage Costs provided on Attachment AEL-5S did not include the demand costs associated with Crary Street – namely, those costs associated with System Pressure – so National Grid should not have removed such costs from the Storage Fixed Costs. In this filing, National Grid has corrected Attachment AEL-5S, which, in turn, has changed the FT-2 Storage Costs shown on Attachment AEL-5S, line 25, and Attachment AEL-1S, page 2, line 4. In addition to the changes noted in the Division's Comments and exhibits, National Grid has also identified that allocating 100% of the Crary Street Gate Station demand charges to the DAC will also impact the calculation of the System Average set forth in Attachment NGC-4S. In turn, this revision impacts the capacity release credits shown in Attachment NGC-1S. Although the Division's Comments did not include the additional changes, National Grid has discussed the changes with the Division and its consultant, Bruce Oliver. The Division and Mr. Oliver have indicated their agreement that such changes should also be included in the proposed November 1, 2017 GCR factors.

Based on the recommendations in the Division's Comments and the additional revisions described in this section, National Grid is proposing GCR factors of $0.5291 per therm for Low Load factor customers and $0.4859 per therm for High Load factor customers. This represents a change from the factors proposed in National Grid's September 29, 2017 supplemental GCR filing (the Supplemental GCR filing) of $0.5329 per therm and $0.4888 per therm, respectively. In addition, the FT-2 Demand rate will increase from the proposed $8.0328 per dekatherm (Dth) in the Supplemental GCR filing to $8.8520 per Dth, and the Storage and Peaking Charge for FT-1 transportation customers eligible for Transitional Sales Service (TSS) will increase from the proposed $0.6831 per Dth in the Supplemental GCR filing to $0.7527 per Dth. Attached to this filing are Attachments AEL-1 Revised and AEL-5 Revised, which provide the updated information demonstrating the proposed GCR factors; as well as Attachments NGC-1 Revised, NGC-2 Revised, and NGC-4 Revised, which are impacted by the updates to the GCR factors.

6. Bill Impact

As a result of the updates described above, based on the GCR factors proposed for effect November 1, 2017 through October 31, 2018, an average residential heating customer using 846 therms per year will experience a total bill increase of $43.25, or 3.7%, from the currently existing rates. The details regarding the bill impact are set forth in Attachment AEL-4 Revised.

7. Confidential Treatment

Finally, this filing contains a Request for Protective Treatment of Confidential Information in accordance with Rule 1.2(g) of the (PUC) Rules of Practice and Procedure and R.I. Gen. Laws § 38-2-2(4)(B). National Grid seeks protection from public disclosure of certain confidential gas-cost pricing information and forecasts, which are provided in the revised attachments of Ann E. Leary at Attachments AEL-1 Revised, and AEL-5 Revised; as well as in the revised attachments of Nancy G.

Culliford at Attachments NGC-1 Revised, NGC-2 Revised, and NGC-4 Revised. Accordingly, National Grid has provided the PUC with one complete, unredacted copy of the confidential materials in a sealed envelope marked **"Contains Privileged and Confidential Materials – Do Not Release,"** and has included redacted copies of the materials for the public filing.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-784-7415.

Very truly yours,

Robert J. Humm

Enclosures

cc: Docket 4719 Service List
Leo Wold, Esq.
Steve Scialabba, Division
Bruce Oliver, Division

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

RHODE ISLAND PUBLIC UTILITIES COMMISSION

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Annual Gas Cost Recovery Filing 2017	)	Docket No. 4719
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MOTION OF THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION

National Grid[1] hereby requests that the Rhode Island Public Utilities Commission (PUC) grant protection from public disclosure of certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by PUC Rule 1.2(g) and R.I. Gen. Laws § 38-2-2(4)(B). National Grid also hereby requests that, pending entry of that finding, the PUC preliminarily grant National Grid's request for confidential treatment pursuant to Rule 1.2 (g)(2).

I. BACKGROUND

On October 23, 2017, National Grid filed with the PUC its reply comments to the written comments submitted by the Division of Public Utilities and Carriers (the Division) on October 16, 2017 regarding National Grid's 2017 Gas Cost Recovery filing in the above-captioned docket. The reply comments include confidential gas-cost pricing information, which is provided in the revised attachments of Ann E. Leary, at Attachments AEL-1 Revised and AEL-5 Revised; and in the revised attachments of Nancy G. Culliford, at Attachments NGC-1 Revised, NGC-2 Revised, and NGC-4 Revised. In accordance with Rule 1.2(g)(3), National Grid has

[1] The Narragansett Electric Company d/b/a National Grid (National Grid).

provided a redacted public version of the reply comments, as well as an unredacted, confidential version.

II. LEGAL STANDARD

Rule 1.2(g) of the PUC's Rules of Practice and Procedure provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). To the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information as confidential and to protect that information from public disclosure.

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

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

The Rhode Island Supreme Court has held that the determination as to whether this exemption applies requires the application of a two-pronged test set forth in *Providence Journal Company v. Convention Center Authority*, 774 A.2d 40 (R.I.2001). The exemption applies where the disclosure of information would be likely either (1) to impair the Government's ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. *See Providence Journal*, 774 A.2d 40.

The first prong of the test assesses whether the information was provided voluntarily to the governmental agency. *Providence Journal*, 774 A.2d at 47. If the answer to the first

question is affirmative, then the question becomes whether the information is "of a kind that would customarily not be released to the public by the person from whom it was obtained." *Id.*

III. BASIS FOR CONFIDENTIALITY

The gas-cost pricing information – which is provided in National Grid's reply comments at the revised attachments of Ms. Leary, at Attachments AEL-1 Revised and AEL-5 Revised; and at the revised attachments of Ms. Culliford, at Attachments NGC-1 Revised, NGC-2 Revised, and NGC-4 Revised – is confidential and privileged information of the type that National Grid would not ordinarily make public. Indeed, National Grid has sought protective treatment for the same information in prior versions of the identified attachments. Moreover, public disclosure of such information could impair National Grid's ability to obtain advantageous pricing in the future, thereby causing substantial competitive harm. Accordingly, National Grid seeks protection for such confidential information.

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

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID
By its attorney,

Robert J. Humm, Esq. (#7920)
National Grid
280 Melrose Street
Providence, RI 02907
(401) 784-7415
Dated: October 23, 2017

Division 2-6

Request:

Several of the Company's recent Monthly Filings of GCR Deferred Gas Balances (e.g., filings dated May 18, 2017, June 20, 2017, July 21, 2017) have included references Unaccounted For Gas ("UFG") volumes and adjustments made to forecasted sales for subsequent months as a result of UFG considerations. In the context of those reports and the associated adjustments to forecasted sales, please:

a. Identity each place within the Company's 2017 GCR filing where either Unaccounted For Gas ("UFG") volumes or a UFG allowance is explicitly reflected or discussed;

b. If there is an allowance for Unaccounted For Gas included in the Company's 2017 Annual GCR filing, identify the magnitude of that allowance and document its derivation of the allowance used;

c. Provide the Company's actual Unaccounted For Gas volumes and UGF percentage:

   i. On an annual basis for each of the last five annual GCR periods;

   ii. By month for each month of the last five annual GCR periods.

d. Explain in further detail why adjustments to forecasted sales to alter the UFG implicit in the Company's GCR Deferred Balances reporting are necessary and appropriate;

e. Explain how the Company and/or ratepayers would be harmed if adjustments to forecasted volumes are not made within monthly GCR Deferred Balances reports;

f. Identify each instance in the Company's reporting of GCR Deferred Balances for prior GCR years in which adjustments to monthly forecasted volumes were made to adjust the UFG implicit in the Company's monthly GCR Deferred Gas Balances reports.

Response:

a. The Company's 2017 Gas Cost Recovery (GCR) filing does not explicitly identify Unaccounted For Gas (UFG) volumes or a UFG allowance. However, the Company's 2017 GCR filing shows the forecast sendout volume (see Attachment NGC-2) and the Company's forecast sales (see Attachment AEL-1, page 11, line 9), from which UFG could be computed. Please see Attachment DIV 2-6(b) for a computation of the UFG contained in the filing.

Division 2-6, page 2

b. Please see Attachment DIV 2-6(b) for a computation of the 2.7% UFG.

c. Please see Attachment DIV-2-6(c) for the requested information. Please note that the monthly UFG and UFG percentage also reflects unbilled volumes.

d. In its initial monthly deferred balance report, the Company projects each month's deferral balance based upon projected gas costs and projected commodity revenue. In each subsequent monthly deferred balance report, the Company recalculates the October deferral balance based upon current month-to-date actuals and projections for the remaining forecasted period based upon normal weather. However, if the relationship between the actual monthly customer billings and actual gas purchased differs from the relationship forecasted in the initial filing, the projected annual UFG will change. This relationship between the sales (customer billings) and sendout (gas purchases) can vary due to changes in monthly weather patterns, which results in billing leads (or lags). Therefore, in each monthly deferred balance report, the Company first calculates the annual UFG to compare to the initial forecasted UFG contained in the Company's annual GCR filing. If the calculated UFG varies from the initial projected UFG contained in the Company's GCR filing, the Company will then adjust the forecasted sales so that the annual UFG will approximate the initial UFG projected. In other words, the Company will adjust the projected sales (customer billings) so that the annual projected UFG will approximate the UFG forecasted in the Company's approved GCR filing.

e. If the Company did not adjust the forecasted sales so that the annual UFG approximates the initial forecasted annual UFG, the projected October deferred balance could be either overstated or understated. An incorrect deferred balance could impact whether the Company should (or should not) request a midseason revision to its current approved GCR factor, which in turn would impact the period in which the Company recovers its gas costs from its customers. For example, if the projected deferred balance was overstated because of a lag in customers' billings and that balance exceeded 5% of the Company's annual GCR revenues, the Company could file for an unnecessary change to its GCR factor. By doing so, the Company would be recovering more revenues than the actual costs incurred, which would require the Company to return this over-recovered revenue in subsequent periods. Although the Company reconciles its gas costs, in this instance the customers would be overpaying for gas costs in the current year only to be refunded in the subsequent year.

Division 2-6, page 3

f. Please see Attachment DIV 2-6(f) for each instance in the past three years in which the Company adjusted monthly forecasted volumes to adjust UFG implicit in the Company's monthly deferred balance reports.

Line No.	Description	Reference		NOV 2017 (a)	DEC 2017 (b)	JAN 2018 (c)	FEB 2018 (d)	MAR 2018 (e)	APR 2018 (f)	MAY 2018 (g)	JUN 2018 (h)	JUL 2018 (i)	AUG 2018 (j)	SEP 2018 (k)	OCT 2018 (l)	Total Nov-Oct (m)
(1)	**Sales**															
(2)	GCR fcst 2017-18	Dkt 4719 AEL-1 pg 11	Dth	1,746,930	3,167,346	4,325,184	4,627,445	4,077,839	2,878,555	1,568,022	912,469	630,861	561,730	630,438	787,624	25,914,442
(3)	**Sendout**															
(4)	GCR fcst 2017-18	Dkt 4719 NGC-2 Pgs 1-9	Dth	2,286,401	3,945,192	4,943,244	4,417,284	3,736,115	2,175,893	1,268,260	808,643	647,353	593,008	639,818	1,177,517	26,638,728
(5)	**UFG**															
(6)	GCR fcst 2017-18	(4) - (2)	Dth	539,471	777,846	618,060	(210,161)	(341,724)	(702,662)	(299,762)	(103,826)	16,492	31,278	9,380	389,893	724,286
(7)	**UFG %**															
(8)	GCR fcst 2017-18	(6) / (4)		24%	20%	13%	-5%	-9%	-32%	-24%	-13%	3%	5%	1%	33%	2.7%

Actual/Forecast UFG for the Periods 2011 - 2017

Line No.	Periods	Description	Reference		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Nov-Oct
					(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
(1)		**Sales**															
(2)	Nov 2016 - Oct 2017	Actual/Fcst Nov 16-Oct 17	Dkt 4647 (PUC 08-18-17)	Dth	1,624,752	2,968,700	4,313,898	4,209,787	3,848,592	3,359,876	1,481,143	1,007,310	651,366	487,578	476,163	943,610	25,372,777
(3)	Nov 2015 - Oct 2016	GCR (Dkt 4576) Actual	Dkt 4576 (PUC 11-18-16)	Dth	1,388,648	2,699,532	3,481,832	4,317,898	3,758,980	2,672,534	1,603,977	904,187	623,002	548,284	540,759	749,733	23,289,364
(4)	Nov 2014 - Oct 2015	GCR (Dkt 4520) Actual	Dkt 4520 (PUC 11-20-15)	Dth	1,323,493	3,404,433	4,535,518	5,777,914	5,342,849	3,611,438	1,581,919	860,825	665,221	591,702	576,843	741,392	29,013,547
(5)	Nov 2013 - Oct 2014	GCR (Dkt 4436) Actual	Dkt 4436 (PUC 11-20-14)	Dth	1,526,737	3,440,236	4,931,618	4,923,590	4,773,574	3,322,148	1,776,556	888,499	637,799	580,607	572,682	738,787	28,112,832
(6)	Nov 2012 - Oct 2012	GCR (Dkt 4346) Actual	Dkt 4346 (PUC 11-21-13)	Dth	1,396,953	2,956,016	3,911,537	4,528,981	3,886,355	3,060,061	1,482,166	790,490	686,094	557,230	653,960	710,428	24,620,271
(7)	Nov 2011 - Oct 2012	GCR (Dkt 4283) Actual	Dkt 4283 (PUC 11-19-12)	Dth	1,527,031	2,263,705	3,350,366	3,725,541	3,268,037	2,173,777	1,289,670	798,118	637,404	577,761	558,218	728,304	20,897,931
(8)		**Sendout**															
(9)	Nov 2016 - Oct 2017	Actual/Fcst Nov 16-Oct 17	Company Data	Dth	2,439,471	4,348,509	4,479,525	3,911,408	4,619,101	1,864,018	1,165,265	733,008	588,266	520,513	552,212	1,334,917	26,556,214
(10)	Nov 2015 - Oct 2016	GCR (Dkt 4576) Actual	Company Data	Dth	2,195,571	2,723,852	4,890,191	4,304,904	2,978,237	2,249,346	1,076,381	667,545	556,713	555,956	582,017	1,118,903	23,899,617
(11)	Nov 2014 - Oct 2015	GCR (Dkt 4520) Actual	Company Data	Dth	2,850,376	3,926,773	5,922,299	6,062,906	4,633,539	2,149,485	888,787	735,715	627,899	601,666	586,021	1,307,617	30,293,082
(12)	Nov 2013 - Oct 2014	GCR (Dkt 4436) Actual	Company Data	Dth	2,944,402	4,389,620	5,483,683	4,690,525	4,428,381	2,110,808	975,266	698,631	662,061	647,157	669,058	1,182,934	28,882,525
(13)	Nov 2012 - Oct 2012	GCR (Dkt 4346) Actual	Company Data	Dth	2,939,805	3,600,041	4,707,254	4,362,287	3,777,393	2,032,909	931,940	709,050	603,187	641,957	659,903	1,260,630	26,226,357
(14)	Nov 2011 - Oct 2012	GCR (Dkt 4283) Actual	Company Data	Dth	1,974,654	3,312,239	4,236,987	3,551,192	2,512,040	1,519,765	957,253	712,168	611,771	613,217	650,030	870,097	21,521,413
(15)		**UFG**															
(16)	Nov 2016 - Oct 2017	Actual/Fcst Nov 16-Oct 17	(9) - (2)	Dth	814,719	1,379,809	165,627	(298,379)	770,509	(1,495,858)	(315,878)	(274,302)	(63,100)	32,935	76,049	391,307	1,183,438
(17)	Nov 2015 - Oct 2016	GCR (Dkt 4576) Actual	(10) - (3)	Dth	806,924	24,320	1,408,359	(12,994)	(780,743)	(423,188)	(527,596)	(236,642)	(66,289)	7,673	41,259	369,170	610,253
(18)	Nov 2014 - Oct 2015	GCR (Dkt 4520) Actual	(11) - (4)	Dth	1,526,882	522,340	1,386,780	284,992	(709,310)	(1,461,953)	(693,132)	(125,110)	(37,321)	9,964	9,178	566,225	1,279,535
(19)	Nov 2013 - Oct 2014	GCR (Dkt 4436) Actual	(12) - (5)	Dth	1,417,665	949,384	552,065	(233,065)	(345,193)	(1,211,340)	(801,290)	(189,868)	24,262	66,550	96,376	444,147	769,693
(20)	Nov 2012 - Oct 2012	GCR (Dkt 4346) Actual	(13) - (6)	Dth	1,542,852	644,025	795,718	(166,694)	(108,963)	(1,027,152)	(550,226)	(81,440)	(82,907)	84,727	5,943	550,203	1,606,086
(21)	Nov 2011 - Oct 2012	GCR (Dkt 4283) Actual	(14) - (7)	Dth	447,623	1,048,534	886,621	(174,349)	(755,997)	(654,012)	(332,417)	(85,950)	(25,632)	35,456	91,812	141,793	623,482
(22)		**UFG %**															
(23)	Nov 2016 - Oct 2017	Actual/Fcst Nov 16-Oct 17	(16) / (9)		33%	32%	4%	-8%	17%	-80%	-27%	-37%	-11%	6%	14%	29%	4.5%
(24)	Nov 2015 - Oct 2016	GCR (Dkt 4576) Actual	(17) / (10)		37%	1%	29%	0%	-26%	-19%	-49%	-35%	-12%	1%	7%	33%	2.6%
(25)	Nov 2014 - Oct 2015	GCR (Dkt 4520) Actual	(18) / (11)		54%	13%	23%	5%	-15%	-68%	-78%	-17%	-6%	2%	2%	43%	4.2%
(26)	Nov 2013 - Oct 2014	GCR (Dkt 4436) Actual	(19) / (12)		48%	22%	10%	-5%	-8%	-57%	-82%	-27%	4%	10%	14%	38%	2.7%
(27)	Nov 2012 - Oct 2012	GCR (Dkt 4346) Actual	(20) / (11)		52%	18%	17%	-4%	-3%	-51%	-59%	-11%	-14%	13%	1%	44%	6.1%
(28)	Nov 2011 - Oct 2012	GCR (Dkt 4283) Actual	(21) / (12)		23%	32%	21%	-5%	-30%	-43%	-35%	-12%	-4%	6%	14%	16%	2.9%

Lines (2) (9) (16) (23) Nov 2016 - Oct 2017 is based on actual data for the period November 2016 through July 2017 and forecast data for the period August 2017 through October 2017.

					Annual UFG % (Nov-Oct)			October Ending Deferred Balance		
	GCR Period	Filing Month	Adjusted Monthly Forecast	UFG adjusted Amount (dth)	Before	After	Diff.	Before	After	Diff.
(1)	2014-2015	Dec-14	Jan-15	(258,156)	2.10%	3.00%	0.90%	($9,170,916)	($7,437,832)	$1,733,084
(2)		Jan-15	Feb-15	2,073,247	10.00%	3.00%	-7.00%	$18,789,650	$4,886,773	($13,902,876)
(3)		Feb-15	Mar-15	1,285,999	7.30%	3.00%	-4.30%	$13,700,640	$5,084,855	($8,615,785)
(4)		Mar-15	Apr-15	859,448	6.80%	4.00%	-2.80%	$9,151,314	$3,400,636	($5,750,678)
(5)		Apr-15	May-15	163,476	5.00%	4.50%	-0.50%	$5,051,427	$3,958,702	($1,092,725)
(6)	2015-2016	Jan-16	Feb-16	523,236	6.00%	4.00%	-2.00%	$4,763,450	$1,935,972	($2,827,478)
(7)		Feb-16	Mar-16	383,959	5.50%	4.00%	-1.50%	$5,284,184	$3,212,167	($2,072,018)
(8)	2016-2017	Dec-16	Jan-17	290,099	6.60%	5.50%	-1.10%	$2,060,948	$705,765	($1,355,182)
(9)		Jan-17	Feb-17	283,861	5.10%	4.00%	-1.10%	$3,358,321	$2,034,125	($1,324,196)
(10)		Feb-17	Mar-17	229,706	4.90%	4.00%	-0.90%	$3,229,177	$2,159,199	($1,069,978)
(11)		Mar-17	Apr-17	1,440,021	8.30%	3.00%	-5.30%	$12,853,376	$6,147,592	($6,705,784)
(12)		Apr-17	May-17	546,842	5.50%	3.50%	-2.00%	$10,118,823	$7,577,831	($2,540,992)
(13)		May-17	Jun-17 - Aug 17	473,360	6.00%	4.80%	-1.20%	$10,580,666	$9,186,030	($1,394,636)

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National Grid - RI Gas
Gas Cost Recovery (GCR) Filing
Factors Effective November 1, 2017

Line No.	Description (a)	Source Reference (b)	Source Line # (c)	High Load[1] (d)	Low Load[2] (e)	FT-2 Mkter[3] (f)
(1)	Fixed Cost Factor - $/dktherm	AEL-1 Revised pg 2	Line (18)	$1.1342	$1.5517	
(2)	Variable Cost Factor -$/dktherm	AEL-1 Revised pg 3	Line (13)	$3.5711	$3.5711	
(3)	Total Gas Cost Recovery Charge- $/dktherm	(1) + (2)		$4.7053	$5.1228	
(4)	Uncollectible %	Docket 4323		3.18%	3.18%	
(5)	Total GCR Charge adjusted for Uncollectibles- $/dkdtherm	(3) / [1 - (4)]		$4.8598	$5.2910	
(6)	**GCR Charge on a per therm basis**	(5) / 10		**$0.4859**	**$0.5291**	
(7)	Current rate effective 11/01/16* - $/therm			$0.4525	$0.4766	
(8)	Increase- $/therm	(6) - (7)		$0.0334	$0.0525	
(9)	Percent Increase	(8) / (7)		7.4%	11.0%	

* GCR rates approved with the Revised GCR filing per Docket 4647 filed on October 03, 2016

[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 Revised 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 Reference	Source Line #	Amount	High Load Factor Total	Low Load Factor Total
	(a)	(b)	(c)	(d)	(e)	(f)
(1)	Fixed Costs (net of Cap Rel to marketers)	AEL-1 Revised pg 4	Line (61)	$53,921,320		
	Less:					
(2)	NGPMP Customer Benefit	NGC-1 Revised		($10,900,000)		
(3)	Interruptible Costs			$0		
(4)	FT-2 Storage Demand Costs	AEL-5 Revised pg 2	Line (25)	($2,040,370)		
(5)	Systeme Pressure to DAC	AEL-1 Revised pg 4	Line (16)	($3,153,600)		
(6)	Refunds			$0		
(7)	Total Credits	sum[(2):(6)]		($16,093,970)		
	Plus:					
(8)	Supply Related LNG O&M Costs	Dkt 4323	Compliance Attachment 6 Schedule MDL-3-GAS	$575,581		
(9)	Portable LNG Storage Cost			$0		
(10)	Working Capital Requirement	AEL-1 Revised pg 8	Line (16)	$292,600		
(11)	Deferred Fixed Cost Under-recovered	AEL-1 Revised pg 6	Line (17)	$1,169,851		
(12)	Reconciliation Amount from Fixed costs- Marketers	AEL-7 pg 2	Line (50)	$36,098		
(13)	Total Additions	sum[(8):(12)]		$2,074,129		
(14)	Total Fixed Costs	(1) + (7) + (13)		$39,901,479		
(15)	Design Winter Sales Percentage	AEL-1 Revised pg 12	Lines (10) & (11)		2.12%	97.88%
(16)	Allocated Supply Fixed Costs	(14) x (15)			$846,723	$39,054,756
(17)	Sales (Dt) Nov 2017 - Oct 2018	AEL-1 Revised pg 11	Line (9)	25,914,442	746,482	25,167,960
(18)	**Fixed Factor**	(16) / (17)			**$1.1342**	**$1.5517**

Line (17)
Col (e): AEL-1 Revised, page 11, Sum of Lines (1), (6), (8)
Col (f): AEL-1 Revised, page 11, Sum of Lines (2):(5) and (7)

REDACTED

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

Line No.	Description	Source Reference	Source Line #	Amount
	(a)	(b)	(c)	(d)
(1)	Variable Costs, excluding Refunds	AEL-1 Revised pg 5	Line (90) - Line (84)	$78,329,672
	Less:			
(2)	Non-Firm Sales			$0
(3)	Refunds	AEL-1 Revised pg 5	Line (84)	$0
(4)	Total Credits	sum [(2):(3)]		$0
	Plus:			
(5)	Working Capital	AEL-1 Revised pg 8	Line (32)	$451,453
(6)	Deferred Variable Cost Under-recovered	AEL-1 Revised pg 6	Line (35)	$12,377,603
(7)	Supply Related LNG O&M	Docket 4323	Compliance Attachment 6 Schedule MDL-3-GAS	$572,694
(8)	Inventory Financing - LNG	AEL-1 Revised pg 10	Line (22)	$212,808
(9)	Inventory Financing - Storage	AEL-1 Revised pg 10	Line (12)	$600,752
(10)	Total Additions	sum [(5):(9)]		$14,215,310
(11)	Total Variable Supply Costs	(1) + (4) + (10)		$92,544,983
(12)	Sales (Dt) Nov 2017 - Oct 2018	AEL-1 Revised pg 11	Line (9)	25,914,442
(13)	**Variable Cost Factor**	(11) / (12)		**$3.5711**

REDACTED

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

Line No.	Description (a)	Reference (b)	Nov-17 (c)	Dec-17 (d)	Jan-18 (e)	Feb-18 (f)	Mar-18 (g)	Apr-18 (h)	May-18 (i)	Jun-18 (j)	Jul-18 (k)	Aug-18 (l)	Sep-18 (m)	Oct-18 (n)	Nov-Oct (o)
	SUPPLY FIXED COSTS - Pipeline Delivery														
(1)	Algonquin	NGC-2 Revised	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$657,206	$7,886,473
(2)	Texas Eastern	NGC-2 Revised	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$212,562	$2,550,744
(3)	TETCO	NGC-2 Revised	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$504,711	$6,056,532
(4)	Tennessee	NGC-2 Revised	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$957,991	$11,495,897
(5)	Tennessee Dracut for peaking	NGC-2 Revised	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$1,622,687
(6)	NETNE	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(7)	Iroquois	NGC-2 Revised	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$5,667	$5,667	$72,036
(8)	Union	NGC-2 Revised	$2,887	$2,984	$2,984	$2,695	$2,984	$2,887	$2,984	$2,887	$2,984	$2,984	$2,887	$2,984	$35,130
(9)	Transcanada	NGC-2 Revised	$13,623	$14,077	$14,077	$12,715	$14,077	$13,623	$14,077	$13,623	$14,077	$14,077	$13,623	$14,077	$165,748
(10)	Dominion	NGC-2 Revised	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$26,853
(11)	Transco	NGC-2 Revised	$4,854	$5,016	$5,016	$4,530	$5,016	$4,854	$5,016	$4,854	$5,016	$5,016	$4,854	$5,016	$59,055
(12)	National Fuel	NGC-2 Revised	$4,480	$4,480	$4,480	$4,480	$4,480	$0	$0	$0	$0	$0	$0	$0	$22,402
(13)	AMA Credits	NGC-2 Revised													
(14)	Columbia	NGC-2 Revised	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$3,695,226
(15)	Algonquin AIM	NGC-2 Revised	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$9,025,819
(16)	Algonquin AFT (Crary Street)	NGC-2 Revised	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$3,153,600
(17)	Westerly Lateral	NGC-2 Revised													
(18)	Less Credits from Mkter Releases	NGC-2 Revised	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($692,715)	($8,312,577)
(19)	**TOTAL SUPPLY FIXED COSTS - Pipeline**	sum[(1):(18)]													
	Supply Fixed - Supplier														
(20)	Distrigas FCS	NGC-2 S	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(21)	**Total**	(20)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(22)	**Total Supply Fixed (Pipeline & Supplier)**	(19) + (21)													
	STORAGE FIXED COSTS - Facilities														
(23)	Texas Eastern SS-1 Demand	NGC-2 Revised	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$965,742
(24)	Texas Eastern SS-1 Capacity	NGC-2 Revised	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$160,336
(25)	Texas Eastern FSS-1 Demand	NGC-2 Revised	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	$1,013
(26)	Texas Eastern FSS-1 Capacity	NGC-2 Revised	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	$7,324
(27)	Dominion GSS Demand	NGC-2 Revised	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$255,651
(28)	Dominion GSS Capacity	NGC-2 Revised	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$180,839
(29)	Dominion GSS-TE Demand	NGC-2 Revised	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$321,430
(30)	Dominion GSS-TE Capacity	NGC-2 Revised	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$239,480
(31)	Tennessee FSMA Demand	NGC-2 Revised	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$379,467
(32)	Tennessee FSMA Capacity	NGC-2 Revised	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$200,574
(33)	Columbia FSS Demand	NGC-2 Revised	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$45,841
(34)	Columbia FSS Capacity	NGC-2 Revised	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$70,488
(35)	Keyspan LNG Tank Lease Payment	NGC-2 Revised	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$1,964,880
(36)	**TOTAL FIXED STORAGE COSTS**	sum[(23):(35)]	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$4,793,063
	STORAGE FIXED COSTS - Delivery														
(37)	Algonquin for TETCO SS-1	NGC-2 Revised	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$1,115,138
(38)	Algonquin delivery for FSS	NGC-2 Revised	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$74,463
(39)	TETCO delivery for FSS	NGC-2 Revised	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$58,566
(40)	Algonquin SCT for SS-1	NGC-2 Revised	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$20,983
(41)	Algonquin delivery for GSS, GSS-TE	NGC-2 Revised	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$925,982
(42)	Algonquin SCT delivery for GSS-TE	NGC-2 Revised	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	$5,900
(43)	Algonquin delivery for GSS Conv	NGC-2 Revised	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$20,168	$242,013
(44)	Tennessee delivery for GSS	NGC-2 Revised	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$657,503
(45)	Tennessee delivery for FSMA	NGC-2 Revised	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$401,932
(46)	TETCO delivery for GSS/GSS-TE	NGC-2 Revised	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$409,403
(47)	TETCO delivery for GSS-TE	NGC-2 Revised	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$3,538	$42,455
(48)	TETCO delivery for GSS-TE	NGC-2 Revised	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$34,396	$412,746
(49)	TETCO delivery for GSS Conv	NGC-2 Revised	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$10,674	$128,087
(50)	Dominion delivery for GSS Conv	NGC-2 Revised	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$103,061
(51)	Dominion delivery for GSS	NGC-2 Revised	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$266,228
(52)	Algonquin delivery for FSS	NGC-2 Revised	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$200,752
(53)	Columbia Delivery for FSS	NGC-2 Revised	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$192,982
(54)	GAZ METRO Demand Payment Summer	NGC-2 Revised													
(55)	ENGIE Gas Demand Payment Summer	NGC-2 Revised													
(56)	ENGIE Gas Demand Payment Winter	NGC-2 Revised													
(57)	Peaking Supply at Dracut	NGC-2 Revised													
(58)	Less Credits from Mkter Releases	NGC-2 Revised													
(59)	**STORAGE DELIVERY FIXED COST**	sum[(37):(58)]													
(60)	**TOTAL STORAGE FIXED**	(36) + (59)													
(61)	**TOTAL FIXED COSTS**	22) + (36) + (59	$4,414,408	$4,448,398	$4,447,065	$4,444,929	$4,447,065	$4,531,059	$4,531,771	$4,531,059	$4,531,771	$4,531,771	$4,530,656	$4,531,368	$53,921,320

REDACTED

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

Line No.	Description	Reference	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
	VARIABLE SUPPLY COSTS (Includes Injections)														
(62)	Tennessee Zone 0	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(63)	Tennessee Zone 4	NGC-2 Revised	$845,439	$1,453,037	$1,277,317	$1,156,241	$901,341	$397,343	$0	$0	$0	$0	$0	$430,604	$6,461,322
(64)	Tennessee Connexion	NGC-2 Revised	$754,066	$892,315	$967,967	$915,725	$954,509	$863,531	$808,384	$625,476	$235,672	$341,482	$695,216	$865,400	$8,919,742
(65)	Tennessee Dracut	NGC-2 Revised	$0	$90,810	$206,945	$1,268,786	$210,276	$0	$0	$0	$0	$0	$0	$0	$1,776,817
(66)	TETCO STX	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(67)	TETCO ELA	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(68)	TETCO WLA	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(69)	TETCO ETX	NGC-2 Revised	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(70)	TRANSCO LEIDY	NGC-2 Revised	$86,657	$101,078	$109,569	$100,291	$108,797	$29,063	$5,426	$5,314	$5,498	$5,543	$5,202	$5,482	$567,921
(71)	M3 Delivered	NGC-2 Revised	$1,206,267	$358,037	$1,004,019	$1,071,522	$492,051	$953,412	$1,601,067	$394,143	$0	$0	$1,264,838	$905,916	$9,251,271
(72)	Maumee	NGC-2 Revised	$203,482	$2,618,510	$2,116,872	$1,893,668	$1,106,712	$135,821	$0	$0	$0	$0	$0	$0	$8,075,065
(73)	Broadrun Col	NGC-2 Revised	$0	$919,211	$944,180	$855,377	$801,857	$27,113	$0	$0	$0	$0	$0	$0	$3,547,738
(74)	Columbia Eagle and Downingtown	NGC-2 Revised	$37,160	$143,521	$1,189,634	$1,057,130	$678,817	$85,803	$100,371	$100,914	$88,226	$103,587	$62,852	$35,232	$3,683,249
(75)	TETCO M2	NGC-2 Revised	$1,804,450	$2,149,949	$2,376,156	$2,158,248	$2,324,151	$1,917,135	$661,786	$1,868,680	$1,914,664	$1,914,345	$1,022,209	$1,885,105	$21,996,878
(76)	Dominion to TETCO FTS	NGC-2 Revised	$18,052	$44,181	$50,488	$43,119	$46,103	$10,849	$0	$0	$0	$0	$0	$0	$212,793
(77)	ANE to Tennessee	NGC-2 Revised	$0	$105,267	$108,782	$97,505	$0	$0	$14,545	$0	$0	$0	$0	$0	$326,099
(78)	Niagara to Tennessee	NGC-2 Revised	$5,575	$0	$15,379	$9,221	$0	$74,298	$70,872	$68,780	$70,972	$70,439	$66,876	$70,772	$523,183
(79)	TETCO to B & W	NGC-2 Revised	$0	$145,309	$192,774	$164,234	$89,597	$0	$0	$0	$0	$0	$0	$0	$591,915
(80)	Algonquin - AIM	NGC-2 Revised	$292,889	$565,086	$2,614,995	$2,287,588	$1,338,226	$953,794	$962,085	$26,862	$0	$0	$0	$7,967	$9,049,493
(81)	Total Pipeline Commodity Charges	sum[(62):(80)]	$5,254,037	$9,586,311	$13,175,077	$13,078,655	$9,052,438	$5,448,163	$4,224,537	$3,090,168	$2,315,033	$2,435,396	$3,117,193	$4,206,480	$74,983,488
(82)	Hedging	NGC-2 Revised	$198,550	$1,315	$17,705	($178,417)	($154,391)	($563)	$75,327	$37,304	$19,000	$15,521	$15,412	$59,837	$106,600
(83)	Costs of Injections	NGC-2 Revised	$0	$0	$0	$0	$0	($156,931)	($1,211,609)	($1,177,976)	($803,616)	($1,052,352)	($1,665,341)	($1,431,657)	($7,499,482)
(84)	Refunds														
(85)	**TOTAL VARIABLE SUPPLY COSTS**	sum[(81):(84)]	$5,452,587	$9,587,626	$13,192,782	$12,900,238	$8,898,047	$5,290,669	$3,088,255	$1,949,497	$1,530,417	$1,398,564	$1,467,263	$2,834,660	$67,590,607
(86)	Underground Storage	NGC-2 Revised	$113,091	$1,262,219	$1,966,608	$1,797,495	$1,642,057	$113,173	$0	$0	$0	$0	$0	$0	$6,894,644
(87)	LNG Withdrawals and Trucking	NGC-2 Revised	$75,435	$77,949	$1,934,136	$738,848	$77,949	$75,435	$77,411	$74,643	$77,133	$78,855	$78,219	$80,052	$3,446,064
(88)	Storage Delivery Costs	NGC-2 Revised	$4,801	$70,340	$115,421	$105,741	$97,222	$4,833	$0	$0	$0	$0	$0	$0	$398,358
(89)	**TOTAL VARIABLE STORAGE COSTS**	sum[(86):(88)]	$193,327	$1,410,509	$4,016,165	$2,642,083	$1,817,228	$193,441	$77,411	$74,643	$77,133	$78,855	$78,219	$80,052	$10,739,066
(90)	**TOTAL VARIABLE COSTS**	(85) + (89)	$5,645,914	$10,998,135	$17,208,947	$15,542,321	$10,715,275	$5,484,110	$3,165,666	$2,024,140	$1,607,551	$1,477,419	$1,545,483	$2,914,712	$78,329,672
(91)	**TOTAL SUPPLY COSTS**	(61) + (90)	$10,060,322	$15,446,533	$21,656,012	$19,987,250	$15,162,341	$10,015,169	$7,697,437	$6,555,199	$6,139,322	$6,009,190	$6,076,138	$7,446,079	$132,250,992
	Storage Costs for FT-2 Calculation														
(92)	**Storage Fixed Costs - Facilities**	(36)	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$4,793,063
(93)	**Storage Fixed Costs - Deliveries**	(59)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
(94)	**Total Storage Costs**	sum[(92):(93)]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

REDACTED

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

Line No.	Description	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-Oct
		actual	actual	actual	actual	actual	actual	actual	actual	actual	forecast	forecast	forecast	
(1)	# of Days in Month	30	31	31	28	31	30	31	30	31	31	30	31	365
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(2)	I. Fixed Cost Deferred													
(3)	Beginning Under/(Over) Recovery	($8,917,829)	($8,528,360)	($8,267,752)	($10,429,146)	($12,450,052)	($11,826,387)	($13,164,136)	($12,103,896)	($8,333,016)	($6,320,297)	($3,659,063)	($981,744)	($8,917,829)
(4)	Supply Fixed Costs (net of cap rel)	$3,643,234	$3,860,783	$4,169,536	$4,258,775	$4,080,805	$4,016,513	$4,152,016	$3,809,981	$4,111,094	$4,557,903	$4,557,229	$4,557,903	$49,775,773
(5)	LNG Demand to DAC	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($124,066)	($1,488,790)
(6)	Supply Related LNG O & M	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$575,581
(7)	NGPMP Credits	($1,141,667)	($8,218)	($1,141,667)	($1,141,667)	$1,297,811	($1,171,974)	($1,141,667)	$1,327,146	($1,141,667)	($1,141,667)	($1,141,667)	($1,141,667)	($7,688,569)
(8)	Working Capital	$20,283	$21,537	$23,316	$23,830	$22,805	$22,434	$23,215	$21,244	$22,979	$25,554	$25,551	$25,554	$278,302
(9)	Total Supply Fixed Costs	$2,445,750	$3,798,001	$2,975,085	$3,064,838	$5,325,320	$2,790,872	$2,957,464	$5,082,271	$2,916,306	$3,365,690	$3,365,012	$3,365,690	$41,452,298
(10)	Supply Fixed - Revenue	$2,008,144	$3,525,810	$5,122,594	$5,070,397	$4,682,340	$4,108,098	$1,875,782	$1,293,559	$889,599	$694,930	$683,406	$1,214,275	$31,168,935
(11)	Monthly Under/(Over) Recovery	$437,605	$272,191	($2,147,509)	($2,005,560)	$642,980	($1,317,226)	$1,081,682	$3,788,712	$2,026,707	$2,670,760	$2,681,606	$2,151,415	$10,283,363
(12)	Prelim. Ending Under/(Over) Recovery	($8,480,224)	($8,256,170)	($10,415,261)	($12,434,705)	($11,807,072)	($13,143,612)	($12,082,454)	($8,315,184)	($6,306,309)	($3,649,537)	($977,456)	$1,169,672	$1,365,534
(13)	Month's Average Balance	($8,699,027)	($8,392,265)	($9,341,507)	($11,431,925)	($12,128,562)	($12,485,000)	($12,623,295)	($10,209,540)	($7,319,663)	($4,984,917)	($2,318,260)	$93,964	
(14)	Interest Rate (BOA Prime minus 200 bps)	1.50%	1.63%	1.75%	1.75%	1.88%	2.00%	2.00%	2.13%	2.25%	2.25%	2.25%	2.25%	
(15)	Interest Applied	($10,725)	($11,582)	($13,884)	($15,347)	($19,314)	($20,523)	($21,442)	($17,832)	($13,988)	($9,526)	($4,287)	$180	($158,271)
(16)	Marketer Reconcilation	($37,411)												($37,411)
(17)	Fixed Ending Under/(Over) Recovery	($8,528,360)	($8,267,752)	($10,429,146)	($12,450,052)	($11,826,387)	($13,164,136)	($12,103,896)	($8,333,016)	($6,320,297)	($3,659,063)	($981,744)	$1,169,851	$1,169,851
(18)	II. Variable Cost Deferred													
(19)	Beginning Under/(Over) Recovery	$9,293,216	$10,097,501	$16,318,521	$18,038,689	$16,722,311	$19,524,584	$13,611,687	$12,383,066	$12,501,947	$12,843,601	$12,570,099	$12,347,092	$9,293,216
(20)														
(21)	Variable Supply Costs	$6,640,193	$16,506,195	$16,528,212	$13,317,911	$16,213,679	$5,609,288	$3,862,631	$3,439,237	$2,431,631	$1,251,233	$1,247,082	$3,102,767	$90,150,058
(22)	Supply Related LNG to DAC	$0	($165,005)	($1,334)	($1,334)	($243,849)	$0	$0	$0	$0	$0	$0	$0	($411,522)
(23)	Supply Related LNG O & M	$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
(24)	Inventory Financing - LNG	$27,598	$24,431	$21,983	$20,642	$16,793	$17,368	$18,893	$22,903	$27,563	$26,170	$31,594	$32,502	$288,440
(25)	Inventory Financing - UG	$88,475	$75,678	$68,419	$51,816	$37,107	$41,623	$50,698	$60,880	$71,907	$63,650	$74,481	$83,947	$768,680
(26)	Working Capital	$38,271	$94,182	$95,253	$76,750	$92,042	$32,329	$22,262	$19,822	$14,015	$7,211	$7,188	$17,883	$517,208
(27)	Total Supply Variable Costs	$6,842,261	$16,583,205	$16,760,256	$13,513,509	$16,163,497	$5,748,333	$4,002,209	$3,590,567	$2,592,840	$1,395,989	$1,408,068	$3,284,823	$91,885,558
(28)	Supply Variable - Revenue	$6,217,781	$10,380,401	$15,065,602	$14,853,204	$13,390,062	$11,688,443	$5,252,890	$3,493,398	$2,275,379	$1,693,750	$1,654,094	$3,277,914	$89,242,920
(29)	Monthly Under/(Over) Recovery	$624,480	$6,202,804	$1,694,654	($1,339,695)	$2,773,435	($5,940,110)	($1,250,681)	$97,169	$317,460	($297,761)	($246,026)	$6,909	$2,642,638
(30)	Prelim. Ending Under/(Over) Recovery	$9,917,696	$16,300,305	$18,013,175	$16,698,994	$19,495,746	$13,584,474	$12,361,007	$12,480,234	$12,819,407	$12,545,840	$12,324,074	$12,354,001	$11,935,855
(31)	Month's Average Balance	$9,605,456	$13,198,903	$17,165,848	$17,368,841	$18,109,028	$16,554,529	$12,986,347	$12,431,650	$12,660,677	$12,694,721	$12,447,086	$12,350,547	
(32)	Interest Rate (BOA Prime minus 200 bps)	1.50%	1.63%	1.75%	1.75%	1.88%	2.00%	2.00%	2.13%	2.25%	2.25%	2.25%	2.25%	
(33)	Interest Applied	$11,842	$18,216	$25,514	$23,317	$28,838	$27,213	$22,059	$21,713	$24,194	$24,259	$23,019	$23,601	$273,785
(34)	Gas Procurement Incentive/(penalty)	$167,963	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$167,963
(35)	Variable Ending Under/(Over) Recovery	$10,097,501	$16,318,521	$18,038,689	$16,722,311	$19,524,584	$13,611,687	$12,383,066	$12,501,947	$12,843,601	$12,570,099	$12,347,092	$12,377,603	$12,377,603
(36)	**GCR Deferred Summary**													
(37)	Beginning Under/(Over) Recovery	$375,387	$1,569,141	$8,050,769	$7,609,543	$4,272,259	$7,698,197	$447,551	$279,169	$4,168,931	$6,523,304	$8,911,037	$11,365,349	$375,387
(38)	Gas Costs	$10,217,640	$20,173,596	$20,668,038	$17,546,975	$20,022,259	$9,597,425	$7,986,271	$7,220,842	$6,514,348	$5,780,760	$5,775,935	$7,632,294	$139,136,384
(39)	Inventory Finance	$116,073	$100,108	$90,401	$72,458	$53,900	$58,991	$69,592	$83,783	$99,470	$89,820	$106,075	$116,449	$1,057,120
(40)	Working Capital	$58,553	$115,719	$118,569	$100,581	$114,847	$54,763	$45,477	$41,066	$36,994	$32,766	$32,738	$43,437	$795,510
(41)	NGPMP Credits	($1,141,667)	($8,218)	($1,141,667)	($1,141,667)	$1,297,811	($1,171,974)	($1,141,667)	$1,327,146	($1,141,667)	($1,141,667)	($1,141,667)	($1,141,667)	($7,688,569)
(42)	Total Costs	$9,250,599	$20,381,206	$19,735,341	$16,578,347	$21,488,817	$8,539,205	$6,959,673	$8,672,837	$5,509,146	$4,761,679	$4,773,081	$6,650,514	$133,300,445
(43)	Revenue	$8,225,926	$13,906,212	$20,188,196	$19,923,602	$18,072,402	$15,796,541	$7,128,672	$4,786,957	$3,164,979	$2,388,680	$2,337,500	$4,492,189	$120,411,855
(44)	Monthly Under/(Over) Recovery	$1,024,674	$6,474,995	($452,855)	($3,345,255)	$3,416,415	($7,257,335)	($168,999)	$3,885,880	$2,344,167	$2,372,999	$2,435,581	$2,158,324	$12,888,590
(45)	Prelim. Ending Under/(Over) Recovery	$1,400,061	$8,044,136	$7,597,914	$4,264,289	$7,688,674	$440,862	$278,553	$4,165,050	$6,513,098	$8,896,303	$11,346,617	$13,523,673	$13,263,977
(46)	Month's Average Balance	$887,724	$4,806,638	$7,824,342	$5,936,916	$5,980,466	$4,069,529	$363,052	$2,222,110	$5,341,014	$7,709,804	$10,128,827	$12,444,511	
(47)	Interest Rate (BOA Prime minus 200 bps)	1.50%	1.63%	1.75%	1.75%	1.88%	2.00%	2.00%	2.13%	2.25%	2.25%	2.25%	2.25%	
(48)	Interest Applied	$1,118	$6,634	$11,629	$7,970	$9,524	$6,690	$617	$3,881	$10,206	$14,733	$18,731	$23,781	$115,514
(49)	Gas Purchase Plan Incentives/(Penalties)	$167,963	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$167,963
(50)														
(51)	**Ending Under/(Over) Recovery W/ Interest**	**$1,569,141**	**$8,050,769**	**$7,609,543**	**$4,272,259**	**$7,698,197**	**$447,551**	**$279,169**	**$4,168,931**	**$6,523,304**	**$8,911,037**	**$11,365,349**	**$13,547,454**	$13,547,454

REDACTED

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

Line No.	Description	Reference	Nov-17 fcst	Dec-17 fcst	Jan-18 fcst	Feb-18 fcst	Mar-18 fcst	Apr-18 fcst	May-18 fcst	Jun-18 fcst	Jul-18 fcst	Aug-18 fcst	Sep-18 fcst	Oct-18 fcst	Total Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
(1)	**I. Fixed Cost Revenue --**														
(2)	(a) Low Load dth	AEL-1 Revised pg 11, sum [Line (2):(5), (7)]	1,688,674	3,093,242	4,240,813	4,549,104	3,980,376	2,797,424	1,507,174	857,523	589,461	527,941	593,153	743,076	25,167,960
(3)	Fixed Cost Factor	AEL-1 Revised pg 1, Line 1, col (e)	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	$1.5517	
(4)	Low Load Revenue	(2) * (3)	$2,620,316	$4,799,783	$6,580,470	$7,058,845	$6,176,349	$4,340,763	$2,338,682	$1,330,619	$914,666	$819,206	$920,396	$1,153,031	$39,053,126
(5)	(b) High Load dth	AEL-1 Revised pg 11, sum [Line (1), (6), (8)]	58,256	74,104	84,371	78,341	97,463	81,132	60,848	54,946	41,400	33,790	37,285	44,548	746,482
(6)	Fixed Cost Factor	AEL-1 Revised pg 1, Line 1, col (d)	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	$1.1342	
(7)	High Load Revenue	(5) * (6)	$66,074	$84,049	$95,693	$88,854	$110,543	$92,019	$69,014	$62,319	$46,956	$38,324	$42,288	$50,527	$846,660
(8)	sub-total Dth	(2) + (5)	1,746,930	3,167,346	4,325,184	4,627,445	4,077,839	2,878,555	1,568,022	912,469	630,861	561,730	630,438	787,624	25,914,442
(9)	FT-2 Storage Revenue from ı	[AEL-5 Revised pg 2, Line (25)] / 12	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$170,031	$2,040,370
(10)	**TOTAL Fixed Revenue**	(4) + (7) + (9)	**$2,856,421**	**$5,053,863**	**$6,846,194**	**$7,317,730**	**$6,456,923**	**$4,602,813**	**$2,577,727**	**$1,562,969**	**$1,131,653**	**$1,027,561**	**$1,132,715**	**$1,373,589**	**$41,940,156**
(11)	**II. Variable Cost Revenue --**														
(12)	(a) Firm Sales dth	(8)	1,746,930	3,167,346	4,325,184	4,627,445	4,077,839	2,878,555	1,568,022	912,469	630,861	561,730	630,438	787,624	25,914,442
(13)	Variable Cost Factor	AEL-1 Revised pg 1, Line (2)	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	$3.5711	
(14)	Variable Revenue	(12) * (13)	$6,238,462	$11,310,908	$15,445,663	$16,525,069	$14,562,370	$10,279,609	$5,599,562	$3,258,518	$2,252,867	$2,005,995	$2,251,356	$2,812,684	$92,543,063
(15)	**TOTAL Variable Revenue**	(14)	**$6,238,462**	**$11,310,908**	**$15,445,663**	**$16,525,069**	**$14,562,370**	**$10,279,609**	**$5,599,562**	**$3,258,518**	**$2,252,867**	**$2,005,995**	**$2,251,356**	**$2,812,684**	**$92,543,063**
(16)	**Total Gas Cost Revenue**	(10) + (15)	**$9,094,883**	**$16,364,771**	**$22,291,857**	**$23,842,799**	**$21,019,293**	**$14,882,422**	**$8,177,289**	**$4,821,487**	**$3,384,520**	**$3,033,556**	**$3,384,071**	**$4,186,273**	**$134,483,219**

REDACTED

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

Line No.	Description	Source	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
(1)	**Fixed Costs**	AEL-1 Revised Pg 4 , Line (61)	$4,414,408	$4,448,398	$4,447,065	$4,444,929	$4,447,065	$4,531,059	$4,531,771	$4,531,059	$4,531,771	$4,531,771	$4,530,656	$4,531,368	$53,921,320
(2)	Capacity Release Revenue		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(3)	Less: System Pressure to DAC	AEL-1 Revised Pg 4 Line (16)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($3,153,600)
(4)	Less: Credits		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(5)	Plus: Supply Related LNG O&M Costs	Dkt 4323	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(6)	Allowable Working Capital Costs	sum[(1):(5)]	$4,151,608	$4,185,598	$4,184,265	$4,182,129	$4,184,265	$4,268,259	$4,268,971	$4,268,259	$4,268,971	$4,268,971	$4,267,856	$4,268,568	$50,767,720
(7)	Number of Days Lag	Dkt 4323	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	[(6) * (7)] / 365	$244,661	$246,664	$246,585	$246,459	$246,585	$251,535	$251,577	$251,535	$251,577	$251,577	$251,511	$251,553	
(9)	Cost of Capital	Dkt 4323	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	
(10)	Return on Working Capital Requirement	(8) * (9)	$17,762	$17,908	$17,902	$17,893	$17,902	$18,261	$18,264	$18,261	$18,264	$18,264	$18,260	$18,263	
(11)	Weighted Cost of Debt	Dkt 4323	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	
(12)	Interest Expense	(8) * (11)	$6,312	$6,364	$6,362	$6,359	$6,362	$6,490	$6,491	$6,490	$6,491	$6,491	$6,489	$6,490	
(13)	Taxable Income	(10) - (12)	$11,450	$11,544	$11,540	$11,534	$11,540	$11,772	$11,774	$11,772	$11,774	$11,774	$11,771	$11,773	
(14)	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	
(15)	Return and Tax Requirement	(13) / (14)	$17,616	$17,760	$17,754	$17,745	$17,754	$18,111	$18,114	$18,111	$18,114	$18,114	$18,109	$18,112	
(16)	**Fixed Working Capital Requirement**	(12) + (15)	$23,928	$24,124	$24,116	$24,104	$24,116	$24,600	$24,604	$24,600	$24,604	$24,604	$24,598	$24,602	$292,600
(17)	**Variable Costs**	AEL-1 Revised Pg 5 , Line (90)	$5,645,914	$10,998,135	$17,208,947	$15,542,321	$10,715,275	$5,484,110	$3,165,666	$2,024,140	$1,607,551	$1,477,419	$1,545,483	$2,914,712	$78,329,672
(18)	Less: Non-firm Sales														$0
(19)	Less: Supply Refunds														$0
(20)	Less: Balancing Related System Pressure Commodity to DAC		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(21)	Plus: Supply Related LNG O&M Costs	Dkt 4323	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(22)	Allowable Working Capital Costs	sum[(17):(21)]	$5,645,914	$10,998,135	$17,208,947	$15,542,321	$10,715,275	$5,484,110	$3,165,666	$2,024,140	$1,607,551	$1,477,419	$1,545,483	$2,914,712	$78,329,672
(23)	Number of Days Lag	Dkt 4323	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	[(22) * (23)] / 365	$332,722	$648,137	$1,014,149	$915,932	$631,467	$323,187	$186,557	$119,286	$94,735	$87,067	$91,078	$171,768	
(25)	Cost of Capital	Dkt 4323	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	
(26)	Return on Working Capital Requirement	(24) * (25)	$24,156	$47,055	$73,627	$66,497	$45,845	$23,463	$13,544	$8,660	$6,878	$6,321	$6,612	$12,470	
(27)	Weighted Cost of Debt	Dkt 4323	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	
(28)	Interest Expense	(24) * (27)	$8,584	$16,722	$26,165	$23,631	$16,292	$8,338	$4,813	$3,078	$2,444	$2,246	$2,350	$4,432	
(29)	Taxable Income	(26) - (28)	$15,571	$30,333	$47,462	$42,866	$29,553	$15,125	$8,731	$5,583	$4,434	$4,075	$4,262	$8,039	
(30)	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	
(31)	Return and Tax Requirement	(29) / (30)	$23,956	$46,666	$73,019	$65,947	$45,466	$23,269	$13,432	$8,589	$6,821	$6,269	$6,558	$12,367	
(32)	**Variable Working Capital Requirement**	(28) + (31)	$32,540	$63,388	$99,184	$89,578	$61,758	$31,608	$18,245	$11,666	$9,265	$8,515	$8,907	$16,799	$451,453

REDACTED

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

Line No.	Description (a)	Source (b)	Nov-17 (c)	Dec-17 (d)	Jan-18 (e)	Feb-18 (f)	Mar-18 (g)	Apr-18 (h)	May-18 (i)	Jun-18 (j)	Jul-18 (k)	Aug-18 (l)	Sep-18 (m)	Oct-18 (n)	Total (o)
(33)	**Storage Fixed Costs**	AEL-1 Revised pg 4, Line (60)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$15,804,120
(34)	Less: System Pressure to DAC	AEL-1 Revised Pg 8 , Line (3)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($3,153,600)
(35)	Less: Credits		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(36)	Plus: Supply Related LNG O&M Costs	Dkt 4323	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(37)	Allowable Working Capital Costs	sum[(33):(36)]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$12,650,520
(38)	Number of Days Lag	Dkt 4323	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	21.51	
(39)	Working Capital Requirement	[(37) * (38)] / 365	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(40)	Cost of Capital	Dkt 4323	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	
(41)	Return on Working Capital Requirement	(39) * (40)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(42)	Weighted Cost of Debt	Dkt 4323	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	
(43)	Interest Expense	(39) * (42)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(44)	Taxable Income	(41) - (43)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(45)	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	
(46)	Return and Tax Requirement	(44) / (45)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(47)	**Storage Fixed Working Capital Requirement**	(43) + (46)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$72,911

REDACTED

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

Line No.	Description (a)	Source (b)	Nov-17 (c)	Dec-17 (d)	Jan-18 (e)	Feb-18 (f)	Mar-18 (g)	Apr-18 (h)	May-18 (i)	Jun-18 (j)	Jul-18 (k)	Aug-18 (l)	Sep-18 (m)	Oct-18 (n)	Total (o)
(1)	**Storage Inventory Balance**	NGC-2 Revised pg 15	$9,436,055	$8,139,654	$6,127,822	$4,288,451	$2,610,887	$2,653,444	$3,877,029	$5,066,626	$5,878,226	$6,941,021	$8,623,396	$10,069,304	
(2)	Hedging														
(3)	Subtotal	(1) + (2)	$9,436,055	$8,139,654	$6,127,822	$4,288,451	$2,610,887	$2,653,444	$3,877,029	$5,066,626	$5,878,226	$6,941,021	$8,623,396	$10,069,304	
(4)	Cost of Capital	Dkt 4323	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	
(5)	Return on Working Capital Requirement	(3) * (4)	$685,058	$590,939	$444,880	$311,342	$189,550	$192,640	$281,472	$367,837	$426,759	$503,918	$626,059	$731,031	$5,351,485
(6)	Weighted Cost of Debt	Dkt 4323	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	
(7)	Interest Charges Financed	(3) * (6)	$243,450	$210,003	$158,098	$110,642	$67,361	$68,459	$100,027	$130,719	$151,658	$179,078	$222,484	$259,788	$1,901,767
(8)	Taxable Income	(5) - (7)	$441,607	$380,936	$286,782	$200,700	$122,189	$124,181	$181,445	$237,118	$275,101	$324,840	$403,575	$471,243	
(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)	$679,396	$586,055	$441,203	$308,768	$187,984	$191,048	$279,146	$364,797	$423,232	$499,754	$620,884	$724,990	$5,307,258
(11)	Working Capital Requirement	(7) + (10)	$922,846	$796,058	$599,301	$419,411	$255,345	$259,507	$379,173	$495,516	$574,891	$678,832	$843,368	$984,778	$7,209,025
(12)	Storage-Related Inventory Costs	(11) / 12	$76,904	$66,338	$49,942	$34,951	$21,279	$21,626	$31,598	$41,293	$47,908	$56,569	$70,281	$82,065	$600,752
(13)	**LNG Inventory Balance**	NGC-2 Revised pg 17	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(14)	Cost of Capital	Dkt 4323	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	7.26%	
(15)	Return on Working Capital Requirement	(13) * (14)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$1,895,692
(16)	Weighted Cost of Debt	Dkt 4323	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	2.58%	
(17)	Interest Charges Financed	(13) * (16)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$673,676
(18)	Taxable Income	(15) - (17)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
(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)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$1,880,025
(21)	Working Capital Requirement	(17) + (20)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$2,553,701
(22)	LNG-Related Inventory Costs	(21) / 12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$212,808
(23)	Total Inventory Financing Costs	(12) + (22)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$813,560

REDACTED

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

Line No.	Rate Class	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
	SALES													
(1)	Residential Non-Heating	26,718	39,278	49,465	46,689	63,744	50,294	32,303	22,003	16,157	14,197	15,072	17,788	393,708
(2)	Residential Heating	1,304,358	2,321,462	3,187,357	3,515,651	3,025,940	2,123,608	1,134,913	640,980	439,872	378,733	439,199	549,175	19,061,247
(3)	Small C&I	126,421	299,220	422,898	433,958	388,594	265,063	116,832	75,482	45,315	41,777	47,836	57,800	2,321,194
(4)	Medium C&I	214,633	381,004	511,908	478,851	459,399	337,938	214,438	122,975	95,239	99,371	93,976	121,150	3,130,883
(5)	Large LLF	40,481	84,267	110,073	111,958	99,039	65,916	38,351	16,635	8,837	7,982	11,775	14,173	609,485
(6)	Large HLF	21,195	26,978	30,535	27,387	26,615	23,997	23,632	27,213	19,713	14,410	15,671	18,743	276,089
(7)	Extra Large LLF	2,782	7,288	8,577	8,686	7,404	4,898	2,641	1,452	198	78	368	778	45,151
(8)	Extra Large HLF	10,343	7,847	4,370	4,265	7,104	6,841	4,912	5,730	5,529	5,182	6,542	8,018	76,684
(9)	**Total Sales**	1,746,930	3,167,346	4,325,184	4,627,445	4,077,839	2,878,555	1,568,022	912,469	630,861	561,730	630,438	787,624	25,914,442
	TRANSPORTATION													
(10)	FT- Small	12,272	18,893	24,139	25,356	22,502	17,022	10,822	5,728	3,123	2,694	3,241	6,419	152,213
(11)	FT- Medium	178,314	296,045	363,113	338,573	321,535	250,078	163,314	97,278	76,751	68,943	71,759	103,719	2,329,421
(12)	FT- Large LLF	175,480	302,854	367,744	351,289	307,673	196,206	110,624	53,831	33,111	31,428	43,563	82,128	2,055,929
(13)	FT- Large HLF	71,231	92,021	105,119	95,337	95,991	85,834	76,094	74,437	62,058	59,775	62,566	67,803	948,265
(14)	FT- Extra Large LLF	123,724	188,656	217,213	189,250	165,531	102,609	61,813	28,070	19,933	18,691	25,191	77,537	1,218,219
(15)	FT- Extra Large HLF	565,425	648,997	660,906	568,148	596,012	595,549	550,705	539,808	545,748	538,527	515,155	540,161	6,865,140
(16)	**Total FT Transportation**	1,126,446	1,547,466	1,738,235	1,567,954	1,509,244	1,247,298	973,371	799,151	740,723	720,059	721,474	877,767	13,569,188
	Total THROUGHPUT													
(17)	Residential Non-Heating	26,718	39,278	49,465	46,689	63,744	50,294	32,303	22,003	16,157	14,197	15,072	17,788	393,708
(18)	Residential Heating	1,304,358	2,321,462	3,187,357	3,515,651	3,025,940	2,123,608	1,134,913	640,980	439,872	378,733	439,199	549,175	19,061,247
(19)	Small C&I	138,693	318,113	447,037	459,314	411,096	282,085	127,654	81,210	48,438	44,471	51,076	64,219	2,473,406
(20)	Medium C&I	392,947	677,050	875,021	817,424	780,934	588,016	377,752	220,253	171,990	168,314	165,735	224,869	5,460,304
(21)	Large LLF	215,961	387,121	477,817	463,247	406,712	262,122	148,974	70,466	41,947	39,409	55,337	96,300	2,665,414
(22)	Large HLF	92,425	118,999	135,655	122,724	122,605	109,831	99,726	101,650	81,771	74,186	78,236	86,545	1,224,355
(23)	Extra Large LLF	126,506	195,944	225,790	197,936	172,935	107,508	64,454	29,522	20,131	18,769	25,559	78,316	1,263,370
(24)	Extra Large HLF	575,769	656,844	665,276	572,413	603,116	602,390	555,617	545,537	551,277	543,710	521,696	548,179	6,941,825
(25)	**Total Throughput**	2,873,376	4,714,812	6,063,418	6,195,399	5,587,083	4,125,854	2,541,393	1,711,620	1,371,584	1,281,789	1,351,911	1,665,391	39,483,630

REDACTED

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

Line No.	Rate Class (a)	Reference	Line #	Nov-17 (b)	Dec-17 (c)	Jan-18 (d)	Feb-18 (e)	Mar-18 (f)	Total (g)	% (h)
	SALES (dth)									
(1)	Residential Non-Heating	AEL-1 Revised pg 15	Line (70)	29,535	42,188	52,449	49,989	70,803	244,963	1.24%
(2)	Residential Heating	AEL-1 Revised pg 15	Line (71)	1,515,940	2,551,787	3,428,758	3,830,274	3,405,142	14,731,901	74.53%
(3)	Small C&I	AEL-1 Revised pg 15	Line (72)	145,923	330,020	455,868	473,415	438,598	1,843,823	9.33%
(4)	Medium C&I	AEL-1 Revised pg 15	Line (74)	243,152	415,446	548,130	518,121	512,176	2,237,025	11.32%
(5)	Large LLF	AEL-1 Revised pg 15	Line (76)	47,853	93,326	118,846	122,328	112,067	494,420	2.50%
(6)	Large HLF	AEL-1 Revised pg 15	Line (78)	22,368	28,216	31,737	28,615	28,048	138,985	0.70%
(7)	Extra Large LLF	AEL-1 Revised pg 15	Line (80)	3,390	8,146	9,307	9,538	8,451	38,833	0.20%
(8)	Extra Large HLF	AEL-1 Revised pg 15	Line (82)	11,459	8,094	4,370	4,265	7,293	35,482	0.18%
(9)	Total Sales			2,019,620	3,477,223	4,649,465	5,036,546	4,582,578	19,765,432	100.00%
(10)	Low Load Factor	sum[(2:5),(7)]		1,956,258	3,398,725	4,560,909	4,953,676	4,476,435	19,346,003	97.88%
(11)	High Load Factor	sum[(1),(6),(8)]		63,362	78,498	88,556	82,870	106,143	419,429	2.12%

2017/2018 Design Day Send Out

(12)	Pipeline	174,349	Dktherm
(13)	Underground Storage	42,694	Dktherm
(14)	LNG	140,965	Dktherm
(15)	Total Projected 2017/2018 Design Day	358,008	Dktherm

REDACTED

Derivation of Monthly Design Sales

Normal Volumes (Dth)

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(1)	Residential Non-Heating	26,718	39,278	49,465	46,689	63,744	50,294	32,303	22,003	16,157	14,197	15,072	17,788	393,708
(2)	Residential Heating	1,304,358	2,321,462	3,187,357	3,515,651	3,025,940	2,123,608	1,134,913	640,980	439,872	378,733	439,199	549,175	19,061,247
(3)	Small C&I	126,421	299,220	422,898	433,958	388,594	265,063	116,832	75,482	45,315	41,777	47,836	57,800	2,321,194
(4)	Small Transport	12,272	18,893	24,139	25,356	22,502	17,022	10,822	5,728	3,123	2,694	3,241	6,419	152,213
(5)	Medium C&I	214,633	381,004	511,908	478,851	459,399	337,938	214,438	122,975	95,239	99,371	93,976	121,150	3,130,883
(6)	Med Transport	178,314	296,045	363,113	338,573	321,535	250,078	163,314	97,278	76,751	68,943	71,759	103,719	2,329,421
(7)	Large Low Load	40,481	84,267	110,073	111,958	99,039	65,916	38,351	16,635	8,837	7,982	11,775	14,173	609,485
(8)	Large Low Load- Transport	175,480	302,854	367,744	351,289	307,673	196,206	110,624	53,831	33,111	31,428	43,563	82,128	2,055,929
(9)	Large High Load	21,195	26,978	30,535	27,387	26,615	23,997	23,632	27,213	19,713	14,410	15,671	18,743	276,089
(10)	Large High Load- Transport	71,231	92,021	105,119	95,337	95,991	85,834	76,094	74,437	62,058	59,775	62,566	67,803	948,265
(11)	XL Low Load	2,782	7,288	8,577	8,686	7,404	4,898	2,641	1,452	198	78	368	778	45,151
(12)	XL Low Load-Transport	123,724	188,656	217,213	189,250	165,531	102,609	61,813	28,070	19,933	18,691	25,191	77,537	1,218,219
(13)	XL High Load	10,343	7,847	4,370	4,265	7,104	6,841	4,912	5,730	5,529	5,182	6,542	8,018	76,684
(14)	XL High Load-Transport	565,425	648,997	660,906	568,148	596,012	595,549	550,705	539,808	545,748	538,527	515,155	540,161	6,865,140
(15)	**Total**	2,873,376	4,714,812	6,063,418	6,195,399	5,587,083	4,125,854	2,541,393	1,711,620	1,371,584	1,281,789	1,351,911	1,665,391	39,483,630
(16)	HLF	694,912	815,122	850,396	741,826	789,465	762,515	687,647	669,190	649,205	632,093	615,005	652,512	8,559,887
(17)	LLF	2,178,464	3,899,690	5,213,022	5,453,573	4,797,617	3,363,339	1,853,746	1,042,430	722,379	649,696	736,906	1,012,879	30,923,743

Baseload

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
		30	31	31	28	31	30	31	30	31	31	30	31	
(18)	Residential Non-Heating	14,813	15,307	15,307	13,826	15,307	14,813	15,307	14,813	15,307	14,197	14,813	15,307	179,116
(19)	Residential Heating	410,153	423,825	423,825	382,810	423,825	410,153	423,825	410,153	423,825	378,733	410,153	423,825	4,945,108
(20)	Small C&I	43,998	45,465	45,465	41,065	45,465	43,998	45,465	43,998	45,315	41,777	43,998	45,465	531,470
(21)	Small Transport	2,954	3,052	3,052	2,757	3,052	2,954	3,052	2,954	3,052	2,694	2,954	3,052	35,580
(22)	Medium C&I	94,104	97,241	97,241	87,831	97,241	94,104	97,241	94,104	95,239	97,241	93,976	97,241	1,142,805
(23)	Med Transport	70,908	73,272	73,272	66,181	73,272	70,908	73,272	70,908	73,272	68,943	70,908	73,272	858,389
(24)	Large Low Load	9,324	9,635	9,635	8,702	9,635	9,324	9,635	9,324	8,837	7,982	9,324	9,635	110,990
(25)	Large Low Load- Transport	35,250	36,425	36,425	32,900	36,425	35,250	36,425	35,250	33,111	31,428	35,250	36,425	420,565
(26)	Large High Load	16,237	16,779	16,779	15,155	16,779	16,237	16,779	16,237	16,779	14,410	15,671	16,779	194,619
(27)	Large High Load- Transport	60,130	62,134	62,134	56,121	62,134	60,130	62,134	60,130	62,058	59,775	60,130	62,134	729,146
(28)	XL Low Load	210	217	217	196	217	210	217	210	198	78	210	217	2,398
(29)	XL Low Load-Transport	20,809	21,503	21,503	19,422	21,503	20,809	21,503	20,809	19,933	18,691	20,809	21,503	248,799
(30)	XL High Load	5,626	5,814	4,370	4,265	5,814	5,626	4,912	5,626	5,529	5,182	5,626	5,814	64,204
(31)	XL High Load-Transport	521,553	538,938	538,938	486,783	538,938	521,553	538,938	521,553	538,938	538,527	515,155	538,938	6,338,754
(32)	Total	1,306,071	1,349,607	1,348,163	1,218,014	1,349,607	1,306,071	1,348,705	1,306,071	1,341,393	1,279,659	1,298,978	1,349,607	15,801,945
(33)	HLF	618,360	638,972	637,528	576,150	638,972	618,360	638,070	618,360	638,611	632,093	611,395	638,972	7,505,839
(34)	LLF	687,711	710,635	710,635	641,864	710,635	687,711	710,635	687,711	702,782	647,567	687,583	710,635	8,296,105

REDACTED

Derivation of Monthly Design Sales

Heat Volumes

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(35)	Residential Non-Heating	11,905	23,971	34,158	32,863	48,437	35,481	16,997	7,190	851	0	259	2,481	214,592
(36)	Residential Heating	894,204	1,897,637	2,763,532	3,132,842	2,602,114	1,713,455	711,087	230,826	16,046	0	29,045	125,350	14,116,139
(37)	Small C&I	82,423	253,755	377,433	392,893	343,130	221,065	71,367	31,484	0	0	3,838	12,335	1,789,723
(38)	Small Transport	9,319	15,841	21,087	22,599	19,450	14,068	7,770	2,774	71	0	287	3,367	116,632
(39)	Medium C&I	120,529	283,763	414,667	391,021	362,158	243,834	117,197	28,870	0	2,130	0	23,909	1,988,079
(40)	Med Transport	107,405	222,773	289,841	272,391	248,263	179,170	90,042	26,370	3,479	0	850	30,447	1,471,032
(41)	Large Low Load	31,157	74,633	100,438	103,256	89,404	56,592	28,716	7,311	0	0	2,451	4,538	498,495
(42)	Large Low Load- Transport	140,230	266,428	331,319	318,389	271,248	160,956	74,198	18,581	0	0	8,312	45,703	1,635,364
(43)	Large High Load	4,957	10,200	13,757	12,232	9,836	7,760	6,854	10,976	2,935	0	0	1,964	81,471
(44)	Large High Load- Transport	11,100	29,887	42,985	39,216	33,856	25,704	13,960	14,307	0	0	2,436	5,668	219,119
(45)	XL Low Load	2,572	7,071	8,360	8,490	7,187	4,688	2,424	1,242	0	0	158	561	42,753
(46)	XL Low Load-Transport	102,915	167,153	195,710	169,828	144,028	81,800	40,310	7,260	0	0	4,382	56,034	969,420
(47)	XL High Load	4,717	2,034	0	0	1,291	1,215	0	104	0	0	916	2,204	12,480
(48)	XL High Load-Transport	43,872	110,059	121,968	81,365	57,073	73,996	11,767	18,254	6,809	0	0	1,223	526,386
(49)	Total	1,567,305	3,365,205	4,715,255	4,977,385	4,237,476	2,819,783	1,192,688	405,549	30,191	2,130	52,933	315,784	23,681,686
(50)	HLF	76,552	176,150	212,868	165,676	150,494	144,155	49,577	50,831	10,595	0	3,610	13,540	1,054,048
(51)	LLF	1,490,753	3,189,055	4,502,387	4,811,709	4,086,982	2,675,627	1,143,111	354,719	19,596	2,130	49,323	302,244	22,627,637
(52)	**Normal Billing DD**	**579**	**931**	**1099**	**936**	**796**	**453**	**227**	**44**	**1**	**1**	**52**	**339**	**5458**

Heat Factors

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
(53)	Residential Non-Heating	21	26	31	35	61	78	75	163	851	-	5	7	39
(54)	Residential Heating	1,544	2,038	2,515	3,347	3,269	3,782	3,133	5,246	16,046	-	559	370	2,586
(55)	Small C&I	142	273	343	420	431	488	314	716	-	-	74	36	328
(56)	Small Transport	16	17	19	24	24	31	34	63	71	-	6	10	21
(57)	Medium C&I	208	305	377	418	455	538	516	656	-	2,130	-	71	364
(58)	Med Transport	186	239	264	291	312	396	397	599	3,479	-	16	90	270
(59)	Large Low Load	54	80	91	110	112	125	127	166	-	-	47	13	91
(60)	Large Low Load- Transport	242	286	301	340	341	355	327	422	-	-	160	135	300
(61)	Large High Load	9	11	13	13	12	17	30	249	2,935	-	-	6	15
(62)	Large High Load- Transport	19	32	39	42	43	57	61	325	-	-	47	17	40
(63)	XL Low Load	4	8	8	9	9	10	11	28	-	-	3	2	8
(64)	XL Low Load-Transport	178	180	178	181	181	181	178	165	-	-	84	165	178
(65)	XL High Load	8	2	-	-	2	3	-	2	-	-	18	7	2
(66)	XL High Load-Transport	76	118	111	87	72	163	52	415	6,809	-	-	4	96
(67)	Total	2,707	3,615	4,290	5,318	5,323	6,225	5,254	9,217	30,191	2,130	1,018	932	4,339
(68)	**NormalBilling DD**	**579**	**931**	**1099**	**936**	**796**	**453**	**227**	**44**	**1**	**1**	**52**	**339**	**5458**
(69)	**DesignBilling DD**	**716**	**1044**	**1195**	**1030**	**912**	**546**	**217**	**35**	**5**	**10**	**88**	**370**	**6168**

REDACTED

Derivation of Monthly Design Sales

Design Sales

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-Oct
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
(70)	Residential Non-Heating	29,535	42,188	52,449	49,989	70,803	57,578	31,555	20,532	15,307	14,197	15,251	18,014	417,398
(71)	Residential Heating	1,515,940	2,551,787	3,428,758	3,830,274	3,405,142	2,475,377	1,103,587	593,765	423,825	378,733	459,307	560,638	20,727,134
(72)	Small C&I	145,923	330,020	455,868	473,415	438,598	310,448	113,688	69,042	45,315	41,777	50,492	58,928	2,533,512
(73)	Small Transport	14,477	20,816	25,981	27,626	25,337	19,910	10,480	5,161	3,052	2,694	3,440	6,727	165,700
(74)	Medium C&I	243,152	415,446	548,130	518,121	512,176	387,997	209,275	117,069	95,239	97,241	93,976	123,337	3,361,159
(75)	Med Transport	203,728	323,084	388,432	365,928	357,714	286,861	159,347	91,884	73,272	68,943	72,347	106,503	2,498,043
(76)	Large Low Load	47,853	93,326	118,846	122,328	112,067	77,534	37,086	15,140	8,837	7,982	13,472	14,588	669,057
(77)	Large Low Load- Transport	208,660	335,191	396,686	383,264	347,202	229,250	107,355	50,030	33,111	31,428	49,317	86,307	2,257,801
(78)	Large High Load	22,368	28,216	31,737	28,615	28,048	25,590	23,330	24,968	16,779	14,410	15,671	18,922	278,655
(79)	Large High Load- Transport	73,857	95,648	108,874	99,276	100,924	91,111	75,479	71,511	62,058	59,775	64,252	68,321	971,087
(80)	XL Low Load	3,390	8,146	9,307	9,538	8,451	5,861	2,534	1,198	198	78	477	829	50,010
(81)	XL Low Load-Transport	148,075	208,944	234,309	206,306	186,520	119,403	60,037	26,585	19,933	18,691	28,225	82,662	1,339,689
(82)	XL High Load	11,459	8,094	4,370	4,265	7,293	7,090	4,912	5,709	5,529	5,182	7,175	8,220	79,299
(83)	XL High Load-Transport	575,806	662,355	671,560	576,319	604,329	610,741	550,187	536,074	538,938	538,527	515,155	540,273	6,920,264
(84)	Total	3,244,224	5,123,263	6,475,306	6,695,265	6,204,604	4,704,750	2,488,852	1,628,667	1,341,393	1,279,659	1,388,557	1,694,268	42,268,808
(85)	HLF	713,025	836,502	868,991	758,465	811,397	792,110	685,463	658,793	638,611	632,093	617,504	653,750	8,666,702
(86)	LLF	2,531,199	4,286,761	5,606,315	5,936,800	5,393,208	3,912,640	1,803,389	969,874	702,782	647,567	771,053	1,040,518	33,602,106

Source: Forecast per Ted Poe

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

Line No.	Description	Reference	Nov-17 forecast	Dec-17 forecast	Jan-18 forecast	Feb-18 forecast	Mar-18 forecast	Apr-18 forecast	May-18 forecast	Jun-18 forecast	Jul-18 forecast	Aug-18 forecast	Sep-18 forecast	Oct-18 forecast	Nov - Oct
(1)	# of Days in Month		30	31	31	28	31	30	31	30	31	31	30	31	365
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
(2)	I. Fixed Cost Deferred														
(3)	Beginning Under/(Over) Recovery	Nov-17: AEL-1 Revised pg 6, Col m, Line (17); Dec 17 - Oct 18: Previous month Line (16)	$1,169,851	$1,667,283	($35,669)	($3,537,260)	($7,518,659)	($10,644,907)	($11,835,997)	($11,002,317)	($9,151,414)	($6,865,149)	($4,470,323)	($2,177,094)	$1,169,851
(4)	Fixed Costs (net of cap rel)	AEL-1 Revised pg 4, Line (61)	$4,414,408	$4,448,398	$4,447,065	$4,444,929	$4,447,065	$4,531,059	$4,531,771	$4,531,059	$4,531,771	$4,531,771	$4,530,656	$4,531,368	$53,921,320
(5)	NGPMP Credits	NGC-1 Revised	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($10,900,000)
(6)	Working Capital	AEL-1 Revised pg 8, Line (16)	$23,928	$24,124	$24,116	$24,104	$24,116	$24,600	$24,604	$24,600	$24,604	$24,604	$24,598	$24,602	$292,600
(7)	System Pressure to DAC	AEL-1 Revised pg 4 Line (16)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($262,800)	($3,153,600)
(8)	Supply Related LNG O & M	AEL-1 Revised pg 3, sum [Line (8), (9)] / 12	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$47,965	$575,581
(9)	Total Supply Fixed Costs	sum[(4):(8)]	$3,315,167	$3,349,354	$3,348,013	$3,345,864	$3,348,013	$3,432,491	$3,433,207	$3,432,491	$3,433,207	$3,433,207	$3,432,085	$3,432,801	$40,735,901
(10)	Fixed - Revenue	AEL-1 Revised pg 7, Line (10)	($2,856,421)	($5,053,863)	($6,846,194)	($7,317,730)	($6,456,923)	($4,602,813)	($2,577,727)	($1,562,969)	($1,131,653)	($1,027,561)	($1,132,715)	($1,373,589)	($41,940,156)
(11)	Prelim. Ending Under/(Over) Recovery	(3) + (9) + (10)	$1,628,598	($37,226)	($3,533,850)	($7,509,126)	($10,627,568)	($11,815,229)	($10,980,517)	($9,132,796)	($6,849,860)	($4,459,502)	($2,170,953)	($117,881)	
(12)	Month's Average Balance	[(3) + (11)] / 2	$1,399,224	$815,028	($1,784,759)	($5,523,193)	($9,073,114)	($11,230,068)	($11,408,257)	($10,067,557)	($8,000,637)	($5,662,325)	($3,320,638)	($1,147,487)	
(13)	Interest Rate (BOA Prime minus 200 bps)		2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
(14)	Interest Applied	[(12) * (13)] / 365 * (1)	$2,588	$1,557	($3,411)	($9,533)	($17,338)	($20,768)	($21,801)	($18,618)	($15,289)	($10,820)	($6,141)	($2,193)	($121,767)
(15)	Marketer Reconciliation	AEL-7, Line (50)	$36,098												$36,098
(16)	Fixed Ending Under/(Over) Recovery	(11) + (14) + (15)	$1,667,283	($35,669)	($3,537,260)	($7,518,659)	($10,644,907)	($11,835,997)	($11,002,317)	($9,151,414)	($6,865,149)	($4,470,323)	($2,177,094)	($120,074)	($120,074)
(17)	II. Variable Cost Deferred														
(18)	Beginning Under/(Over) Recovery	Nov-17: AEL-1 Revised pg 6, Col m, Line (35); Dec 17 - Oct 18: Previous month line (32)	$12,377,603	$11,991,389	$11,904,896	$13,899,917	$13,116,953	$9,425,736	$4,753,108	$2,437,824	$1,327,010	$809,919	$417,636	($133,544)	$12,377,603
(19)	Variable Costs	AEL-1 Revised pg 5, Line (90)	$5,645,914	$10,998,135	$17,208,947	$15,542,321	$10,715,275	$5,484,110	$3,165,666	$2,024,140	$1,607,551	$1,477,419	$1,545,483	$2,914,712	$78,329,672
(20)	Supply Related Syst. Pressure to DAC		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(21)	Supply Related LNG O & M	Dkt 4323	$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
(22)	Inventory Financing - LNG	AEL-1 Revised pg 10, Line (22)	$26,654	$26,019	$10,255	$4,234	$3,598	$8,815	$14,180	$19,402	$21,289	$22,312	$27,518	$28,532	$212,808
(23)	Inventory Financing - UG	AEL-1 Revised pg 10, Line (12)	$76,904	$66,338	$49,942	$34,951	$21,279	$21,626	$31,598	$41,293	$47,908	$56,569	$70,281	$82,065	$600,752
(24)	Working Capital	AEL-1 Revised pg 8, Line (32)	$32,540	$63,388	$99,184	$89,578	$61,758	$31,608	$18,245	$11,666	$9,265	$8,515	$8,907	$16,799	$451,453
(25)	Total Variable Costs	sum[(19):(24)]	$5,829,736	$11,201,604	$17,416,052	$15,718,809	$10,849,635	$5,593,883	$3,277,414	$2,144,226	$1,733,737	$1,612,540	$1,699,914	$3,089,832	$80,167,380
(26)	Variable - Revenue	AEL-1 Revised pg 7, Line (15)	($6,238,462)	($11,310,908)	($15,445,663)	($16,525,069)	($14,562,370)	($10,279,609)	($5,599,562)	($3,258,518)	($2,252,867)	($2,005,995)	($2,251,356)	($2,812,684)	($92,543,063)
(27)	Prelim. Ending Under/(Over) Recovery	(18) + (25) + (26)	$11,968,877	$11,882,085	$13,875,285	$13,093,657	$9,404,217	$4,740,009	$2,430,959	$1,323,532	$807,880	$416,464	($133,806)	$143,604	
(28)	Month's Average Balance	[(18) + (27)] / 2	$12,173,240	$11,936,737	$12,890,090	$13,496,787	$11,260,585	$7,082,873	$3,592,034	$1,880,678	$1,067,445	$613,192	$141,915	$5,030	
(29)	Interest Rate (BOA Prime minus 200 bps)		2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
(30)	Interest Applied	[(28) * (29)] / 365 * (1)	$22,512	$22,811	$24,632	$23,296	$21,519	$13,098	$6,864	$3,478	$2,040	$1,172	$262	$10	$141,694
(31)	Gas Procurement Incentive/(penalty)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
(32)	Variable Ending Under/(Over) Recovery	(27) + (30) + (31)	$11,991,389	$11,904,896	$13,899,917	$13,116,953	$9,425,736	$4,753,108	$2,437,824	$1,327,010	$809,919	$417,636	($133,544)	$143,614	$143,614
(33)	**GCR Deferred Summary**														
(34)	Beginning Under/(Over) Recovery	(3) + (18)	$13,547,454	$13,658,672	$11,869,227	$10,362,657	$5,598,294	($1,219,171)	($7,082,889)	($8,564,494)	($7,824,404)	($6,055,229)	($4,052,687)	($2,310,637)	$13,547,454
(35)	Gas Costs	sum[(4),(7):(8),(15),(19):(21)]	$9,929,309	$15,279,423	$21,488,902	$19,820,140	$14,995,230	$9,848,058	$7,530,327	$6,388,088	$5,972,211	$5,842,079	$5,909,028	$7,278,969	$130,281,764
(36)	Inventory Finance	(22) + (23)	$103,558	$92,357	$60,197	$39,185	$24,877	$30,441	$45,777	$60,695	$69,197	$78,882	$97,799	$110,596	$813,560
(37)	Working Capital	(6) + (24)	$56,468	$87,511	$123,300	$113,682	$85,874	$56,208	$42,850	$36,266	$33,869	$33,119	$33,505	$41,401	$744,053
(38)	NGPMP Credits	(5)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($908,333)	($10,900,000)
(39)	Total Costs	sum[(35):(38)]	$9,181,001	$14,550,958	$20,764,065	$19,064,673	$14,197,648	$9,026,373	$6,710,621	$5,576,717	$5,166,944	$5,045,747	$5,131,999	$6,522,633	$120,939,378
(40)	Revenue	(10) + (26)	($9,094,883)	($16,364,771)	($22,291,857)	($23,842,799)	($21,019,293)	($14,882,422)	($8,177,289)	($4,821,487)	($3,384,520)	($3,033,556)	($3,384,071)	($4,186,273)	($134,483,219)
(41)	Prelim. Ending Under/(Over) Recovery	(34) + (39) + (40)	$13,633,572	$11,844,859	$10,341,435	$5,584,531	($1,223,351)	($7,075,220)	($8,549,557)	($7,809,264)	($6,041,980)	($4,043,038)	($2,304,759)	$25,723	$3,613
(42)	Month's Average Balance	[(34) + (41)] / 2	$13,590,513	$12,751,765	$11,105,331	$7,973,594	$2,187,471	($4,147,195)	($7,816,223)	($8,186,879)	($6,933,192)	($5,049,134)	($3,178,723)	($1,142,457)	
(43)	Interest Rate (BOA Prime minus 200 bps)		2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
(44)	Interest Applied	(14) + (30)	$25,100	$24,368	$21,222	$13,763	$4,180	($7,669)	($14,936)	($15,140)	($13,249)	($9,649)	($5,878)	($2,183)	$19,927
(45)	Gas Purchase Plan Incentives/(Penalties)	(31)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
(46)	**Ending Under/(Over) Recovery W/ Interest**	(41) + (44) + (45)	$13,658,672	$11,869,227	$10,362,657	$5,598,294	($1,219,171)	($7,082,889)	($8,564,494)	($7,824,404)	($6,055,229)	($4,052,687)	($2,310,637)	**$23,540**	$23,540

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

Residential Heating:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(1)												
(2)												
(3)												
(4)			---	---	---	---	---	---	---	---	---	---
(5)		550	$866.53	$838.40	$28.13	3.4%	$28.89	($1.60)	$0.00	$0.00	$0.00	$0.84
(6)		608	$939.42	$908.32	$31.09	3.4%	$31.93	($1.77)	$0.00	$0.00	$0.00	$0.93
(7)		667	$1,013.45	$979.32	$34.12	3.5%	$35.00	($1.90)	$0.00	$0.00	$0.00	$1.02
(8)		727	$1,087.68	$1,050.52	$37.16	3.5%	$38.15	($2.10)	$0.00	$0.00	$0.00	$1.11
(9)		788	$1,160.13	$1,119.80	$40.33	3.6%	$41.38	($2.26)	$0.00	$0.00	$0.00	$1.21
(10)	**Average Customer**	**846**	**$1,227.60**	**$1,184.35**	**$43.25**	**3.7%**	$44.39	($2.44)	$0.00	$0.00	$0.00	$1.30
(11)		904	$1,295.33	$1,249.10	$46.24	3.7%	$47.45	($2.60)	$0.00	$0.00	$0.00	$1.39
(12)		966	$1,367.48	$1,318.07	$49.41	3.7%	$50.71	($2.78)	$0.00	$0.00	$0.00	$1.48
(13)		1,023	$1,433.65	$1,381.33	$52.32	3.8%	$53.69	($2.94)	$0.00	$0.00	$0.00	$1.57
(14)		1,081	$1,500.24	$1,444.93	$55.31	3.8%	$56.75	($3.10)	$0.00	$0.00	$0.00	$1.66
(15)		1,145	$1,572.72	$1,514.12	$58.60	3.9%	$60.12	($3.28)	$0.00	$0.00	$0.00	$1.76

Residential Heating Low Income:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(16)												
(17)												
(18)												
(19)			---	---	---	---	---	---	---	---	---	---
(20)		550	$824.04	$795.90	$28.13	3.5%	$28.89	($1.60)	$0.00	$0.00	$0.00	$0.84
(21)		608	$894.18	$863.09	$31.09	3.6%	$31.93	($1.77)	$0.00	$0.00	$0.00	$0.93
(22)		667	$965.44	$931.32	$34.12	3.7%	$35.00	($1.90)	$0.00	$0.00	$0.00	$1.02
(23)		727	$1,036.96	$999.80	$37.16	3.7%	$38.15	($2.10)	$0.00	$0.00	$0.00	$1.11
(24)		788	$1,106.95	$1,066.62	$40.33	3.8%	$41.38	($2.26)	$0.00	$0.00	$0.00	$1.21
(25)	**Average Customer**	**846**	**$1,172.20**	**$1,128.95**	**$43.25**	**3.8%**	$44.39	($2.44)	$0.00	$0.00	$0.00	$1.30
(26)		904	$1,237.73	$1,191.49	$46.24	3.9%	$47.45	($2.60)	$0.00	$0.00	$0.00	$1.39
(27)		966	$1,307.53	$1,258.12	$49.41	3.9%	$50.71	($2.78)	$0.00	$0.00	$0.00	$1.48
(28)		1,023	$1,371.55	$1,319.23	$52.32	4.0%	$53.69	($2.94)	$0.00	$0.00	$0.00	$1.57
(29)		1,081	$1,436.03	$1,380.72	$55.31	4.0%	$56.75	($3.10)	$0.00	$0.00	$0.00	$1.66
(30)		1,145	$1,506.28	$1,447.68	$58.60	4.0%	$60.12	($3.28)	$0.00	$0.00	$0.00	$1.76

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

Residential Non-Heating:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(35)	140	$351.59	$347.56	$4.03	1.2%	$4.65	($0.74)	$0.00	$0.00	$0.00	$0.12
(36)	155	$370.93	$366.48	$4.45	1.2%	$5.16	($0.84)	$0.00	$0.00	$0.00	$0.13
(37)	171	$391.64	$386.68	$4.96	1.3%	$5.71	($0.90)	$0.00	$0.00	$0.00	$0.15
(38)	184	$408.36	$403.11	$5.26	1.3%	$6.14	($1.04)	$0.00	$0.00	$0.00	$0.16
(39)	198	$426.44	$420.73	$5.70	1.4%	$6.59	($1.06)	$0.00	$0.00	$0.00	$0.17
(40) **Average Customer**	**214**	**$446.66**	**$440.52**	**$6.13**	**1.4%**	$7.11	($1.16)	$0.00	$0.00	$0.00	$0.18
(41)	228	$465.15	$458.59	$6.56	1.4%	$7.59	($1.23)	$0.00	$0.00	$0.00	$0.20
(42)	244	$485.82	$478.79	$7.03	1.5%	$8.11	($1.29)	$0.00	$0.00	$0.00	$0.21
(43)	258	$503.94	$496.47	$7.46	1.5%	$8.61	($1.37)	$0.00	$0.00	$0.00	$0.22
(44)	275	$525.84	$517.93	$7.91	1.5%	$9.17	($1.50)	$0.00	$0.00	$0.00	$0.24
(45)	288	$542.63	$534.32	$8.31	1.6%	$9.61	($1.55)	$0.00	$0.00	$0.00	$0.25

Residential Non-Heating Low Income:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(50)	140	$329.17	$325.14	$4.03	1.2%	$4.65	($0.74)	$0.00	$0.00	$0.00	$0.12
(51)	155	$347.83	$343.38	$4.45	1.3%	$5.16	($0.84)	$0.00	$0.00	$0.00	$0.13
(52)	171	$367.82	$362.86	$4.96	1.4%	$5.71	($0.90)	$0.00	$0.00	$0.00	$0.15
(53)	184	$383.95	$378.70	$5.26	1.4%	$6.14	($1.04)	$0.00	$0.00	$0.00	$0.16
(54)	198	$401.39	$395.69	$5.70	1.4%	$6.59	($1.06)	$0.00	$0.00	$0.00	$0.17
(55) **Average Customer**	**214**	**$420.90**	**$414.77**	**$6.13**	**1.5%**	$7.11	($1.16)	$0.00	$0.00	$0.00	$0.18
(56)	228	$438.74	$432.19	$6.56	1.5%	$7.59	($1.23)	$0.00	$0.00	$0.00	$0.20
(57)	244	$458.70	$451.67	$7.03	1.6%	$8.11	($1.29)	$0.00	$0.00	$0.00	$0.21
(58)	258	$476.18	$468.71	$7.46	1.6%	$8.61	($1.37)	$0.00	$0.00	$0.00	$0.22
(59)	275	$497.31	$489.40	$7.91	1.6%	$9.17	($1.50)	$0.00	$0.00	$0.00	$0.24
(60)	288	$513.51	$505.20	$8.31	1.6%	$9.61	($1.55)	$0.00	$0.00	$0.00	$0.25

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

C & I Small:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
		---	---	---	---	---	---	---	---	---	---
	880	$1,425.58	$1,378.09	$47.49	3.4%	$46.19	($0.12)	$0.00	$0.00	$0.00	$1.42
	973	$1,532.58	$1,480.11	$52.47	3.5%	$51.06	($0.16)	$0.00	$0.00	$0.00	$1.57
	1,067	$1,640.02	$1,582.43	$57.59	3.6%	$56.02	($0.16)	$0.00	$0.00	$0.00	$1.73
	1,162	$1,746.17	$1,683.46	$62.71	3.7%	$61.01	($0.18)	$0.00	$0.00	$0.00	$1.88
	1,258	$1,847.68	$1,779.82	$67.86	3.8%	$66.05	($0.23)	$0.00	$0.00	$0.00	$2.04
Average Customer	**1,352**	**$1,946.00**	**$1,873.10**	**$72.91**	**3.9%**	$70.98	($0.26)	$0.00	$0.00	$0.00	$2.19
	1,446	$2,045.12	$1,967.07	$78.05	4.0%	$75.92	($0.21)	$0.00	$0.00	$0.00	$2.34
	1,542	$2,145.63	$2,062.47	$83.16	4.0%	$80.93	($0.26)	$0.00	$0.00	$0.00	$2.49
	1,635	$2,243.16	$2,155.00	$88.16	4.1%	$85.82	($0.30)	$0.00	$0.00	$0.00	$2.64
	1,730	$2,341.69	$2,248.37	$93.32	4.2%	$90.83	($0.31)	$0.00	$0.00	$0.00	$2.80
	1,825	$2,440.26	$2,341.80	$98.46	4.2%	$95.81	($0.30)	$0.00	$0.00	$0.00	$2.95

C & I Medium:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
		---	---	---	---	---	---	---	---	---	---
	7,941	$8,960.74	$8,463.58	$497.15	5.9%	$416.91	$65.33	$0.00	$0.00	$0.00	$14.91
	8,796	$9,831.55	$9,280.88	$550.67	5.9%	$461.78	$72.37	$0.00	$0.00	$0.00	$16.52
	9,650	$10,700.92	$10,096.80	$604.12	6.0%	$506.61	$79.39	$0.00	$0.00	$0.00	$18.12
	10,505	$11,571.78	$10,914.15	$657.63	6.0%	$551.49	$86.41	$0.00	$0.00	$0.00	$19.73
	11,361	$12,442.96	$11,731.70	$711.26	6.1%	$596.45	$93.47	$0.00	$0.00	$0.00	$21.34
Average Customer	**12,217**	**$13,314.42**	**$12,549.58**	**$764.84**	**6.1%**	$641.38	$100.51	$0.00	$0.00	$0.00	$22.95
	13,073	$14,185.93	$13,367.48	$818.44	6.1%	$686.34	$107.55	$0.00	$0.00	$0.00	$24.55
	13,928	$15,056.20	$14,184.27	$871.93	6.1%	$731.20	$114.57	$0.00	$0.00	$0.00	$26.16
	14,782	$15,926.12	$15,000.71	$925.41	6.2%	$776.05	$121.60	$0.00	$0.00	$0.00	$27.76
	15,637	$16,796.40	$15,817.41	$978.99	6.2%	$820.96	$128.66	$0.00	$0.00	$0.00	$29.37
	16,492	$17,667.26	$16,634.78	$1,032.47	6.2%	$865.82	$135.68	$0.00	$0.00	$0.00	$30.97

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

C & I LLF Large:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(91)											
(92)											
(93)											
(94)		---	---	---	---	---	---	---	---	---	---
(95)	41,066	$43,305.45	$41,425.78	$1,879.67	4.5%	$2,155.96	($332.68)	$0.00	$0.00	$0.00	$56.39
(96)	45,488	$47,734.44	$45,652.29	$2,082.14	4.6%	$2,388.12	($368.44)	$0.00	$0.00	$0.00	$62.46
(97)	49,910	$52,163.40	$49,878.87	$2,284.54	4.6%	$2,620.29	($404.29)	$0.00	$0.00	$0.00	$68.54
(98)	54,334	$56,594.19	$54,107.14	$2,487.04	4.6%	$2,852.54	($440.11)	$0.00	$0.00	$0.00	$74.61
(99)	58,757	$61,023.99	$58,334.48	$2,689.51	4.6%	$3,084.75	($475.93)	$0.00	$0.00	$0.00	$80.69
(100) **Average Customer**	**63,179**	**$65,453.08**	**$62,561.17**	**$2,891.91**	**4.6%**	$3,316.89	($511.74)	$0.00	$0.00	$0.00	$86.76
(101)	67,600	$69,881.04	$66,786.75	$3,094.29	4.6%	$3,548.99	($547.53)	$0.00	$0.00	$0.00	$92.83
(102)	72,023	$74,310.90	$71,014.21	$3,296.69	4.6%	$3,781.20	($583.41)	$0.00	$0.00	$0.00	$98.90
(103)	76,447	$78,742.25	$75,243.03	$3,499.22	4.7%	$4,013.45	($619.21)	$0.00	$0.00	$0.00	$104.98
(104)	80,870	$83,172.09	$79,470.43	$3,701.66	4.7%	$4,245.65	($655.04)	$0.00	$0.00	$0.00	$111.05
(105)	85,292	$87,601.06	$83,696.95	$3,904.10	4.7%	$4,477.84	($690.86)	$0.00	$0.00	$0.00	$117.12

C & I HLF Large:

	Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(106)											
(107)											
(108)											
(109)		---	---	---	---	---	---	---	---	---	---
(110)	50,411	$45,638.66	$44,308.29	$1,330.37	3.0%	$1,683.68	($393.22)	$0.00	$0.00	$0.00	$39.91
(111)	55,841	$50,320.38	$48,846.65	$1,473.73	3.0%	$1,865.07	($435.55)	$0.00	$0.00	$0.00	$44.21
(112)	61,273	$55,003.57	$53,386.49	$1,617.07	3.0%	$2,046.49	($477.93)	$0.00	$0.00	$0.00	$48.51
(113)	66,699	$59,682.13	$57,921.85	$1,760.28	3.0%	$2,227.73	($520.26)	$0.00	$0.00	$0.00	$52.81
(114)	72,129	$64,363.80	$62,460.22	$1,903.58	3.0%	$2,409.09	($562.62)	$0.00	$0.00	$0.00	$57.11
(115) **Average Customer**	**77,558**	**$69,044.66**	**$66,997.75**	**$2,046.92**	**3.1%**	$2,590.44	($604.93)	$0.00	$0.00	$0.00	$61.41
(116)	82,989	$73,726.35	$71,536.13	$2,190.22	3.1%	$2,771.82	($647.31)	$0.00	$0.00	$0.00	$65.71
(117)	88,416	$78,405.70	$76,072.24	$2,333.45	3.1%	$2,953.07	($689.62)	$0.00	$0.00	$0.00	$70.00
(118)	93,847	$83,088.15	$80,611.39	$2,476.76	3.1%	$3,134.46	($732.00)	$0.00	$0.00	$0.00	$74.30
(119)	99,275	$87,768.25	$85,148.25	$2,620.00	3.1%	$3,315.77	($774.37)	$0.00	$0.00	$0.00	$78.60
(120)	104,705	$92,449.90	$89,686.57	$2,763.33	3.1%	$3,497.13	($816.70)	$0.00	$0.00	$0.00	$82.90

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

C & I LLF Extra-Large:

		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(121)												
(122)												
(123)												
(124)			---	---	---	---	---	---	---	---	---	---
(125)		174,357	$140,147.51	$130,818.50	$9,329.01	7.1%	$9,153.75	($104.61)	$0.00	$0.00	$0.00	$279.87
(126)		193,136	$154,674.28	$144,340.54	$10,333.74	7.2%	$10,139.62	($115.89)	$0.00	$0.00	$0.00	$310.01
(127)		211,912	$169,199.04	$157,860.63	$11,338.41	7.2%	$11,125.40	($127.14)	$0.00	$0.00	$0.00	$340.15
(128)		230,688	$183,724.31	$171,381.29	$12,343.02	7.2%	$12,111.16	($138.43)	$0.00	$0.00	$0.00	$370.29
(129)		249,466	$198,250.40	$184,902.67	$13,347.73	7.2%	$13,096.95	($149.65)	$0.00	$0.00	$0.00	$400.43
(130)	**Average Customer**	**268,243**	**$212,775.72**	**$198,423.34**	**$14,352.37**	**7.2%**	$14,082.75	($160.95)	$0.00	$0.00	$0.00	$430.57
(131)		287,018	$227,299.88	$211,942.95	$15,356.93	7.2%	$15,068.45	($172.23)	$0.00	$0.00	$0.00	$460.71
(132)		305,796	$241,826.55	$225,464.88	$16,361.67	7.3%	$16,054.30	($183.48)	$0.00	$0.00	$0.00	$490.85
(133)		324,573	$256,351.99	$238,985.67	$17,366.32	7.3%	$17,040.08	($194.75)	$0.00	$0.00	$0.00	$520.99
(134)		343,350	$270,877.37	$252,506.39	$18,370.98	7.3%	$18,025.87	($206.02)	$0.00	$0.00	$0.00	$551.13
(135)		362,127	$285,402.77	$266,027.12	$19,375.65	7.3%	$19,011.66	($217.28)	$0.00	$0.00	$0.00	$581.27

C & I HLF Extra-Large:

		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	EE	LIHEAP	GET
(136)												
(137)												
(138)												
(139)			---	---	---	---	---	---	---	---	---	---
(140)		447,421	$318,708.77	$303,810.12	$14,898.65	4.9%	$14,943.85	($492.16)	$0.00	$0.00	$0.00	$446.96
(141)		495,605	$352,463.80	$335,960.65	$16,503.14	4.9%	$16,553.20	($545.15)	$0.00	$0.00	$0.00	$495.09
(142)		543,789	$386,219.58	$368,111.95	$18,107.63	4.9%	$18,162.56	($598.16)	$0.00	$0.00	$0.00	$543.23
(143)		591,972	$419,973.95	$400,261.93	$19,712.02	4.9%	$19,771.84	($651.18)	$0.00	$0.00	$0.00	$591.36
(144)		640,155	$453,728.33	$432,411.88	$21,316.44	4.9%	$21,381.13	($704.18)	$0.00	$0.00	$0.00	$639.49
(145)	**Average Customer**	**688,340**	**$487,484.46**	**$464,563.44**	**$22,921.02**	**4.9%**	$22,990.56	($757.17)	$0.00	$0.00	$0.00	$687.63
(146)		736,523	$521,239.16	$496,713.71	$24,525.45	4.9%	$24,599.87	($810.18)	$0.00	$0.00	$0.00	$735.76
(147)		784,708	$554,994.81	$528,864.83	$26,129.98	4.9%	$26,209.24	($863.16)	$0.00	$0.00	$0.00	$783.90
(148)		832,891	$588,749.99	$561,015.61	$27,734.38	4.9%	$27,818.54	($916.19)	$0.00	$0.00	$0.00	$832.03
(149)		881,074	$622,504.39	$593,165.51	$29,338.89	4.9%	$29,427.88	($969.16)	$0.00	$0.00	$0.00	$880.17
(150)		929,259	$656,260.81	$625,317.44	$30,943.37	4.9%	$31,037.25	($1,022.18)	$0.00	$0.00	$0.00	$928.30

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

Line No.	Item	Reference	Proposed	Billing Units
	(a)	(b)	(c)	(d)
(1)	FT-2 Demand Usage (Dt) Nov 2017 - Oct 2018	Pg 2, Line (21)	**$8.8520**	Dth/Mth
(2)	Weighted Average Upstream Pipeline Transportation Cost	NGC-4 Revised	**$0.6168**	Per Dth of capacity
(3)	Storage and Peaking charge for FT-1 firm transportation Customers eligible for TSS	Pg 3, Line (5)	**$0.7527**	Per Dth

REDACTED

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

Line No.	Description	Source Reference	Source Line #	Amount	
	(a)	(b)	(c)	(d)	
(1)	Storage Fixed Costs	AEL-1 Revised pg 4	Line (60)	[redacted]	
	Less:				
(2)	System Pressure to DAC			$0	
(3)	Credits			$0	
(4)	Refunds			$0	
(5)	Total Credits	sum [(2):(4)]		$0	
		NGC-4 Revised			
	Plus:				
(6)	Supply Related LNG O&M Costs	AEL-1 Revised Pg 2	Line (8) + Line (9)	$575,581	
(7)	Working Capital Requirement	AEL-1 Revised pg 9	Line (47)	$72,911	
(8)	Tennessee Dracut for peaking	AEL-1 Revised pg 4	Line(5)	$1,622,687	
(9)	Total Additions	sum [(6):(8)]		$2,271,180	
(10)	Total Storage Fixed Costs	(1) + (5) + (9)		[redacted]	
	Inventory Financing				
(11)	Underground	AEL-1 Revised pg 10	Line (12)	$600,752	
(12)	LNG	AEL-1 Revised pg 10	Line (22)	$212,808	
(13)	Total Storage Fixed Costs	(10) + (11) + (12)		[redacted]	
(14)	LNG Storage MDQ (Dth)	AEL-1 Revised pg 12	Line (14)	[redacted]	
(15)	AGT	NGC-4 Revised		[redacted]	
(16)	TENN	NGC-4 Revised		[redacted]	
(17)	Total Storage MDQ	sum [(14):(16)]		[redacted]	
(18)	Storage MDQ X 12 Months	(17) *12		2,203,908	MDCQ Dth
(19)	FT- 2 Demand Rate	(13) / (18)		$8.5706	per MDCQ Dth
(20)	Uncollectible %	Docket 4323		3.18%	
(21)	Total FT-2 Demand Rate adjusted for Uncollectibles	(19) / [(1 - (20)]		$8.8520	per MDCQ Dth
(22)	MDQ-U	Mkter MDQ Forecast		4,379	
(23)	MDQ-P	Mkter MDQ Forecast		15,460	
(24)	Marketer MDQs	(22) + (23)		19,839	Dth/Mth
(25)	**FT-2 Storage Costs**	(19) x (24) x 12 Months		**$2,040,370**	

REDACTED

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

Line No.	Description	Source Reference	Source Line #	Amount	
	(a)	(b)	(c)	(d)	
(1)	Total Storage Fixed Costs	Pg 2	Line(13)	$18,888,860	
(2)	Usage (Dth) Nov 2017 - Oct 2018	AEL-1 Revised pg 2	Line(17)	25,914,442	
(3)	Volumetric Rate	(1) / (2)		$0.7288	
(4)	Uncollectible %	Docket 4323		3.18%	
(5)	Volumetric Rate Including Uncollectible	(3) / [1 - (4)]		$0.7527	per dth
(6)	**Storage and Peaking charge applied to FT-1 firm transportation Customers eligible for TSS**			$0.0752	per therm

Price - Volume Analysis - March 2017 Gas Cost Increase Analysis

Line No.	Description	Reference	March Forecast	March Actual	Difference
	(a)	(b)	(c)	(d)	(e)= (d) - (c)
	Volumes (Dth)				
(1)	Pipeline		2,902,829	3,829,080	926,251
(2)	LNG		16,869	112,671	95,802
(3)	UG		741,589	677,350	(64,239)
(4)	Total		3,661,287	4,619,101	957,814
	Costs ($):				
(5)	Pipeline		$6,969,097	$11,941,948	$4,972,851
(6)	LNG		$73,195	$489,167	$415,972
(7)	UG		$1,511,655	$1,560,812	$49,157
(8)	Total Gas Cost Increase		$8,553,947	$13,991,927	$5,437,980
	Rate ($/Dth)				
(9)	Pipeline	Line (2) / Line (7)	$2.40	$3.12	$0.72
(10)	LNG	Line (3) / Line (8)	$4.34	$4.34	$0.00
(11)	UG	Line (4) / Line (9)	$2.04	$2.30	$0.27
(12)	Total	Line (5) / Line (10)	$2.34	$3.03	$0.69
	Volume difference ($)				
(13)	Pipeline	Line (2) * [Col (c), Line (12)]	$6,969,097	$9,192,836	$2,223,739
(14)	LNG	Line (2) * [Col (c), Line (13)]	$73,195	$488,879	$415,684
(15)	UG	Line (2) * [Col (c), Line (14)]	$1,511,655	$1,380,710	($130,944)
(16)	Total	Sum[Line (17):Line (19)]	$8,553,947	$11,062,426	$2,508,480
(17)	Volume Difference	Line (16) / Line (10)			46%
	Price difference ($)				
(18)	Pipeline	[Col (c), Line (2)] * Line (12)	$9,192,836	$11,941,948	$2,749,111
(19)	LNG	[Col (c), Line (3)] * Line (13)	$488,879	$489,167	$288
(20)	UG	[Col (c), Line (4)] * Line (14)	$1,380,710	$1,560,812	$180,101
(21)	Total:	Sum[Line (22):Line (24)]	$11,062,426	$13,991,927	$2,929,500
(22)	Price Difference	Line (21) / Line (10)			54%
(23)	Total Gas Cost Increase	Line (20) + Line (25)			$5,437,980

Actual Dth Usage for Filing

Line No.	THROUGHPUT (Dth) Rate Class	Apr Actual (a)	May Actual (b)	Jun Actual (c)	Jul Actual (d)	Aug Actual (e)	Sep Actual (f)	Oct Actual (g)	Nov Actual (h)	Nov '16 - Revised	Difference	Dec Actual (i)	Jan Actual (j)	Feb Actual (k)	Mar Actual (l)	Apr-Mar (m)
1	**SALES**															
2	Residential Non-Heating	60,019	39,167	28,743	18,658	16,187	16,103	19,867	27,860	27,860	0	38,287	50,638	50,625	47,073	**413,226**
3	Residential Non-Heating Low Incom	2,941	1,956	1,023	327	259	277	392	708	708	0	1,220	1,697	1,646	1,406	**13,852**
4	Residential Heating	1,778,181	1,062,089	573,872	392,213	337,357	341,248	470,510	1,105,743	1,105,743	0	2,028,011	2,935,054	2,884,975	2,623,389	**16,532,640**
5	Residential Heating Low Income	152,450	100,566	55,710	40,021	33,305	34,078	46,179	99,712	99,712	0	178,044	250,781	238,178	213,710	**1,442,733**
6	Small C&I	236,605	124,634	68,665	47,017	41,144	34,719	46,769	116,386	116,386	0	260,153	412,737	405,424	368,672	**2,162,923**
7	Medium C&I	310,734	195,493	122,262	92,582	92,842	91,211	118,506	202,328	202,328	0	353,053	502,001	473,805	444,548	**2,999,365**
8	Large LLF	77,000	38,092	17,590	8,111	9,003	7,444	14,885	38,117	38,117	0	70,274	111,810	100,523	94,633	**587,482**
9	Large HLF	14,204	15,349	19,350	15,912	10,345	14,381	17,352	17,053	17,053	0	21,083	26,215	26,803	24,099	**222,146**
10	Extra Large LLF	8,303	5,409	3,332	1,167	1,113	283	744	3,267	3,267	0	6,464	12,229	9,417	10,069	**61,797**
11	Extra Large HLF	6,283	4,488	5,453	5,653	5,410	6,275	7,588	10,464	10,464	0	5,556	6,078	3,679	3,582	**70,507**
12	**Total Sales**	2,646,719	1,587,241	896,000	621,661	546,964	546,017	742,792	1,621,637	1,621,637	0	2,962,145	4,309,240	4,195,075	3,831,181	**24,506,672**
13	**TSS**															
14	Small	101	55	14	1	0	1	3	1	1	0	820	1,643	1,720	1,352	**5,711**
15	Medium	17,296	10,629	427	871	692	666	738	1,651	1,651	0	2,542	5,657	6,588	6,566	**54,323**
16	Large LLF	5,738	3,350	7,452	470	406	(7,506)	71	1,104	1,104	0	2,207	5,122	5,623	8,641	**32,678**
17	Large HLF	2,679	2,702	294	0	221	1,580	6,129	360	360	0	986	(7,763)	781	852	**8,821**
18	Extra Large LLF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
19	Extra Large HLF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20	**Total TSS**	25,815	16,736	8,187	1,342	1,320	(5,259)	6,941	3,116	3,116	0	6,555	4,658	14,712	17,411	**101,533**
21	**Sales & TSS THROUGHPUT**															
22	Residential Non-Heating	60,019	39,167	28,743	18,658	16,187	16,103	19,867	27,860	27,860	0	38,287	50,638	50,625	47,073	**413,226**
23	Residential Non-Heating Low Incom	2,941	1,956	1,023	327	259	277	392	708	708	0	1,220	1,697	1,646	1,406	**13,852**
24	Residential Heating	1,778,181	1,062,089	573,872	392,213	337,357	341,248	470,510	1,105,743	1,105,743	0	2,028,011	2,935,054	2,884,975	2,623,389	**16,532,640**
25	Residential Heating Low Income	152,450	100,566	55,710	40,021	33,305	34,078	46,179	99,712	99,712	0	178,044	250,781	238,178	213,710	**1,442,733**
26	Small C&I	236,705	124,688	68,679	47,017	41,144	34,720	46,772	116,387	116,387	0	260,972	414,380	407,145	370,024	**2,168,634**
27	Medium C&I	328,031	206,121	122,689	93,453	93,534	91,877	119,244	203,978	203,978	0	355,596	507,658	480,393	451,114	**3,053,688**
28	Large LLF	82,739	41,442	25,042	8,581	9,409	(62)	14,956	39,221	39,221	0	72,481	116,932	106,146	103,274	**620,160**
29	Large HLF	16,883	18,051	19,644	15,912	10,566	15,961	23,481	17,413	17,413	0	22,069	18,451	27,584	24,951	**230,967**
30	Extra Large LLF	8,303	5,409	3,332	1,167	1,113	283	744	3,267	3,267	0	6,464	12,229	9,417	10,069	**61,797**
31	Extra Large HLF	6,283	4,488	5,453	5,653	5,410	6,275	7,588	10,464	10,464	0	5,556	6,078	3,679	3,582	**70,507**
32	**Total Sales & TSS Throughput**	2,672,534	1,603,977	904,187	623,002	548,284	540,759	749,733	1,624,752	1,624,752	0	2,968,700	4,313,898	4,209,787	3,848,592	**24,608,205**
33	**FT-1 TRANSPORTATION**															
34	FT-1 Medium	50,248	46,317	16,972	12,658	23,275	19,597	25,082	15,039	**53,568**	**38,529**	57,778	91,539	92,513	76,349	**565,896**
35	FT-1 Large LLF	70,276	54,505	4,166	(6,639)	15,268	12,755	21,342	30,674	**79,339**	**48,665**	85,561	138,218	139,766	118,745	**733,301**
36	FT-1 Large HLF	36,833	33,922	28,372	31,907	24,836	26,008	28,244	3,130	**34,070**	**30,940**	34,229	46,585	45,978	41,018	**412,001**
37	FT-1 Extra Large LLF	106,626	93,152	12,455	(19,882)	16,867	16,137	27,896	49,729	**122,379**	**72,650**	116,405	178,743	179,983	159,841	**1,010,601**
38	FT-1 Extra Large HLF	410,300	485,818	417,435	478,958	424,379	489,409	401,651	26,686	**487,450**	**460,764**	491,114	557,480	552,086	489,501	**5,685,581**
39	Default	4,502	4,208	102	527	1,411	1,527	2,003	1,315	**4,376**	**3,060**	5,384	7,861	7,933	6,877	**46,709**
40	**Total FT-1 Transportation**	678,786	717,920	479,501	497,528	506,036	565,433	506,217	126,573	**781,181**	**654,608**	790,470	1,020,427	1,018,260	892,330	**8,454,089**
41	**FT-2 TRANSPORTATION**															
42	FT-2 Small	8,922	4,864	2,660	1,939	1,894	1,805	2,711	5,763	5,763	0	12,400	19,816	18,921	18,027	**99,721**
43	FT-2 Medium	180,341	117,208	72,110	51,904	45,212	44,845	62,395	113,132	113,132	0	196,524	277,630	266,892	257,186	**1,685,377**
44	FT-2 Large LLF	124,706	75,799	25,923	15,596	13,724	15,849	28,855	90,345	90,345	0	164,245	224,090	204,116	189,418	**1,172,665**
45	FT-2 Large HLF	39,401	32,801	27,650	21,669	21,990	26,358	24,907	36,219	36,219	0	43,989	56,893	59,620	56,196	**447,691**
46	FT-2 Extra Large LLF	9,132	6,423	3,574	2,469	2,001	475	818	1,374	1,374	0	4,987	7,574	6,675	5,895	**51,397**
47	FT-2 Extra Large HLF	40,735	36,244	36,123	35,144	32,540	38,843	37,476	42,225	42,225	0	46,991	50,604	47,994	55,613	**500,532**
48	**Total FT-2 Transportation**	403,236	273,340	168,039	128,721	117,359	128,175	157,161	289,058	289,058	0	469,135	636,607	604,218	582,335	**3,957,383**
49	**Total THROUGHPUT**															
50	Residential Non-Heating	60,019	39,167	28,743	18,658	16,187	16,103	19,867	27,860	27,860	0	38,287	50,638	50,625	47,073	**413,226**
51	Residential Non-Heating Low Incom	2,941	1,956	1,023	327	259	277	392	708	708	0	1,220	1,697	1,646	1,406	**13,852**
52	Residential Heating	1,778,181	1,062,089	573,872	392,213	337,357	341,248	470,510	1,105,743	1,105,743	0	2,028,011	2,935,054	2,884,975	2,623,389	**16,532,640**
53	Residential Heating Low Income	152,450	100,566	55,710	40,021	33,305	34,078	46,179	99,712	99,712	0	178,044	250,781	238,178	213,710	**1,442,733**
54	Small C&I	245,627	129,552	71,339	48,956	43,038	36,525	49,483	122,150	122,150	0	273,372	434,196	426,066	388,051	**2,268,355**
55	Medium C&I	558,619	369,646	211,771	158,015	162,022	156,319	206,721	332,149	370,678	38,529	609,897	876,827	839,797	784,649	**5,304,961**
56	Large LLF	277,720	171,746	55,130	17,537	38,400	28,542	65,153	160,240	208,905	48,665	322,287	479,241	450,028	411,438	**2,526,127**
57	Large HLF	93,117	84,774	75,665	69,488	57,392	68,327	76,631	56,763	87,702	30,940	100,288	121,930	133,181	122,164	**1,090,659**
58	Extra Large LLF	124,061	104,983	19,361	(16,246)	19,981	16,895	29,458	54,369	127,019	72,650	127,856	198,546	196,075	175,805	**1,123,795**
59	Extra Large HLF	457,318	526,550	459,011	519,756	462,329	534,527	446,715	79,375	540,139	460,764	543,661	614,162	603,758	548,696	**6,256,620**
60	Default	4,502	4,208	102	527	1,411	1,527	2,003	1,315	4,376	3,060	5,384	7,861	7,933	6,877	**46,709**
61	**Total Throughput**	3,754,555	2,595,237	1,551,727	1,249,252	1,171,679	1,234,367	1,413,111	2,040,383	2,694,991	654,608	4,228,306	5,970,932	5,832,264	5,323,257	**37,019,677**

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SUMMARY OF ESTIMATED GAS COSTS FOR 2017-2018 GCR

07/31/2017 NYMEX

Variable Costs	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	GCR TOTAL
Total Pipeline Supply Costs	$5,452,587	$9,587,626	$13,192,782	$12,900,238	$8,898,047	$5,290,669	$3,088,255	$1,949,497	$1,530,417	$1,398,564	$1,467,263	$2,834,660	$67,590,607
Total Storage Product Costs	$113,091	$1,262,219	$1,966,608	$1,797,495	$1,642,057	$113,173	$0	$0	$0	$0	$0	$0	$6,894,644
Total Storage Delivery Costs	$4,801	$70,340	$115,421	$105,741	$97,222	$4,833	$0	$0	$0	$0	$0	$0	$398,358
Total LNG Costs	$75,435	$77,949	$1,934,136	$738,848	$77,949	$75,435	$77,411	$74,643	$77,133	$78,855	$78,219	$80,052	$3,446,064
Total All Variable Gas Costs	$5,645,914	$10,998,135	$17,208,947	$15,542,321	$10,715,275	$5,484,110	$3,165,666	$2,024,140	$1,607,551	$1,477,419	$1,545,483	$2,914,712	$78,329,672
Fixed Costs													
Total Pipeline Demands	[redacted]												
Total Storage Facilities	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$399,422	$4,793,063
Total Storage Delivery	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$438,183	$5,258,193
Total Supplier Demands	[redacted]												
Total All Fixed Costs	$5,107,123	$5,141,113	$5,139,780	$5,137,644	$5,139,780	$5,223,774	$5,224,486	$5,223,774	$5,224,486	$5,224,486	$5,223,370	$5,224,082	$62,233,897
Capacity Release Credits	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$692,715	$8,312,577
NGPMP Credit	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$908,333	$10,900,000
Net Fixed Costs	$3,506,075	$3,540,065	$3,538,732	$3,536,596	$3,538,732	$3,622,725	$3,623,438	$3,622,725	$3,623,438	$3,623,438	$3,622,322	$3,623,034	$43,021,320
Total All Gas Costs	[redacted]												$121,350,992

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV 2017	DEC 2017	JAN 2018	FEB 2018	MAR 2018	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	TOTAL
Forecast Demand													
RI Sales GCR	2,286,401	3,945,192	4,943,244	4,417,284	3,736,115	2,175,893	1,268,260	808,643	647,353	593,008	639,818	1,177,517	26,638,728
Total Demand	2,286,401	3,945,192	4,943,244	4,417,284	3,736,115	2,175,893	1,268,260	808,643	647,353	593,008	639,818	1,177,517	26,638,728
Storage Injections													
TENNESSEE FSMA 501	0	0	0	0	0	0	122,389	118,441	0	15,409	118,441	122,389	497,067
DOMINION GSS 300170	0	0	0	0	0	0	0	0	0	0	67,306	36,578	103,884
DOMINION GSS 300168	0	0	0	0	0	0	26,019	25,179	11,663	21,856	21,151	21,856	127,723
DOMINION GSS 300171	0	0	0	0	0	11,012	31,885	30,856	29,910	26,783	25,919	26,783	183,150
DOMINION GSSTE 600045	0	0	0	0	0	0	0	0	21,580	63,172	188,947	100,490	374,188
TETCO FSS-1 400515	0	0	0	0	0	1,734	8,964	8,675	8,964	8,964	8,675	8,964	54,941
TETCO SS-1 400221	0	0	0	0	0	35,783	188,124	182,056	188,124	188,124	182,056	188,124	1,152,392
TETCO SS-1 400185	0	0	0	0	0	1,612	8,225	7,960	8,225	8,225	7,960	8,225	50,430
DOMINION GSS 300169	0	0	0	0	0	8,626	34,803	33,680	32,647	29,234	28,291	29,234	196,516
COLUMBIA FSS 9630	0	0	0	0	0	3,818	40,791	40,791	34,673	40,791	26,514	14,277	201,656
TENNESSEE 62918	0	0	0	0	0	0	42,454	41,084	0	36,623	41,084	42,454	203,700
Total Storage Injections	0	0	0	0	0	62,585	503,653	488,722	335,786	439,182	716,344	599,374	3,145,647
LNG PROVIDENCE	0	0	0	0	0	58,815	147,562	141,626	49,504	21,620	141,028	22,964	583,119
LNG EXETER	0	0	0	0	0	87,891	4,034	5,080	2,092	5,976	5,677	4,631	115,381
Total LNG Injections	0	0	0	0	0	146,706	151,596	146,706	51,596	27,596	146,706	27,596	698,500
Total Injections	0	0	0	0	0	209,291	655,249	635,428	387,382	466,778	863,049	626,970	3,844,147

Delivered Firm Sales Supply

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	GCR Total
Sources of Supply													
TENNESSEE ZONE 0 CXN	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 0	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 1	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 4 CXN	348,000	359,600	359,600	336,400	359,600	348,000	333,804	256,881	95,795	138,861	291,827	359,600	3,587,968
TENNESSEE ZONE 4	372,136	561,797	456,709	408,980	326,648	153,627	0	0	0	0	0	171,448	2,451,346
TENNESSEE NIAGARA	2,134	0	5,335	3,201	0	32,010	33,077	32,010	33,077	33,077	32,010	33,077	239,008
TENNESSEE DRACUT	0	14,431	23,557	144,527	38,778	0	0	0	0	0	0	0	221,294
TETCO ELA	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO ETX	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO STX	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO WLA	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO M2	774,107	798,268	798,167	720,958	798,475	776,776	272,001	775,935	801,546	801,412	441,848	801,270	8,560,762
TETCO M3 DELIVERED	477,660	104,703	188,368	205,193	149,868	376,031	666,208	163,113	0	0	546,497	375,849	3,253,490
COLUMBIA MAUMEE	72,184	878,862	691,706	616,913	367,033	49,885	0	0	0	0	0	0	2,676,583
COLUMBIA BROADRUN	0	308,519	308,519	278,662	265,930	9,958	0	0	0	0	0	0	1,171,588
COLUMBIA EAGLE	14,378	29,290	94,579	84,510	78,468	30,887	40,791	40,791	34,673	40,791	26,514	14,277	529,950
COLUMBIA DOWNINGTOWN	0	10,643	111,019	100,198	111,987	2,063	0	0	0	0	0	0	335,911
TRANSCO LEIDY	36,470	38,067	38,067	34,383	38,067	11,414	2,232	2,160	2,232	2,232	2,160	2,232	209,716
TETCO LEIDY	7,164	16,486	16,486	14,890	16,486	4,257	0	0	0	0	0	0	75,767
TETCO to B&W SCT	0	49,945	60,372	51,168	28,654	0	0	0	0	0	0	0	190,140
ALGONQUIN - AIM	116,496	165,795	491,644	439,006	408,990	377,851	402,200	11,169	0	0	0	3,321	2,416,471
ANE II-DAWN-TENN-WADDY	0	30,824	30,806	27,835	0	0	5,784	0	0	0	0	0	95,249
GAZ METRO LNG Refill	0	0	0	0	0	26,706	27,596	26,706	27,596	27,596	26,706	27,596	190,500
GDF SUEZ LNG Refill	0	0	0	0	0	120,000	124,000	120,000	24,000	0	120,000	0	508,000
PORTABLE LNG	0	0	0	0	0	0	0	0	0	0	0	0	0

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
Non LNG Liquid take	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,172,760	1,756,097	1,282,059	967,322	1,016,374	1,340,855	1,761,074	26,015,241
LNG Liquid take	0	0	0	0	0	146,706	151,596	146,706	51,596	27,596	146,706	27,596	698,500
Total take	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,319,466	1,907,693	1,428,765	1,018,918	1,043,969	1,487,561	1,788,670	26,713,741
Storage Withdrawals													
TENNESSEE FSMA 501	0	16,077	162,881	157,995	151,063	3,435	0	0	0	0	0	0	491,450
DOMINION GSS 300170	0	16,034	43,945	36,771	3,958	0	0	0	0	0	0	0	100,707
DOMINION GSS 300168	738	22,597	30,387	36,554	36,003	0	0	0	0	0	0	0	126,279
DOMINION GSS 300171	0	30,764	68,291	57,610	22,368	0	0	0	0	0	0	0	179,033
DOMINION GSSTE 600045	49,628	69,626	69,626	62,888	69,626	43,248	0	0	0	0	0	0	364,642
TETCO FSS-1 400515	0	13,651	13,651	13,651	12,013	0	0	0	0	0	0	0	52,968
TETCO SS-1 400221	0	283,662	288,039	288,039	257,851	0	0	0	0	0	0	0	1,117,591
TETCO SS-1 400185	0	12,605	12,605	12,605	11,092	0	0	0	0	0	0	0	48,907
DOMINION GSS 300169	0	44,009	54,033	49,328	43,446	0	0	0	0	0	0	0	190,815
COLUMBIA FSS 9630	0	44,787	71,211	52,666	24,450	3,729	0	0	0	0	0	0	196,842
TENNESSEE 62918	0	8,334	61,187	32,433	99,444	0	0	0	0	0	0	0	201,398
LNG PROVIDENCE	10,824	11,185	362,848	109,863	11,185	10,824	11,185	10,824	11,185	11,185	10,824	11,185	583,119
LNG EXETER	4,482	4,631	29,607	40,057	4,631	4,482	4,631	4,482	4,631	4,631	4,482	4,631	115,381
Total Withdrawal Delivered	65,673	577,962	1,268,312	950,459	747,131	65,718	15,817	15,306	15,817	15,817	15,306	15,817	3,769,133
Total Storage Withdrawal	50,366	562,145	875,857	800,540	731,314	50,411	0	0	0	0	0	0	3,070,633
Total Peaking Withdrawal	15,306	15,817	392,455	149,919	15,817	15,306	15,817	15,306	15,817	15,817	15,306	15,817	698,500
Total Supply	**2,286,401**	**3,945,192**	**4,943,244**	**4,417,284**	**3,736,115**	**2,238,478**	**1,771,913**	**1,297,365**	**983,139**	**1,032,190**	**1,356,162**	**1,776,891**	**29,784,374**
Storage Withdrawals at Storage Facilty													
TENNESSEE FSMA 501	0	16,261	164,743	159,800	152,789	3,474	0	0	0	0	0	0	497,067
DOMINION GSS 300170	0	16,540	45,331	37,931	4,082	0	0	0	0	0	0	0	103,884
DOMINION GSS 300168	746	22,855	30,735	36,972	36,415	0	0	0	0	0	0	0	127,723
DOMINION GSS 300171	0	31,471	69,861	58,935	22,883	0	0	0	0	0	0	0	183,150
DOMINION GSSTE 600045	50,934	71,465	71,465	64,549	71,465	44,310	0	0	0	0	0	0	374,188
TETCO FSS-1 400515	0	14,160	14,160	14,160	12,461	0	0	0	0	0	0	0	54,941
TETCO SS-1 400221	0	292,495	297,008	297,008	265,881	0	0	0	0	0	0	0	1,152,392
TETCO SS-1 400185	0	12,998	12,998	12,998	11,438	0	0	0	0	0	0	0	50,430
DOMINION GSS 300169	0	45,324	55,647	50,802	44,744	0	0	0	0	0	0	0	196,516
COLUMBIA FSS 9630	0	45,883	72,953	53,954	25,048	3,818	0	0	0	0	0	0	201,656
TENNESSEE 62918	0	8,429	61,887	32,804	100,580	0	0	0	0	0	0	0	203,700
	51,680	577,880	896,787	819,912	747,786	51,601	0	0	0	0	0	0	3,145,646

REDACTED

National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
07/31/2017 NYMEX	**$2.920**	**$3.079**	**$3.173**	**$3.164**	**$3.119**	**$2.795**	**$2.769**	**$2.795**	**$2.821**	**$2.826**	**$2.806**	**$2.826**	
TENNESSEE ZONE 0 CONNEXION													
Basis	($0.198)	($0.183)	($0.195)	($0.188)	($0.163)	($0.173)	($0.167)	($0.157)	($0.166)	($0.165)	($0.166)	($0.178)	
Usage to Zn 6	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	
Fuel to Zn 6	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	
Total Delivered	$2.8853	$3.0670	$3.1527	$3.1506	$3.1297	$2.7809	$2.7600	$2.7976	$2.8153	$2.8216	$2.7997	$2.8080	
TENNESSEE ZONE 0													
Basis	($0.198)	($0.183)	($0.195)	($0.188)	($0.163)	($0.173)	($0.167)	($0.157)	($0.166)	($0.165)	($0.166)	($0.178)	
Usage to Zn 6	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	
Fuel to Zn 6	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	
Total Delivered	$3.1892	$3.3709	$3.4566	$3.4545	$3.4336	$3.0848	$3.0639	$3.1015	$3.1192	$3.1255	$3.1036	$3.1119	
TENNESSEE ZONE 1													
Basis	($0.142)	($0.095)	($0.129)	($0.060)	($0.097)	($0.115)	($0.127)	($0.133)	($0.105)	($0.084)	($0.102)	($0.100)	
Usage to Zn 6	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	
Fuel to Zn 6	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	
Total Delivered	$3.1866	$3.4006	$3.4629	$3.5252	$3.4400	$3.0849	$3.0454	$3.0662	$3.1223	$3.1493	$3.1098	$3.1326	
TENNESSEE ZONE 4 CONNEXION													
Basis	($0.789)	($0.637)	($0.523)	($0.484)	($0.506)	($0.353)	($0.386)	($0.399)	($0.400)	($0.406)	($0.462)	($0.458)	
Usage to Zn 6	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	
Fuel to Zn 6	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	
Total Delivered	$2.1669	$2.4814	$2.6918	$2.7221	$2.6544	$2.4814	$2.4217	$2.4349	$2.4602	$2.4592	$2.3823	$2.4066	
TENNESSEE ZONE 4													
Basis	($0.789)	($0.637)	($0.523)	($0.484)	($0.506)	($0.353)	($0.386)	($0.399)	($0.400)	($0.406)	($0.462)	($0.458)	
Usage to Zn 6	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	
Fuel to Zn 6	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	
Total Delivered	$2.2719	$2.5864	$2.7968	$2.8271	$2.7594	$2.5864	$2.5267	$2.5399	$2.5652	$2.5642	$2.4873	$2.5116	
TENNESSEE NIAGARA													
Basis	($0.416)	($0.397)	($0.401)	($0.394)	($0.400)	($0.580)	($0.731)	($0.751)	($0.780)	($0.801)	($0.821)	($0.791)	
Tenn usage	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	
Tenn Fuel	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	
Total Delivered	$2.6124	$2.7919	$2.8826	$2.8806	$2.8292	$2.3211	$2.1426	$2.1487	$2.1457	$2.1295	$2.0892	$2.1396	
TENNESSEE DRACUT													
Basis	$0.390	$3.177	$5.575	$5.578	$2.267	$0.065	-$0.095	-$0.025	$0.123	$0.122	-$0.228	-$0.200	
Usage	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	
Fuel	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	
Total Delivered	$3.3463	$6.2926	$8.7849	$8.7789	$5.4225	$2.8963	$2.7103	$2.8063	$2.9803	$2.9843	$2.6143	$2.6623	
TETCO ELA													
Basis	($0.100)	($0.097)	($0.103)	($0.090)	($0.090)	($0.103)	($0.103)	($0.113)	($0.107)	($0.108)	($0.112)	($0.105)	
Usage to M3	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.63%	4.33%	4.33%	4.33%	4.33%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0289	$3.2233	$3.3162	$3.3204	$3.2729	$2.8948	$2.8676	$2.8844	$2.9179	$2.9221	$2.8969	$2.9252	

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TETCO ETX													
Basis	($0.135)	($0.197)	($0.183)	($0.159)	($0.144)	($0.077)	($0.102)	($0.113)	($0.069)	($0.062)	($0.078)	($0.059)	
Usage to M3	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.63%	4.33%	4.33%	4.33%	4.33%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.9922	$3.1178	$3.2318	$3.2476	$3.2159	$2.9221	$2.8686	$2.8844	$2.9577	$2.9702	$2.9325	$2.9734	
TETCO STX													
Basis	($0.095)	($0.147)	($0.143)	($0.142)	($0.117)	($0.047)	($0.065)	($0.070)	($0.023)	($0.025)	($0.038)	($0.032)	
Usage to M3	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.73%	4.47%	4.47%	4.47%	4.47%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0422	$3.1801	$3.2837	$3.2753	$3.2541	$2.9615	$2.9154	$2.9374	$3.0139	$3.0171	$2.9825	$3.0097	
TETCO WLA													
Basis	($0.088)	($0.097)	($0.105)	($0.092)	($0.093)	($0.080)	($0.080)	($0.090)	($0.085)	($0.085)	($0.090)	($0.082)	
Usage to M3	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.59%	4.29%	4.29%	4.29%	4.29%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0420	$3.2238	$3.3145	$3.3188	$3.2702	$2.9196	$2.8923	$2.9091	$2.9415	$2.9468	$2.9206	$2.9499	
TETCO M2													
Basis	($0.715)	($0.535)	($0.355)	($0.330)	($0.365)	($0.457)	($0.465)	($0.515)	($0.560)	($0.565)	($0.618)	($0.600)	
Usage on Tetco	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Tetco	2.07%	2.49%	2.49%	2.49%	2.49%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.3310	$2.6933	$2.9770	$2.9936	$2.9107	$2.4681	$2.4330	$2.4083	$2.3887	$2.3887	$2.3135	$2.3526	
TETCO M3 DELIVERED													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5254	$3.4195	$5.3301	$5.2220	$3.2832	$2.5355	$2.4033	$2.4164	$2.4860	$2.4810	$2.3144	$2.4103	
COLUMBIA MAUMEE													
Basis	($0.201)	($0.205)	($0.220)	($0.202)	($0.210)	($0.170)	($0.183)	($0.227)	($0.243)	($0.295)	($0.360)	($0.305)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
COLUMBIA BROADRUN													
Basis	($0.201)	($0.205)	($0.220)	($0.202)	($0.210)	($0.170)	($0.183)	($0.227)	($0.243)	($0.295)	($0.360)	($0.305)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
COLUMBIA EAGLE													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5845	$3.4917	$5.4300	$5.3203	$3.3534	$2.5947	$2.4606	$2.4739	$2.5445	$2.5394	$2.3705	$2.4678	
COLUMBIA DOWNINGTOWN													
Basis	$0.100	$0.670	$2.737	$2.720	$0.470	($0.150)	($0.283)	($0.287)	($0.070)	($0.092)	($0.410)	($0.325)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.1271	$3.8758	$6.0897	$6.0631	$3.7119	$2.7432	$2.5804	$2.6029	$2.8517	$2.8343	$2.4882	$2.5957	
TRANSCO LEIDY													
Basis	($0.808)	($0.693)	($0.567)	($0.520)	($0.533)	($0.515)	($0.603)	($0.600)	($0.623)	($0.608)	($0.662)	($0.635)	
Usage on Transco	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
Fuel on Transco	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Delivered to Algonquin	$2.1280	$2.4031	$2.6240	$2.6622	$2.6039	$2.2967	$2.1822	$2.2113	$2.2143	$2.2344	$2.1601	$2.2073	
Total Delivered	$2.3761	$2.6553	$2.8783	$2.9169	$2.8580	$2.5464	$2.4308	$2.4602	$2.4633	$2.4835	$2.4086	$2.4562	

REDACTED

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Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TETCO LEIDY													
Basis	($0.680)	($0.684)	($0.404)	($0.558)	($0.610)	($0.527)	($0.559)	($0.462)	($0.465)	($0.466)	($0.573)	($0.485)	
Usage on Tetco	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
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	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5200	$2.6800	$3.0626	$2.8958	$2.7966	$2.5487	$2.4894	$2.6151	$2.6386	$2.6427	$2.5129	$2.6233	
TETCO to B&W SCT													
Basis	($0.715)	($0.535)	($0.355)	($0.330)	($0.365)	($0.457)	($0.465)	($0.515)	($0.560)	($0.565)	($0.618)	($0.600)	
Usage on Tetco	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
Fuel to M3	2.07%	2.49%	2.49%	2.49%	2.49%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5471	$2.9094	$3.1931	$3.2097	$3.1268	$2.6842	$2.6491	$2.6244	$2.6048	$2.6048	$2.5296	$2.5687	
ALGONQUIN - AIM													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
AGT Usage	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	
AGT Fuel	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5142	$3.4083	$5.3189	$5.2108	$3.2720	$2.5243	$2.3921	$2.4052	$2.4748	$2.4698	$2.3032	$2.3991	
DAWN TO TENNESSEE - WADDY													
Basis	$0.135	$0.155	$0.150	$0.158	$0.153	$0.041	($0.369)	($0.209)	($0.293)	($0.294)	($0.399)	($0.221)	
Union usage	$0.0075	$0.0075	$0.0075	$0.0075	$0.0075	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	
Iroquois usage	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	
Tenn usage	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	
Fuel on Union	0.88%	1.00%	1.15%	1.09%	1.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fuel on TransCanada	0.93%	0.55%	1.12%	0.39%	0.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fuel on Iroquois	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	
Fuel on Tenn	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	
Total Delivered	$3.2400	$3.4151	$3.5312	$3.5030	$3.4602	$2.9548	$2.5148	$2.7025	$2.6439	$2.6480	$2.5218	$2.7216	

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Normal Weather Scenario

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
TENNESSEE ZONE 0 CONNEXION													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$2.885	$3.067	$3.153	$3.151	$3.130	$2.781	$2.760	$2.798	$2.815	$2.822	$2.800	$2.808	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 0													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.189	$3.371	$3.457	$3.454	$3.434	$3.085	$3.064	$3.101	$3.119	$3.126	$3.104	$3.112	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 1													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.187	$3.401	$3.463	$3.525	$3.440	$3.085	$3.045	$3.066	$3.122	$3.149	$3.110	$3.133	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 4 CONNEXION													
Delivered MMBtu	348,000	359,600	359,600	336,400	359,600	348,000	333,804	256,881	95,795	138,861	291,827	359,600	
Delivered Price	$2.1669	$2.4814	$2.6918	$2.7221	$2.6544	$2.4814	$2.4217	$2.4349	$2.4602	$2.4592	$2.3823	$2.4066	
Total Delivered Cost	$754,066	$892,315	$967,967	$915,725	$954,509	$863,531	$808,384	$625,476	$235,672	$341,482	$695,216	$865,400	
TENNESSEE ZONE 4													
Delivered MMBtu	372,136	561,797	456,709	408,980	326,648	153,627	0	0	0	0	0	171,448	
Delivered Price	$2.2719	$2.5864	$2.7968	$2.8271	$2.7594	$2.5864	$2.5267	$2.5399	$2.5652	$2.5642	$2.4873	$2.5116	
Total Delivered Cost	$845,439	$1,453,037	$1,277,317	$1,156,241	$901,341	$397,343	$0	$0	$0	$0	$0	$430,604	
TENNESSEE NIAGARA													
Delivered MMBtu	2,134	0	5,335	3,201	0	32,010	33,077	32,010	33,077	33,077	32,010	33,077	
Delivered Price	$2.6124	$2.7919	$2.8826	$2.8806	$2.8292	$2.3211	$2.1426	$2.1487	$2.1457	$2.1295	$2.0892	$2.1396	
Total Delivered Cost	$5,575	$0	$15,379	$9,221	$0	$74,298	$70,872	$68,780	$70,972	$70,439	$66,876	$70,772	
TENNESSEE DRACUT													
Delivered MMBtu	0	14,431	23,557	144,527	38,778	0	0	0	0	0	0	0	
Delivered Price	$3.35	$6.29	$8.78	$8.78	$5.42	$2.90	$2.71	$2.81	$2.98	$2.98	$2.61	$2.66	
Total Delivered Cost	$0	$90,810	$206,945	$1,268,786	$210,276	$0	$0	$0	$0	$0	$0	$0	
TETCO ELA													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.0289	$3.2233	$3.3162	$3.3204	$3.2729	$2.8948	$2.8676	$2.8844	$2.9179	$2.9221	$2.8969	$2.9252	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO ETX													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$2.9922	$3.1178	$3.2318	$3.2476	$3.2159	$2.9221	$2.8686	$2.8844	$2.9577	$2.9702	$2.9325	$2.9734	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TETCO STX													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.042	$3.180	$3.284	$3.275	$3.254	$2.962	$2.915	$2.937	$3.014	$3.017	$2.982	$3.010	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO WLA													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.0420	$3.2238	$3.3145	$3.3188	$3.2702	$2.9196	$2.8923	$2.9091	$2.9415	$2.9468	$2.9206	$2.9499	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO M2													
Delivered MMBtu	774,107	798,268	798,167	720,958	798,475	776,776	272,001	775,935	801,546	801,412	441,848	801,270	
Delivered Price	$2.3310	$2.6933	$2.9770	$2.9936	$2.9107	$2.4681	$2.4330	$2.4083	$2.3887	$2.3887	$2.3135	$2.3526	
Total Delivered Cost	$1,804,450	$2,149,949	$2,376,156	$2,158,248	$2,324,151	$1,917,135	$661,786	$1,868,680	$1,914,664	$1,914,345	$1,022,209	$1,885,105	
TETCO M3 DELIVERED													
Delivered MMBtu	477,660	104,703	188,368	205,193	149,868	376,031	666,208	163,113	0	0	546,497	375,849	
Delivered Price	$2.5254	$3.4195	$5.3301	$5.2220	$3.2832	$2.5355	$2.4033	$2.4164	$2.4860	$2.4810	$2.3144	$2.4103	
Total Delivered Cost	$1,206,267	$358,037	$1,004,019	$1,071,522	$492,051	$953,412	$1,601,067	$394,143	$0	$0	$1,264,838	$905,916	
COLUMBIA MAUMEE													
Delivered MMBtu	72,184	878,862	691,706	616,913	367,033	49,885	0	0	0	0	0	0	
Delivered Price	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
Total Delivered Cost	$203,482	$2,618,510	$2,116,872	$1,893,668	$1,106,712	$135,821	$0	$0	$0	$0	$0	$0	
COLUMBIA BROADRUN													
Delivered MMBtu	0	308,519	308,519	278,662	265,930	9,958	0	0	0	0	0	0	
Delivered Price	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
Total Delivered Cost	$0	$919,211	$944,180	$855,377	$801,857	$27,113	$0	$0	$0	$0	$0	$0	
COLUMBIA EAGLE													
Delivered MMBtu	14,378	29,290	94,579	84,510	78,468	30,887	40,791	40,791	34,673	40,791	26,514	14,277	
Delivered Price	$2.5845	$3.4917	$5.4300	$5.3203	$3.3534	$2.5947	$2.4606	$2.4739	$2.5445	$2.5394	$2.3705	$2.4678	
Total Delivered Cost	$37,160	$102,271	$513,560	$449,622	$263,130	$80,143	$100,371	$100,914	$88,226	$103,587	$62,852	$35,232	
COLUMBIA DOWNINGTOWN													
Delivered MMBtu	0	10,643	111,019	100,198	111,987	2,063	0	0	0	0	0	0	
Delivered Price	$3.1271	$3.8758	$6.0897	$6.0631	$3.7119	$2.7432	$2.5804	$2.6029	$2.8517	$2.8343	$2.4882	$2.5957	
Total Delivered Cost	$0	$41,251	$676,075	$607,508	$415,687	$5,660	$0	$0	$0	$0	$0	$0	

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TRANSCO LEIDY													
Delivered MMBtu	36,470	38,067	38,067	34,383	38,067	11,414	2,232	2,160	2,232	2,232	2,160	2,232	
Delivered Price	$2.3761	$2.6553	$2.8783	$2.9169	$2.8580	$2.5464	$2.4308	$2.4602	$2.4633	$2.4835	$2.4086	$2.4562	
Total Delivered Cost	$86,657	$101,078	$109,569	$100,291	$108,797	$29,063	$5,426	$5,314	$5,498	$5,543	$5,202	$5,482	
TETCO LEIDY													
Delivered MMBtu	7,164	16,486	16,486	14,890	16,486	4,257	0	0	0	0	0	0	
Delivered Price	$2.5200	$2.6800	$3.0626	$2.8958	$2.7966	$2.5487	$2.4894	$2.6151	$2.6386	$2.6427	$2.5129	$2.6233	
Total Delivered Cost	$18,052	$44,181	$50,488	$43,119	$46,103	$10,849	$0	$0	$0	$0	$0	$0	
TETCO to B&W SCT													
Delivered MMBtu	0	49,945	60,372	51,168	28,654	0	0	0	0	0	0	0	
Delivered Price	$2.5471	$2.9094	$3.1931	$3.2097	$3.1268	$2.6842	$2.6491	$2.6244	$2.6048	$2.6048	$2.5296	$2.5687	
Total Delivered Cost	$0	$145,309	$192,774	$164,234	$89,597	$0	$0	$0	$0	$0	$0	$0	
ALGONQUIN - AIM													
Delivered MMBtu	116,496	165,795	491,644	439,006	408,990	377,851	402,200	11,169	0	0	0	3,321	
Delivered Price	$2.5142	$3.4083	$5.3189	$5.2108	$3.2720	$2.5243	$2.3921	$2.4052	$2.4748	$2.4698	$2.3032	$2.3991	
Total Delivered Cost	$292,889	$565,086	$2,614,995	$2,287,588	$1,338,226	$953,794	$962,085	$26,862	$0	$0	$0	$7,967	
DAWN TO TENNESSEE - WADDY													
Delivered MMBtu	0	30,824	30,806	27,835	0	0	5,784	0	0	0	0	0	
Delivered Price	$3.2400	$3.4151	$3.5312	$3.5030	$3.4602	$2.9548	$2.5148	$2.7025	$2.6439	$2.6480	$2.5218	$2.7216	
Total Delivered Cost	$0	$105,267	$108,782	$97,505	$0	$0	$14,545	$0	$0	$0	$0	$0	

	NOV 2017	**DEC** 2017	**JAN** 2018	**FEB** 2018	**MAR** 2018	**APR** 2018	**MAY** 2018	**JUN** 2018	**JUL** 2018	**AUG** 2018	**SEP** 2018	**OCT** 2018	**TOTAL**
Financial Hedges as of July 31, 2017													
Quantity	1,500,000	1,995,000	2,480,000	2,180,000	1,920,000	1,369,386	855,123	509,890	394,987	397,525	344,660	610,180	14,556,751
Average Price	$2.924	$3.043	$3.193	$3.099	$3.049	$2.795	$2.857	$2.868	$2.869	$2.865	$2.851	$2.924	
07/31/2017 NYMEX	$2.920	$3.079	$3.173	$3.164	$3.119	$2.795	$2.769	$2.795	$2.821	$2.826	$2.806	$2.826	
NYMEX Hedges	$5,925	-$71,035	$50,680	-$141,917	-$135,016	-$563	$75,327	$37,304	$19,000	$15,521	$15,412	$59,837	-$69,525
Basis Hedges	$192,625	$72,350	-$32,975	-$36,500	-$19,375	$0	$0	$0	$0	$0	$0	$0	$176,125
Impact of Financial Hedges	**$198,550**	**$1,315**	**$17,705**	**-$178,417**	**-$154,391**	**-$563**	**$75,327**	**$37,304**	**$19,000**	**$15,521**	**$15,412**	**$59,837**	**$106,600**
Total Pipeline Costs (Incl Inj)	**$5,452,587**	**$9,587,626**	**$13,192,782**	**$12,900,238**	**$8,898,047**	**$5,447,600**	**$4,299,864**	**$3,127,473**	**$2,334,034**	**$2,450,916**	**$3,132,605**	**$4,266,317**	**$75,090,088**
Total Delivered Pipeline Vol	**2,220,728**	**3,367,230**	**3,674,933**	**3,466,825**	**2,988,984**	**2,172,760**	**1,756,097**	**1,282,059**	**967,322**	**1,016,374**	**1,340,855**	**1,761,074**	**26,015,241**
WACOG (Cost/Volume)	$2.455	$2.847	$3.590	$3.721	$2.977	$2.507	$2.449	$2.439	$2.413	$2.411	$2.336	$2.423	$2.886
Injections	0	0	0	0	0	62,585	503,653	488,722	335,786	439,182	716,344	599,374	3,145,647
Cost of Injections	$0	$0	$0	$0	$0	$156,931	$1,211,609	$1,177,976	$803,616	$1,052,352	$1,665,341	$1,431,657	**$7,499,482**
Total GCR Cost Including Financial Hedges, Excluding Injections													
Total Pipeline Costs	**$5,452,587**	**$9,587,626**	**$13,192,782**	**$12,900,238**	**$8,898,047**	**$5,290,669**	**$3,088,255**	**$1,949,497**	**$1,530,417**	**$1,398,564**	**$1,467,263**	**$2,834,660**	**$67,590,607**
Total Pipeline Purchase Volumes	**2,220,728**	**3,367,230**	**3,674,933**	**3,466,825**	**2,988,984**	**2,110,175**	**1,252,443**	**793,337**	**631,536**	**577,191**	**624,512**	**1,161,700**	**22,869,594**

REDACTED

2017 GCR Estimate
Fixed Cost Estimates
Nov 2017 - Oct 2018

2017-2018 Gas Supply Fixed Costs
UNIT PRICES

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
PIPELINE FIXED COST UNIT PRICES													
ALGONQUIN AFT-E/AFT-1 DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN AFT-3 DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN AFT-ES/1S DEMAND	$/Dth	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294
ALGONQUIN AIM DEMAND	$/Dth	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862
ALGONQUIN AFT-CLMS DEMAND (Crary St)	$/Dth	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375	$2.7375
COLUMBIA FTS DEMAND	$/Dth	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890
DOMINION FTNN DEMAND	$/Dth	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671
IROQUOIS DEMAND	$/Dth	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.5997	$5.5997
NATIONAL FUEL DEMAND	$/Dth	$3.8067	$3.8067	$3.8067	$3.8067	$3.8067	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$/Dth	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$/Dth	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$/Dth	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$/Dth	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	$/Dth	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575
TENNESSEE FT-A DEMAND DRACUT	$/Dth	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447
TENNESSEE FT-A DEMAND ZONE 5 TO 6	$/Dth	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563
TEXAS EASTERN CDS STX DEMAND M3	$/Dth	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060
TEXAS EASTERN CDS WLA DEMAND M3	$/Dth	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260
TEXAS EASTERN CDS ELA DEMAND M3	$/Dth	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750
TEXAS EASTERN CDS ETX DEMAND M3	$/Dth	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890
TEXAS EASTERN CDS 1-3 DEMAND M3	$/Dth	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500
TEXAS EASTERN FTS DEMAND	$/Dth	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500
TEXAS EASTERN SCT STX DEMAND M3	$/Dth	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220
TEXAS EASTERN SCT WLA DEMAND M3	$/Dth	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310
TEXAS EASTERN SCT ELA DEMAND M3	$/Dth	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500
TEXAS EASTERN SCT ETX DEMAND M3	$/Dth	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760
TEXAS EASTERN SCT 1-3 DEMAND M3	$/Dth	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600
TRANSCANADA DEMAND	$/Dth	$13.4616	$13.9103	$13.9103	$12.5642	$13.9103	$13.4616	$13.9103	$13.4616	$13.9103	$13.9103	$13.4616	$13.9103
TRANSCO DEMAND ZONE 6 TO 6	$/Dth	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305
UNION DEMAND	$/Dth	$2.8170	$2.9109	$2.9109	$2.6292	$2.9109	$2.8170	$2.9109	$2.8170	$2.9109	$2.9109	$2.8170	$2.9109
STORAGE FIXED COST UNIT PRICES													
COLUMBIA FSS DEMAND	$/Dth	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010	$1.5010
COLUMBIA FSS CAPACITY	$/Dth	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288	$0.0288
DOMINION GSS DEMAND	$/Dth	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683
DOMINION GSS CAPACITY	$/Dth	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145
DOMINION GSS-TE DEMAND	$/Dth	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683	$1.8683
DOMINION GSS-TE CAPACITY	$/Dth	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145	$0.0145
TENNESSEE FSMA DEMAND	$/Dth	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938	$1.4938
TENNESSEE FSMA CAPACITY	$/Dth	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205	$0.0205
TEXAS EASTERN SS-1 DEMAND	$/Dth	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370	$5.4370
TEXAS EASTERN SS-1 CAPACITY	$/Dth	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293
TEXAS EASTERN FSS-1 DEMAND	$/Dth	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894	$0.0894
TEXAS EASTERN FSS-1 CAPACITY	$/Dth	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293	$0.1293

REDACTED

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
STORAGE DELIVERY FIXED UNIT PRICES													
ALGONQUIN FOR TETCO SS-1	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN DELIVERY FOR FSS-1	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN SCT FOR SS-1	$/Dth	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294
ALGONQUIN DELIVERY FOR GSS, GSS-TE,	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN SCT DELIVERY FOR GSS-TE	$/Dth	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294
ALGONQUIN DELIVERY FOR GSS	$/Dth	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854	$9.7854
ALGONQUIN DELIVERY FOR FSS	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
COLUMBIA DELIVERY FOR FSS	$/Dth	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190	$6.3190
DOMINION DELIVERY FOR GSS	$/Dth	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671
DOMINION DELIVERY FOR GSS	$/Dth	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671
TENNESSEE DELIVERY FOR GSS	$/Dth	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475
TENNESSEE DELIVERY FOR FSMA	$/Dth	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475	$8.1475
TETCO DELIVERY FOR FSS-1	$/Dth	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700	$5.1700
TETCO DELIVERY FOR GSS/GSS-TE	$/Dth	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500
TETCO DELIVERY FOR GSS-TE	$/Dth	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760	$6.5760
TETCO DELIVERY FOR GSS-TE	$/Dth	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640	$6.8640
TETCO DELIVERY FOR GSS	$/Dth	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790	$5.1790
SUPPLIER FIXED COST UNIT PRICES													
GAZ METRO DEMAND PAYMENT Summer	$/Dth	[redacted]											
ENGIE GAS DEMAND PAYMENT Summer	$/Dth												
ENGIE GAS DEMAND PAYMENT Winter	$/Dth												
PEAKING SUPPLY AT DRACUT	$/Dth												
							BILLING UNITS						
PIPELINE FIXED COST BILLING UNITS													
ALGONQUIN AFT-E/AFT-1 DEMAND	Dth	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285
ALGONQUIN AFT-3 DEMAND	Dth	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063
ALGONQUIN AFT-ES/1S DEMAND	Dth	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079
ALGONQUIN AIM DEMAND	Dth	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
ALGONQUIN AFT-CLMS DEMAND (Crary St)	Dth	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000
COLUMBIA FTS DEMAND	Dth	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455
DOMINION FTNN DEMAND	Dth	537	537	537	537	537	537	537	537	537	537	537	537
IROQUOIS DEMAND	Dth	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012
NATIONAL FUEL DEMAND	Dth	1,177	1,177	1,177	1,177	1,177	0	0	0	0	0	0	0
TENNESSEE FT-A DEMAND ZONE 0 TO 6	Dth	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
TENNESSEE FT-A DEMAND ZONE 1 TO 6	Dth	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
TENNESSEE FT-A DEMAND ZONE 0 TO 6	Dth	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022
TENNESSEE FT-A DEMAND ZONE 1 TO 6	Dth	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	Dth	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600
TENNESSEE FT-A DEMAND DRACUT	Dth	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
TENNESSEE FT-A DEMAND DRACUT FOR PEAKI	Dth	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500
TENNESSEE FT-A DEMAND ZONE 5 TO 6	Dth	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067
TEXAS EASTERN CDS STX DEMAND M3	Dth	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844
TEXAS EASTERN CDS WLA DEMAND M3	Dth	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716
TEXAS EASTERN CDS ELA DEMAND M3	Dth	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758
TEXAS EASTERN CDS ETX DEMAND M3	Dth	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995
TEXAS EASTERN CDS 1-3 DEMAND M3	Dth	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934
TEXAS EASTERN FTS DEMAND	Dth	537	537	537	537	537	537	537	537	537	537	537	537
TEXAS EASTERN SCT STX DEMAND M3	Dth	571	571	571	571	571	571	571	571	571	571	571	571
TEXAS EASTERN SCT WLA DEMAND M3	Dth	648	648	648	648	648	648	648	648	648	648	648	648
TEXAS EASTERN SCT ELA DEMAND M3	Dth	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183
TEXAS EASTERN SCT ETX DEMAND M3	Dth	329	329	329	329	329	329	329	329	329	329	329	329
TEXAS EASTERN SCT 1-3 DEMAND M3	Dth	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099
TRANSCANADA DEMAND	Dth	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012
TRANSCO DEMAND ZONE 6 TO 6	Dth	37,200	38,440	38,440	34,720	38,440	37,200	38,440	37,200	38,440	38,440	37,200	38,440
UNION DEMAND	Dth	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025

REDACTED

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
STORAGE FIXED COST BILLING UNITS													
COLUMBIA FSS DEMAND	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
COLUMBIA FSS CAPACITY	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
DOMINION GSS DEMAND	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
DOMINION GSS CAPACITY	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
DOMINION GSS-TE DEMAND	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
DOMINION GSS-TE CAPACITY	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
TENNESSEE FSMA DEMAND	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
TENNESSEE FSMA CAPACITY	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
TEXAS EASTERN SS-1 DEMAND	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
TEXAS EASTERN SS-1 CAPACITY	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
TEXAS EASTERN FSS-1 DEMAND	Dth	944	944	944	944	944	944	944	944	944	944	944	944
TEXAS EASTERN FSS-1 CAPACITY	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
STORAGE DELIVERY BILLING UNITS													
ALGONQUIN FOR TETCO SS-1	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
ALGONQUIN DELIVERY FOR FSS-1	Dth	944	944	944	944	944	944	944	944	944	944	944	944
ALGONQUIN SCT FOR SS-1	Dth	665	665	665	665	665	665	665	665	665	665	665	665
ALGONQUIN DELIVERY FOR GSS, GSS-TE,	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
ALGONQUIN SCT DELIVERY FOR GSS-TE	Dth	187	187	187	187	187	187	187	187	187	187	187	187
ALGONQUIN DELIVERY FOR GSS	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
ALGONQUIN DELIVERY FOR FSS	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
COLUMBIA DELIVERY FOR FSS	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
DOMINION DELIVERY FOR GSS	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
DOMINION DELIVERY FOR GSS	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
TENNESSEE DELIVERY FOR GSS	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
TENNESSEE DELIVERY FOR FSMA	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
TETCO DELIVERY FOR FSS-1	Dth	944	944	944	944	944	944	944	944	944	944	944	944
TETCO DELIVERY FOR GSS/GSS-TE	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
TETCO DELIVERY FOR GSS-TE	Dth	538	538	538	538	538	538	538	538	538	538	538	538
TETCO DELIVERY FOR GSS-TE	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
TETCO DELIVERY FOR GSS	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
SUPPLIER FIXED COST BILLING UNITS													
GAZ METRO DEMAND PAYMENT Summer	Dth	[redacted]											
ENGIE GAS DEMAND PAYMENT Summer	Dth												
ENGIE GAS DEMAND PAYMENT Winter	Dth												
PEAKING SUPPLY AT DRACUT	Dth												

REDACTED

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	
PIPELINE FIXED COST DOLLARS							**TOTAL COST**							
ALGONQUIN AFT-E/AFT-1 DEMAND	$	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	
ALGONQUIN AFT-3 DEMAND	$	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	
ALGONQUIN AFT-ES/1S DEMAND	$	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	
ALGONQUIN AIM DEMAND	$	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	
ALGONQUIN AFT-CLMS DEMAND (Crary St)	$	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	$262,800	
CANADIAN CAPACITY AMA FEE	$	[redacted]												
COLUMBIA FTS DEMAND	$	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	
DOMINION FTNN DEMAND	$	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	
IROQUOIS DEMAND	$	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$5,667	$5,667	
NATIONAL FUEL DEMAND	$	$4,480	$4,480	$4,480	$4,480	$4,480	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	$	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	
TENNESSEE FT-A DEMAND DRACUT	$	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	$49,819	
TENNESSEE FT-A DEMAND DRACUT FOR PEAKI	$	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	$135,224	
TENNESSEE FT-A DEMAND ZONE 5 TO 6	$	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	
TEXAS EASTERN CDS STX DEMAND M3	$	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	
TEXAS EASTERN CDS WLA DEMAND M3	$	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	
TEXAS EASTERN CDS ELA DEMAND M3	$	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	
TEXAS EASTERN CDS ETX DEMAND M3	$	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	
TEXAS EASTERN CDS 1-3 DEMAND M3	$	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	
TEXAS EASTERN FTS DEMAND	$	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	
TEXAS EASTERN SCT STX DEMAND M3	$	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	
TEXAS EASTERN SCT WLA DEMAND M3	$	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	
TEXAS EASTERN SCT ELA DEMAND M3	$	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	
TEXAS EASTERN SCT ETX DEMAND M3	$	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	
TEXAS EASTERN SCT 1-3 DEMAND M3	$	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	
TRANSCANADA DEMAND	$	$13,623	$14,077	$14,077	$12,715	$14,077	$13,623	$14,077	$13,623	$14,077	$14,077	$13,623	$14,077	
TRANSCO DEMAND ZONE 6 TO 6	$	$4,854	$5,016	$5,016	$4,530	$5,016	$4,854	$5,016	$4,854	$5,016	$5,016	$4,854	$5,016	
UNION DEMAND	$	$2,887	$2,984	$2,984	$2,695	$2,984	$2,887	$2,984	$2,887	$2,984	$2,984	$2,887	$2,984	
WESTERLY LATERAL (Yankee Gas)	$	[redacted]												
TOTAL PIPELINE DEMAND COSTS														
STORAGE FIXED COST DOLLARS														
COLUMBIA FSS DEMAND	$	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	$3,820	
COLUMBIA FSS CAPACITY	$	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	$5,874	
DOMINION GSS DEMAND	$	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	$21,304	
DOMINION GSS CAPACITY	$	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	$15,070	
DOMINION GSS-TE DEMAND	$	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	$26,786	
DOMINION GSS-TE CAPACITY	$	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	$19,957	
TENNESSEE FSMA DEMAND	$	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	$31,622	
TENNESSEE FSMA CAPACITY	$	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	$16,715	
TEXAS EASTERN SS-1 DEMAND	$	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	$80,478	
TEXAS EASTERN SS-1 CAPACITY	$	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	$13,361	
TEXAS EASTERN FSS-1 DEMAND	$	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84	
TEXAS EASTERN FSS-1 CAPACITY	$	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	$610	
NATIONAL GRID LNG TANK LEASE PAYMENTS	$	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	$163,740	**$1,964,880**
TOTAL STORAGE DEMAND COSTS	$	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$4,793,063**
STORAGE DELIVERY FIXED COSTS														
ALGONQUIN FOR TETCO SS-1	$	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	$92,928	
ALGONQUIN DELIVERY FOR FSS-1	$	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	$6,205	
ALGONQUIN SCT FOR SS-1	$	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	$1,749	
ALGONQUIN DELIVERY FOR GSS, GSS-TE,	$	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	$77,165	
ALGONQUIN SCT DELIVERY FOR GSS-TE	$	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	$492	
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	
ALGONQUIN DELIVERY FOR FSS	$	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	$16,729	
COLUMBIA DELIVERY FOR FSS	$	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	$16,082	
DOMINION DELIVERY FOR GSS	$	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	$22,186	
DOMINION DELIVERY FOR GSS CONV	$	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	$8,588	
TENNESSEE DELIVERY FOR GSS	$	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	$54,792	
TENNESSEE DELIVERY FOR FSMA	$	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	$33,494	
TETCO DELIVERY FOR FSS-1	$	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	$4,880	
TETCO DELIVERY FOR GSS/GSS-TE	$	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	$34,117	
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	
TETCO DELIVERY FOR GSS-TE	$	$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	
TOTAL STORAGE DELIVERY DEMAND COSTS		**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$5,258,193**

REDACTED

GAZ METRO DEMAND PAYMENT Summer	$	[redacted]												
ENGIE GAS DEMAND PAYMENT Summer	$													
ENGIE GAS DEMAND PAYMENT Winter	$													
PEAKING SUPPLY AT DRACUT	$													
TOTAL SUPPLIER DEMAND COSTS														
TOTAL ALL DEMAND COSTS	$	**$5,107,123**	**$5,141,113**	**$5,139,780**	**$5,137,644**	**$5,139,780**	**$5,223,774**	**$5,224,486**	**$5,223,774**	**$5,224,486**	**$5,224,486**	**$5,223,370**	**$5,224,082**	**$62,233,897**
		Nov-17	**Dec-17**	**Jan-18**	**Feb-18**	**Mar-18**	**Apr-18**	**May-18**	**Jun-18**	**Jul-18**	**Aug-18**	**Sep-18**	**Oct-18**	**Total**
Marketer Demand Charge Credits														
Capacity Release Volumes as of August 1, 2017														
Tennessee Zone 1	Dth	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	
Tennessee Dracut	Dth	8	8	8	8	8	8	8	8	8	8	8	8	
Algonquin	Dth	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	
Tetco STX/AGT	Dth	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	
Tetco WLA/AGT	Dth	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	
Tetco ELA/AGT	Dth	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	
Columbia/AGT	Dth	2,282	2,282	2,282	2,282	2,282	2,282	2,282	2,282	2,282	2,282	2,282	2,282	
Total		**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	**33,547**	
System Weighted Average cost per MMBtu		**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	**$20.6491**	
Total Demand Charge Credit		**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$8,312,577**
Demand Costs Net of Releases to Marketers	$	**$4,414,408**	**$4,448,398**	**$4,447,065**	**$4,444,929**	**$4,447,065**	**$4,531,059**	**$4,531,771**	**$4,531,059**	**$4,531,771**	**$4,531,771**	**$4,530,656**	**$4,531,368**	**$53,921,320**
TOTAL PIPELINE DEMANDS	$	[redacted]												
TOTAL STORAGE FACILITIES DEMANDS	$	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$399,422**	**$4,793,063**
TOTAL STORAGE DELIVERY DEMANDS	$	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$438,183**	**$5,258,193**
TOTAL SUPPLIER DEMANDS	$	[redacted]												
Total All Demands	$	**$5,107,123**	**$5,141,113**	**$5,139,780**	**$5,137,644**	**$5,139,780**	**$5,223,774**	**$5,224,486**	**$5,223,774**	**$5,224,486**	**$5,224,486**	**$5,223,370**	**$5,224,082**	**$62,233,897**
Marketer Release Credits	$	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$692,715**	**$8,312,577**
NGPMP Credit	$	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$908,333**	**$10,900,000**
Demand Net of Releases	$	**$3,506,075**	**$3,540,065**	**$3,538,732**	**$3,536,596**	**$3,538,732**	**$3,622,725**	**$3,623,438**	**$3,622,725**	**$3,623,438**	**$3,623,438**	**$3,622,322**	**$3,623,034**	**$43,021,320**

REDACTED

Storage Product Cost

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
WACOG Injections	$2.366	$2.847	$3.585	$3.773	$3.029	$2.507	$2.406	$2.410	$2.393	$2.396	$2.325	$2.389	
Injection Charge	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	$0.024	
Total Injection Cost	$2.390	$2.871	$3.609	$3.796	$3.052	$2.531	$2.429	$2.434	$2.417	$2.420	$2.349	$2.412	

Combined Storage	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	
Beginning Inventory	4,257,865	4,206,185	3,628,305	2,731,518	1,911,606	1,163,820	1,174,804	1,678,457	2,167,179	2,502,966	2,942,148	3,658,492	
Volume Withdrawn	51,680	577,880	896,787	819,912	747,786	51,601	0	0	0	0	0	0	3,145,646
Volume Injected	0	0	0	0	0	62,585	503,653	488,722	335,786	439,182	716,344	599,374	3,145,647
Begining Inventory $	$9,552,094	$9,436,055	$8,139,654	$6,127,822	$4,288,451	$2,610,887	$2,653,444	$3,877,029	$5,066,626	$5,878,226	$6,941,021	$8,623,396	
Volume Withdrawn $ (1)	$116,040	$1,297,517	$2,013,563	$1,840,954	$1,679,009	$115,861	$0	$0	$0	$0	$0	$0	$7,062,944
Volume Injected $	$0	$0	$0	$0	$0	$158,419	$1,223,585	$1,189,596	$811,601	$1,062,795	$1,682,374	$1,445,909	$7,574,279
Ending Inventory	4,206,185	3,628,305	2,731,518	1,911,606	1,163,820	1,174,804	1,678,457	2,167,179	2,502,966	2,942,148	3,658,492	4,257,865	
Ending Inventory $	$9,436,055	$8,139,654	$6,127,822	$4,288,451	$2,610,887	$2,653,444	$3,877,029	$5,066,626	$5,878,226	$6,941,021	$8,623,396	$10,069,304	
Average $/MMBtu	$2.2434	$2.2434	$2.2434	$2.2434	$2.2434	$2.2586	$2.3099	$2.3379	$2.3485	$2.3592	$2.3571	$2.3649	
Withdrawal Costs	**$1,082**	**$18,811**	**$22,565**	**$21,560**	**$19,001**	**$1,019**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$84,038**
Transportation Costs	**$771**	**$16,231**	**$45,901**	**$40,721**	**$41,270**	**$1,126**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$146,020**
Costs Allocated to Fuel	**$2,948**	**$35,298**	**$46,955**	**$43,460**	**$36,951**	**$2,688**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$168,300**
Storage Value Less Fuel	**$113,091**	**$1,262,219**	**$1,966,608**	**$1,797,495**	**$1,642,057**	**$113,173**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$6,894,644**
Delivered Volumes	50,366	562,145	875,857	800,540	731,314	50,411	0	0	0	0	0	0	3,070,633
Hedge Amortization	$100	$1,116	$1,732	$1,583	$1,444	$100	$0	$0	$0	$0	$0	$0	$6,075

- amortization of hedges on injection gas
$6,075
(1) Includes Hedge Amortization
3,145,646 Withdrawal

REDACTED

Storage Withdrawal Variable Costs
2017-2018 GCR Storage Estimate

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Storage Withdrawals at Facility (Dth)													
TENNESSEE FSMA 501	0	16,261	164,743	159,800	152,789	3,474	0	0	0	0	0	0	497,067
DOMINION GSS 300170	0	16,540	45,331	37,931	4,082	0	0	0	0	0	0	0	103,884
DOMINION GSS 300168	746	22,855	30,735	36,972	36,415	0	0	0	0	0	0	0	127,723
DOMINION GSS 300171	0	31,471	69,861	58,935	22,883	0	0	0	0	0	0	0	183,150
DOMINION GSSTE 600045	50,934	71,465	71,465	64,549	71,465	44,310	0	0	0	0	0	0	374,188
TETCO FSS-1 400515	0	14,071	14,071	14,071	12,382	0	0	0	0	0	0	0	54,595
TETCO SS-1 400221	0	286,440	290,860	290,860	260,377	0	0	0	0	0	0	0	1,128,537
TETCO SS-1 400185	0	12,728	12,728	12,728	11,201	0	0	0	0	0	0	0	49,386
DOMINION GSS 300169	0	45,324	55,647	50,802	44,744	0	0	0	0	0	0	0	196,516
COLUMBIA FSS 9630	0	45,883	72,953	53,954	25,048	3,818	0	0	0	0	0	0	201,656
TENNESSEE 62918	0	8,429	61,887	32,804	100,580	0	0	0	0	0	0	0	203,700
TOTAL WITHDRAWALS	51,680	571,467	890,281	813,406	741,967	51,601	0	0	0	0	0	0	3,120,402
Storage Withdrawal Charges													
Tennessee Withdrawal	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	$0.0087	
Dominion GSS Withdrawal	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	$0.0161	
Dominion GSS-TE Withdrawal	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	$0.0210	
TETCO SS-1 Withdrawal	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	$0.0471	
TETCO FSS-1 Withdrawal	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	$0.0307	
Columbia Withdrawal	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	$0.0153	
Storage Withdrawal Costs													
Tennessee Withdrawal	$0	$215	$1,972	$1,676	$2,204	$30	$0	$0	$0	$0	$0	$0	$6,097
Dominion GSS Withdrawal	$12	$1,871	$3,245	$2,973	$1,741	$0	$0	$0	$0	$0	$0	$0	$9,841
Dominion GSS-TE Withdrawal	$1,070	$1,501	$1,501	$1,356	$1,501	$931	$0	$0	$0	$0	$0	$0	$7,858
TETCO SS-1 Withdrawal	$0	$14,091	$14,299	$14,299	$12,791	$0	$0	$0	$0	$0	$0	$0	$55,480
TETCO FSS-1 Withdrawal	$0	$432	$432	$432	$380	$0	$0	$0	$0	$0	$0	$0	$1,676
Columbia Withdrawal	$0	$702	$1,116	$825	$383	$58	$0	$0	$0	$0	$0	$0	$3,085
Total Storage Withdrawal Costs	$1,082	$18,811	$22,565	$21,560	$19,001	$1,019	$0	$0	$0	$0	$0	$0	$84,038

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Storage Withdrawals at Gate (Dth)													
TENNESSEE FSMA 501	0	16,077	162,881	157,995	151,063	3,435	0	0	0	0	0	0	491,450
DOMINION GSS 300170	0	16,034	43,945	36,771	3,958	0	0	0	0	0	0	0	100,707
DOMINION GSS 300168	738	22,597	30,387	36,554	36,003	0	0	0	0	0	0	0	126,279
DOMINION GSS 300171	0	30,764	68,291	57,610	22,368	0	0	0	0	0	0	0	179,033
DOMINION GSSTE 600045	49,628	69,626	69,626	62,888	69,626	43,248	0	0	0	0	0	0	364,642
TETCO FSS-1 400515	0	13,651	13,651	13,651	12,013	0	0	0	0	0	0	0	52,968
TETCO SS-1 400221	0	283,662	288,039	288,039	257,851	0	0	0	0	0	0	0	1,117,591
TETCO SS-1 400185	0	12,605	12,605	12,605	11,092	0	0	0	0	0	0	0	48,907
DOMINION GSS 300169	0	44,009	54,033	49,328	43,446	0	0	0	0	0	0	0	190,815
COLUMBIA FSS 9630	0	44,787	71,211	52,666	24,450	3,729	0	0	0	0	0	0	196,842
TENNESSEE 62918	0	8,334	61,187	32,433	99,444	0	0	0	0	0	0	0	201,398
TOTAL WITHDRAWALS	50,366	562,145	875,857	800,540	731,314	50,411	0	0	0	0	0	0	3,070,633
Storage Transportation Charges													
Tennessee Transport	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	
Dominion Transport on TETCO/AGT	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	$0.0138	
Dominion Transport on DTI/TETCO/AGT	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	$0.0302	
Dominion Transport on Tennessee	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	
Dominion Transport on DTI/Tennessee	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	$0.1329	
TETCO SS-1 Transport	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
TETCO FSS-1 Transport	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	$0.0478	
Columbia Transport	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	$0.0347	
Storage Transportation Costs													
Tennessee Transport	$0	$2,844	$26,104	$22,185	$29,184	$400	$0	$0	$0	$0	$0	$0	$80,717
Dominion Transport on TETCO/AGT	$685	$1,385	$1,903	$1,663	$1,270	$597	$0	$0	$0	$0	$0	$0	$7,503
Dominion Transport on DTI/TETCO/AGT	$0	$1,329	$1,632	$1,490	$1,312	$0	$0	$0	$0	$0	$0	$0	$5,763
Dominion Transport on Tennessee	$86	$2,633	$3,540	$4,259	$4,194	$0	$0	$0	$0	$0	$0	$0	$14,712
Dominion Transport on DTI/Tennessee	$0	$2,131	$5,840	$4,887	$526	$0	$0	$0	$0	$0	$0	$0	$13,384
TETCO SS-1 Transport	$0	$3,703	$3,758	$3,758	$3,362	$0	$0	$0	$0	$0	$0	$0	$14,581
TETCO FSS-1 Transport	$0	$652	$652	$652	$574	$0	$0	$0	$0	$0	$0	$0	$2,531
Columbia Transport	$0	$1,554	$2,471	$1,827	$848	$129	$0	$0	$0	$0	$0	$0	$6,830
Total Storage Transportation Costs	$771	$16,231	$45,901	$40,721	$41,270	$1,126	$0	$0	$0	$0	$0	$0	$146,020
Total Storage Variable Costs	$1,852	$35,043	$68,466	$62,281	$60,271	$2,146	$0	$0	$0	$0	$0	$0	$230,058

REDACTED

LNG Estimate for 2017 - 2018

NATIONAL GRID - RI SERVICE AREA
NOVEMBER 2017 - OCTOBER 2018

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
LNG Supply Costs													
07/31/2017 NYMEX	$2.920	$3.079	$3.173	$3.164	$3.119	$2.795	$2.769	$2.795	$2.821	$2.826	$2.806	$2.826	
Trucking GDF Suez	[redacted]												
Basis ENGIE Gas Contract													
Delivered Cost ENGIE Gas													
Trucking Gaz Metro	[redacted]												
Gaz Metro Contract Commodity													
Delivered Cost Gaz Metro													
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Combined LNG Inventory													
Beginning Inventory Volume	[redacted]												
Engie Gas Injections													
Gaz Metro Injections													
Volume Withdrawn	15,306	15,817	392,455	149,919	15,817	15,306	15,817	15,306	15,817	15,817	15,306	15,817	698,500
Begining Inventory	[redacted]												
Injection Costs													
Withdrawal Costs	$75,434.53	$77,949	$1,934,136	$738,848	$77,949	$75,435	$77,411	$74,643	$77,133	$78,855	$78,219	$80,052	$3,446,064
Ending Volume	[redacted]												
Ending Inventory													
Average Cost Per Dth	$4.928	$4.928	$4.928	$4.928	$4.928	$4.894	$4.877	$4.877	$4.986	$5.110	$5.061	$5.157	
Portable Vapor													
Portable Vapor Volume	0	0	0	0	0	0	0	0	0	0	0	0	
Average Cost Per Dth	[redacted]												
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total All LNG Costs	**$75,435**	**$77,949**	**$1,934,136**	**$738,848**	**$77,949**	**$75,435**	**$77,411**	**$74,643**	**$77,133**	**$78,855**	**$78,219**	**$80,052**	**$3,446,064**

REDACTED

PRELIMINARY **PRELIMINARY**

12 Month Forward Pricing

National Grid
Summary of Transportation Capacity Release
Pipeline Path Availability and Pricing
November 2017 - October 2018

Path to City Gate	As of 8/1/17 Existing Releases	Total Available	Remaining Available	Cost per Dth	New Credit or Surcharge	Old Credit or Surcharge
Company Weighted Average				**$0.6168**		
Tennessee Zone 1	9,500	9,500	0	$1.0067	($0.3899)	($0.6327)
Tennessee Dracut	8	1,000	992	$1.7441	($1.1273)	($0.9495)
Algonquin @ Lambertville, NJ	2,714	2,714	0	$0.3507	$0.2661	$0.2242
Texas Eastern - South Texas Algonquin @ Lambertville, NJ	4,043	4,044	1	$1.1166	($0.4998)	($0.8044)
Texas Eastern - West La Algonquin @ Lambertville, NJ	8,500	8,500	0	$0.8717	($0.2549)	($0.5921)
Texas Eastern - East La Algonquin @ Lambertville, NJ	6,500	6,500	0	$0.7630	($0.1462)	($0.4710)
Columbia (Maumee/Downington) at 5:1 ratio*	2,282	3,000	718	$0.3698	$0.2470	($0.0396)
Totals:	33,547	35,258	1,711			

REDACTED

Gas Year 2017 - 2018
TEXAS EASTERN SOUTH TEXAS SUPPLY PATH COST MATRIX
CITY GATE DELIVERED MDQ = 4,044

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
TETCO STX SUPPLY ZONE DEMAND	$/Dth	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	
TECCO WLA SUPPLY ZONE DEMAND	$/Dth	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	
TETCO ELA SUPPLY ZONE DEMAND	$/Dth	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	
TETCO M1 TO M3 DEMAND	$/Dth	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	
ALGONQUIN AFT-E DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	
VARIABLE														
TETCO USAGE STX TO M3	$/Dth	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	
ALGONQUIN USAGE	$/Dth	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	($0.0950)	($0.1470)	($0.1430)	($0.1420)	($0.1170)	($0.0470)	($0.0650)	($0.0700)	($0.0230)	($0.0250)	($0.0380)	($0.0320)	
NET COST AFTER BASIS	$/Dth	$2.8250	$2.9320	$3.0300	$3.0220	$3.0020	$2.7480	$2.7040	$2.7250	$2.7980	$2.8010	$2.7680	$2.7940	
BILLING UNITS														
FIXED														
TETCO STX SUPPLY ZONE DEMAND	$/Dth	4,081	4,084	4,084	4,084	4,084	4,081	4,081	4,081	4,081	4,081	4,081	4,081	
TECCO WLA SUPPLY ZONE DEMAND	$/Dth	4,081	4,084	4,084	4,084	4,084	4,081	4,081	4,081	4,081	4,081	4,081	4,081	
TETCO ELA SUPPLY ZONE DEMAND	$/Dth	4,081	4,084	4,084	4,084	4,084	4,081	4,081	4,081	4,081	4,081	4,081	4,081	
TETCO M1 TO M3 DEMAND	$/Dth	4,081	4,084	4,084	4,084	4,084	4,081	4,081	4,081	4,081	4,081	4,081	4,081	
ALGONQUIN AFT-E DEMAND	$/Dth	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	48,528
VARIABLE														
PURCHASE VOLUMES	Dth	127,178	132,515	132,515	119,691	132,515	127,178	131,417	127,178	131,417	131,417	127,178	131,417	1,551,618
TETCO USAGE STX TO M3	Dth	122,434	126,592	126,592	114,341	126,592	122,434	126,515	122,434	126,515	126,515	122,434	126,515	1,489,915
ALGONQUIN USAGE	Dth	121,320	125,364	125,364	113,232	125,364	121,320	125,364	121,320	125,364	125,364	121,320	125,364	1,476,060
DELIVERED VOLUMES	Dth	121,320	125,364	125,364	113,232	125,364	121,320	125,364	121,320	125,364	125,364	121,320	125,364	1,476,060
FUEL USE %														
TETCO STX TO M3 FUEL	%	3.73%	4.47%	4.47%	4.47%	4.47%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	
ALGONQUIN AFT-E FUEL	%	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
TRANSPORTATION COST														
FIXED														
TETCO STX SUPPLY ZONE DEMAND	$	$27,776	$27,793	$27,793	$27,793	$27,793	$27,776	$27,776	$27,776	$27,776	$27,776	$27,776	$27,776	$333,382
TECCO WLA SUPPLY ZONE DEMAND	$	$11,533	$11,540	$11,540	$11,540	$11,540	$11,533	$11,533	$11,533	$11,533	$11,533	$11,533	$11,533	$138,428
TETCO ELA SUPPLY ZONE DEMAND	$	$9,693	$9,699	$9,699	$9,699	$9,699	$9,693	$9,693	$9,693	$9,693	$9,693	$9,693	$9,693	$116,336
TETCO M1 TO M3 DEMAND	$	$43,464	$43,490	$43,490	$43,490	$43,490	$43,464	$43,464	$43,464	$43,464	$43,464	$43,464	$43,464	$521,675
ALGONQUIN AFT-E DEMAND	$	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$26,583	$318,994
VARIABLE														
TETCO USAGE STX TO M3	$	$8,289	$8,570	$8,570	$7,741	$8,570	$8,289	$8,565	$8,289	$8,565	$8,565	$8,289	$8,565	$100,867
ALGONQUIN USAGE	$	$1,517	$1,567	$1,567	$1,415	$1,567	$1,517	$1,567	$1,517	$1,567	$1,567	$1,517	$1,567	$18,451
PURCHASE COST	$	$359,278	$388,535	$401,522	$361,707	$397,811	$349,485	$355,352	$346,560	$367,705	$368,099	$352,028	$367,180	$4,415,262
TOTAL FIXED	$	$119,049	$119,105	$119,105	$119,105	$119,105	$119,049	$119,049	$119,049	$119,049	$119,049	$119,049	$119,049	$1,428,814
TOTAL VARIABLE	$	$369,083	$398,672	$411,659	$370,863	$407,948	$359,290	$365,484	$356,365	$377,837	$378,232	$361,834	$377,312	$4,534,580
DELIVERED COST AT NYMEX	$	$354,254	$385,996	$397,780	$358,266	$391,010	$339,089	$347,133	$339,089	$353,652	$354,279	$340,424	$354,279	$4,315,251
NET NON-GAS VARIABLE COST	$	$14,828	$12,677	$13,879	$12,597	$16,938	$20,201	$18,351	$17,276	$24,185	$23,953	$21,410	$23,033	$219,328
AVERAGE NON-GAS VARIABLE COST	$/Dth	**$0.1222**	**$0.1011**	**$0.1107**	**$0.1113**	**$0.1351**	**$0.1665**	**$0.1464**	**$0.1424**	**$0.1929**	**$0.1911**	**$0.1765**	**$0.1837**	**$0.1486**
AVERAGE FIXED COST	$/Dth													$29.4431
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.9680**
TOTAL PATH COST	$/Dth													**$1.1166**

REDACTED

Gas Year 2017 - 2018
TEXAS EASTERN WEST LOUISIANA SUPPLY PATH TO ALGONQUIN CITY GATE
CITY GATE DELIVERED MDQ = 8,500

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
TETCO WLA SUPPLY ZONE DEMAND	$/Dth	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	
TETCO ELA SUPPLY ZONE DEMAND	$/Dth	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	
TETCO M1 TO M3 DEMAND	$/Dth	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	
ALGONQUIN AFT-E DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	
VARIABLE														
TETCO USAGE WLA TO M3	$/Dth	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	
ALGONQUIN USAGE	$/Dth	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	($0.0880)	($0.0970)	($0.1050)	($0.0920)	($0.0930)	($0.0800)	($0.0800)	($0.0900)	($0.0850)	($0.0850)	($0.0900)	($0.0820)	
NET COST AFTER BASIS	$/Dth	$2.8320	$2.9820	$3.0680	$3.0720	$3.0260	$2.7150	$2.6890	$2.7050	$2.7360	$2.7410	$2.7160	$2.7440	
BILLING UNITS														
FIXED														
TETCO WLA SUPPLY ZONE DEMAND	Dth	8,578	8,583	8,583	8,583	8,583	8,578	8,578	8,578	8,578	8,578	8,578	8,578	
TETCO ELA SUPPLY ZONE DEMAND	Dth	8,578	8,583	8,583	8,583	8,583	8,578	8,578	8,578	8,578	8,578	8,578	8,578	
TETCO M1 TO M3 DEMAND	Dth	8,578	8,583	8,583	8,583	8,583	8,578	8,578	8,578	8,578	8,578	8,578	8,578	
ALGONQUIN AFT-E DEMAND	Dth	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	102,000
VARIABLE														
PURCHASE VOLUMES	Dth	266,924	278,008	278,008	251,104	278,008	266,924	275,822	266,924	275,822	275,822	266,924	275,822	3,256,111
TETCO USAGE WLA TO M3	Dth	257,342	266,081	266,081	240,331	266,081	257,342	265,920	257,342	265,920	265,920	257,342	265,920	3,131,621
ALGONQUIN USAGE	Dth	255,000	263,500	263,500	238,000	263,500	255,000	263,500	255,000	263,500	263,500	255,000	263,500	3,102,500
DELIVERED VOLUMES	Dth	255,000	263,500	263,500	238,000	263,500	255,000	263,500	255,000	263,500	263,500	255,000	263,500	3,102,500
FUEL USE %														
TETCO WLA TO M3 FUEL	%	3.59%	4.29%	4.29%	4.29%	4.29%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	
ALGONQUIN AFT-E FUEL	%	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
TRANSPORTATION COST														
FIXED														
TETCO WLA SUPPLY ZONE DEMAND	$	$24,242	$24,256	$24,256	$24,256	$24,256	$24,242	$24,242	$24,242	$24,242	$24,242	$24,242	$24,242	$290,958
TETCO ELA SUPPLY ZONE DEMAND	$	$20,373	$20,385	$20,385	$20,385	$20,385	$20,373	$20,373	$20,373	$20,373	$20,373	$20,373	$20,373	$244,524
TETCO M1 TO M3 DEMAND	$	$91,356	$91,412	$91,412	$91,412	$91,412	$91,356	$91,356	$91,356	$91,356	$91,356	$91,356	$91,356	$1,096,498
ALGONQUIN AFT-E DEMAND	$	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$55,874	$670,487
VARIABLE														
TETCO USAGE WLA TO M3	$	$16,599	$17,162	$17,162	$15,501	$17,162	$16,599	$17,152	$16,599	$17,152	$17,152	$16,599	$17,152	$201,990
ALGONQUIN USAGE	$	$3,188	$3,294	$3,294	$2,975	$3,294	$3,188	$3,294	$3,188	$3,294	$3,294	$3,188	$3,294	$38,781
PURCHASE COST	$	$755,930	$829,018	$852,927	$771,390	$841,251	$724,700	$741,685	$722,030	$754,649	$756,028	$724,967	$756,855	$9,231,430
TOTAL FIXED	$	$191,845	$191,927	$191,927	$191,927	$191,927	$191,845	$191,845	$191,845	$191,845	$191,845	$191,845	$191,845	$2,302,466
TOTAL VARIABLE	$	$775,716	$849,474	$873,383	$789,866	$861,707	$744,486	$762,131	$741,817	$775,094	$776,473	$744,753	$777,301	$9,472,201
DELIVERED VOLUMES AT NYMEX	$	$744,600	$811,317	$836,086	$753,032	$821,857	$712,725	$729,632	$712,725	$743,334	$744,651	$715,530	$744,651	$9,070,138
NET NON-GAS VARIABLE COST	$	$31,116	$38,158	$37,298	$36,834	$39,850	$31,761	$32,499	$29,092	$31,761	$31,822	$29,223	$32,650	$402,063
AVERAGE NON-GAS VARIABLE COST	$/Dth	**$0.1220**	**$0.1448**	**$0.1415**	**$0.1548**	**$0.1512**	**$0.1246**	**$0.1233**	**$0.1141**	**$0.1205**	**$0.1208**	**$0.1146**	**$0.1239**	**$0.1296**
AVERAGE FIXED COST	$/Dth													$22.5732
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.7421**
TOTAL PATH COST	$/Dth													**$0.8717**

REDACTED

Gas Year 2017 - 2018
TEXAS EASTERN EAST LOUISIANA SUPPLY PATH TO ALGONQUIN CITY GATE
CITY GATE DELIVERED MDQ = 6,500

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
TETCO ELA SUPPLY ZONE DEMAND	$/Dth	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	
TETCO M1 TO M3 DEMAND	$/Dth	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	
ALGONQUIN AFT-E DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	
VARIABLE														
TETCO USAGE ELA TO M3	$/Dth	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	
ALGONQUIN USAGE	$/Dth	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	($0.1000)	($0.0970)	($0.1030)	($0.0900)	($0.0900)	($0.1030)	($0.1030)	($0.1130)	($0.1070)	($0.1080)	($0.1120)	($0.1050)	
NET COST AFTER BASIS	$/Dth	$2.8200	$2.9820	$3.0700	$3.0740	$3.0290	$2.6920	$2.6660	$2.6820	$2.7140	$2.7180	$2.6940	$2.7210	
BILLING UNITS														
FIXED														
TETCO ELA SUPPLY ZONE DEMAND	Dth	6,560	6,564	6,564	6,564	6,564	6,560	6,560	6,560	6,560	6,560	6,560	6,560	
TETCO M1 TO M3 DEMAND	Dth	6,560	6,564	6,564	6,564	6,564	6,560	6,560	6,560	6,560	6,560	6,560	6,560	
ALGONQUIN AFT-E DEMAND	Dth	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	78,000
VARIABLE														
PURCHASE VOLUMES	Dth	204,203	212,683	212,683	192,101	212,683	204,203	211,010	204,203	211,010	211,010	204,203	211,010	2,491,003
TETCO USAGE ELA TO M3	Dth	196,791	203,474	203,474	183,783	203,474	196,791	203,350	196,791	203,350	203,350	196,791	203,350	2,394,769
ALGONQUIN USAGE	Dth	195,000	201,500	201,500	182,000	201,500	195,000	201,500	195,000	201,500	201,500	195,000	201,500	2,372,500
DELIVERED VOLUMES	Dth	195,000	201,500	201,500	182,000	201,500	195,000	201,500	195,000	201,500	201,500	195,000	201,500	2,372,500
FUEL USE %														
TETCO ELA TO M3 FUEL	%	3.63%	4.33%	4.33%	4.33%	4.33%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	
ALGONQUIN AFT-E FUEL	%	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
TRANSPORTATION COST														
FIXED														
TETCO ELA SUPPLY ZONE DEMAND	$	$15,579	$15,589	$15,589	$15,589	$15,589	$15,579	$15,579	$15,579	$15,579	$15,579	$15,579	$15,579	$186,989
TETCO M1 TO M3 DEMAND	$	$69,861	$69,903	$69,903	$69,903	$69,903	$69,861	$69,861	$69,861	$69,861	$69,861	$69,861	$69,861	$838,498
ALGONQUIN AFT-E DEMAND	$	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$42,727	$512,725
VARIABLE														
TETCO USAGE ELA TO M3	$	$12,339	$12,758	$12,758	$11,523	$12,758	$12,339	$12,750	$12,339	$12,750	$12,750	$12,339	$12,750	$150,152
ALGONQUIN USAGE	$	$2,438	$2,519	$2,519	$2,275	$2,519	$2,438	$2,519	$2,438	$2,519	$2,519	$2,438	$2,519	$29,656
PURCHASE COST	$	$575,854	$634,220	$652,936	$590,517	$644,216	$549,715	$562,553	$547,673	$572,682	$573,526	$550,124	$574,159	$7,028,176
TOTAL FIXED	$	$128,167	$128,219	$128,219	$128,219	$128,219	$128,167	$128,167	$128,167	$128,167	$128,167	$128,167	$128,167	$1,538,212
TOTAL VARIABLE	$	$590,630	$649,497	$668,213	$604,316	$659,493	$564,492	$577,822	$562,450	$587,950	$588,794	$564,900	$589,427	$7,207,984
DELIVERED VOLUMES AT NYMEX	$	$569,400	$620,419	$639,360	$575,848	$628,479	$545,025	$557,954	$545,025	$568,432	$569,439	$547,170	$569,439	$6,935,988
NET NON-GAS VARIABLE COST	$	$21,230	$29,078	$28,853	$28,468	$31,014	$19,467	$19,868	$17,425	$19,519	$19,355	$17,730	$19,988	$271,997
AVERAGE NON-GAS VARIABLE COST	$/Dth	**$0.1089**	**$0.1443**	**$0.1432**	**$0.1564**	**$0.1539**	**$0.0998**	**$0.0986**	**$0.0894**	**$0.0969**	**$0.0961**	**$0.0909**	**$0.0992**	**$0.1146**
AVERAGE FIXED COST	$/Dth													$19.7207
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.6484**
TOTAL PATH COST	$/Dth													**$0.7630**

REDACTED

Gas Year 2017 - 2018
MAUMEE/DOWNINGTON COLUMBIA PATH TO CITY GATE
CITY GATE DELIVERED MDQ = 3,000

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
COLUMBIA FTS DEMAND	$/Dth	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	
ALGONQUIN DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	
VARIABLE														
COLUMBIA USAGE	$/Dth	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
ALGONQUIN USAGE	$/Dth	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY BASIS MAUMEE	$/Dth	($0.2010)	($0.2050)	($0.2200)	($0.2020)	($0.2100)	($0.1700)	($0.1830)	($0.2270)	($0.2430)	($0.2950)	($0.3600)	($0.3050)	
SUPPLY BASIS DOWNINGTON	$/Dth	$0.1000	$0.6700	$2.7370	$2.7200	$0.4700	($0.1500)	($0.2830)	($0.2870)	($0.0700)	($0.0920)	($0.4100)	($0.3250)	
NET COST AFTER BASIS MAUMEE	$/Dth	$2.7190	$2.8740	$2.9530	$2.9620	$2.9090	$2.6250	$2.5860	$2.5680	$2.5780	$2.5310	$2.4460	$2.5210	
NET COST AFTER BASIS DOWNINGTON	$/Dth	$3.0200	$3.7490	$5.9100	$5.8840	$3.5890	$2.6450	$2.4860	$2.5080	$2.7510	$2.7340	$2.3960	$2.5010	
BILLING UNITS														
FIXED														
COLUMBIA FTS DEMAND	Dth	3,044	3,044	3,044	3,044	3,044	3,044	3,044	3,044	3,044	3,044	3,044	3,044	
ALGONQUIN DEMAND	Dth	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000
VARIABLE														
PURCHASE VOLUMES MAUMEE	Dth	76,788	78,259	78,259	70,686	78,259	75,689	78,212	75,689	78,212	78,212	75,689	78,212	
PURCHASE VOLUMES DOWNINGTON	Dth	15,358	15,652	15,652	14,137	15,652	15,138	15,642	15,138	15,642	15,642	15,138	15,642	
COLUMBIA USAGE	Dth	90,827	93,911	93,911	84,823	93,911	90,827	93,854	90,827	93,854	93,854	90,827	93,854	
ALGONQUIN USAGE	Dth	90,000	93,000	93,000	84,000	93,000	90,000	93,000	90,000	93,000	93,000	90,000	93,000	
DELIVERED VOLUMES MAUMEE	Dth	75,000	77,500	77,500	70,000	77,500	75,000	77,500	75,000	77,500	77,500	75,000	77,500	912,500
DELIVERED VOLUMES DOWNINGTON	Dth	15,000	15,500	15,500	14,000	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	182,500
FUEL USE %														
COLUMBIA FUEL	%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
ALGONQUIN AFT-E FUEL	%	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
TRANSPORTATION COST														
FIXED														
COLUMBIA FTS DEMAND	$	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$19,750	$236,998
ALGONQUIN DEMAND	$	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$19,720	$236,642
VARIABLE														
COLUMBIA USAGE	$	$2,035	$2,104	$2,104	$1,900	$2,104	$2,035	$2,102	$2,035	$2,102	$2,102	$2,035	$2,102	$24,758
ALGONQUIN USAGE	$	$1,125	$1,163	$1,163	$1,050	$1,163	$1,125	$1,163	$1,125	$1,163	$1,163	$1,125	$1,163	$13,688
PURCHASE COST MAUMEE	$	$208,788	$224,917	$231,099	$209,371	$227,656	$198,683	$202,256	$194,369	$201,630	$197,954	$185,135	$197,172	$2,479,028
PURCHASE COST DOWNINGTON	$	$46,380	$58,679	$92,502	$83,183	$56,174	$40,039	$38,887	$37,965	$43,032	$42,766	$36,270	$39,122	$615,000
TOTAL FIXED	$	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$39,470	$473,640
TOTAL VARIABLE	$	$258,327	$286,861	$326,868	$295,504	$287,096	$241,882	$244,407	$235,494	$247,927	$243,985	$224,564	$239,558	$3,132,473
DELIVERED VOLUMES AT NYMEX	$	$262,800	$286,347	$295,089	$265,776	$290,067	$251,550	$257,517	$251,550	$262,353	$262,818	$252,540	$262,818	$3,201,225
NET NON-GAS VARIABLE COST	$	-$4,473	$514	$31,779	$29,728	-$2,971	-$9,668	-$13,110	-$16,056	-$14,426	-$18,833	-$27,976	-$23,260	-$68,752
AVERAGE NON-GAS VARIABLE COST	$/Dth	**-$0.0497**	**$0.0055**	**$0.3417**	**$0.3539**	**-$0.0319**	**-$0.1074**	**-$0.1410**	**-$0.1784**	**-$0.1551**	**-$0.2025**	**-$0.3108**	**-$0.2501**	**-$0.0628**
AVERAGE FIXED COST	$/Dth													$13.1567
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.4325**
TOTAL PATH COST	$/Dth													**$0.3698**

REDACTED

Gas Year 2017 - 2018
TENNESSEE ZONE 1 TO CITY GATE
CITY GATE DELIVERED MDQ = 9,500

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
TENNESSEE ZONE 1 TO 6 DEMAND	$/Dth	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	
VARIABLE														
TENNESSE ZONE 1 TO 6 USAGE	$/Dth	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	($0.1420)	($0.0950)	($0.1290)	($0.0600)	($0.0970)	($0.1150)	($0.1270)	($0.1330)	($0.1050)	($0.0840)	($0.1020)	($0.1000)	
NET COST AFTER BASIS	$/Dth	$2.7780	$2.9840	$3.0440	$3.1040	$3.0220	$2.6800	$2.6420	$2.6620	$2.7160	$2.7420	$2.7040	$2.7260	
BILLING UNITS														
FIXED														
TENNESSEE ZONE 1 TO 6 DEMAND	Dth	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	114,000
VARIABLE														
PURCHASE VOLUMES	Dth	295,950	305,815	305,815	276,220	305,815	295,950	305,815	295,950	305,815	305,815	295,950	305,815	3,600,727
TENNESSE ZONE 1 TO 6 USAGE	Dth	285,000	294,500	294,500	266,000	294,500	285,000	294,500	285,000	294,500	294,500	285,000	294,500	3,467,500
DELIVERED VOLUMES	Dth	285,000	294,500	294,500	266,000	294,500	285,000	294,500	285,000	294,500	294,500	285,000	294,500	3,467,500
FUEL USE %														
TENNESSEE ZONE 1 TO 6 FUEL	%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	
TRANSPORTATION COST														
FIXED														
TENNESSEE ZONE 1 TO 6 DEMAND	$	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$2,442,005
VARIABLE														
TENNESSE ZONE 1 TO 6 USAGE	$	$86,042	$88,910	$88,910	$80,305	$88,910	$86,042	$88,910	$86,042	$88,910	$88,910	$86,042	$88,910	$1,046,838
PURCHASE COST	$	$822,150	$912,552	$930,901	$857,387	$924,173	$793,146	$807,964	$787,819	$830,594	$838,545	$800,249	$833,652	$10,139,134
TOTAL FIXED	$	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$203,500	$2,442,005
TOTAL VARIABLE	$	$908,191	$1,001,462	$1,019,811	$937,693	$1,013,083	$879,188	$896,873	$873,861	$919,504	$927,455	$886,291	$922,562	$11,185,972
DELIVERED VOLUMES AT NYMEX	$	$832,200	$906,766	$934,449	$841,624	$918,546	$796,575	$815,471	$796,575	$830,785	$832,257	$799,710	$832,257	$10,137,213
NET NON-GAS VARIABLE COST	$	$75,991	$94,696	$85,362	$96,069	$94,537	$82,613	$81,403	$77,286	$88,719	$95,198	$86,581	$90,305	$1,048,760
AVERAGE NON-GAS VARIABLE COST	$/Dth	**$0.2666**	**$0.3216**	**$0.2899**	**$0.3612**	**$0.3210**	**$0.2899**	**$0.2764**	**$0.2712**	**$0.3013**	**$0.3233**	**$0.3038**	**$0.3066**	**$0.3025**
AVERAGE FIXED COST	$/Dth													$21.4211
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.7043**
TOTAL PATH COST	$/Dth													**$1.0067**

REDACTED

Gas Year 2017 - 2018
ALGONQUIN LAMBERTVILLE TO CITY GATE
CITY GATE DELIVERED MDQ = 2,714

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
						UNIT PRICING								
FIXED														
ALGONQUIN AFT-E DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	
VARIABLE														
ALGONQUIN AFT-E USAGE	$/Dth	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	($0.4300)	$0.2950	$2.0930	$1.9950	$0.1200	($0.2950)	($0.4000)	($0.4130)	($0.3700)	($0.3800)	($0.5250)	($0.4500)	
NET COST AFTER BASIS	$/Dth	$2.4900	$3.3740	$5.2660	$5.1590	$3.2390	$2.5000	$2.3690	$2.3820	$2.4510	$2.4460	$2.2810	$2.3760	
						BILLING UNITS								
FIXED														
ALGONQUIN AFT-E DEMAND	Dth	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	2,714	32,568
VARIABLE														
PURCHASE VOLUMES	Dth	82,168	84,958	84,958	76,736	84,958	82,168	84,907	82,168	84,907	84,907	82,168	84,907	999,908
ALGONQUIN AFT-E USAGE	Dth	81,420	84,134	84,134	75,992	84,134	81,420	84,134	81,420	84,134	84,134	81,420	84,134	990,610
DELIVERED VOLUMES	Dth	81,420	84,134	84,134	75,992	84,134	81,420	84,134	81,420	84,134	84,134	81,420	84,134	990,610
						FUEL USE %								
ALGONQUIN AFT-E FUEL	%	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
						TRANSPORTATION COST								
FIXED														
ALGONQUIN AFT-E DEMAND	$	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$214,082
VARIABLE														
ALGONQUIN AFT-E USAGE	$	$1,018	$1,052	$1,052	$950	$1,052	$1,018	$1,052	$1,018	$1,052	$1,052	$1,018	$1,052	$12,383
PURCHASE COST	$	$204,598	$286,649	$447,389	$395,883	$275,179	$205,419	$201,144	$195,724	$208,106	$207,682	$187,425	$201,738	$3,016,935
TOTAL FIXED	$	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$17,840	$214,082
TOTAL VARIABLE	$	$205,615	$287,700	$448,441	$396,833	$276,231	$206,437	$202,196	$196,741	$209,158	$208,733	$188,442	$202,790	$3,029,318
DELIVERED VOLUMES AT NYMEX	$	$237,746	$259,049	$266,957	$240,439	$262,414	$227,569	$232,967	$227,569	$237,342	$237,763	$228,465	$237,763	$2,896,042
NET NON-GAS VARIABLE COST	$	-$32,131	$28,652	$181,484	$156,394	$13,817	-$21,132	-$30,772	-$30,828	-$28,184	-$29,029	-$40,022	-$34,973	$133,276
AVERAGE NON-GAS VARIABLE COST	$/Dth	**-$0.3946**	**$0.3405**	**$2.1571**	**$2.0580**	**$0.1642**	**-$0.2595**	**-$0.3657**	**-$0.3786**	**-$0.3350**	**-$0.3450**	**-$0.4916**	**-$0.4157**	**$0.1345**
AVERAGE FIXED COST	$/Dth													$6.5734
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.2161**
TOTAL PATH COST	$/Dth													**$0.3507**

REDACTED

Gas Year 2017 - 2018
TENNESSEE DRACUT TO CITY GATE
CITY GATE DELIVERED MDQ = 1,000

		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
UNIT PRICING														
FIXED														
TENNESSEE ZONE 6 TO 6 DEMAND	$/Dth	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	
VARIABLE														
TENNESSE ZONE 6 TO 6 USAGE	$/Dth	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	
07/31/2017 NYMEX	$/Dth	$2.9200	$3.0790	$3.1730	$3.1640	$3.1190	$2.7950	$2.7690	$2.7950	$2.8210	$2.8260	$2.8060	$2.8260	
SUPPLY AREA BASIS	$/Dth	$0.6720	$3.3100	$5.7250	$5.7220	$2.3150	$0.4470	$0.0970	$0.1730	$0.2150	$0.1650	($0.0320)	$0.0550	
NET COST AFTER BASIS	$/Dth	$3.5920	$6.3890	$8.8980	$8.8860	$5.4340	$3.2420	$2.8660	$2.9680	$3.0360	$2.9910	$2.7740	$2.8810	
BILLING UNITS														
FIXED														
TENNESSEE ZONE 6 TO 6 DEMAND	Dth	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
VARIABLE														
PURCHASE VOLUMES	Dth	30,003	31,003	31,003	28,003	31,003	30,003	31,003	30,003	31,003	31,003	30,003	31,003	365,037
TENNESSE ZONE 6 TO 6 USAGE	Dth	30,000	31,000	31,000	28,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000	365,000
DELIVERED VOLUMES	Dth	30,000	31,000	31,000	28,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000	365,000
FUEL USE %														
TENNESSEE ZONE 6 TO 6 FUEL	%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	
TRANSPORTATION COST														
FIXED														
TENNESSEE ZONE 6 TO 6 DEMAND	$	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$56,936
VARIABLE														
TENNESSE ZONE 6 TO 6 USAGE	$	$1,080	$1,116	$1,116	$1,008	$1,116	$1,080	$1,116	$1,080	$1,116	$1,116	$1,080	$1,116	$13,140
PURCHASE COST	$	$107,771	$198,079	$275,866	$248,833	$168,471	$97,270	$88,855	$89,049	$94,125	$92,730	$83,228	$89,320	$1,633,596
TOTAL FIXED	$	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$4,745	$56,936
TOTAL VARIABLE	$	$108,851	$199,195	$276,982	$249,841	$169,587	$98,350	$89,971	$90,129	$95,241	$93,846	$84,308	$90,436	$1,646,736
DELIVERED VOLUMES AT NYMEX	$	$87,600	$95,449	$98,363	$88,592	$96,689	$83,850	$85,839	$83,850	$87,451	$87,606	$84,180	$87,606	$1,067,075
NET NON-GAS VARIABLE COST	$	$21,251	$103,746	$178,619	$161,249	$72,898	$14,500	$4,132	$6,279	$7,790	$6,240	$128	$2,830	$579,661
AVERAGE NON-GAS VARIABLE COST	$/Dth	**$0.7084**	**$3.3466**	**$5.7619**	**$5.7589**	**$2.3515**	**$0.4833**	**$0.1333**	**$0.2093**	**$0.2513**	**$0.2013**	**$0.0043**	**$0.0913**	**$1.5881**
AVERAGE FIXED COST	$/Dth													$4.7447
AVERAGE COST AT 100% LOAD FACTOR	$/Dth													**$0.1560**
TOTAL PATH COST	$/Dth													**$1.7441**

REDACTED

CALCULATION OF SYSTEM WEIGHTED AVERAGE DEMAND COSTS **2017 - 2018 GCR PROJECTED PRICES**

August 1, 2017 **UNIT PRICES**

		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
PIPELINE FIXED COST UNIT PRICES $/Dth													
ALGONQUIN AFT-E/AFT-1 DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN AFT-3 DEMAND	$/Dth	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734	$6.5734
ALGONQUIN AFT-ES/1S DEMAND	$/Dth	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294	$2.6294
ALGONQUIN AIM DEMAND	$/Dth	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862	$41.7862
ALGONQUIN AFT-CLMS DEMAND (Crary St)	$/Dth	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
COLUMBIA FTS DEMAND	$/Dth	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890	$6.4890
DOMINION FTNN DEMAND	$/Dth	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671	$4.1671
IROQUOIS DEMAND	$/Dth	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.9982	$5.5997	$5.5997
NATIONAL FUEL DEMAND	$/Dth	$3.8067	$3.8067	$3.8067	$3.8067	$3.8067	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$/Dth	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$/Dth	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216	$21.5216
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$/Dth	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$/Dth	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211	$21.4211
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	$/Dth	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575	$22.7575
TENNESSEE FT-A DEMAND DRACUT	$/Dth	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447	$4.7447
TENNESSEE FT-A DEMAND ZONE 5 TO 6	$/Dth	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563	$7.1563
TEXAS EASTERN CDS STX DEMAND M3	$/Dth	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060	$6.8060
TEXAS EASTERN CDS WLA DEMAND M3	$/Dth	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260	$2.8260
TEXAS EASTERN CDS ELA DEMAND M3	$/Dth	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750	$2.3750
TEXAS EASTERN CDS ETX DEMAND M3	$/Dth	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890	$2.1890
TEXAS EASTERN CDS 1-3 DEMAND M3	$/Dth	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500	$10.6500
TEXAS EASTERN FTS DEMAND	$/Dth	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500	$5.3500
TEXAS EASTERN SCT STX DEMAND M3	$/Dth	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220	$2.7220
TEXAS EASTERN SCT WLA DEMAND M3	$/Dth	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310	$1.1310
TEXAS EASTERN SCT ELA DEMAND M3	$/Dth	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500	$0.9500
TEXAS EASTERN SCT ETX DEMAND M3	$/Dth	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760	$0.8760
TEXAS EASTERN SCT 1-3 DEMAND M3	$/Dth	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600	$4.2600
TRANSCANADA DEMAND	$/Dth	$13.4616	$13.9103	$13.9103	$12.5642	$13.9103	$13.4616	$13.9103	$13.4616	$13.9103	$13.9103	$13.4616	$13.9103
TRANSCO DEMAND ZONE 6 TO 6	$/Dth	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305	$0.1305
UNION DEMAND	$/Dth	$2.8170	$2.9109	$2.9109	$2.6292	$2.9109	$2.8170	$2.9109	$2.8170	$2.9109	$2.9109	$2.8170	$2.9109

REDACTED

CALCULATION OF SYSTEM WEIGHTED AVERAGE DEMAND COSTS **2017 - 2018 GCR PROJECTED PRICES**

August 1, 2017

		UNIT PRICES											
		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
PIPELINE FIXED COST BILLING UNITS													
ALGONQUIN AFT-E/AFT-1 DEMAND	DTH	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285	87,285
ALGONQUIN AFT-3 DEMAND	DTH	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063	11,063
ALGONQUIN AFT-ES/1S DEMAND	DTH	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079	4,079
ALGONQUIN AIM DEMAND	DTH	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
ALGONQUIN AFT-CLMS DEMAND (Crary St)	DTH	0	0	0	0	0	0	0	0	0	0	0	0
COLUMBIA FTS DEMAND	DTH	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455	47,455
DOMINION FTNN DEMAND	DTH	537	537	537	537	537	537	537	537	537	537	537	537
IROQUOIS DEMAND	DTH	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012
NATIONAL FUEL DEMAND	DTH	1,177	1,177	1,177	1,177	1,177	0	0	0	0	0	0	0
TENNESSEE FT-A DEMAND ZONE 0 TO 6	DTH	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
TENNESSEE FT-A DEMAND ZONE 1 TO 6	DTH	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
TENNESSEE FT-A DEMAND ZONE 0 TO 6	DTH	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022
TENNESSEE FT-A DEMAND ZONE 1 TO 6	DTH	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313	13,313
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	DTH	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600
TENNESSEE FT-A DEMAND DRACUT	DTH	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000
TENNESSEE FT-A DEMAND ZONE 5 TO 6	DTH	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067	2,067
TEXAS EASTERN CDS STX DEMAND M3	DTH	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844	13,844
TEXAS EASTERN CDS WLA DEMAND M3	DTH	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716
TEXAS EASTERN CDS ELA DEMAND M3	DTH	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758	23,758
TEXAS EASTERN CDS ETX DEMAND M3	DTH	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995	7,995
TEXAS EASTERN CDS 1-3 DEMAND M3	DTH	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934	45,934
TEXAS EASTERN FTS DEMAND	DTH	537	537	537	537	537	537	537	537	537	537	537	537
TEXAS EASTERN SCT STX DEMAND M3	DTH	571	571	571	571	571	571	571	571	571	571	571	571
TEXAS EASTERN SCT WLA DEMAND M3	DTH	648	648	648	648	648	648	648	648	648	648	648	648
TEXAS EASTERN SCT ELA DEMAND M3	DTH	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183
TEXAS EASTERN SCT ETX DEMAND M3	DTH	329	329	329	329	329	329	329	329	329	329	329	329
TEXAS EASTERN SCT 1-3 DEMAND M3	DTH	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099	2,099
TRANSCANADA DEMAND	DTH	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012	1,012
TRANSCO DEMAND ZONE 6 TO 6	DTH	37,200	38,440	38,440	34,720	38,440	37,200	38,440	37,200	38,440	38,440	37,200	38,440
UNION DEMAND	DTH	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025
PIPELINE ALLOCATED TO PEAKING													
TENNESSEE FT-A DEMAND DRACUT	DTH	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)	(28,500)

REDACTED

CALCULATION OF SYSTEM WEIGHTED AVERAGE DEMAND COSTS **2017 - 2018 GCR PROJECTED PRICES**

August 1, 2017

		UNIT PRICES												
		Nov-17	**Dec-17**	**Jan-18**	**Feb-18**	**Mar-18**	**Apr-18**	**May-18**	**Jun-18**	**Jul-18**	**Aug-18**	**Sep-18**	**Oct-18**	
PIPELINE FIXED COST DOLLARS														
ALGONQUIN AFT-E/AFT-1 DEMAND	$	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	$573,759	
ALGONQUIN AFT-3 DEMAND	$	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	$72,722	
ALGONQUIN AFT-ES/1S DEMAND	$	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	$10,725	
ALGONQUIN AIM DEMAND	$	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	$752,152	
ALGONQUIN AFT-CLMS DEMAND (Crary St)	$	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
COLUMBIA FTS DEMAND	$	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	$307,935	
DOMINION FTNN DEMAND	$	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	$2,238	
IROQUOIS DEMAND	$	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$6,070	$5,667	$5,667	
NATIONAL FUEL DEMAND	$	$4,480	$4,480	$4,480	$4,480	$4,480	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	$75,326	
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	$139,890	
TENNESSEE FT-A DEMAND ZONE 0 TO 6	$	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	$128,998	
TENNESSEE FT-A DEMAND ZONE 1 TO 6	$	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	$285,179	
TENNESSEE FT-A DEMAND ZONE 0 TO 6 CXN	$	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	$263,987	
TENNESSEE FT-A DEMAND DRACUT	$	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	$185,043	
TENNESSEE FT-A DEMAND ZONE 5 TO 6	$	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	$14,792	
TEXAS EASTERN CDS STX DEMAND M3	$	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	$94,222	
TEXAS EASTERN CDS WLA DEMAND M3	$	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	$44,413	
TEXAS EASTERN CDS ELA DEMAND M3	$	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	$56,425	
TEXAS EASTERN CDS ETX DEMAND M3	$	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	$17,501	
TEXAS EASTERN CDS 1-3 DEMAND M3	$	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	$489,197	
TEXAS EASTERN FTS DEMAND	$	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	$2,873	
TEXAS EASTERN SCT STX DEMAND M3	$	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	$1,554	
TEXAS EASTERN SCT WLA DEMAND M3	$	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	$733	
TEXAS EASTERN SCT ELA DEMAND M3	$	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	$1,124	
TEXAS EASTERN SCT ETX DEMAND M3	$	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	$288	
TEXAS EASTERN SCT 1-3 DEMAND M3	$	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	$8,942	
TRANSCANADA DEMAND	$	$13,623	$14,077	$14,077	$12,715	$14,077	$13,623	$14,077	$13,623	$14,077	$14,077	$13,623	$14,077	
TRANSCO DEMAND ZONE 6 TO 6	$	$4,854	$5,016	$5,016	$4,530	$5,016	$4,854	$5,016	$4,854	$5,016	$5,016	$4,854	$5,016	
UNION DEMAND	$	$2,887	$2,984	$2,984	$2,695	$2,984	$2,887	$2,984	$2,887	$2,984	$2,984	$2,887	$2,984	
WESTERLY LATERAL (Yankee)	$	[redacted]												
	$													
PIPELINE ALLOCATED TO PEAKING														
TENNESSEE FT-A DEMAND DRACUT	$	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	($135,224)	
		($135,224)	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($135,224)**	**($1,622,687)**
TOTAL PIPELINE FIXED DEMAND CHARGES		[redacted]												
TOTAL DEMAND UNITS DTH		5,202,570	5,404,819	5,404,819	4,881,772	5,404,819	5,202,570	5,347,159	4,719,210	4,876,517	4,876,517	4,719,210	5,347,159	61,387,141
100% LOAD FACTOR UNIT VALUE $/DTH														[redacted]
Average rate per unit per month														
AVERAGE SYSTEM VARIABLE UNIT VALUE $/DTH														
Marketer Reconciliation 2015/16														($36,098)
Marketer Demand Units DTH		1,006,410	1,039,957	1,039,957	939,316	1,039,957	1,006,410	1,039,957	1,006,410	1,039,957	1,039,957	1,006,410	1,039,957	12,244,655
100% LOAD FACTOR UNIT VALUE $/DTH														**-0.0029**
TOTAL AVERAGE SYSTEM UNIT VALUE $/DTH														**$ 0.6168**

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV 2017	DEC 2017	JAN 2018	FEB 2018	MAR 2018	APR 2018	MAY 2018	JUN 2018	JUL 2018	AUG 2018	SEP 2018	OCT 2018	TOTAL
Forecast Demand													
RI Sales GCR	2,286,401	3,945,192	4,943,244	4,417,284	3,736,115	2,175,893	1,268,260	808,643	647,353	593,008	639,818	1,177,517	26,638,728
Total Demand	2,286,401	3,945,192	4,943,244	4,417,284	3,736,115	2,175,893	1,268,260	808,643	647,353	593,008	639,818	1,177,517	26,638,728
Storage Injections													
TENNESSEE FSMA 501	0	0	0	0	0	0	122,389	118,441	0	15,409	118,441	122,389	497,067
DOMINION GSS 300170	0	0	0	0	0	0	0	0	0	0	67,306	36,578	103,884
DOMINION GSS 300168	0	0	0	0	0	0	26,019	25,179	11,663	21,856	21,151	21,856	127,723
DOMINION GSS 300171	0	0	0	0	0	11,012	31,885	30,856	29,910	26,783	25,919	26,783	183,150
DOMINION GSSTE 600045	0	0	0	0	0	0	0	0	21,580	63,172	188,947	100,490	374,188
TETCO FSS-1 400515	0	0	0	0	0	1,734	8,964	8,675	8,964	8,964	8,675	8,964	54,941
TETCO SS-1 400221	0	0	0	0	0	35,783	188,124	182,056	188,124	188,124	182,056	188,124	1,152,392
TETCO SS-1 400185	0	0	0	0	0	1,612	8,225	7,960	8,225	8,225	7,960	8,225	50,430
DOMINION GSS 300169	0	0	0	0	0	8,626	34,803	33,680	32,647	29,234	28,291	29,234	196,516
COLUMBIA FSS 9630	0	0	0	0	0	3,818	40,791	40,791	34,673	40,791	26,514	14,277	201,656
TENNESSEE 62918	0	0	0	0	0	0	42,454	41,084	0	36,623	41,084	42,454	203,700
Total Storage Injections	0	0	0	0	0	62,585	503,653	488,722	335,786	439,182	716,344	599,374	3,145,647
LNG PROVIDENCE	0	0	0	0	0	58,815	147,562	141,626	49,504	21,620	141,028	22,964	583,119
LNG EXETER	0	0	0	0	0	87,891	4,034	5,080	2,092	5,976	5,677	4,631	115,381
Total LNG Injections	0	0	0	0	0	146,706	151,596	146,706	51,596	27,596	146,706	27,596	698,500
Total Injections	0	0	0	0	0	209,291	655,249	635,428	387,382	466,778	863,049	626,970	3,844,147

Delivered Firm Sales Supply

.	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	GCR Total
Sources of Supply													
TENNESSEE ZONE 0 CXN	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 0	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 1	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE ZONE 4 CXN	348,000	359,600	359,600	336,400	359,600	348,000	333,804	256,881	95,795	138,861	291,827	359,600	3,587,968
TENNESSEE ZONE 4	372,136	561,797	456,709	408,980	326,648	153,627	0	0	0	0	0	171,448	2,451,346
TENNESSEE NIAGARA	2,134	0	5,335	3,201	0	32,010	33,077	32,010	33,077	33,077	32,010	33,077	239,008
TENNESSEE DRACUT	0	14,431	23,557	144,527	38,778	0	0	0	0	0	0	0	221,294
TETCO ELA	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO ETX	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO STX	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO WLA	0	0	0	0	0	0	0	0	0	0	0	0	0
TETCO M2	774,107	798,268	798,167	720,958	798,475	776,776	272,001	775,935	801,546	801,412	441,848	801,270	8,560,762
TETCO M3 DELIVERED	477,660	104,703	188,368	205,193	149,868	376,031	666,208	163,113	0	0	546,497	375,849	3,253,490
COLUMBIA MAUMEE	72,184	878,862	691,706	616,913	367,033	49,885	0	0	0	0	0	0	2,676,583
COLUMBIA BROADRUN	0	308,519	308,519	278,662	265,930	9,958	0	0	0	0	0	0	1,171,588
COLUMBIA EAGLE	14,378	29,290	94,579	84,510	78,468	30,887	40,791	40,791	34,673	40,791	26,514	14,277	529,950
COLUMBIA DOWNINGTOWN	0	10,643	111,019	100,198	111,987	2,063	0	0	0	0	0	0	335,911
TRANSCO LEIDY	36,470	38,067	38,067	34,383	38,067	11,414	2,232	2,160	2,232	2,232	2,160	2,232	209,716
TETCO LEIDY	7,164	16,486	16,486	14,890	16,486	4,257	0	0	0	0	0	0	75,767
TETCO to B&W SCT	0	49,945	60,372	51,168	28,654	0	0	0	0	0	0	0	190,140
ALGONQUIN - AIM	116,496	165,795	491,644	439,006	408,990	377,851	402,200	11,169	0	0	0	3,321	2,416,471
ANE II-DAWN-TENN-WADDY	0	30,824	30,806	27,835	0	0	5,784	0	0	0	0	0	95,249
GAZ METRO LNG Refill	0	0	0	0	0	26,706	27,596	26,706	27,596	27,596	26,706	27,596	190,500
GDF SUEZ LNG Refill	0	0	0	0	0	120,000	124,000	120,000	24,000	0	120,000	0	508,000
PORTABLE LNG	0	0	0	0	0	0	0	0	0	0	0	0	0

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National Grid
2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
Non LNG Liquid take	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,172,760	1,756,097	1,282,059	967,322	1,016,374	1,340,855	1,761,074	26,015,241
LNG Liquid take	0	0	0	0	0	146,706	151,596	146,706	51,596	27,596	146,706	27,596	698,500
Total take	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,319,466	1,907,693	1,428,765	1,018,918	1,043,969	1,487,561	1,788,670	26,713,741
Storage Withdrawals													
TENNESSEE FSMA 501	0	16,077	162,881	157,995	151,063	3,435	0	0	0	0	0	0	491,450
DOMINION GSS 300170	0	16,034	43,945	36,771	3,958	0	0	0	0	0	0	0	100,707
DOMINION GSS 300168	738	22,597	30,387	36,554	36,003	0	0	0	0	0	0	0	126,279
DOMINION GSS 300171	0	30,764	68,291	57,610	22,368	0	0	0	0	0	0	0	179,033
DOMINION GSSTE 600045	49,628	69,626	69,626	62,888	69,626	43,248	0	0	0	0	0	0	364,642
TETCO FSS-1 400515	0	13,651	13,651	13,651	12,013	0	0	0	0	0	0	0	52,968
TETCO SS-1 400221	0	283,662	288,039	288,039	257,851	0	0	0	0	0	0	0	1,117,591
TETCO SS-1 400185	0	12,605	12,605	12,605	11,092	0	0	0	0	0	0	0	48,907
DOMINION GSS 300169	0	44,009	54,033	49,328	43,446	0	0	0	0	0	0	0	190,815
COLUMBIA FSS 9630	0	44,787	71,211	52,666	24,450	3,729	0	0	0	0	0	0	196,842
TENNESSEE 62918	0	8,334	61,187	32,433	99,444	0	0	0	0	0	0	0	201,398
LNG PROVIDENCE	10,824	11,185	362,848	109,863	11,185	10,824	11,185	10,824	11,185	11,185	10,824	11,185	583,119
LNG EXETER	4,482	4,631	29,607	40,057	4,631	4,482	4,631	4,482	4,631	4,631	4,482	4,631	115,381
Total Withdrawal Delivered	65,673	577,962	1,268,312	950,459	747,131	65,718	15,817	15,306	15,817	15,817	15,306	15,817	3,769,133
Total Storage Withdrawal	50,366	562,145	875,857	800,540	731,314	50,411	0	0	0	0	0	0	3,070,633
Total Peaking Withdrawal	15,306	15,817	392,455	149,919	15,817	15,306	15,817	15,306	15,817	15,817	15,306	15,817	698,500
Total Supply	**2,286,401**	**3,945,192**	**4,943,244**	**4,417,284**	**3,736,115**	**2,238,478**	**1,771,913**	**1,297,365**	**983,139**	**1,032,190**	**1,356,162**	**1,776,891**	**29,784,374**
Storage withdrawals at Storage Facilty													
TENNESSEE FSMA 501	0	16,261	164,743	159,800	152,789	3,474	0	0	0	0	0	0	497,067
DOMINION GSS 300170	0	16,540	45,331	37,931	4,082	0	0	0	0	0	0	0	103,884
DOMINION GSS 300168	746	22,855	30,735	36,972	36,415	0	0	0	0	0	0	0	127,723
DOMINION GSS 300171	0	31,471	69,861	58,935	22,883	0	0	0	0	0	0	0	183,150
DOMINION GSSTE 600045	50,934	71,465	71,465	64,549	71,465	44,310	0	0	0	0	0	0	374,188
TETCO FSS-1 400515	0	14,160	14,160	14,160	12,461	0	0	0	0	0	0	0	54,941
TETCO SS-1 400221	0	292,495	297,008	297,008	265,881	0	0	0	0	0	0	0	1,152,392
TETCO SS-1 400185	0	12,998	12,998	12,998	11,438	0	0	0	0	0	0	0	50,430
DOMINION GSS 300169	0	45,324	55,647	50,802	44,744	0	0	0	0	0	0	0	196,516
COLUMBIA FSS 9630	0	45,883	72,953	53,954	25,048	3,818	0	0	0	0	0	0	201,656
TENNESSEE 62918	0	8,429	61,887	32,804	100,580	0	0	0	0	0	0	0	203,700
	51,680	577,880	896,787	819,912	747,786	51,601	0	0	0	0	0	0	3,145,646

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2017 Estimated GCR
Normal Weather Scenario

Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
07/31/2017 NYMEX	**$2.920**	**$3.079**	**$3.173**	**$3.164**	**$3.119**	**$2.795**	**$2.769**	**$2.795**	**$2.821**	**$2.826**	**$2.806**	**$2.826**	
TENNESSEE ZONE 0 CONNEXION													
Basis	($0.198)	($0.183)	($0.195)	($0.188)	($0.163)	($0.173)	($0.167)	($0.157)	($0.166)	($0.165)	($0.166)	($0.178)	
Usage to Zn 6	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	$0.0425	
Fuel to Zn 6	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	
Total Delivered	$2.8853	$3.0670	$3.1527	$3.1506	$3.1297	$2.7809	$2.7600	$2.7976	$2.8153	$2.8216	$2.7997	$2.8080	
TENNESSEE ZONE 0													
Basis	($0.198)	($0.183)	($0.195)	($0.188)	($0.163)	($0.173)	($0.167)	($0.157)	($0.166)	($0.165)	($0.166)	($0.178)	
Usage to Zn 6	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	$0.3464	
Fuel to Zn 6	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	
Total Delivered	$3.1892	$3.3709	$3.4566	$3.4545	$3.4336	$3.0848	$3.0639	$3.1015	$3.1192	$3.1255	$3.1036	$3.1119	
TENNESSEE ZONE 1													
Basis	($0.142)	($0.095)	($0.129)	($0.060)	($0.097)	($0.115)	($0.127)	($0.133)	($0.105)	($0.084)	($0.102)	($0.100)	
Usage to Zn 6	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	$0.3019	
Fuel to Zn 6	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	
Total Delivered	$3.1866	$3.4006	$3.4629	$3.5252	$3.4400	$3.0849	$3.0454	$3.0662	$3.1223	$3.1493	$3.1098	$3.1326	
TENNESSEE ZONE 4 CONNEXION													
Basis	($0.789)	($0.637)	($0.523)	($0.484)	($0.506)	($0.353)	($0.386)	($0.399)	($0.400)	($0.406)	($0.462)	($0.458)	
Usage to Zn 6	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	$0.0115	
Fuel to Zn 6	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	
Total Delivered	$2.1669	$2.4814	$2.6918	$2.7221	$2.6544	$2.4814	$2.4217	$2.4349	$2.4602	$2.4592	$2.3823	$2.4066	
TENNESSEE ZONE 4													
Basis	($0.789)	($0.637)	($0.523)	($0.484)	($0.506)	($0.353)	($0.386)	($0.399)	($0.400)	($0.406)	($0.462)	($0.458)	
Usage to Zn 6	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	$0.1165	
Fuel to Zn 6	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	1.13%	
Total Delivered	$2.2719	$2.5864	$2.7968	$2.8271	$2.7594	$2.5864	$2.5267	$2.5399	$2.5652	$2.5642	$2.4873	$2.5116	
TENNESSEE NIAGARA													
Basis	($0.416)	($0.397)	($0.401)	($0.394)	($0.400)	($0.580)	($0.731)	($0.751)	($0.780)	($0.801)	($0.821)	($0.791)	
Tenn usage	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	
Tenn Fuel	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	
Total Delivered	$2.6124	$2.7919	$2.8826	$2.8806	$2.8292	$2.3211	$2.1426	$2.1487	$2.1457	$2.1295	$2.0892	$2.1396	
TENNESSEE DRACUT													
Basis	$0.390	$3.177	$5.575	$5.578	$2.267	$0.065	-$0.095	-$0.025	$0.123	$0.122	-$0.228	-$0.200	
Usage	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	$0.0360	
Fuel	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	
Total Delivered	$3.3463	$6.2926	$8.7849	$8.7789	$5.4225	$2.8963	$2.7103	$2.8063	$2.9803	$2.9843	$2.6143	$2.6623	
TETCO ELA													
Basis	($0.100)	($0.097)	($0.103)	($0.090)	($0.090)	($0.103)	($0.103)	($0.113)	($0.107)	($0.108)	($0.112)	($0.105)	
Usage to M3	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.63%	4.33%	4.33%	4.33%	4.33%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0289	$3.2233	$3.3162	$3.3204	$3.2729	$2.8948	$2.8676	$2.8844	$2.9179	$2.9221	$2.8969	$2.9252	
TETCO ETX													
Basis	($0.135)	($0.197)	($0.183)	($0.159)	($0.144)	($0.077)	($0.102)	($0.113)	($0.069)	($0.062)	($0.078)	($0.059)	
Usage to M3	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	$0.0627	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.63%	4.33%	4.33%	4.33%	4.33%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.9922	$3.1178	$3.2318	$3.2476	$3.2159	$2.9221	$2.8686	$2.8844	$2.9577	$2.9702	$2.9325	$2.9734	

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Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TETCO STX													
Basis	($0.095)	($0.147)	($0.143)	($0.142)	($0.117)	($0.047)	($0.065)	($0.070)	($0.023)	($0.025)	($0.038)	($0.032)	
Usage to M3	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	$0.0677	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.73%	4.47%	4.47%	4.47%	4.47%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	3.73%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0422	$3.1801	$3.2837	$3.2753	$3.2541	$2.9615	$2.9154	$2.9374	$3.0139	$3.0171	$2.9825	$3.0097	
TETCO WLA													
Basis	($0.088)	($0.097)	($0.105)	($0.092)	($0.093)	($0.080)	($0.080)	($0.090)	($0.085)	($0.085)	($0.090)	($0.082)	
Usage to M3	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	$0.0645	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel to M3	3.59%	4.29%	4.29%	4.29%	4.29%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	3.59%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.0420	$3.2238	$3.3145	$3.3188	$3.2702	$2.9196	$2.8923	$2.9091	$2.9415	$2.9468	$2.9206	$2.9499	
TETCO M2													
Basis	($0.715)	($0.535)	($0.355)	($0.330)	($0.365)	($0.457)	($0.465)	($0.515)	($0.560)	($0.565)	($0.618)	($0.600)	
Usage on Tetco	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Tetco	2.07%	2.49%	2.49%	2.49%	2.49%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.3310	$2.6933	$2.9770	$2.9936	$2.9107	$2.4681	$2.4330	$2.4083	$2.3887	$2.3887	$2.3135	$2.3526	
TETCO M3 DELIVERED													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5254	$3.4195	$5.3301	$5.2220	$3.2832	$2.5355	$2.4033	$2.4164	$2.4860	$2.4810	$2.3144	$2.4103	
COLUMBIA MAUMEE													
Basis	($0.201)	($0.205)	($0.220)	($0.202)	($0.210)	($0.170)	($0.183)	($0.227)	($0.243)	($0.295)	($0.360)	($0.305)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
COLUMBIA BROADRUN													
Basis	($0.201)	($0.205)	($0.220)	($0.202)	($0.210)	($0.170)	($0.183)	($0.227)	($0.243)	($0.295)	($0.360)	($0.305)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
COLUMBIA EAGLE													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5845	$3.4917	$5.4300	$5.3203	$3.3534	$2.5947	$2.4606	$2.4739	$2.5445	$2.5394	$2.3705	$2.4678	

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	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
COLUMBIA DOWNINGTOWN													
Basis	$0.100	$0.670	$2.737	$2.720	$0.470	($0.150)	($0.283)	($0.287)	($0.070)	($0.092)	($0.410)	($0.325)	
Usage on Columbia	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	$0.0224	
Usage on AGT	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	$0.0125	
Fuel on Columbia	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$3.1271	$3.8758	$6.0897	$6.0631	$3.7119	$2.7432	$2.5804	$2.6029	$2.8517	$2.8343	$2.4882	$2.5957	
TRANSCO LEIDY													
Basis	($0.808)	($0.693)	($0.567)	($0.520)	($0.533)	($0.515)	($0.603)	($0.600)	($0.623)	($0.608)	($0.662)	($0.635)	
Usage on Transco	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	$0.0073	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
Fuel on Transco	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Delivered to Algonquin	$2.1280	$2.4031	$2.6240	$2.6622	$2.6039	$2.2967	$2.1822	$2.2113	$2.2143	$2.2344	$2.1601	$2.2073	
Total Delivered	$2.3761	$2.6553	$2.8783	$2.9169	$2.8580	$2.5464	$2.4308	$2.4602	$2.4633	$2.4835	$2.4086	$2.4562	
TETCO LEIDY													
Basis	($0.680)	($0.684)	($0.404)	($0.558)	($0.610)	($0.527)	($0.559)	($0.462)	($0.465)	($0.466)	($0.573)	($0.485)	
Usage on Tetco	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
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	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5200	$2.6800	$3.0626	$2.8958	$2.7966	$2.5487	$2.4894	$2.6151	$2.6386	$2.6427	$2.5129	$2.6233	
TETCO to B&W SCT													
Basis	($0.715)	($0.535)	($0.355)	($0.330)	($0.365)	($0.457)	($0.465)	($0.515)	($0.560)	($0.565)	($0.618)	($0.600)	
Usage on Tetco	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	$0.0458	
Usage on AGT	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	$0.2286	
Fuel to M3	2.07%	2.49%	2.49%	2.49%	2.49%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	
Fuel on AGT	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5471	$2.9094	$3.1931	$3.2097	$3.1268	$2.6842	$2.6491	$2.6244	$2.6048	$2.6048	$2.5296	$2.5687	
ALGONQUIN - AIM													
Basis	($0.430)	$0.295	$2.093	$1.995	$0.120	($0.295)	($0.400)	($0.413)	($0.370)	($0.380)	($0.525)	($0.450)	
AGT Usage	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	
AGT Fuel	0.91%	0.97%	0.97%	0.97%	0.97%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	
Total Delivered	$2.5142	$3.4083	$5.3189	$5.2108	$3.2720	$2.5243	$2.3921	$2.4052	$2.4748	$2.4698	$2.3032	$2.3991	
DAWN TO TENNESSEE - WADDY													
Basis	$0.135	$0.155	$0.150	$0.158	$0.153	$0.041	($0.369)	($0.209)	($0.293)	($0.294)	($0.399)	($0.221)	
Union usage	$0.0075	$0.0075	$0.0075	$0.0075	$0.0075	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	
Iroquois usage	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	$0.0047	
Tenn usage	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	$0.0880	
Fuel on Union	0.88%	1.00%	1.15%	1.09%	1.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fuel on TransCanada	0.93%	0.55%	1.12%	0.39%	0.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Fuel on Iroquois	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	
Fuel on Tenn	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	
Total Delivered	$3.2400	$3.4151	$3.5312	$3.5030	$3.4602	$2.9548	$2.5148	$2.7025	$2.6439	$2.6480	$2.5218	$2.7216	

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National Grid
2017 Estimated GCR
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Natural Gas Supply VS. Requirements

Units: DTH

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
Total Delivered to the City Gate Gas Supply Costs													
TENNESSEE ZONE 0 CONNEXION													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$2.885	$3.067	$3.153	$3.151	$3.130	$2.781	$2.760	$2.798	$2.815	$2.822	$2.800	$2.808	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 0													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.189	$3.371	$3.457	$3.454	$3.434	$3.085	$3.064	$3.101	$3.119	$3.126	$3.104	$3.112	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 1													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.187	$3.401	$3.463	$3.525	$3.440	$3.085	$3.045	$3.066	$3.122	$3.149	$3.110	$3.133	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TENNESSEE ZONE 4 CONNEXION													
Delivered MMBtu	348,000	359,600	359,600	336,400	359,600	348,000	333,804	256,881	95,795	138,861	291,827	359,600	
Delivered Price	$2.1669	$2.4814	$2.6918	$2.7221	$2.6544	$2.4814	$2.4217	$2.4349	$2.4602	$2.4592	$2.3823	$2.4066	
Total Delivered Cost	$754,066	$892,315	$967,967	$915,725	$954,509	$863,531	$808,384	$625,476	$235,672	$341,482	$695,216	$865,400	
TENNESSEE ZONE 4													
Delivered MMBtu	372,136	561,797	456,709	408,980	326,648	153,627	0	0	0	0	0	171,448	
Delivered Price	$2.2719	$2.5864	$2.7968	$2.8271	$2.7594	$2.5864	$2.5267	$2.5399	$2.5652	$2.5642	$2.4873	$2.5116	
Total Delivered Cost	$845,439	$1,453,037	$1,277,317	$1,156,241	$901,341	$397,343	$0	$0	$0	$0	$0	$430,604	
TENNESSEE NIAGARA													
Delivered MMBtu	2,134	0	5,335	3,201	0	32,010	33,077	32,010	33,077	33,077	32,010	33,077	
Delivered Price	$2.6124	$2.7919	$2.8826	$2.8806	$2.8292	$2.3211	$2.1426	$2.1487	$2.1457	$2.1295	$2.0892	$2.1396	
Total Delivered Cost	$5,575	$0	$15,379	$9,221	$0	$74,298	$70,872	$68,780	$70,972	$70,439	$66,876	$70,772	
TENNESSEE DRACUT													
Delivered MMBtu	0	14,431	23,557	144,527	38,778	0	0	0	0	0	0	0	
Delivered Price	$3.35	$6.29	$8.78	$8.78	$5.42	$2.90	$2.71	$2.81	$2.98	$2.98	$2.61	$2.66	
Total Delivered Cost	$0	$90,810	$206,945	$1,268,786	$210,276	$0	$0	$0	$0	$0	$0	$0	
TETCO ELA													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.0289	$3.2233	$3.3162	$3.3204	$3.2729	$2.8948	$2.8676	$2.8844	$2.9179	$2.9221	$2.8969	$2.9252	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	

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	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TETCO ETX													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$2.9922	$3.1178	$3.2318	$3.2476	$3.2159	$2.9221	$2.8686	$2.8844	$2.9577	$2.9702	$2.9325	$2.9734	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO STX													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.042	$3.180	$3.284	$3.275	$3.254	$2.962	$2.915	$2.937	$3.014	$3.017	$2.982	$3.010	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO WLA													
Delivered MMBtu	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered Price	$3.0420	$3.2238	$3.3145	$3.3188	$3.2702	$2.9196	$2.8923	$2.9091	$2.9415	$2.9468	$2.9206	$2.9499	
Total Delivered Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
TETCO M2													
Delivered MMBtu	774,107	798,268	798,167	720,958	798,475	776,776	272,001	775,935	801,546	801,412	441,848	801,270	
Delivered Price	$2.3310	$2.6933	$2.9770	$2.9936	$2.9107	$2.4681	$2.4330	$2.4083	$2.3887	$2.3887	$2.3135	$2.3526	
Total Delivered Cost	$1,804,450	$2,149,949	$2,376,156	$2,158,248	$2,324,151	$1,917,135	$661,786	$1,868,680	$1,914,664	$1,914,345	$1,022,209	$1,885,105	
TETCO M3 DELIVERED													
Delivered MMBtu	477,660	104,703	188,368	205,193	149,868	376,031	666,208	163,113	0	0	546,497	375,849	
Delivered Price	$2.5254	$3.4195	$5.3301	$5.2220	$3.2832	$2.5355	$2.4033	$2.4164	$2.4860	$2.4810	$2.3144	$2.4103	
Total Delivered Cost	$1,206,267	$358,037	$1,004,019	$1,071,522	$492,051	$953,412	$1,601,067	$394,143	$0	$0	$1,264,838	$905,916	
COLUMBIA MAUMEE													
Delivered MMBtu	72,184	878,862	691,706	616,913	367,033	49,885	0	0	0	0	0	0	
Delivered Price	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
Total Delivered Cost	$203,482	$2,618,510	$2,116,872	$1,893,668	$1,106,712	$135,821	$0	$0	$0	$0	$0	$0	
COLUMBIA BROADRUN													
Delivered MMBtu	0	308,519	308,519	278,662	265,930	9,958	0	0	0	0	0	0	
Delivered Price	$2.8189	$2.9794	$3.0604	$3.0696	$3.0153	$2.7227	$2.6828	$2.6643	$2.6746	$2.6265	$2.5394	$2.6162	
Total Delivered Cost	$0	$919,211	$944,180	$855,377	$801,857	$27,113	$0	$0	$0	$0	$0	$0	
COLUMBIA EAGLE													
Delivered MMBtu	14,378	29,290	94,579	84,510	78,468	30,887	40,791	40,791	34,673	40,791	26,514	14,277	
Delivered Price	$2.5845	$3.4917	$5.4300	$5.3203	$3.3534	$2.5947	$2.4606	$2.4739	$2.5445	$2.5394	$2.3705	$2.4678	
Total Delivered Cost	$37,160	$102,271	$513,560	$449,622	$263,130	$80,143	$100,371	$100,914	$88,226	$103,587	$62,852	$35,232	
COLUMBIA DOWNINGTOWN													
Delivered MMBtu	0	10,643	111,019	100,198	111,987	2,063	0	0	0	0	0	0	
Delivered Price	$3.1271	$3.8758	$6.0897	$6.0631	$3.7119	$2.7432	$2.5804	$2.6029	$2.8517	$2.8343	$2.4882	$2.5957	
Total Delivered Cost	$0	$41,251	$676,075	$607,508	$415,687	$5,660	$0	$0	$0	$0	$0	$0	

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	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
TRANSCO LEIDY													
Delivered MMBtu	36,470	38,067	38,067	34,383	38,067	11,414	2,232	2,160	2,232	2,232	2,160	2,232	
Delivered Price	$2.3761	$2.6553	$2.8783	$2.9169	$2.8580	$2.5464	$2.4308	$2.4602	$2.4633	$2.4835	$2.4086	$2.4562	
Total Delivered Cost	$86,657	$101,078	$109,569	$100,291	$108,797	$29,063	$5,426	$5,314	$5,498	$5,543	$5,202	$5,482	
TETCO LEIDY													
Delivered MMBtu	7,164	16,486	16,486	14,890	16,486	4,257	0	0	0	0	0	0	
Delivered Price	$2.5200	$2.6800	$3.0626	$2.8958	$2.7966	$2.5487	$2.4894	$2.6151	$2.6386	$2.6427	$2.5129	$2.6233	
Total Delivered Cost	$18,052	$44,181	$50,488	$43,119	$46,103	$10,849	$0	$0	$0	$0	$0	$0	
TETCO to B&W SCT													
Delivered MMBtu	0	49,945	60,372	51,168	28,654	0	0	0	0	0	0	0	
Delivered Price	$2.5471	$2.9094	$3.1931	$3.2097	$3.1268	$2.6842	$2.6491	$2.6244	$2.6048	$2.6048	$2.5296	$2.5687	
Total Delivered Cost	$0	$145,309	$192,774	$164,234	$89,597	$0	$0	$0	$0	$0	$0	$0	
ALGONQUIN - AIM													
Delivered MMBtu	116,496	165,795	491,644	439,006	408,990	377,851	402,200	11,169	0	0	0	3,321	
Delivered Price	$2.5142	$3.4083	$5.3189	$5.2108	$3.2720	$2.5243	$2.3921	$2.4052	$2.4748	$2.4698	$2.3032	$2.3991	
Total Delivered Cost	$292,889	$565,086	$2,614,995	$2,287,588	$1,338,226	$953,794	$962,085	$26,862	$0	$0	$0	$7,967	
DAWN TO TENNESSEE - WADDY													
Delivered MMBtu	0	30,824	30,806	27,835	0	0	5,784	0	0	0	0	0	
Delivered Price	$3.2400	$3.4151	$3.5312	$3.5030	$3.4602	$2.9548	$2.5148	$2.7025	$2.6439	$2.6480	$2.5218	$2.7216	
Total Delivered Cost	$0	$105,267	$108,782	$97,505	$0	$0	$14,545	$0	$0	$0	$0	$0	

	NOV	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**TOTAL**
Total Pipeline Costs	$5,254,037	$9,586,311	$13,175,077	$13,078,655	$9,052,438	$5,448,163	$4,224,537	$3,090,168	$2,315,033	$2,435,396	$3,117,193	$4,206,480	$74,983,488
Total Pipeline Volumes	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,172,760	1,756,097	1,282,059	967,322	1,016,374	1,340,855	1,761,074	26,015,241
WACOG	$2.3659	$2.8469	$3.5851	$3.7725	$3.0286	$2.5075	$2.4056	$2.4103	$2.3932	$2.3962	$2.3248	$2.3886	$2.8823
Injections	0	0	0	0	0	62,585	503,653	488,722	335,786	439,182	716,344	599,374	3,145,647
Value at WACOG	$0	$0	$0	$0	$0	$156,931	$1,211,609	$1,177,976	$803,616	$1,052,352	$1,665,341	$1,431,657	$7,499,482
Pipeline Costs less Injections	$5,254,037	$9,586,311	$13,175,077	$13,078,655	$9,052,438	$5,291,232	$3,012,928	$1,912,193	$1,511,417	$1,383,044	$1,451,852	$2,774,823	$67,484,007
Pipeline Volumes less injections	2,220,728	3,367,230	3,674,933	3,466,825	2,988,984	2,110,175	1,252,443	793,337	631,536	577,191	624,512	1,161,700	22,869,594
NYMEX cost of Supplies	$6,484,527	$10,367,701	$11,660,561	$10,969,034	$9,322,641	$5,897,939	$3,468,016	$2,217,376	$1,781,564	$1,631,142	$1,752,379	$3,282,965	$68,835,845
Non-gas cost of delivered supplies													**-$0.0591**