



THE LIEUTE LIFE'S COMMISSION

October 26, 2007

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE:

Long-Range Gas Supply Plan, 2007/2008 – 2011/2012

Docket No. 3789

Dear Ms. Massaro:

Enclosed please find ten (10) copies of National Grid's Long Range Gas Supply Plan ("Plan") for the gas operations of National Grid in Rhode Island's service area. The Supply plan presents the Company's analysis of customer demand and available resources for the five-year forecast period of 2007/2008 through 2011/2012.

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

Very truly yours,

Laura S. Olton

Laura S. Olton

Enclosure

CC:

Docket 3789 Service List

Submitted on behalf of The Narragansett Electric Company, d/b/a National Grid ("the Company").

Certificate of Service

I certify that a copy of the cover letter and materials accompanying this certificate were mailed or hand-delivered to the parties listed below.

Carol A. Gilmore

National Grid

Date: 1926/07

Docket 3789 - National Grid - Long-Range Energy Plans Service List as of 11/27/06

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Long-Range Gas Supply Plan

for the

Rhode Island Service Area

2007/2008 - 2011/2012

Submitted to

THE RHODE ISLAND PUBLIC UTILITIES COMMISSION

October 26, 2007

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National Grid

Long-Range Gas Supply Plan for the Rhode Island Service Area

I. Introduction

This filing presents the Long-Range Gas Supply Plan ("Supply Plan") for the Rhode Island service area of National Grid ("Company") over the five-year forecast period of 2007/2008 through 2011/2012.

The Supply Plan is designed to accomplish the following objectives: (1) to describe the Company's planning process; (2) to review the "design" criteria and demand forecast developed by the Company as part of its planning process; (3) to provide an overview of the gas resources held by the Company; and (4) to present the Company's analysis demonstrating that those resources will be sufficient and cost effective over the planning period to meet customer load requirements.

This filing addresses a number of issues raised by the Division regarding the Company's 2006 Long Range Gas Supply Plan, filed in Docket 3789. First, the data relied on in the 2006 filing to forecast demand did not include data that incorporated the impact of hurricanes Katrina and Rita and the resulting drop in demand from the well publicized energy problems and unprecedented price increases. Second, the Division also observed that the Company continued to rely on design weather conditions for peak day and design winter weather that had been developed in the 1994 Integrated Resource Plan. The Division questioned whether the recent tendency toward warm winters may imply that lesser standards may be justified and could result in reduced costs.

The third issue involved the need to increase the level and frequency of planning reviews throughout the current period of exceptional change in the New England natural gas situation, with substantial changes occurring in both the supply and demand. Supply opportunities are increasing as the region begins to add new liquefied natural gas (LNG) receiving terminals while a number of new pipeline projects have been completed, are under construction or are proposed. The supply structure across North America is also changing as supplies from new fields and new LNG terminals are being developed in response to the higher prices. At the same time, demand in New England is changing because of the rapid increase in demand for natural gas for electric generation. Moreover, it is clear that the electric generation demand will continue to evolve as older, dirtier generation facilities are altered or shut down to comply with clean air regulations and potential global warming related legislation. The exceptional gap between oil and natural gas prices, if it continues, may also cause natural gas demand in New England to grow. This 2007 Plan addresses the Division's above concerns.

II. Planning Process

The fundamental goal of the Company's gas supply planning process is to ensure that there are adequate resources to meet the needs of firm-service customers over the planning period, even under design weather conditions. To meet this objective, the planning process encompasses four basic steps:

- (a) Establishment of planning criteria (e.g. design weather conditions, local pressure requirements);
- (b) Preparation of a demand forecast under normal weather conditions for firm-service customers including those transportation customers who

- are not exempt from the Company's mandatory capacity assignment program;
- (c) Conversion of the normal weather load requirement to a design weather load requirement;
- (d) Identification of accessible supply sources and basins. Evaluation and selection of supply sources based on reliability, diversity and liquidity as well as the availability of appropriate transportation and storage assets to deliver gas from the source of supply to the city gate in quantities necessary to meet design weather load requirements in a least cost, reliable manner.

Each of these steps is discussed below.

The evaluation of firm-service load requirements and resource capabilities is facilitated by the use of SENDOUT® modeling software. SENDOUT® is a linear-optimization software model that is used to develop least-cost solutions to gas supply and dispatch requirements. In addition, the Company uses distribution network modeling software to scrutinize supply adequacy in specific areas of the system. These tools play a critical role in evaluating whether modifications to the resource portfolio are needed or appropriate. In particular, the network modeling software allows the Company to keep a close watch on resource requirements in areas of the distribution system that are isolated from the core system, such as Aquidneck Island, Westerly and the Bristol/Warren area, where load growth may trigger the need to add resources to serve that local area.

The Company's planning activities are part of an ongoing, dynamic process that involves continual evaluation of a range of factors including day-to-day consumption patterns and usage levels, gas commodity and resource pricing, customer load growth, and changes in supply conditions both in the region and in the North America gas market. Long term, the Company's planning process has provided a basis for reductions in firm capacity contracts (and their related costs),

and at the same time, has enabled the Company to pinpoint the need for incremental capacity at those specific areas on the system experiencing higher load-growth rates. As a result, the current resource portfolio is tailored to meet customer load requirements under normal and design weather conditions over the five-year horizon of this study.

The portfolio planning process must also consider the ability to access gas supply in a way that enhances the stability of prices to customers. Some supply sourcing options have proven to be vulnerable to severe price spikes during peak demand periods over the last few years. While the Gas Purchase Incentive Plan (GPIP) and storage inventories provide significant protection from such spikes, the effectiveness of the GPIP can be enhanced through modifications to the portfolio. For example, gas supplies purchased in the Gulf of Mexico are not exposed to regional Northeast U.S. prices where spikes during peak demand periods have been the most severe. By increasing the purchase of supply outside the Northeast or under formulas based on Gulf area pricing, the vulnerability to such price spikes can be reduced. The evaluation of potential new supply sources based on their ability to improve the performance of the portfolio to stabilize prices began in 2006 and represents a significant change in the planning process compared to prior plans.

III. Planning Criteria

The Company's planning criteria represent a set of conditions used by the Company to forecast customer load requirements and design its resource portfolio. Since the load of the vast majority of the customers for which the Company must plan is heat load affected by cold temperatures, the Company must develop

planning criteria that are explicitly designed to capture the range of temperature conditions that can be reasonably expected to occur over time. As explained below, the Company generally achieves this result by performing a statistical analysis of historical temperature patterns and using that analysis to develop the planning criteria.

A. <u>Portfolio Design Standards</u>

Design standards for the gas supply portfolio are used to set the minimum supply capability needed to meet system requirements. At a minimum, the portfolio needs to provide sufficient primary firm capacity to meet the requirements of firm sales and non-capacity exempt firm transportation customers under the design system requirements. To ensure that it has adequate capacity, the Company has developed four design load requirements: design hour; design day; design winter; and design cold snap. Each of these portfolio design requirements serves a different purpose.

1. Design Hour

The design hour analysis determines if adequate gas supply will be available during the peak hour of the day. This peak hour analysis is used to design the gas distribution system itself, where pipe must be sized to accommodate the design hour flow and reasonably anticipated growth in the area served.

Increasingly, the design hour analysis is playing a greater role in portfolio design because all new pipeline contracts only allow for uniform hourly deliveries of the contracted daily demand. Historically, contracts allowed for varying hourly

deliveries, and a number of the Company's legacy contracts provide for higher peak hour take levels as long as total daily deliveries are within contract demand volumes. For the most part, the Company manages peak hour swings during the coldest weather by dedicating a portion of its LNG production capability to meet any upswing above pipeline contract levels.

Difficulty managing peak hour demand primarily occurs in areas where the Company has no LNG production and the pipeline has a delivery constraint. In Rhode Island, peak hour capability has only surfaced as a major issue for supply to Aquidneck Island where the LNG facility was specifically designed to meet peak hour needs. As the Company adds pipeline capacity at its city gates to meet its full system requirements, it contracts for the new capacity to meet the forecast peak hourly demand.

2. <u>Design Day</u>

Design day is the standard used to ensure that there are contracts for pipeline, storage and peaking supply capability to meet demand on the highest sendout day. The design day is intended to be a low probability event which may not have yet actually occurred. The Company uses certain assumed conditions to estimate demand for that day:

- 68 heating degree days (HDD).
- Normal wind speed (approximately 9 MPH).
- Average day (not weekday or weekend).
- Typical sun and clouds.
- Transport customers meet 100% of their requirements.

- All non-firm customers are interrupted.
- System use per heating degree day is consistent with January average.

At the same time, the Company also assumes that certain conditions will exist with respect to its supply capability. The Company assumes that:

- All firm pipeline capacity will be delivered per contract.
- All storage will be available at sufficient levels such that deliverability is not reduced by any ratchets or monthly limits on capacity withdrawal.
- 100% of LNG production will be available.

3. <u>Design Winter</u>

The design winter standard is used to ensure that the gas supply portfolio is able to meet all firm system requirements during the peak season. It is essentially a "stress test" for pipeline storage capability that also provides guidance in managing storage inventory levels through the winter. The design winter analysis is performed over the December to March period because storage sendout in November is generally minimal and spot supplies are available at moderate prices to mitigate unusually cold weather should such conditions occur.

Pipeline storages are designed to be used at a maximum daily rate that would exhaust them in 60 to 100 days. The storage contracts also have other limitations, such as limits on the maximum monthly withdrawal quantity, or the maximum daily withdrawal quantity and these quantities may be reduced as the inventory declines

below certain levels. These contractual and tariff limitations are designed to match the physical limits inherent in the storage fields themselves. For example, the daily contract withdrawal quantity ratchets down as the inventory goes down because actual storage pressure and deliverability drop as the amount of gas in storage drops. The modeling process for the design winter incorporates these limitations and optimizes storage dispatch to maximize the utilization of each individual storage contract. Taking into account the various limitations and the pattern of weather and demand, the SENDOUT® model dispatches the storages optimally to minimize the overall cost of supply. The storage available for the Rhode Island system ends up being used over a period of 100 to 120 days that extends to about March 20th, with some modest amount of storage allocated to cover the late November and the late March to early April period.

The design winter, December to March, was chosen as the best match between storage capability and peak season demand with the result that the design study provides a blueprint for managing storage through an extreme winter. This is important because there is a natural inclination to use storage earlier to reduce cost if prices appear to be elevated. However, if it turns out that severe cold conditions occur in the mid or late winter period, a reduced storage deliverability at that time may prove very costly and may result in insufficient supply capability under peak conditions.

4. Cold Snap

The cold snap design condition is similar to design winter but provides the guidelines for dispatch of LNG supplies rather than storage. The Company has very

limited ability to restock LNG. LNG restock is expensive and is limited regionally by the number of trucks that can be loaded at the Distrigas terminal in Everett, Massachusetts and by the number of trucks and experienced drivers available. In addition, each LNG facility has a limited ability to receive trucks. Moreover, during the most severe cold spells, the U.S. Department of Transportation limits the number of hours drivers can work, thus reducing the availability of LNG for restocking.

The cold snap design study acts as a guide to planning and managing LNG supply over the winter. The SENDOUT® model analysis enables targets to be set for the minimum LNG inventory necessary at various points through the winter. For these targets to be effective, the cold snap analysis needs to be based on the coldest period of weather requiring the consistent and substantial use of LNG to meet system requirements that could reasonably be expected to occur based on past experience and current climatic conditions.

B. <u>Design Weather Conditions</u>

1. <u>Design Day</u>

Currently, the Company relies on a design day condition of 68 heating degree days. The Company arrived at this standard through a statistical analysis of historical peak winter days that was performed in 1994 as part of the development of the Company's Integrated Resource Plan (IRP) in Docket 2025. The Company developed a time series of the coldest day of each winter season from the 1940/41 season to the 1993/94 season. The Company calculated the mean and standard deviation of the data series of the 54 observations, one for each year, and the

standard deviation of the time series was used to determine the heating degree day value which would only be expected to be exceeded once in one hundred (100) years. The mean was 57.4 heating degree days (HDDs), and the standard deviation was 4.6 HDD's, resulting in a 1 in 100-year expected HDD level of 68.2, which was then rounded down to 68 HDD. The Company has used this level as the design day design parameter since that filing.

In response to a Division data request in Docket 3766 (the 2006 GCR filing), the Company recalculated the value using data through March 2006. As a result, the mean dropped from 57.4 to 56.5 HDDs but the standard deviation increased to 5.3, resulting in an estimated value of 68.8 heating degree days.

This statistically derived design standard compares to an observed maximum in the 1942/43 winter of 69 HDD. The most recent 30 year period includes a maximum value of 67 heating degrees days while the maximum in the prior 30 year period (1948-1977) was 66 heating degree days.

2. Design Winter

The current design winter condition is a total of 4,583 heating degree days over the December to March period. This value was also derived as part of the 1994 IRP development and relied on the same methodology, a 1 in 100-year probability utilizing data from December 1905 to March 1994.

Unlike the design day where actual experience clearly confirms the forecast design condition, the coldest actual December to March period in the last 30 years (1978 – 2007) is 4,417 HDD, 166 degree days less than the current design winter.

However, the current design winter of 4,583 degree days is 68 degree days less than the coldest December to March in our data series (the 4,651 degree days experienced between December 1, 1917 and March 31, 1918).

3. Cold Snap

The cold snap analysis was not developed as part of the 1994 IRP. At that time, recent additions of pipeline capacity had left the Company with sufficient pipeline capacity so as to limit the need for LNG. As efforts to reduce pipeline capacity to reduce fixed costs, it was necessary to add a design condition to aid in the planning and management of LNG supplies in order to prevent a shortage of LNG during a severe cold spell. As described earlier, this analysis was developed as a stress test for and as a targeted planning tool for LNG supplies, and it has worked effectively for several years.

The current standard is based on the actual heating degree day levels experienced over a 10-day period early in February 1979, 590 HDD's. A review of almost sixty (60) years of history shows that this is the coldest 10-day period in our daily data (which dates back to 1948).

The Company's review of the historical weather data for other possible cold snap design conditions included a review of other possible historical cold weather outbreaks and an evaluation of whether cold snaps of a different duration than 10 days might be appropriate. The same February 1979 cold snap that yielded the 10 day design standard also shows that a two week period would potentially be a more

appropriate design standard. Further, the data from that cold spell shows 16 consecutive days where LNG would be required to meet system demand.

Table I

Actual Degree Days - Providence Airport

February 1979

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
43	42	39	39	46	48	48	42	54	61	63	61	60	63	53	55	61	59	49	42

The table above shows the actual degree days over the first twenty days of February 1979. LNG use to meet supply requirements generally starts at 40 heating degree days with some variation caused by the day of the week, the pattern of temperatures for the day, and wind speeds. The sixteen day period from February 5th to the 20th would require LNG to be used every day. Some additional LNG would also be required for pressure support over the first four days with a small amount needed on the first and second.

4. <u>Discussion of Design Criteria</u>

In developing its design standards the Company took into consideration potential changes to the climate in Rhode Island. One of the primary considerations was the degree to which changes in the climate affect the probability or severity of the extreme weather conditions. By definition, extreme conditions occur infrequently, thus it is difficult to draw statistical or even observational conclusions

about extreme conditions relying solely on recent data. The Company believes that there is insufficient information to forecast the affect of climate change on the future probability or magnitude of severe weather. The Company's efforts to determine if climate change could be considered included in the development of its design weather standards included discussions with Weather Service Incorporated (WSI). WSI's climatologist attributes much of the recent unusually warm weather to currently elevated sea surface temperatures in both the Atlantic and Pacific Oceans. Long term ocean warming and cooling cycles in these temperatures are well documented and research has shown the significant correlation between temperatures in the U.S. and sea surface temperature changes. WSI indicated that there was a major shift toward higher sea surface temperatures in the late 1970s and early 1980s in the Atlantic and Pacific and that these warm conditions are continuing. However, WSI also indicated that historically, warm conditions have been followed by a cooling cycle. What is unclear is how long these warm conditions will continue and when the next cooling cycle will begin.

In addition to the climate-related issues that involve extreme variations in temperature, other influences, such as unusually high wind speeds, could significantly affect projected sendout when they occur in conjunction with exceptionally cold temperatures. Experience has shown that unusually high winds, in conjunction with extreme cold temperatures, produce significant increases in gas consumption, increasing sendout for the day as much as 10% under exceptional conditions. A number of the more recent outbreaks of severe cold have included very high winds. The customer gas use per heating degree factor for January (or

February)), because it is calculated using multiple years of history, assumes the historical normal wind speed of approximately 9 mph. If climate change is causing the higher wind speeds recently observed during cold conditions, the wind speed assumption would need to be increased accordingly. As a result the customer gas use per heating degree day in January (and February) may increase due to wind offsetting any trend toward warmer temperatures. Additionally, customer gas use per heating degree day factor was developed with monthly usage and heating degree data. Therefore, the factor used for the design day load forecast is the same for weekdays as it is for weekends and holidays. Experience has shown that even during relatively warm winter conditions, the load typically would run about 1,200 Dth higher on weekdays than on the average day (which includes weekends). This means if the design weather conditions occur on a weekday, loads could be higher than forecast.

Another issue that arises from relying on an average is the impact of using the average use per degree day to increase the estimate from the normal level of degree days to the design level. Experience has shown that the marginal use per heating degree day is noticeably higher than the average. If the demand estimate for design conditions were prepared using the marginal use per degree day rather than the average, the result would be a higher level of demand under design conditions. While evidence suggests that mid-winter marginal use per degree has increased longer term, it is clear that it is difficult to model this increase accurately because of limitations in the data and the significant number of other variables that also affect peak period sendouts. For example, data may be tainted by the closing

of schools and businesses and some of the occurrences of severe cold would naturally have been on weekends or holidays. Additionally, the process of packing ("storing" gas on the pipeline by increasing pressures normal to the high end of the range of operating pressures) and drafting ("withdrawing" gas on the pipeline by decreasing pressure below to the lower end of the range of normal operating pressure) the system over the day may cause a higher or lower gate throughput measurement which naturally lags the change in temperature.

5. Conclusion

After evaluation of factors that might affect the design day standard the Company has concluded that the data available supports the continued use of 68 heating degree days as a design standard for the peak day. As recently as January 15, 2004, Providence experienced a gas day (10am to 10am) of 64 degree days with above average winds, yielding a sendout consistent with 66 or 67 HDD. With this actual experience within the past few years and the potential that the wind, higher marginal use per degree day, or other influences may also cause a higher sendout than the model predicts, the Company believes it is prudent to continue to use the 68 degree days as the standard.

Unlike design day, the design winter standard of 4,583 HDD appears to be higher than necessary. The highest observation in the past 30 years is 4,417 HDD, 166 degree days less than the current standard. It appears that the 4,651 HDD from the 1917/18 winter is not consistent with current measurement parameters and is

simply out of date. The Company proposes a new standard of 4,400 HDD, until there is evidence of a new cycle of colder sea surface temperatures.

The previous cold snap standard of 590 degree days over a 10 day period in February also falls short of capturing how difficult it would have been to meet the actual cold spell that occurred in February of 1979. To ensure reliability, the Company should expand this standard to include the 14 day period from that outbreak of cold, totaling 777 degree days.

IV. Preparation of Demand Forecast Under Normal Weather Conditions

To calculate customer load requirements ("sendout requirement") under design weather conditions, the Company first develops a demand forecast that identifies customer consumption under normal weather conditions. The Company's forecasting process consists of the following steps:

a) Compile Historical Consumption Data

The Company first compiles the most recent actual customer and consumption information available which for this study, included numbers of customers and energy consumption by rate class, by month from July 2000 through May 2007.

b) Adjust Consumption Data for Known and Measurable Changes

The Company then adjusts the actual data for any significant customer changes that would affect the Company's sendout requirements (e.g., the shut-down of the ongoing operations of a major customer).

c) Weather Normalization

The consumption data is normalized to account for the effect of weather by identifying a base-load or non-weather sensitive component and a weather sensitive component. For the base-load component, the Company uses the lower of the average use per day per customer in July and August or in August and September multiplied by the number of customers and billing days in each month. The non-base load or weather sensitive component is normalized by

applying the ratio of the normal billing degree days to actual billing degree days. Normal billing degree days are based on the 10-year normal of 5,463 degree days as established at the time of the Company's last rate case. The combination of the base load and normalized weather sensitive load provide the weather normalized consumption.

d) <u>Utilize Weather Normalized Historical Data for Forecasted Future</u> Growth

For all but the extra large rate class, the historical pattern of customer growth formed the basis of forecasted customer growth over the five year planning period. Various scenarios and sensitivities analyzed included using five-year, four-year, three-year, two-year and one-year average month-to-month change. The forecasted customer growth is based on the pattern over the past three years. An exception was the residential heating rate class where the customer counts were kept flat through next July and then the historic pattern was projected to continue. This reflects the current slowdown in the residential housing market. Forecasted consumption was projected on the basis of the average use per customer in the same month over the two most recent years. In the case of residential and small C&I rate classes, the average use per customer was adjusted to reflect a one-percent decline per year in recognition of conservation and increased use of more energy efficient equipment and appliances. Alternative scenarios included one-half a percent and two-percent declines in average use. The forecasted future growth for the extra large rate class is based on a marketing department account-by-account review

The demand forecast developed by the Company through this process represents the forecasted sendout requirement for the "Planning Load," which is the maximum customer load that the Company is obligated to supply under normal weather conditions. The Planning Load includes the load requirements of all firm sales customers, as well as all the load requirements of all firm transportation customers who are <u>not</u> exempt from pipeline capacity assignment.

V. Conversion of Normal Load to Design Load Requirement

The next step in the process is to convert the load requirement under normal weather conditions to the load requirement under design weather conditions. The design weather Planning Load is determined by calculating a heating gas use per degree factor from normal weather degree days and applying it to the 4,400 design degree days for the winter months of December through March. Additionally a non-heat base load is calculated for each winter month based on a calculated average sendout for the month of July. Each winter month's design heat sendout is then added to the monthly base load resulting in a total design sendout.

The design-weather sendout requirement by month is presented in Appendix I for the five years of the planning period. A more detailed explanation of the calculation performed to convert the normal weather requirement to the design-weather sendout requirement is provided in Appendix II.

VI. Comparison of Available Resources to Design Load Requirements

A. Overview of Resource Portfolio

To meet load requirements under design weather conditions, the Company maintains a resource portfolio consisting of pipeline transportation, underground storage and on-system LNG peaking resources. By resource type, the Company's currently available resources to meet deliverability requirements on the peak day are as follows:

	Available Resources (Citygate quantity in Dth)
Pipeline	172,900
Transportation	
Underground	39,112
Storage	
Distrigas Service	10,000
On-System LNG	127,000
TOTAL	349,012

With respect to transportation capacity, the Company has capacity entitlements on multiple upstream pipelines that provide access to production fields and pricing hubs with supply liquidity. These entitlements provide the operational flexibility to move gas supplies along a variety of transportation paths to the Company's city gates. These pipeline capacity contracts fall into three categories. First, the Company has contract entitlements to long-haul capacity that is used to transport gas from production areas in the Gulf of Mexico to underground storage facilities in central Pennsylvania and New York and to the Company's city gate in Rhode Island. Second, the Company has contract entitlements to capacity used to transport gas from the underground storage fields in central Pennsylvania, West Virginia and New York to the Company's city gates. Third, the Company has contracts for regional capacity from points in the Northeast to the Company's city gates.

In addition to pipeline capacity, the Company relies on underground storage capacity to meet load requirements. Gas from underground storage is primarily used to meet peak period requirements and to manage short-term fluctuations in demand. Typically, the Company's underground storage capacity is filled during the off peak season and drawn upon during the peak season. This is beneficial to the

cost profile of the overall portfolio because the Company is able to withdraw underground storage gas to meet peak period requirements instead of maintaining more costly long haul pipeline capacity on a year-round basis to meet that requirement. The storage supplies also generally serve as a hedge to winter price increases. In addition, the Company is able to use its long-haul capacity to bring gas from the production areas to the underground storage facilities during the off-peak season. As a result, pipeline capacity that would not otherwise be used during the off-peak is used more efficiently at a higher load factor.

Similar to the function of underground storage resources, the Company's on-system LNG resources are used to meet winter requirements not met by pipeline and underground storage resources. Because these resources are essentially available to the Company on demand, these resources are used to meet hourly fluctuations in customer requirements and to balance pressures across portions of the distribution system during periods of high demand as well as to provide supply for the day. To properly reflect this need to be able to run the LNG at less than maximum for the portion of the day when demand is below average, the LNG capacity included above has been reduced by 10,000 DT per day. This reduction captures the lost opportunity to use the LNG facility to meet supply needs for the day because a portion of the capacity must be dedicated to operation during the peak hours, leaving them unavailable during the low demand hours.

The Available Resources Table above also reflects the assumption that the second pump at the Cumberland LNG facility is not assumed to be available to provide supply. Instead it is assumed to provide back up in case of failure of the

primary pump, or, as a reserve to provide supply in the event of a pipeline problem, failure of one of the other LNG facilities or unexpected demand from unusual conditions such as high winds on peak days, the failure of a marketer or supplier.

The Company's LNG facilities play a key role in providing reliability and can be used to reduce the risk of a failure of supply at a modest cost. The facilities are distributed strategically across the system to enhance service reliability and to provide deliverability to major points on the distribution system. The severe price increases on even moderately colder than normal mid-winter days provides strong evidence that gas supply in New England is heavily constrained during peak periods. The best, most economical, approach to protect customers from problems in the event of supply disruptions is to have a portion of LNG peaking capacity available for emergencies. Moreover, of all the mechanical systems the Company relies on to provide service under peaking conditions, the LNG pump is the most prone to failure.

To assist in reviewing the gas resources available to meet customer load requirements under normal and design weather conditions, the Company prepared several schedules detailing the interstate pipeline and underground storage contracts and on-system peaking resources composing the resource portfolio. These schedules are presented in Appendix III. Appendix III, Schedule 1 presents a schematic depiction of the interstate-pipeline transportation contracts that the Company holds as part of its resource portfolio to ensure the needed level of city gate deliverability (or throughput capacity) under design-weather conditions. Appendix III, Schedule 2 provides a detailed listing of the interstate-pipeline

contracts designating for each contract the contract number, maximum daily (contract) quantity ("MDQ"), the annual contract quantity ("ACQ"), the contract expiration date, notification terms and data, and receipt and delivery points. As shown on Schedule 2, the Company's pipeline contracts are varied with respect to the contract term, with a majority of the existing contracts expiring in 2010 and 2012. The notification period for contract termination is generally a minimum of 12 months, with contracts on Texas Eastern requiring a five-year notice.

Each of the pipeline transportation contracts detailed on Schedule 2 are associated with designated receipt and delivery points because each interstate-pipeline contract is used to transport gas supply from a specific (receipt) point to a specific (delivery) point. The receipt point is the starting point of the Company's primary firm entitlement to capacity on the interstate pipeline. Receipt points may be located at specific points on the pipeline where the Company receives gas from production wells or gas-processing plants, at gas-supply market "hubs," or the point of interconnection with an underground storage facility or another interstate pipeline. Delivery points include the Company's various city gates, underground storage facilities upstream of the Company's system or an interconnection point with another interstate pipeline. As shown on Schedule 1, many of the pipeline contracts are designed to allow the Company to move gas from one pipeline to another along a transportation "path" from the gas production or market hub areas into Rhode Island.

Schedules 3 and 4 provide similar information for the Company's underground storage contracts and Schedule 5 shows the operational capabilities of the Company's on-system peaking facilities. The Company's on-system LNG

storage facilities are filled using a combination of approaches. For example, a portion of LNG storage is filled primarily using contractual liquid supplies from Distrigas and may be supplemented by spot purchases of liquid refill in the summer months following colder winters.

B. Analysis of the Adequacy of the Resource Portfolio

1. <u>Use of the SENDOUT® Modeling Software</u>

To generate the long-term gas-supply plan, the Company evaluates the current resource portfolio in relation to the forecasted demand requirement (discussed above in Section IV) under design weather conditions. The primary analytical tool used in this evaluation process is the SENDOUT® model, which enables the Company to: (1) test the ability of the resource portfolio to serve the demand requirement under various weather conditions; and (2) determine the least-cost use of available resources to meet the forecasted demand requirement. Based on the results of this analysis, the Company is able to make decisions on the adequacy of the resource portfolio and its ability to meet system requirements over the five-year planning period.

As noted above, the SENDOUT® model is a linear programming optimization software tool used to assist in evaluating, selecting and explaining long-term portfolio strategies. The model can be used to determine the best use of a given portfolio of supply, capacity and storage contracts. That is, the model can solve for the dispatch of resources that minimizes the cost of serving the specified demand given the existing resource and system operating constraints. The model dispatches resources based on the lowest variable cost to meet demand, assuming that

demand charges are fixed. The modeling process takes into account pipeline fuel losses, location based gas cost differentials (basis) and all pipeline variable costs.

The modeling process also incorporates all constraints including storage withdrawal ratchets, seasonal and monthly withdrawal limitations, as well as various planning parameters that define weather conditions that may not be inherent in the demand forecast under design-weather conditions. Moreover, the modeling process dispatches and uses resources based on economics. The least expensive resource available to the Company is used first, unless it must be conserved over the winter period to ensure reliability. For example, if incremental purchases LNG supplies are less costly than pipeline supplies at the start of the winter period, the model will dispatch pipeline supplies first in order to conserve LNG inventory for future winter needs.

In addition to the design winter and design day studies, the Company also looks at other conditions that represent challenges to its supply capability using the SENDOUT® model. It models a severe cold snap to ensure that it has adequate LNG peaking supplies to meet an extended period of severe colder-than-normal weather. The cold snap analysis result is shown in Appendix V.

As described in the design criteria section, the cold snap analysis is based on the weather experienced during an actual 14 day period in February of 1979. The cold-snap analysis provides guidance on the amount of supply that, under these extreme circumstances, would be needed to meet system requirements. The cold-snap analysis is considered in both portfolio design and in day-to-day peaking supply management. As the gas system in the New England region continues to be

subjected to additional stress from electric generation loads, a mid-winter cold snap has a substantial potential to influence winter-supply management.

The Company also uses SENDOUT® to evaluate the various supply alternatives that come up periodically as interstate pipeline companies propose various storage or peaking projects. Different assumptions about pricing can be tested and the overall economics of a portfolio change can be determined at least within the assumptions being made.

2. <u>Planning and Portfolio Strategy</u>

The market in New England continues to evolve rapidly. In the 1999 to 2001 period, the development of Sable Island gas in Eastern Canada and the completion of Maritimes and Northeast Pipeline provided large increases in supply available to the New England area. At the same time, the lower portion of Maritimes and Northeast Pipeline was also used for the final delivery of Western Canadian supply through the new Portland Pipeline. In addition, Distrigas supply was also expanded by deliveries from the expansion of liquefaction capacity in Trinidad. Lastly, the future outlook for supply in the Northeast was very positive with the anticipation of new Eastern Canadian supplies from the Deep Panuke Field, new Western Canadian supply through the proposed Millennium Pipeline and the start of construction of yet another LNG liquefaction train in Trinidad.

Faced with this fundamental shift in supply from scarcity to abundance, the Company developed a strategy of adding low-cost new capacity at regional hubs such as Dracut, MA and Beverly, MA. The fixed cost associated with that capacity was between 15% and 35% of the fixed cost of pipeline capacity from the Gulf of

Mexico. In addition, the Company terminated some expensive upstream contracts. This strategy was extremely successful and resulted in a substantial reduction in fixed costs relative to a small increase in commodity costs.

Over the last several years, however, New England has seen a huge increase in gas-fired electric generation capacity, along with continued growth in distribution company load requirements. This increase in demand appears to have offset the increase in capacity. In addition, development of the Deep Panuke Field has not occurred and is now scheduled for 2010. Supply from Sable Island has been in decline and other offshore Eastern Canadian supplies have not developed as expected. The further additions of LNG supply from Trinidad have generally been directed to other terminals and the Millennium project has been delayed and reduced in size.

The increase in demand and the reduction in supply from expected levels have led to a sharp increase in the basis for New England supply. Basis is defined as the difference between the NYMEX price at Henry Hub in Louisiana and the price of the supply delivered to another location (in this case, places like Dracut, MA or Lambertville, NJ, the starting point of the Algonquin pipeline). Basis for winter deliveries has increased sharply since late 2003 and has reached the point where purchasing a baseload winter supply at a location in the region, where the Company needs supply to fill existing capacity, exceeds the cost of pipeline capacity from the Gulf of Mexico plus the variable cost to bring the supply to New England. Recent experience has also shown that severe price increases are regularly occurring on the very coldest days of the winter when electric generation demand coincides with

the peak demand of the distribution companies. Prices in the region have gone as high as \$70 per dekatherm during an extreme cold period.

The volatility is shown on the charts in Appendix VI. These charts show the daily prices at the Dracut, Massachusetts point where the Company has 15,000 Dt/day of contract pipeline receipt capacity on Tennessee Pipeline and the price for the month for supply delivered to Tennessee Pipeline in South Texas, the receipt point for the new Tennessee Connexion project capacity. The most severe spikes in the daily price at Dracut occurred during the 2003/2004 winter during January, when New England experienced the most severe cold weather in many years and prices at Dracut exceeded \$40.00 per DT. The chart showing the 2006/2007 winter also shows spikes, sometimes a doubling of the price overnight.

The SENDOUT modeling performed for the Long Range Plan does not incorporate daily price fluctuations in purchased supply at this time. It does incorporate daily variations in demand and limitations in storage services that restrict utilization of storages. The modeling of pricing at the daily level is much more difficult and requires development of assumptions for pricing across all supply sources that would need to be coordinated with daily temperature and demand assumptions to be correct. The Company has not developed that modeling capability but is investigating potential modeling improvements to capture the impact of the severe variations in pricing.

The Company has developed three portfolio strategies to reduce the impact of these severe cost increases. In 2003 and 2004, the Company was able to reduce exposure to high daily prices by contracting for gas at regional supply points with a

fixed basis set prior to the start of the winter. More recently, the pre-winter, fixed basis offered by suppliers has increased, making overall pricing, including the fixed basis, more expensive and reducing the effectiveness of this strategy.

The Company implemented its second strategy in 2005, when it expanded its Distrigas FCS contract by 4,700 Dt/day to a total of 10,000 Dt/day, allowing the Company to rely less on regional daily purchases. While 4,700 Dt/day is a small quantity compared to the total supply capability of about 350,000 Dt/day, the exceptional flexibility of the supply and its unique pricing made it ideal. First, the contract provided 4,700 Dt of additional supply at a NYMEX based price (Gulf of Mexico), reducing reliance on regionally priced supply. Distrigas FCS purchases are priced at the NYMEX closing price for the month or at a price that has previously been locked. Second, unlike any other supply available for purchase from other sources, there is no corresponding commitment to buy it. Deliveries can be increased to the maximum on cold days and reduced on warm days and may also be reduced if prices for alternative supplies decline below first of the month Distrigas price. Several times since the contract was put in place, the ability to reduce takes and buy less expensive supply has proved to be very valuable when alternative supply prices dropped below the NYMEX closing price. The unused Distrigas contract capability could then be used at a later time to mitigate a mid month increase in regional prices above the NYMEX closing price for the month.

Third, the contract allows for a portion of the contract quantity to be taken as liquid. This means that more LNG can be used on days when prices are high because an additional firm LNG supply of up to 11 truck loads per day is available to

restock. Although the Distrigas FCS contract is very helpful in dealing with the pricing consequences of the constraints on New England regional supply, the Company believes it would be beneficial to further reduce exposure to severe regional cost increases during cold periods.

One approach to provide further protection would be to contract for additional storage service. Storage provides the ability to fix the price through summer purchases while offering substantial flexibility in the timing of its use. While the Company was able to find storage services that could meet system needs at a reasonable cost, it was unable to secure the necessary firm transportation from storage to its city gate needed for reliability on the very coldest days. The cost of the pipeline capacity to deliver a storage supply significantly exceeds the cost of the storage and undermines the ultimate economics of the storage. As an alternative to storage, the Company investigated pipeline capacity to the Gulf of Mexico supply basin where gas prices would be much less influenced by regional demand in New England. In 2005, the Company entered into a contract for capacity on the Tennessee Gas Pipeline's ("TGP") Northeast Connexion Expansion Project, which is designed to provide for the transportation of additional supplies from the Gulf of Mexico to the Company's city gate at a price that is competitive with many of the Company's existing pipeline capacity contracts. This new capacity is entering service in November 2007, after having received all necessary FERC approvals and completion of the upgrades to Tennessee's pipeline and compressors. The capacity purchased by the Company has a primary receipt point in South Texas, which has been among the lowest cost and most stable pricing locations in the Gulf area. Over

the last three years, basis in South Texas for supply delivered to Tennessee Pipeline has averaged minus \$0.56/Dt, that is, its price has averaged 56 cents below the NYMEX closing price. The 11,600 Dt/day of contract capacity will both significantly reduce customers' exposure to the high New England basis thus reducing overall commodity costs and, at the same time it will free up storage and LNG capacity that can provide further protection from high daily prices during cold spells and improve supply reliability. The Tennessee Connexion capacity will also provide supply to meet future growth and, because it is less expensive than certain other pipeline contracts, the Company may reduce costs by terminating other contracts in the event that growth is slower than expected or other new supply sources become available.

This capacity has 4 major benefits.

- 1. It creates the opportunity for additional value from asset management and release. For example the Company was able to negotiate an additional \$120,000 per month for the coming winter based on adding this capacity. In the September 1, 2007 GCR filing the company also incorporated \$30,000 per month of additional capacity release value for the months of April through October to reflect the value it expects to extract from this additional capacity in the summer.
- The September 1, 2007 GCR filing also reflects the substantial commodity cost savings from this capacity. A

simulation performed using the GCR model for the 2007/2008 gas cost year which compared commodity gas costs modeled without the Connexion capacity resulted in estimated commodity costs \$2,153,000 higher than the level in the estimate with the Connexion capacity. Details of the study are provided in Appendix VII.

3. The commodity benefit indicated above is based on pricing all daily supplies at a uniform price for the month for all supplies. As shown in the charts in Appendix VI, during the winter, prices for daily supplies in New England are quite volatile. At times they more than double when significantly colder than normal weather arrives. To the extent this new capacity reduces dependence on daily priced supplies subject to these large price swings and frees up other storage and LNG resources that can substitute for regional supplies priced at daily price indexes, significant additional savings will be available. How much those savings will be depends on the occurrence and duration of colder than normal weather. While difficult to model or estimate, the savings are expected to be much higher than those from this past winter where over \$400,000 was saved using the existing portfolio and the economic dispatch of LNG. It is expected that this capacity will allow the economic dispatch

of an incremental 200,000 to 400,000 Dt of LNG to avoid the purchase of higher cost supplies in an average winter.

Under the right circumstances that could save several million dollars in gas costs.

4. Finally, there will be opportunities in the future to reduce other higher cost contracts if the supply situation in New England warrants it or if demand growth does not meet expectations.

The Tennessee Connexion capacity provided the best available means to reliably reduce reliance on historically volatile regional prices and meet forecast demand. The New England gas supply situation has many uncertainties that make planning difficult. There are a multitude of LNG terminal projects proposed for construction to serve the New England market and the Northeast more generally. While many projects face substantial opposition and delays in their approval and/or construction, some projects are moving forward. The key issue has shifted from approval of the terminal to certainty of LNG liquid supply. The most advanced project, the Northeast Gateway project that will go into service by the end of 2007, is still lacking a firm supply of LNG liquid. The timing of the completion of a significant LNG project with a full firm supply and pipeline delivery capacity to city gates cannot be predicted, and the longer such projects are delayed the greater the risk to our customers from the exposure to regional prices. The Company is concerned that the ongoing year-to-year growth in regional gas-fired electric generation and gas consumption as new homes and businesses are constructed will continue to put upward pressure on regional prices. If LNG projects continue to be delayed, extremely high prices to customers will be the result. The Company's portfolio strategy is designed to mitigate that risk and ensure reliability at a nominal cost.

3. Results

In the 2004 Long Range Plan the Company demonstrated that the portfolio was able to meet requirements under design conditions consistent with its planning parameters. The Company also showed that there was a close match between the portfolio's capability and system requirements with little excess capacity. Based on that assessment, the need to remove the propane facility from service, the loss of peaking capacity from Pawtucket Power and the need to improve the Company's ability to manage extreme daily price excursions, the Company entered into a contract in January 2005 for the Connexion capacity, the most cost effective pipeline capacity offered in many years.

The review of the design parameters shows that customer demand for both the peak day and design winter can be met by the existing portfolio. Appendix II shows forecasted peak day in 2012 of 335,000 DT, about 4% less than the 349,000 DT of available capacity shown above. Similarly, there is adequate capacity available to meet the design winter requirements. Appendix IV shows the design winter dispatch and a review of the dispatch shows a number of contracts with unused capability during the peak winter months.

The key planning parameter for the portfolio is the cold snap analysis which is shown in Appendix VI. The cold snap analysis indicates that for the upcoming 2007/2008 winter the Company would have to use 711,000 Dt of LNG to meet

customer demand, 86% of its total LNG working inventory, if the cold snap were to occur as shown in our design conditions. During that time period, the Company would be able to restock 34,000 DT, reducing the overall net draw to 81%. This means that even as late as February 1st, the Company must maintain an LNG inventory of at least 680,000 DT, approximately 80% full. Given the potential for significant LNG use during January, the potential to need 80% of total LNG inventory in February is a strong indication that the portfolio is adequate but with no excess capacity. It also indicates that LNG inventories need to be carefully managed during the winter until it is clear that such a severe outbreak of cold will not occur.

4. <u>Future Modifications to the Resource Portfolio</u>

The Company's principal objective in designing the resource portfolio is to ensure that the Company obtains supply at the best cost possible without compromising reliability. As part of its evaluation, the Company also assesses the impact on customers caused by the increase in winter basis in New England and the severe volatility of daily prices. In the past, this evaluation has led to the development of strategies to manage price volatility and to portfolio changes which successfully took advantage of the reduction in basis following the arrival of new supplies in 1999. The Company continually monitors customer demand, load growth, and market opportunities to add or terminate resource contracts. In general, the Company's ability to eliminate contracts from the resource portfolio is constrained by: (1) system requirements; and (2) contractual terms and notification requirements. Nevertheless, the Company vigorously pursues opportunities to restructure the portfolio, which may come about as a result of changes in the

marketplace, expiration of existing contracts or re-contracting options extended by the pipeline companies.

The current environment is difficult for supply planning. None of the proposed LNG projects given a good indication of what pricing terms will be. The portfolio provides a significant ability to purchase supply from either the Canaport LNG project in St Johns, New Brunswick or from either of the offshore LNG projects near Boston, the Northeast Gateway or the Suez project. It has 15,000 Dt of Tennessee capacity at Dracut, 8,000 Dt per day from Hubline and 10,000 Dt of additional Algonquin that can all be directly used to deliver firm supplies from any of the LNG projects. The additional 10,000 Dt/day of Algonquin East-to-West capacity which the company recently contracted for is attractively priced and needed to meet requirements in constrained areas. It is expected to be available in late 2009 or 2010 provided it is approved by FERC. With this new capacity in place the Company can meet the cold snap design condition in 2012, the last year of this study, and meet key hourly limits at several gates that are or are expected to be constrained.

The current portfolio offers exceptional opportunities to obtain the lowest cost supply from new and existing supply sources. The regional capacity described above, combined with the Company's existing contract capacity in the Gulf of Mexico producing area or from Western Ohio and Western Canada through Niagara and Iroquois Pipeline provides a well diversified portfolio of supply sources. Each of these areas offers an opportunity. Gas from the Rockies will be available in Western

Ohio through the Rockies Express Pipeline. The Gulf is home to a large number of new LNG terminal facilities and new production.

The increased prices for supply have generated a series of responses that are shifting the structure of gas supply sourcing to new producing areas and dramatically expanding the use of vaporized LNG as a supply source. At the same time, there is no near term alternative available to meet increasing electric demand except the greater utilization of natural gas-fired generation, particularly in the Northeast.

While the current environment for supply planning is challenging because of the pace of change and the current tightness of supply, the Company has never been in a better position to take advantage of the changes. Over the time period when the changes will really take hold, roughly the next 5 years, the majority of the Company's contracts will be in a position where they can be terminated if better alternatives become available.

More importantly, though, the Company is entering a new era where it is part of a much larger organization that is the largest gas distribution Company in the Northeast. This is exciting for two reasons. First, the Company will be better positioned to deal with suppliers and pipelines than it has in the past and second, it will be able to access more suppliers and have more supply opportunities than previously.

As the full integration of the Keyspan operation moves forward, the Rhode Island gas service area of National Grid will also have the benefit of access to additional planning resources. Some of the limitations to the existing modeling

capability will be eliminated. Keyspan brings with it access to more sophisticated modeling software, experienced people, more resources dedicated to modeling and planning and a great deal of first hand knowledge and understanding of the dynamics of the New England and New York markets.

5. Conclusion

The Supply Plan presents the Company's analysis of customer demand and available gas resources for the five-year planning period 2007/08 through 2011/12. As discussed above, the Company's analysis shows that the available gas resources are sufficient to meet forecasted sendout requirements under all design weather conditions over the five-year planning period ending 2012. Moreover, through the planning process, the Company has sought to add resources to mitigate the substantial increase in basis in New England as well as the exposure to sharp increases in costs from the reliance on regional supplies at daily prices. The Company continues to monitor and evaluate the market as it evolves and changes to ensure that the portfolio continues to represent the optimal combination of resources to meet customer demand in a reliable and cost-effective manner.

NATIONAL GRID

DESIGN SENDOUT ESTIMATE Units in Dth

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Year													
07-08	2,682,867	, ,						,	,	,	,	, ,	30,478,415
	349,061	571,439	570,293	•	,	,	268,302	,					3,885,966
	3,031,920	5,532,765	0,320,644	5,045,774	4,452,734	2,369,397	1,450,786	931,643	830,242	847,405	971,397	1,781,466	34,364,381
08-09	2,692,027	4,978,266	5,770,186	5,158,044	3,989,460	2,101,035	1,186,522	800,050	711,850	725,667	810,448	1,531,689	30,455,244
	349,079	571,462	570,311	577,513	476,875	275,529	268,320	134,331	120,631	124,225	163,722	255,007	3,887,005
	3,041,106	5,549,728	6,340,497	5,735,557	4,466,335	2,376,564	1,454,842	934,381	832,481	849,892	974,170	1,786,696	34,342,249
09-10	2,702,263	4,997,195	5,792,126	5,177,656	4,004,629	2,109,024	1,191,033	803,092	714,557	728,426	813,530	1,537,513	30,571,044
	348,700	570,864	569,748	563,541	476,370	275,232	272,284	133,757	120,698	124,089	163,528	254,713	3,873,524
	3,050,963	5,568,059	6,361,874	5,741,197	4,480,999	2,384,256	1,463,317	936,849	835,255	852,515	977,058	1,792,226	34,444,568
10-11	2,712,515	5,016,154	5,814,100	5,197,299	4,019,822	2,117,025	1,195,552	806,139	717,268	731,189	816,616	1,543,346	30,687,025
	348,719	570,888	569,766	563,564	476,394	275,250	272,302	133,774	120,714	124,105	163,455	254,730	3,873,661
	3,061,234	5,587,042	6,383,866	5,760,863	4,496,216	2,392,275	1,467,854	939,913	837,982	855,294	980,071	1,798,076	34,560,686
11-12	2,722,790	5,035,155	5,836,124	5,345,680	4,035,049	2,125,044	1,200,081	809,193	719,985	733,959	819,710	1,549,192	30,931,962
	348,738	570,912	569,785	575,955	476,419	275,268	272,320	133,790	120,731	124,122	163,561	254,748	3,886,349
	3,071,528	5,606,067	6,405,909	5,921,635	4,511,468	2,400,312	1,472,401	942,983	840,716	858,081	983,271	1,803,940	34,818,311

Note: February 2008 AND 2012 adjusted for leap year.

Total

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Peak Subperiod Demand Forecast by Class

JAN 8, 2008 Daily System Activity Units: DT

AREA DESIGN SALES NON EX TRANS

SYSTEM 302103 28768

Demand Type	Requirement	Supply Path	DT	Storage/LNG	DT
RI Sales - Design	302,103	TENN_ZONE_0	9,432	TENN_8995	0
Non Exempt Transport	28,768	TENN_ZONE_1	19,903	TENN_501	4,256
Design ·		TENN_CONX	11,600	GSS 600045	5,549
		TENN_DRACUT	15,000	GSS 300171	2,584
		TETCO_STX	13,198	GSS 300169	2,035
		TETCO_ELA	7,134	GSS 300168	1,383
		TETCO_WLA	15,716	GSS 300170	5,256
		TETCO_ETX	9,886	TETCO_40022	13,957
		TETCO - NF	882	TETCO_40051	932
		HUBLINE	8,000	TETCO 40018	647
		M3_DELIVERE	6,656	COL FS 3801	2,513
		MAUMEE_SUPP	29,619	LNG EXETER	20,000
		BROADRUN_CO	9,873	LNG PROV	76,243
		COLUMBIA TE	7,360	LNG CUMBERLAN	12,316
		TRAN WHART	310		
		TETCO B&W	2,072		
		DOM TET FTS	3,662		
		TETCO DOM	530		
		ANE	1,000		
		NIAGARA	1,067		
		NEWPORT_LNG	300		
		DIST FCS VA	10,000		
· ·	330,871		183,200		147,671

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Peak Subperiod Demand Summary

JAN 8, 2009 Daily System Activity Units: DT

FORECAST

AREA DESIGN SALES NON EX TRANS

SYSTEM 303134 28769

	Demand Type	Requirement	Supply Path	DT	Storage/LNG	DT
	RI SALES DE	303,134	TENN_ZONE_0	9,432	TENN_8995	0
	NON EX TR D	28,769	TENN_ZONE_1	19,903	TENN_501	4,256
	•	0	TENN_CONX	11,600	GSS 600045	5,549
	•	0	TENN_DRACUT	15,000	GSS 300171	2,584
	•	0	TETCO_STX	13,198	GSS 300169	2,035
	•	0	TETCO_ELA	7,134	GSS 300168	1,383
	•	0	TETCO_WLA	15,716	GSS 300170	5,256
		0	TETCO_ETX	9,886	TETCO_40022	13,957
		0	TETCO - NF	882	TETCO_40051	932
		0	HUBLINE	8,000	TETCO 40018	647
		0	M3_DELIVERE	6,656	COL FS 3801	2,513
		0	MAUMEE_SUPP	29,619	LNG EXETER	18,260
		0	BROADRUN_CO	9,873	LNG PROV	79,096
		0	COLUMBIA TE	7,360	LNG VALLEY	12,235
		0	TRAN WHART	310		0
		0	TETCO B&W	2,072		0
		0	DOM TET FTS	3,662		0
		0	TETCO DOM	530		0
		0	ANE	1,000		0
		0	NIAGARA	1,067		0
		0	NEWPORT_LNG	300		0
		0	DIST FCS VA	10,000	•	0
Total		331,903		183,200		148,703

Total

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Peak Subperiod Demand Summary

JAN 8, 2010 Daily System Activity Units: MDT

AREA DESIGN SALES NON EX TRANS

SYSTEM 304287 28740

Demand Type	Requirement	Supply Plan	DT	Storage/LNG	DT
RI SALES DE	304,	287 TENN_ZONE_0	9,432	TENN_8995	0
NON EX TR D	28,	740 TENN_ZONE_1	19,903	TENN_501	4,256
		0 TENN_CONX	11,600	GSS 600045	5,549
		0 TENN_DRACUT	15,000	GSS 300171	2,584
		0 TETCO_STX	13,198	GSS 300169	2,035
		0 TETCO_ELA	7,134	GSS 300168	1,383
		0 TETCO_WLA	15,716	GSS 300170	5,256
		0 TETCO_ETX	9,886	TETCO_40022	13,957
		0 TETCO - NF	882	TETCO_40051	932
		0 HUBLINE	18,000	TETCO 40018	647
		0 M3_DELIVERE	6,656	COL FS 3801	2,513
		0 MAUMEE_SUPP	29,619	LNG EXETER	13,559
		0 BROADRUN_CO	9,873	LNG PROV	73,500
		0 COLUMBIA TE	7,360	LNG VALLEY	13,956
		0 TRAN WHART	310	•	0
		0 TETCO B&W	2,072	•	0
		0 DOM TET FTS	3,662	•	0
		0 TETCO DOM	530	•	0
		0 ANE	1,000	•	0
		0 NIAGARA	1,067	•	0
		0 NEWPORT_LNG	0	•	0
		0 DIST FCS VA	10,000		0
	333,	027 .	192,900		140,127

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Peak Subperiod Demand Forecast by Class

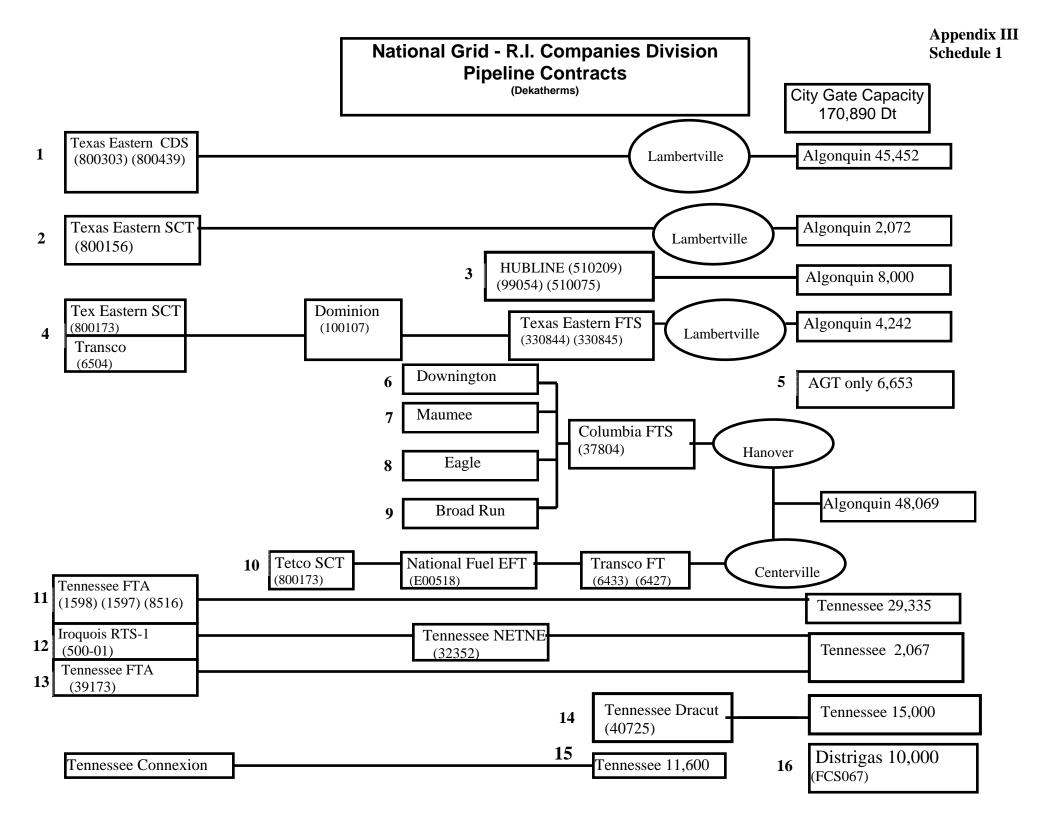
JAN 8, 2011	Daily	System Activ	ity	Units: MDT				
AREA DESIGN SA	LES NON EX T	RANS .						
SYSTEM	305349	28741		0	0		0	0
Demand Ty	pe Requiemer	nt Su	pply Path		DT	Storage/LNG		DT
RI SALES D		,	NN_ZONE_0		432	TENN_8995		0
NON EX TR	: D		NN_ZONE_1	,	903	TENN_501		4,256
			NN_CONX	,	600	GSS 600045		5,549
•			NN_DRACUT		000	GSS 300171		2,584
•			TCO_STX		198	GSS 300169		2,035
			TCO_ELA		134	GSS 300168		1,383
		0 TE	TCO_WLA	15,	716	GSS 300170		5,256
			TCO_ETX	,	886	TETCO_40022		13,957
		0 TE	TCO - NF		882	TETCO_40051		932
•		0 HL	JBLINE	18,	000	TETCO 40018		647
		0 M3	_DELIVERE	6,0	656	COL FS 3801		2,513
		0 M <i>A</i>	AUMEE_SUPP	29,	619	LNG EXETER		16,000
		0 BR	OADRUN_CO	9,8	873	LNG PROV		73,843
		0 CC	LUMBIA TE	7,3	360	LNG VALLEY		12,235
		0 TR	AN WHART	;	310			0
		0 TE	TCO B&W	2,	072			0
		0 DC	M TET FTS	3,0	662			0
		0 TE	TCO DOM		530			0
		0 AN	ΙE	1.0	000			0
			AGARA		067			0
			WPORT LNG	-,	0			0
			ST FCS VA	10,	000			0
Total .		334,090 .		192,	900			141,190

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JAN 8, 2012 Daily System Activity Units: DT

	Demand Type	Requirement	Supply Path	DT	Storage/LNG	DT
	RI SALES DE	306,598	TENN_ZONE_0	9,432	TENN_8995	0
	NON EX TR D	28,742	TENN_ZONE_1	19,903	TENN_501	4,256
	•	0	TENN_CONX	11,600	GSS 600045	5,549
		0	TENN_DRACUT	15,000	GSS 300171	2,584
		0	TETCO_STX	13,198	GSS 300169	2,035
		0	TETCO_ELA	7,134	GSS 300168	1,383
		0	TETCO_WLA	15,716	GSS 300170	5,256
	•	0	TETCO_ETX	9,886	TETCO_40022	13,957
	•	0	TETCO - NF	882	TETCO_40051	932
		0	HUBLINE	18,000	TETCO 40018	647
		0	M3_DELIVERE	6,656	COL FS 3801	2,513
		0	MAUMEE_SUPP	29,619	LNG EXETER	20,000
		0	BROADRUN_CO	9,873	LNG PROV	70,178
	•	0	COLUMBIA TE	7,360	LNG VALLEY	13,150
		0	TRAN WHART	310		0
	•	0	TETCO B&W	2,072		0
		0	DOM TET FTS	3,662		0
		0	TETCO DOM	530		0
		0	ANE	1,000		0
		0	NIAGARA	1,067		0
		0	NEWPORT_LNG	0		0
	•	0	DIST FCS VA	10,000		0
Total		335,340		192,900		142,440



NATIONAL GRID - R.I. SERVICE AREA

TRANSPORATION CONTRACTS
AS OF October 1,2007
RHODE ISLAND

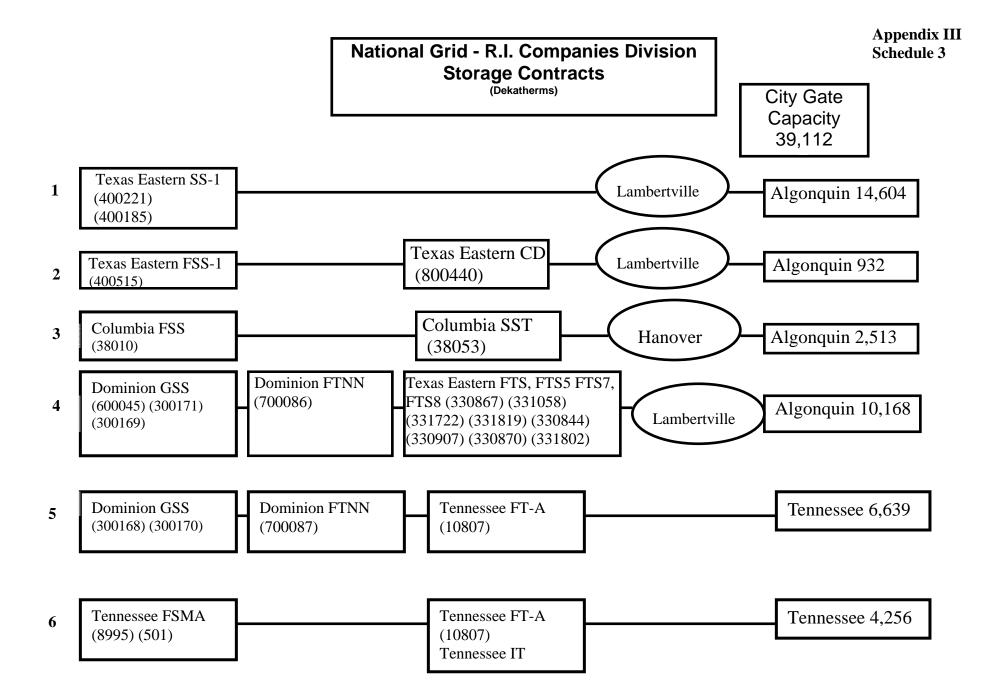
Appendix III Schedule 2 Page 1 of 2

Path # 1 1 1	PIPELINE Texas Eastern Texas Eastern Algonquin Path Total	Rate Schedule CDS Zn1-3 CDS Zn1-4 AFT-E	Contract # 800303R 800439 93011E	Maximum Daily Quqntity 45,219 715 45,934 45,934	Annual Contract Quantity 16,504,935 260,975 15,774,067	Expiration <u>Date</u> 10/31/12 10/31/12 10/31/12	Notification Terms 5 years 5 years 12 months	Notification <u>Date</u> 10/31/07 10/31/07 10/31/11	Receipt Points Supply Area Supply Area Lambertville/Hanover NJ (Tetco)	<u>Delivery Points</u> Lambertville, Hanover Lambertville, Hanover PGC City Gates
2 2	Texas Eastern Algonquin Path Total	SCT Zn1-3 AFT-ES1	800156 93001ESC	2,099 2,072 2,072	766,135 671,854	10/31/12 10/31/12	24 months 12 months	10/31/10 10/31/11	Supply Area Lambertville, NJ; Hanover, NJ	Lambertville, Hanover City Gate - Warren
3 3 3	Algonquin Hubline Algonquin Hubline Algonquin Hubline Path Total	AFT-1 AFT-1 AFT-1	510075 99054 510209	4,000 500 3,500 8,000	1,460,000 182,500 1,277,500	10/13/13 10/31/23 10/31/15	12 months 12 Months 12 Months	10/13/12 10/31/22 10/31/14	M&N or offshore LNG M&N or offshore LNG M&N or offshore LNG	City Gate - Warren PGC City Gate - Westerly Westerly - Yankee - Montville,Conn
4 4 4 4 4 4 4 4	Texas Eastern Transco Transco Dominion Dominion Texas Eastern Texas Eastern Algonquin Algonquin Path Total	SCT Zn1-2 FT Zn2-6 FT Zn3-6 FTNN FTNN FTS FTS AFT-1 AFT-1S3	800173 6504 6504 700086 100107 330845 330844 93207 96004SC	549 138 3 2,061 537 537 3,760 3,659 533 4,192	200,385 50,370 1,095 752,265 196,005 196,005 2,327,605 1,335,535 618,125	10/31/11 10/31/12 10/31/12 03/31/12 03/31/12 03/31/10 10/31/09 10/31/09 10/31/12 10/31/12	5 Years 12 Months 12 Months 12 months 12 months 2 years 2 years 12 months 12 months	10/31/06 10/31/11 10/31/11 04/01/11 03/31/09 10/31/07 10/31/07 10/31/11	Supply Area Supply Area Pools Supply Area Pools Lebanon, Oakford, Broadrun Tetco - Oakford Dominion - Leidy Leidy, Pa. Lambertville, N.J. (Tetco) Centerville	Dominion - Oakford , PA Leidy, Pa. (Dominion) Leidy, Pa. (Dominion) Leidy (Tetco) Tetco - Leidy Lambertville Lambertville, N.J. (AGT) PGC City Gates City Gate - Warren
5	Algonquin Path Total	AFT-E	93011E	6,656 6,656	2,279,070	10/31/12	12 months	10/31/11	Lambertville/Hanover NJ (Tetco)	PGC City Gates
6 6	Columbia Algonquin Path Total	FTS AFT-1	37804 90106	3,855 3,798 3,798	17,321,075 1,392,475	10/31/10 11/01/10	12 months 12 months	10/31/09 10/31/09	Downington Hanover N.J. (Columbia)	Hanover N.J. (AGT) PGC City Gates

NATIONAL GRID - R.I. SERVICE AREA

TRANSPORATION CONTRACTS AS OF October 1,2007 RHODE ISLAND Appendix III Schedule 2 Page 2 of 2

		Data		Maximum Daily	Annual	Expiration	Notification	Notification		
Path #	PIPELINE	Rate Schedule	Contract #	Quantity	Contract Quantity	Date	Terms	Date	Receipt Points	Delivery Points
7	Columbia	FTS	37804	30,000	17,321,075	10/31/10	12 months	10/31/09	Maumee Ohio	Hanover N.J. (AGT)
7	Algonquin	AFT-1	90107	26,129	3,945,479	11/01/10	12 months	10/31/09	Hanover N.J. (Columbia)	PGC City Gates
7	Algonquin	AFT-1	90106	3,490	1,273,850	11/01/10	12 months	10/31/09	Hanover N.J. (Columbia)	PGC City Gates
	Path Total			29,619						
8	Columbia	FTS	37804	3,600	17,321,075	10/31/10	12 months	10/31/09	Eagle (PA)	Hanover N.J. (AGT)
8	Algonquin Path Total	AFT-3	9001	3,562 3,562	1,300,130	12/14/10	12 months	12/14/09	Hanover N.J. (Columbia)	PGC City Gates
9	Columbia	FTS	37804	10,000	17,321,075	10/31/10	12 months	10/31/09	Broadrun West VA	Hanover N.J. (AGT)
9	Algonquin	AFT-1	90106	5,437	1,984,505	11/01/10	12 months	10/31/09	Hanover NJ (Columbia)	PGC City Gates
9	Algonquin Path Total	AFT-3	9001	4,436 9,873	1,619,140	12/14/10	12 months	12/14/09	Hanover NJ (Columbia)	PGC City Gates
10	Texas Eastern	SCT Zn1-2	800173	925	337,625	10/31/12	5 Years	11/01/07	Supply Area	National Fuel- Bristoria (925)
10	National Fuel	EFT	E00518	1,177	429,605	03/31/10	12 months	03/30/09	Tetco - Bristoria	NF Storage or Transco Wharton
10	National Fuel (d)	EFT	E00533	63	22,995	03/31/10	12 months	03/30/09	Appalachian pool	Wharton, N.Y. (Transco)
10	Transco	FT	6427	1,178	429,970	05/31/09	12 months	05/30/08	Wharton	Algonquin - Centerville, NJ
10	Transco	FT	6433	62	22,630	05/31/09	12 Months	05/30/08	Warton (National Fuel)	Centerville, N.J. (AGT)
10	Algonquin	AFT-1S3	96004SC	1,051	383,615	10/31/12	12 months	10/31/11	Centerville	City Gate - Warren
10	Algonquin	AFT-1	96003	61	22,265	10/31/12	12 months	10/31/11	Centerville, N.J. (Transco)	PGC City Gates
	Path Total			1,192						
11	Tennessee	FT-A	1598	19,335	7,057,275	04/30/12	12 months	05/01/11	Zone 0, Zone 1 Supply area	PGC City Gates
11	Tennessee	FTA	1597	5,000	1,825,000	10/31/08	12 months	11/01/07	Zone 0, Zone 1	Zone 4/6 City Gate
11	Tennessee Path Total	FTA	8516	5,000 29,335	1,825,000	10/31/08	12 months	11/01/07	Zone 0, Zone 1	Zone 4/6 City Gate
12	Iroquois	RTS-1	500-01	1,012	365,000	10/31/11	12 months	10/31/10	Waddington	Zone 5 - Iroquois Wright
12	Tennessee Path Total	NETNE	32352	1,000 1,000	365,000	01/24/12	12 months	01/24/11	Zone 5 - Iroquois Wright	Zone 6 City Gate - Cumberland
13	Tennessee	FTA	39173	1,067	389,455	03/31/13	12 months	03/31/12	Zone 5 - Niagara River	Zone 6 City Gate - Cumberland
14	Tennessee Path Total	FT-A	40725	15,000 15,000	5,475,000	06/30/12	12 months	07/01/11	Dracut, Mass.	PGC City Gates
15	Tennessee Connexio	on FT-A		11,600	4,234,000	10/31/19	12 months	10/31/18	Zone 0 (South Texas)	City Gates
16	Distrigas	FCS	FCS027	10,000	1,510,000	10/31/10	N/A	N/A	Everett, Ma.	City Gates



Appendix III Schedule 4 Page 1 of 2

STORAGE CONTRACTS AS OF October 1,2007

		Rate				Expiration	Notification	Notification		
	STORAGE	<u>Schedule</u>	Contract #	MDWQ	Capacity	<u>Date</u>	<u>Terms</u>	Date	Receipt Points	Delivery Points
1	Texas Eastern	SS-1	400185	688	51,990	04/30/13	5 years	04/30/08	Oakford	Lambertville
1	Texas Eastern	SS-1	400221	14,137	1,188,036	04/30/12	5 years	05/01/07	Leidy, Oakford, Pa.	Lambertville, Hanover N.J.
1	Algonquin	AFT-E	93011E	3,987	1,076,490	10/31/12	12 months	10/31/11	Lambertville/Hanover N.J. (Tetco)	PGC City Gates
1	Algonquin	AFT-EW	9W009E	6,812	1,446,384	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
1	Algonquin	AFT-1	93207	3,805	1,388,825	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
	Path Total			14,604						
2	Texas Eastern	FSS-1	400515	944	56,640	04/30/12	5 years	05/01/07	Leidy, Oakford, Pa.	Lambertville, Hanover N.J.
2	Texas Eastern	CDS Zn3-3	800440	944	344,560	10/31/12	5 years	10/31/07	Leidy, Pa.	Lambertville, N.J. (AGT)
2	Algonquin	AFT-3	9001	932	340,180	12/14/10	12 months	12/14/09	Hanover N.J. (Columbia)	PGC City Gates
	Path Total			932						
3	Columbia	FSS	38010	2,545	203,957	10/31/09	12 months	10/31/08	Storage Pools	Hanover, N.J. (AGT)
3	Columbia	SST	38053	2,545	696,603	07/31/09	12 months	07/31/08	Storage Pools	Hanover N.J. (AGT)
3	Algonquin	AFT-3	9001	2,110	770,150	12/14/10	12 months	12/14/09	Hanover N.J. (Columbia)	PGC City Gates
3	Algonquin	AFT-1	93207	403	147,095	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
	Path Total			2,513						
4	Dominion	GSS-TE	600045	14,270	1,376,324	03/31/09	2 years	04/01/07	Leidy, Oakford, Pa.	Leidy, Oakford, Pa. (Tetco)
4	Dominion	GSS	300171	2,617	188,814	03/31/08	2 years	04/01/06	Storage Pools	Leidy. Pa. (Tetco)
4	Dominion	GSS	300123	2,061	206,100	03/31/12	2 years	04/01/10	Leidy	Tetco - Leidy
4	Dominion	FTNN	700086	2,061	296,745	03/31/12	12 months	04/01/11	Leidy (storage)	Leidy (Tetco)
4	Texas Eastern	FTS	330844	2,617	955,205	10/31/09	2 years	10/31/07	Leidy, Pa.	Lambertville, N.J. (AGT)
4	Texas Eastern	FTS-5	330907	248	90,520	03/31/12	2 years	03/31/10	Leidy, Pa.	Lambertville, N.J. (AGT)
4	Texas Eastern	FTS-5	330870	1,000	100,000	03/31/12	Two Years	03/31/10	Dominion - Chambersburg	Lambertville - AGT
4	Texas Eastern	FTS-5	330867	813	122,763	03/31/12	Two Years	03/31/10	Dominion - Chambersburg	Lambertville
4	Texas Eastern	FTS-7	331058	538	196,370	03/31/09	2 years	04/01/07	Leidy, Pa.	Lambertville, N.J. (AGT)
4	Texas Eastern	FTS-8	331802	187	28,237	03/31/09	Two Years	04/01/07	Dominion - Oakford	Lambertville
4	Texas Eastern	FTS-8	331722	79	28,835	03/31/09	2 years	04/01/07	Leidy, Pa.	Lambertville, N.J. (AGT)
	Texas Eastern	FTS-8	331819	4,745	1,731,925	03/31/09	2 years	04/01/07	Leidy, Pa.	Lambertville, N.J. (AGT)
4	Algonquin	AFT-1P	933011	1,000	365,000	03/31/12	12 months	03/31/11	Lambertville	City Gate - Cumberland
4	Algonquin	AFT-1P	933001	813	296,745	10/31/12	12 months	10/31/11	Lambertville	City Gate - Warren
4	Algonquin	AFT-1P	933004	248	90,520	03/31/12	12 months	03/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
4	Algonquin	AFT-1	93407	208	75,920	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
4	Algonquin	AFT-1	9B105	7,633	1,796,340	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
4	Algonquin	AFT-1	9\$102	79	16,805	10/31/12	12 months	10/31/11	Lambertville, N.J. (Tetco)	PGC City Gates
4	Algonquin	AFT-1SX	9S100S	187	39,737	10/31/12	12 months	10/31/11	Lambertville	City Gate - Warren
	Path Total			10,168						

NATIONAL GRID - R.I. SERVICE AREA

STORAGE CONTRACTS AS OF October 1,2007 Appendix III Schedule 4 Page 2 of 2

	STORAGE	Rate Schedule	Contract #	MDWQ	Capacity	Expiration <u>Date</u>	Notification <u>Terms</u>	Notification <u>Date</u>	Receipt Points	Delivery Points
5	Dominion	GSS	300140	1,401	154,050	03/31/10	2 years	03/31/08	Zone 4 - Ellisburg	Zone 6 City Gate
5	Dominion	GSS	300141	5,448	490,340	03/31/10	2 years	03/31/08	Zone 4 - Ellisburg	Zone 6 City Gate
5	Tennessee	FTA	10807	6,639	2,423,235	10/31/12	12 months	11/01/11	Zone 4 - North Storage	Zone 6 City Gate - Cumberland
6 6	Tennessee Tennessee	FSMA FTA	8995 10807	10,249 4,256	210,000 1,553,440	10/31/12 10/31/12	12 months 12 months	11/01/11 11/01/11	Elisburg, Pa. Zone 4 - North Storage	PGC City Gate Zone 6 City Gate - Cumberland

National Grid - RHODE ISLAND SERVICE AREA

PEAKING FACILITIES as of October 1, 2007

Facility Location	Date in Service	Effective Storage capacity (f)	Max hour	Max day	Type of Facility
Providence R.I. (a)	1973	600,000 Dth (b)	3,958 Dth	85,000-95,000 Dth (c) (d)	LNG Tank
Exeter R.I.	1972	162,500 Dth	1,000 Dth	24,000 Dth	LNG Tank
Westerly R.I.	1993	N/A	250 Dth	(d)	Truck Mounted
Newport R.I.	2002	N/A	500 Dth	(d)	Truck fed Vaporizer
Cumberland R.I.	1974	66,900 Dth	750 Dth	18,000 Dth (e)	LNG Tank

- (a) The Providence LNG tank is owned and operated by Keyspan.
- (b) National Grid share of the approximately 2,200,000 Dth Tank capacity.
- (c) National Grid share of the 150,000 Dth total daily output. Note all output from the tank enters Rhode Island distribution system.
- (d) Facilities are operated to follow the daily load requirement. To the extent the Keyspan LNG facility is operated to meet loads during the peak sendout hours, it's ability to produce for supply purposes is reduced.
- (e) Assumes single pump operation with second pump as back up.
- (f) Tank capacities have been adjusted to reflect necessary heel levels and lower Btu supplies.

New Energy Associates, LLC Page 1 NATIONAL GRID

Report 13 21:40:59 DESIGN WEATHER SCENARIO

Natural Gas Supply VS. Requirements					Units: DT								
	NOV 2007	DEC 2007	JAN 2008	FEB 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	TOTAL
Forecast Demand SALES DESIGN NON EXEMPT TRANSPORT Total Demand	2,682,867 349,061 3,031,928	4,961,326 571,439 5,532,765	5,750,551 570,293 6,320,844	5,267,297 576,477 5,843,774	3,975,884 476,850 4,452,734	2,093,886 275,511 2,369,397	1,182,484 268,302 1,450,786	797,328 134,315 931,643	709,428 120,814 830,242	723,197 124,208 847,405	807,691 163,706 971,397	1,526,476 254,990 1,781,466	30,478,415 3,885,966 34,364,381
Storage Injections													
TENN_8995	0	0	0	0	0	32,000	23,100	27,300	27,300	27,300	26,250	26,250	189,500
TENN_501	0	0	0	0	0	120,000	37,389	72,641	72,641	96,855	60,534	60,534	520,595
GSS 600045	0	0	0	0	0	180,000	137,632	137,632	137,632	137,632	137,632	123,869	992,031
GSS 300171	0	0	0	0	0	31,470	18,881	18,881	18,881	18,881	18,881	16,993	142,870
GSS 300169	0	0	0	0	0	43,281	20,610	20,610	20,610	20,610	20,610	18,549	164,880
GSS 300168	0	0	0	0	0	30,000	15,405	15,405	15,405	15,405	15,405	13,865	120,890
GSS 300170	0	0	0	0	0	102,971	49,034	49,034	49,034	49,034	49,034	44,131	392,272
TETCO_400221	0	0	0	0	0	183,210	118,804	118,804	118,804	118,804	118,804	106,923	884,151
TETCO_400515	0	0	0	0	0	8,730	5,664	5,664	5,664	5,664	5,664	5,098	42,148
TETCO 400185	0	0	0	0	0	10,918	5,199	5,199	5,199	5,199	5,199	5,199	42,112
COL FS 38010	0	0	0	0	0	60,000	20,396	20,396	20,396	20,396	20,396	18,356	180,335
LNG EXETER	8,000	2,900	0	0	49,510	10,800	2,700	0	0	0	15,750	18,900	108,560
LNG PROV	45,000	0	3,642	4,396	0	0	40,500	81,000	62,100	0	0	32,400	269,038
LNG VALLEY	3,620	3,782	1,937	0	6,404	0	43	0	43	43	20,097	43	36,013
Total Inj	56,620	6,682	5,580	4,396	55,914	813,380	495,357	572,566	553,709	515,823	514,256	491,110	4,085,393
Total Req	3,088,548	5,539,447	6,326,424	5,848,170	4,508,648	3,182,777	1,946,143	1,504,209	1,383,951	1,363,228	1,485,653	2,272,576	38,449,774

	NOV 2007	DEC 2007	JAN 2008	FEB 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	TOTAL
Sources of Supply	2007	2007	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	
TENN ZONE 0	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	173,819	215,196	282,960	292,392	3,256,343
TENN ZONE 1	202,900	616,993	616,993	577,187	493,761	24,636	292,392	202,900	0	213,190	202,900	292,392	2,329,570
TENN_ZONE_T	29,700		166,117	148,495	,	24,030	0	0	0	0	0	0	599,924
_	•	221,049	,	,	34,563		-					-	,
TETCO_STX	395,940	409,138	409,138	382,742	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	4,830,468
TETCO_ELA	84,908	207,681	214,020	206,886	105,465	0	0	0	0	0	0	0	818,960
TETCO_WLA	367,185	480,648	482,415	455,764	287,625	331,471	0	0	0	0	0	0	2,405,107
TETCO_ETX	296,580	306,466	306,466	286,694	306,466	296,580	306,466	296,580	306,466	306,466	296,580	0	3,311,810
TETCO - NF	0	24,696	26,460	25,578	11,466	0	0	0	0	0	0	0	88,200
HUBLINE	0	158,188	140,080	121,453	49,068	235,431	248,000	0	0	0	55,231	248,000	1,255,453
M3_DELIVERED	0	35,419	181,041	179,712	52,866	0	0	0	0	0	0	0	449,037
MAUMEE_SUPP	872,445	918,189	918,189	858,951	898,774	888,570	158,874	17,690	14,396	12,396	14,396	519,210	6,092,079
BROADRUN_COL	296,190	306,063	306,063	286,317	306,063	296,190	76,041	31,340	6,000	8,000	6,000	165,792	2,090,059
COLUMBIA TET	0	48,789	57,839	25,600	5,028	0	0	0	0	0	0	0	137,255
TRAN WHART	0	1,240	2,170	620	0	0	0	0	0	0	0	0	4,030
TETCO B&W	0	43,512	19,270	12,432	12,846	0	0	0	0	0	0	0	88,060
DOM TET FTS	0	80,564	87,393	91,106	32,618	0	0	0	0	0	0	0	291,680
TETCO DOM	0	11,130	10,070	11,921	3,710	0	0	0	0	0	0	0	36,831
ANE	30,000	31,000	31,000	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000	366,000
NIAGARA	0	21,460	19,000	23,000	8,000	0	0	0	0	0	0	0	71,460
NEWPORT LNG	0	620	0	0	0	0	0	0	0	0	0	0	620
DIST FCS VAP	0	272,251	300,000	290,000	113,038	0	0	0	0	0	0	174,711	1,150,000
DIST FCS LIQ	0	0	0	0	0	0	0	0	0	0	Ö	0	0
DISTRI FLS	56,620	16,895	24,480	9,796	55,914	10,800	43,243	81,000	62,143	43	35,847	51,343	448,122
TENN CONX	348,000	359,600	359,600	336,400	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	4,245,600
Total Take	3,060,528	4,863,982	4,970,195	4,633,181	3,869,400	3,140,578	1,924,754	1,483,510	1,362,562	1,341,838	1,464,954	2,251,186	34,366,667
Total Take	3,000,328	4,003,902	4,970,193	4,033,101	3,009,400	3,140,376	1,924,754	1,403,310	1,302,302	1,341,030	1,404,934	2,231,100	34,300,007
Storage Withdrawals													
TENN_8995	8,400	14,745	76,674	60,900	7,281	21,500	0	0	0	0	0	0	189,500
TENN 501	0	127,246	131,936	123,424	131.936	. 0	0	0	0	0	0	0	514,542
GSS 600045	0	207,710	292,237	273,383	218,701	0	0	0	0	0	0	0	992,031
GSS 300171	0	11,185	60,991	68,109	2,584	0	0	0	0	0	0	0	142,869
GSS 300169	0	25,136	61,050	59,015	19,684	0	0	0	0	0	0	0	164,885
GSS 300168	0	25,463	41,490	40,107	13,830	0	0	0	0	0	0	0	120,890
GSS 300170	0	39,725	152,819	152,424	47,304	0	0	0	0	0	0	0	392,272
TETCO_400221	0	150,563	308,889	285,129	139,570	0	0	0	0	0	0	0	884,151
TETCO_400221 TETCO_400515	0	5,592	14,726	13,594	8,236	0	0	0	0	0	0	0	42,148
_	ū			,		0	0	0	0		0	0	
TETCO 400185	0	9,070	13,517	12,478	6,470	-	0	-	0	0	0	0	41,535
COL FS 38010	ŭ	15,078	70,364	72,621	22,262	0	-	0	•	0	-	ŭ	180,325
LNG EXETER	3,000	18,900	34,000	31,160	3,100	3,000	3,100	3,000	3,100	3,100	3,000	3,100	111,560
LNG PROV	15,000	20,400	91,242	19,899	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	269,038
LNG VALLEY	1,620	4,653	6,292	2,747	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	37,363
Total With	28,020	675,466	1,356,229	1,214,989	639,248	42,200	21,390	20,700	21,390	21,390	20,700	21,390	4,083,107
Total Supply	3,088,548	5,539,447	6,326,424	5,848,170	4,508,648	3,182,777	1,946,143	1,504,209	1,383,951	1,363,228	1,485,653	2,272,576	38,449,774

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Natural Gas Supply VS. Requirements

Units: MDT

	Natural Gas Supply	y VS. Require	ments		Units: MD	т							
· ·	NOV 2008	DEC 2008	JAN 2009	FEB 2009	MAR 2009	APR 2009	MAY 2009	JUN 2009	JUL 2009	AUG 2009	SEP 2009	OCT 2009	Total
Forecast Demand RI SALES DES NON EX TR DE Total Demand	2,692,027 349,079 3,041,106	4,978,266 571,462 5,549,728	5,770,186 570,311 6,340,497	5,158,044 577,513 5,735,557	3,989,460 476,875 4,466,335	2,101,035 275,529 2,376,564	1,186,522 268,320 1,454,842	800,050 134,331 934,381	711,850 120,631 832,481	725,667 124,225 849,892	810,448 163,722 974,170	1,531,689 255,007 1,786,696	30,455,244 3,887,005 34,342,249
Storage Injections													
TENN 8995	0	0	0	0	0	12,472	23,100	27,300	28,350	26,250	26,250	26,250	169,972
TENN 501	0	0	0	0	0	84,748	74,013	71,269	108,962	60,534	60,534	60,534	520,595
GSS 600045	0	0	0	0	0	180,000	137,632	137,632	137,632	137,632	137,632	123,869	992,031
GSS 300171	0	0	0	0	0	31,470	18,881	18,881	18,881	18,881	18,881	16,993	142,870
GSS 300169	0	0	0	0	0	43,281	20,610	20,610	20,610	20,610	20,610	18,549	164,880
GSS 300168	0	0	0	0	0	30,000	15,405	15,405	15,405	15,405	15,405	13,865	120,890
GSS 300170	0	0	0	0	0	102,971	49,034	49,034	49,034	49,034	49,034	44,131	392,272
TETCO_400221	0	0	0	0	0	183,210	118,804	118,804	118,804	118,804	118,804	106,923	884,151
TETCO_400515	0	0	0	0	0	8,730	5,664	5,664	5,664	5,664	5,664	5,098	42,148
TETCO 400185	0	0	0	0	0	10,918	5,199	5,199	5,199	5,199	5,199	5,199	42,112
COL FS 38010	0	0	0	0	0	60,000	20,396	20,396	20,396	20,396	20,396	18,356	180,335
LNG EXETER	11,000	0	4,300	0	0	36,000	1,300	0	0	6,000	0	15,000	73,600
LNG PROV	45,000	343	61,125	16,000	72,756	9,000	13,900	25,389	8,610	22,999	499	0	275,621
LNG VALLEY	4,970	2,610	13,400	0	43	3,000	9,959	3,131	2,790	2,790	2,097	43	44,833
Total Inj	60,970	2,953	78,825	16,000	72,799	795,801	513,898	518,714	540,337	510,199	481,005	454,810	4,046,310
Total Req	3,102,076	5,552,681	6,419,322	5,751,557	4,539,134	3,172,365	1,968,740	1,453,095	1,372,818	1,360,091	1,455,175	2,241,506	38,388,559

	NOV 2008	DEC 2008	JAN 2009	FEB 2009	MAR 2009	APR 2009	MAY 2009	JUN 2009	JUL 2009	AUG 2009	SEP 2009	OCT 2009	TOTAL
Sources of Supply	000 000	000 000	000 000	004.000	000 000	000 000	000 000	000 000	040 400	100.010	000 000	000 000	0.054.007
TENN_ZONE_0	282,960	292,392	292,392	264,096	292,392	282,960	292,392	282,960	213,429	180,312	282,960	292,392	3,251,637
TENN_ZONE_1	0	609,793	610,673	557,284	374,393	0	0	0	0	0 0	0	0	2,152,143
TENN_DRACUT	29,700	122,810	177,628	163,573	41,018	290,171					-		824,900
TETCO_STX TETCO ELA	395,940 54,111	409,138 156,351	409,138 211,741	369,544 199,752	409,138 71,340	395,940 0	409,138 0	395,940 0	409,138 0	409,138 0	395,940 0	409,138 0	4,817,270 693,296
_	,	,	,	,	,		0	0	0	0	0	0	,
TETCO_WLA TETCO ETX	362,128 296,580	401,499 306,466	471,480	440,048 276,808	197,933 306,466	8,671	306,466	296,580	306,466			306,466	1,881,759
TETCO_ETA	290,560	18,522	306,466 25,578	24,696	8,820	296,580 0	300,400	290,560	300,466	306,466 0	296,580 0	300,466	3,608,390 77,616
HUBLINE	0	152,239	143,534	147,744	52,671	240,000	0	0	0	0	28,004	248,000	1,012,192
M3 DELIVERED	0	206.336	206,336	186,368	206,336	240,000	0	0	0	0	20,004	240,000	805,376
MAUMEE_SUPP	871,540	918,189	918,189	829,332	902,863	888,570	358,945	14,000	18,396	14,396	14,396	353,259	6,102,073
BROADRUN COL	294,076	306,063	306,063	276,444	281,415	290,801	133,650	6,396	2,000	6,000	6,000	174,218	2,083,126
COLUMBIA TET	294,070	37,364	59,017	41,361	7,360	290,001	133,030	0,590	2,000	0,000	0,000	0	145,102
TRAN WHART	0	1,240	2,170	930	7,500	0	0	0	0	0	0	0	4,340
TETCO B&W	12,432	12,846	16,245	11,603	12,846	0	0	0	0	0	0	0	65,973
DOM TET FTS	0	73,724	82,526	91,625	36,620	0	0	0	0	0	0	0	284,494
TETCO DOM	0	3,180	4,770	4,770	530	0	0	0	0	0	0	0	13,250
ANE	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
NIAGARA	30,000	31,000	31,000	28,000	31,000	30,000	31,000	30,000	0	0	30,000	31,000	303,000
NEWPORT LNG	0	620	0 1,000	0	0 1,000	0,000	01,000	0	0	0	00,000	0	620
DIST FCS VAP	0	304,805	310,000	280,000	255,195	0	0	0	0	0	0	0	1,150,000
DIST FCS LIQ	10,600	17,775	81,888	24,000	69,599	48,000	17,059	20,150	5,730	28,549	2,007	15,043	340,400
DISTRI FLS	50,370	8,100	32,400	6,254	3,200	0	8,100	8,370	5,670	3,240	589	0	126,292
TENN CONX	348,000	359,600	359,600	324,800	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	4,234,000
Total Take	3,068,437	4,781,052	5,089,834	4,577,031	3,951,735	3,149,693	1,947,350	1,432,396	1,351,428	1,338,701	1,434,476	2,220,116	34,342,249
Storage Withdrawals													
TENN 8995	8,400	17,694	76,674	60,900	4,332	1,972	0	0	0	0	0	0	169,972
TENN_501	5,619	131.936	131,936	119,168	131,936	0	0	0	0	0	0	0	520,595
GSS 600045	0	246,155	292,237	263,956	189,683	0	0	0	0	0	0	0	992,031
GSS 300171	0	11,881	62,861	67,184	945	0	0	0	0	0	0	0	142,870
GSS 300169	0	34,300	56,980	53,250	20,350	0	0	0	0	0	0	0	164,880
GSS 300168	0	28,290	40,045	38,724	13,830	0	0	0	0	0	0	0	120,890
GSS 300170	0	62,418	143,395	143,950	42,509	0	0	0	0	0	0	0	392,272
TETCO_400221	0	162,030	308,889	285,129	128,103	0	0	0	0	0	0	0	884,151
TETCO_400515	0	6,372	14,726	13,594	7,456	0	0	0	0	0	0	0	42,148
TETCO 400185	0	9,647	13,517	12,478	6,470	0	0	0	0	0	0	0	42,112
COL FS 38010	0	26,750	67,851	65,338	20,396	0	0	0	0	0	0	0	180,335
LNG EXETER	3,000	9,933	6,345	29,822	3,100	3,000	3,100	3,000	3,100	3,100	3,000	3,100	73,600
LNG PROV	15,000	20,743	99,096	18,287	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	275,621
LNG VALLEY	1,620	3,481	14,935	2,747	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	44,833
Total With	33,639	771,629	1,329,488	1,174,526	587,400	22,672	21,390	20,700	21,390	21,390	20,700	21,390	4,046,310
Total Supply	3,102,076	5,552,681	6,419,322	5,751,557	4,539,134	3,172,365	1,968,740	1,453,095	1,372,818	1,360,091	1,455,175	2,241,506	38,388,559

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	Natural Gas Supply	y VS. Require	ements		Units: MD	Т							
	NOV 2009	DEC 2009	JAN 2010	FEB 2010	MAR 2010	APR 2010	MAY 2010	JUN 2010	JUL 2010	AUG 2010	SEP 2010	OCT 2010	TOTAL
Forecast Demand RI SALES DES NON EX TR DE Total Demand	2,702,263 348,700 3,050,963	4,997,195 570,864 5,568,059	5,792,126 569,748 6,361,874	5,177,656 563,541 5,741,197	4,004,629 476,370 4,480,999	2,109,024 275,232 2,384,256	1,191,033 272,284 1,463,317	803,092 133,757 936,849	714,557 120,698 835,255	728,426 124,089 852,515	813,530 163,528 977,058	1,537,513 254,713 1,792,226	30,571,044 3,873,524 34,444,568
Storage Injections													
TENN_8995	0	0	0	0	0	26,730	25,063	25,337	28,350	26,250	26,250	26,250	184,230
TENN_501	0	0	0	0	0	84,748	74,518	70,764	108,962	60,534	60,534	60,534	520,595
GSS 600045	0	0	0	0	0	180,000	137,632	137,632	137,632	137,632	137,632	123,869	992,031
GSS 300171	0	0	0	0	0	31,470	18,881	18,881	18,881	18,881	18,881	16,993	142,870
GSS 300169	0	0	0	0	0	43,281	20,610	20,610	20,610	20,610	20,610	18,549	164,880
GSS 300168	0	0	0	0	0	30,000	15,405	15,405	15,405	15,405	15,405	13,865	120,890
GSS 300170	0	0	0	0	0	102,971	49,034	49,034	49,034	49,034	49,034	44,131	392,272
TETCO_400221	0	0	0	0	0	183,210	118,804	118,804	118,804	118,804	118,804	106,923	884,151
TETCO_400515	0	0	0	0	0	8,730	5,664	5,664	5,664	5,664	5,664	5,098	42,148
TETCO 400185	0	0	0	0	0	10,918	5,199	5,199	5,199	5,199	5,199	5,199	42,112
COL FS 38010	0	0	0	0	0	60,000	20,396	20,396	20,396	20,396	20,396	18,356	180,335
LNG EXETER	11,000	3,100	3,100	2,800	1,500	0	0	0	0	3,000	12,000	0	36,500
LNG PROV	45,000	5,097	63,100	6,700	0	66,100	18,499	15,000	15,500	19,999	499	0	255,494
LNG VALLEY	4,970	1,919	12,301	14,425	10,763	2,480	2,920	2,700	2,880	2,790	0	5,490	63,638
Total Inj	60,970	10,116	78,501	23,925	12,263	830,638	512,626	505,426	547,316	504,199	490,908	445,257	4,022,146
Total Req	3,111,933	5,578,175	6,440,375	5,765,122	4,493,262	3,214,894	1,975,943	1,442,275	1,382,571	1,356,714	1,467,966	2,237,483	38,466,714

	NOV 2009	DEC 2009	JAN 2010	FEB 2010	MAR 2010	APR 2010	MAY 2010	JUN 2010	JUL 2010	AUG 2010	SEP 2010	OCT 2010	TOTAL
Sources of Supply													
TENN_ZONE_0	282,960	292,392	292,392	264,096	292,392	282,960	292,392	282,960	216,203	182,935	282,960	292,392	3,257,034
TENN_ZONE_1	0	585,075	611,109	557,284	404,499	0	0	0	0	0	0	0	2,157,968
TENN DRACUT	29,700	81,143	130,233	98,017	47,303	0	0	0	0	0	0	0	386,395
TETCO STX	395,940	409,138	409,138	369,544	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	4,817,270
TETCO ELA	60,685	157,871	212,269	199,752	71,340	0	0	0	0	0	0	0	701,916
TETCO WLA	364,359	403.367	471.480	440.048	200.740	73,552	0	0	0	0	0	0	1,953,547
TETCO_ETX	296,580	306,466	306,466	276,808	306,466	296,580	306,466	296,580	306,466	306,466	296,580	306,466	3,608,390
TETCO - NF	0	18,522	25,578	24,696	8,820	0	0	0	0	0	0	0	77,616
HUBLINE	0	143,379	279,329	269,458	165,827	467,593	0	0	0	0	0	0	1,325,585
M3_DELIVERED	0	206,336	206,336	186,368	187,908	0	0	0	0	0	0	0	786,948
MAUMEE_SUPP	879,470	918,189	918,189	829,332	913,770	888,570	447,668	8,396	8,000	4,396	37,525	617,598	6,471,103
BROADRUN_COL	287,199	306,063	306,063	276,444	290,071	296,190	55,870	12,000	12,396	16,000	13,763	163,409	2,035,467
COLUMBIA TET	0	21,890	31,803	14,720	0	0	0	0	0	0	0	0	68,413
TRAN WHART	0	620	310	620	0	0	0	0	0	0	0	0	1,550
TETCO B&W	12,432	12,846	12,846	11,603	12,846	0	0	0	0	0	0	0	62,574
DOM TET FTS	0	74,315	83,918	91,806	36,620	0	0	0	0	0	0	0	286,659
TETCO DOM	0	5,830	4,113	1,060	5,300	0	0	0	0	0	0	0	16,303
ANE	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
NIAGARA	30,000	31,000	31,000	28,000	31,000	30,000	31,000	30,000	0	0	30,000	31,000	303,000
NEWPORT_LNG	0	600	0	0	0	0	0	0	0	0	0	0	600
DIST FCS VAP	0	309,250	310,000	280,000	250,750	0	0	0	0	0	0	0	1,150,000
DIST FCS LIQ	26,720	12,239	48,670	16,475	3,903	40,630	8,670	7,260	7,430	11,590	12,000	5,490	201,075
DISTRI FLS	34,250	5,376	36,531	18,200	8,360	27,950	12,750	10,440	10,950	14,200	499	0	179,505
TENN_CONX	348,000	359,600	359,600	324,800	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	4,234,000
Total Take	3,078,294	4,692,508	5,118,374	4,607,130	4,037,653	3,177,965	1,954,553	1,421,575	1,361,182	1,335,324	1,447,267	2,216,093	34,447,918
Storage Withdrawals													
TENN_8995	8,400	20,024	76,674	60,900	2,002	16,230	0	0	0	0	0	0	184,230
TENN_501	5,619	131,936	131,936	119,168	131,936	0	0	0	0	0	0	0	520,595
GSS 600045	0	267,654	292,237	263,956	168,184	0	0	0	0	0	0	0	992,031
GSS 300171	0	9,867	65,820	67,184	0	0	0	0	0	0	0	0	142,870
GSS 300169	0	39,448	57,461	56,980	10,991	0	0	0	0	0	0	0	164,880
GSS 300168	0	28,229	40,107	38,724	13,830	0	0	0	0	0	0	0	120,890
GSS 300170	0	80,709	144,855	140,570	26,137	0	0	0	0	0	0	0	392,272
TETCO_400221	0	237,607	308,889	285,129	52,526	0	0	0	0	0	0	0	884,151
TETCO_400515	0	11,328	14,726	13,594	2,500	0	0	0	0	0	0	0	42,148
TETCO 400185	0	10,398	13,517	12,478	5,719	0	0	0	0	0	0	0	42,112
COL FS 38010	0	27,078	67,523	65,338	20,396	0	0	0	0	0	0	0	180,335
LNG EXETER	3,000	3,100	3,100	2,800	3,100	3,000	3,100	3,000	3,100	3,100	3,000	3,100	36,500
LNG PROV	15,000	15,500	88,499	14,000	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	255,494
LNG VALLEY	1,620	2,790	16,656	17,172	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	60,288
Total With	33,639	885,668	1,322,001	1,157,992	455,609	36,929	21,390	20,700	21,390	21,390	20,700	21,390	4,018,796
Total Supply	3,111,933	5,578,175	6,440,375	5,765,122	4,493,262	3,214,894	1,975,943	1,442,275	1,382,571	1,356,714	1,467,966	2,237,483	38,466,714

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Natural Gas Supply VS. Requirements

Units: MDT

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	NOV 2010	DEC 2010	JAN 2011	FEB 2011	MAR 2011	APR 2011	MAY 2011	JUN 2011	JUL 2011	AUG 2011	SEP 2011	OCT 2011	TOTAL
NATIONAL GRID 2008-2013 Budget RI NORMAL WEATHER SCENARIO			New Energy A SENDOUT? \ Rep			Page 10 20-Oct-2007 21:40:59							
TENN 8995	0	0	0	0	C	26,472	26,040	24,360	28,350	26,250	26,250	26,250	183,972
TENN_501	0	0	0	0	(84,748	76,605	68,677	108,962	60,534	60,534	60,534	520,595
GSS 600045	0	0	0	0	(180,000	137,632	137,632	137,632	137,632	137,632	123,869	992,031
GSS 300171	0	0	0	0	(31,470	18,881	18,881	18,881	18,881	18,881	16,993	142,870
GSS 300169	0	0	0	0	(43,281	20,610	20,610	20,610	20,610	20,610	18,549	164,880
GSS 300168	0	0	0	0	(30,000	15,405	15,405	15,405	15,405	15,405	13,865	120,889
GSS 300170	0	0	0	0	(102,971	49,034	49,034	49,034	49,034	49,034	44,131	392,272
TETCO_400221	0	0	0	0	(183,210	118,804	118,804	118,804	118,804	118,804	106,923	884,151
TETCO_400515	0	0	0	0	(8,730	5,664	5,664	5,664	5,664	5,664	5,098	42,148
TETCO 400185	0	0	0	0	(10,918	5,199	5,199	5,199	5,199	5,199	5,199	42,112
COL FS 38010	0	0	0	0	(60,000	20,396	20,396	20,396	20,396	20,396	18,356	180,335
LNG EXETER	11,000	2,500	1,700	3,000	(0	0	0	0	8,200	30,000	0	56,400
LNG PROV	45,000	400	53,613	0	(33,500	33,500	0	53,600	7,000	8,999	0	235,611
LNG VALLEY	1,620	1,919	28,345	0	43		6,310	0	5,400	12,780	2,700	2,790	61,907
Total Inj	57,620	4,819	83,658	3,000	43	795,301	534,080	484,662	587,937	506,389	520,108	442,557	4,020,174
Total Req	3,118,854	5,591,861	6,467,524	5,763,863	4,496,259	3,187,576	2,001,934	1,424,575	1,425,919	1,361,683	1,500,179	2,240,633	38,580,860

	NOV 2010	DEC 2010	JAN 2011	FEB 2011	MAR 2011	APR 2011	MAY 2011	JUN 2011	JUL 2011	AUG 2011	SEP 2011	OCT 2011	TOTAL
Sources of Supply													
TENN_ZONE_0	282,960	292,392	292,392	264,096	292,392	282,960	292,392	282,960	218,930	185,714	282,960	292,392	3,262,540
TENN_ZONE_1	0	616,993	611,613	557,284	476,272	0	0	0	0	0	0	0	2,262,162
TENN DRACUT	29,700	84,019	130,874	99,705	59,679	0	0	0	0	0	0	0	403,976
TETCO STX	395,940	409,138	409,138	369,544	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	4,817,270
TETCO ELA	67,606	171,355	212,847	199,752	79,709	0	0	0	0	0	0	0	731,269
TETCO WLA	366,611	434.978	471.480	440.048	235.957	78,527	0	0	0	0	0	0	2,027,601
TETCO_ETX	296,580	306,466	306,466	276,808	306,466	296,580	306,466	296,580	306,466	306,466	296,580	306,466	3,608,390
TETCO - NF	0	21,168	25,578	24,696	8,820	0	0	0	0	0	0	0	80,262
HUBLINE	0	146,363	280,781	271,787	167,027	470,637	0	0	0	0	0	0	1,336,594
M3 DELIVERED	0	145,327	206,336	186,368	66,560	0	0	0	0	0	0	0	604,591
MAUMEE_SUPP	883,425	918,189	918,189	829,332	904,154	888,570	397,170	20,396	12,396	4,396	8,444	608,016	6,392,675
BROADRUN_COL	284,341	306,063	306,063	276,444	300,229	296,190	113,969	0	8,000	16,000	45,857	178,841	2,131,997
COLUMBIA TET	0	24,555	34,431	14,720	0	0	0	0	0	0	0	0	73,706
TRAN WHART	0	620	784	620	0	0	0	0	0	0	0	0	2,024
TETCO B&W	12,432	12,846	15,154	11,603	12,846	0	0	0	0	0	0	0	64,882
DOM TET FTS	0	74,864	87,871	92,402	36,620	0	0	0	0	0	0	0	291,757
TETCO DOM	0	6,089	10,070	13,250	5,300	0	0	0	0	0	0	0	34,709
ANE	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
NIAGARA	30,000	31,000	31,000	28,000	31,000	30,000	31,000	30,000	0	0	30,000	31,000	303,000
NEWPORT_LNG	0	600	21	560	0	0	0	0	0	0	0	0	1,181
DIST FCS VAP	0	298,990	310,000	280,000	261,010	0	0	0	0	0	0	0	1,150,000
DIST FCS LIQ	15,554	9,298	56,000	6,224	43	20,000	24,910	0	36,000	17,260	37,520	2,700	225,509
DISTRI FLS	42,066	4,678	34,358	8,100	0	13,500	14,900	0	23,000	10,720	4,179	90	155,590
TENN_CONX	348,000	359,600	359,600	324,800	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	4,234,000
Total Take	3,085,215	4,706,591	5,142,045	4,604,143	4,043,822	3,150,904	1,980,545	1,403,876	1,404,529	1,340,294	1,479,480	2,219,243	34,560,686
Storage Withdrawals													
TENN_8995	8,400	18,962	76,961	60,900	2,777	15,972	0	0	0	0	0	0	183,972
TENN_501	5,619	131,936	131,936	119,168	131,936	0	0	0	0	0	0	0	520,595
GSS 600045	0	264,048	292,237	263,956	171,790	0	0	0	0	0	0	0	992,031
GSS 300171	0	9,239	66,447	67,184	0	0	0	0	0	0	0	0	142,870
GSS 300169	0	40,011	58,052	56,980	9,837	0	0	0	0	0	0	0	164,880
GSS 300168	0	28,229	40,107	38,724	13,830	0	0	0	0	0	0	0	120,890
GSS 300170	0	98,368	145,458	141,703	6,742	0	0	0	0	0	0	0	392,272
TETCO_400221	0	224,612	308,889	285,129	65,521	0	0	0	0	0	0	0	884,151
TETCO_400515	0	11,328	14,726	13,594	2,500	0	0	0	0	0	0	0	42,148
TETCO 400185	0	10,398	13,517	12,478	5,719	0	0	0	0	0	0	0	42,112
COL FS 38010	0	26,750	67,851	65,338	20,396	0	0	0	0	0	0	0	180,335
LNG EXETER	3,000	3,100	23,000	2,800	3,100	3,000	3,100	3,000	3,100	3,100	3,000	3,100	56,400
LNG PROV	15,000	15,500	53,596	29,020	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	235,611
LNG VALLEY	1,620	2,790	32,700	2,747	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	61,907
Total With	33,639	885,271	1,325,478	1,159,720	452,437	36,672	21,390	20,700	21,390	21,390	20,700	21,390	4,020,174
Total Supply	3,118,854	5,591,861	6,467,524	5,763,863	4,496,259	3,187,576	2,001,934	1,424,575	1,425,919	1,361,683	1,500,179	2,240,633	38,580,860

New Energy Associates, LLC Page 13 SENDOUT? Version 9.0.2 REP013 20-Oct-2007 Report 13 21:40:59

	Natural Gas Supply	y VS. Require	ments		Units: MD	Т							
	NOV 2011	DEC 2011	JAN 2012	FEB 2012	MAR 2012	APR 2012	MAY 2012	JUN 2012	JUL 2012	AUG 2012	SEP 2012	OCT 2012	TOTAL
Forecast Demand													
RI SALES DES	2,722,790	5,035,155	5,836,124	5,345,680	4,035,049	2,125,044	1,200,081	809,193	719,985	733,959	819,710	1,549,192	30,931,962
NON EX TR DE	348,738	570,912	569,785	575,955	476,419	275,268	272,320	133,790	120,731	124,122	163,561	254,748	3,886,349
Total Demand	3,071,528	5,606,067	6,405,909	5,921,635	4,511,468	2,400,312	1,472,401	942,983	840,716	858,081	983,271	1,803,940	34,818,311
Storage Injections													
TENN 8995	0	0	0	0	0	26,214	25,945	24,455	28,350	26,250	26,250	26,250	183,714
TENN 501	0	0	0	0	0	84,748	79,770	65,512	108,962	60,534	60,534	60,534	520,595
GSS 600045	0	0	0	0	0	180,000	137,632	137,632	137,632	137,632	137,632	123,869	992,031
GSS 300171	0	0	0	0	0	31,470	18,881	18,881	18,881	18,881	18,881	16,993	142,870
GSS 300169	0	0	0	0	0	43,281	20,610	20,610	20,610	20,610	20,610	18,549	164,880
GSS 300168	0	0	0	0	0	30,000	15,405	15,405	15,405	15,405	15,405	13,865	120,890
GSS 300170	0	0	0	0	0	102,971	49,034	49,034	49,034	49,034	49,034	44,131	392,272
TETCO_400221	0	0	0	0	0	183,210	118,804	118,804	118,804	118,804	118,804	106,923	884,151
TETCO_400515	0	0	0	0	0	8,730	5,664	5,664	5,664	5,664	5,664	5,098	42,148
TETCO 400185	0	0	0	0	0	10,918	5,199	5,199	5,199	5,199	5,199	5,199	42,112
COL FS 38010	0	0	0	0	0	60,000	20,396	20,396	20,396	20,396	20,396	18,356	180,335
LNG EXETER	11,000	0	0	0	0	0	0	0	0	42,884	18,000	0	71,884
LNG PROV	45,000	0	58,042	55,155	0	23,499	13,500	23,999	7,000	23,999	499	0	250,693
LNG VALLEY	1,620	1,919	0	7,836	2,790	317	43	7,517	43	5,850	2,097	43	30,075
Total Inj	57,620	1,919	58,042	62,991	2,790	785,359	510,883	513,109	535,980	551,143	499,005	439,810	4,018,650
Total Req	3,129,148	5,607,986	6,463,951	5,984,626	4,514,258	3,185,671	1,983,284	1,456,092	1,376,696	1,409,224	1,482,276	2,243,750	38,836,961

	NOV 2011	DEC 2011	JAN 2012	FEB 2012	MAR 2012	APR 2012	MAY 2012	JUN 2012	JUL 2012	AUG 2012	SEP 2012	OCT 2012	TOTAL
Sources of Supply													
TENN_ZONE_0	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	221,664	188,501	282,960	292,392	3,277,493
TENN_ZONE_1	0	612,413	616,993	577,187	504,048	0	0	0	0	0	0	0	2,310,641
TENN_DRACUT	29,700	86,233	250,795	95,402	72,565	0	0	0	0	0	0	0	534,696
TETCO_STX	395,940	409,138	409,138	382,742	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	4,830,468
TETCO_ELA	78,799	172,339	214,020	206,886	81,211	0	0	0	0	0	0	0	753,255
TETCO_WLA	368,869	436,383	473,152	455,764	239,409	83,512	0	0	0	0	0	0	2,057,090
TETCO_ETX	296,580	306,466	306,466	286,694	306,466	296,580	306,466	296,580	306,466	306,466	296,580	306,466	3,618,276
TETCO - NF	0	21,168	26,460	25,578	8,820	470.000	0	0	0	0	0	0	82,026
HUBLINE	0	152,115	168,863	264,344	169,044	473,688	0	-	0	0	-	0	1,228,055
M3_DELIVERED	-	146,905	198,135	193,024	66,560	0	•	0	-		0	ŭ	604,625
MAUMEE_SUPP BROADRUN COL	888,570	918,189	918,189	858,951	914,284	888,570	390,272	18,396	14,000 6,396	10,396 10,000	25,360	588,134	6,433,311 2,149,178
COLUMBIA TET	280,296	306,063	306,063	286,317	290,642	296,190	128,484 0	2,000	0,396	,	32,141	204,587 0	
	0	28,727	37,762	14,720	605	0	-	0	0	0	0	0	81,814
TRAN WHART TETCO B&W	0 12,432	620 12,846	930 15,968	620 12,018	0 12,846	0	0	0	0	0	0	0	2,170 66,110
DOM TET FTS	12,432	75,982	91,550	93,856	36,620	0	0	0	0	0	0	0	298,009
TETCO DOM	0	,	10,193	,	5,300	0	0	0	0	0	0	0	,
ANE	30,000	10,600 31,000	31,000	13,250 29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000	39,343 366,000
NIAGARA	30,000	31,000	,	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000	304,000
NEWPORT LNG	30,000	600	31,000 621	29,000 560	31,000	30,000	31,000	30,000	0	0	30,000	31,000	304,000 1,781
DIST FCS VAP	0	310,000	310,000	290,000	240,000	0	0	0	0	0	0	0	1,150,000
DIST FCS VAP	35,866	4,603	36,000	44,000	2,340	13,000	7,143	21,649	4,543	48,549	20,596	0	238,289
DISTRI FLS	21,754	7,319	29,700	29,700	2,340 450	10,816	6,400	9,867	2,500	24,184	20,590	43	142,733
TENN_CONX	348,000	359,600	359,600	336,400	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	4,245,600
Total Take	3,099,765	4,732,703	5,134,991	4,799,541	4,074,340	3,149,257	1,961,894	1,435,392	1,355,306	1,387,834	1,461,577	2,222,360	34,814,961
Total Take	3,099,703	4,732,703	3,134,331	4,733,341	4,074,340	3,143,237	1,301,034	1,433,332	1,333,300	1,307,034	1,401,377	2,222,300	34,614,901
Storage Withdrawals													
TENN_8995	8,400	18,223	77,528	60,900	2,949	15,714	0	0	0	0	0	0	183,714
TENN_501	1,363	131,936	131,936	123,424	131,936	0	0	0	0	0	0	0	520,595
GSS 600045	0	258,445	292,237	273,383	167,966	0	0	0	0	0	0	0	992,031
GSS 300171	0	7,451	67,034	68,385	0	0	0	0	0	0	0	0	142,870
GSS 300169	0	39,210	58,581	59,015	8,074	0	0	0	0	0	0	0	164,880
GSS 300168	0	27,660	40,107	40,107	13,016	0	0	0	0	0	0	0	120,890
GSS 300170	0	86,583	146,007	146,235	13,448	0	0	0	0	0	0	0	392,272
TETCO_400221	0	237,607	308,889	285,129	52,526	0	0	0	0	0	0	0	884,151
TETCO_400515	0	11,328	14,726	13,594	2,500	0	0	0	0	0	0	0	42,148
TETCO 400185	0	10,398	13,517	12,478	5,719	0	0	0	0	0	0	0	42,112
COL FS 38010	0	24,237	67,851	67,851	20,396	0	0	0	0	0	0	0	180,335
LNG EXETER	3,000	3,909	23,000	17,475	3,100	3,000	3,100	3,000	3,100	3,100	3,000	3,100	71,884
LNG PROV	15,000	15,506	83,191	14,500	15,500	15,000	15,500	15,000	15,500	15,500	15,000	15,500	250,693
LNG VALLEY	1,620	2,790	4,355	2,610	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	33,425
Total With	29,383	875,283	1,328,960	1,185,085	439,918	36,414	21,390	20,700	21,390	21,390	20,700	21,390	4,022,000
Total Supply	3,129,148	5,607,986	6,463,951	5,984,626	4,514,258	3,185,671	1,983,284	1,456,092	1,376,696	1,409,224	1,482,276	2,243,750	38,836,961

COLD SNAP ANALYSIS National Grid - Rhode Island DTH

2007-2008 Gas Year

Heatload = 4,269/degree day Baseload = 27,057/day

Daseload = 21,031/day														
REQUIREMENTS														
Date	05-Feb	06-Feb	07-Feb	08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb
Degree Days	46	48	48	42	54	61	63	61	60	63	53	55	61	59
Sendout for Sales	230,929	239,793	239,793	213,201	266,385	297,409	306,273	297,409	292,977	306,273	261,953	270,817	297,409	288,545
RESOURCES														
Tenn Zn0	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432
Tenn Zn1	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903
Tenn Z0 New	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600
Dracut	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Tetco Stx	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198
Tetco Wla	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716
Tetco Ela Tetco Etx	7,134 9,886	7,134 9.886	7,134 9,886	7,134 9,886	7,134 9,886									
Tetco EIX	882	882	882	882	882	9,880	9,880	882	882	882	882	882	882	9,886 882
Hubline	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8.000	8,000	8,000	8,000
Algonquin only	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656	6,656
Tetco to Dominion	530	530	530	530	530	530	530	530	530	530	530	530	530	530
Tetco to B&W	2.072	2.072	2.072	2.072	2.072	2.072	2.072	2.072	2,072	2.072	2.072	2.072	2.072	2.072
Dominion Tetco	3,662	3,662	3,662	3,662	3,662	3.662	3.662	3,662	3,662	3.662	3.662	3,662	3,662	3,662
Col Maumee	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619
Broadrun	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873
Col Tet M3	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554
Col Transco	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806
Trans Wharton	310	310	310	310	310	310	310	310	310	310	310	310	310	310
ANE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Niagara	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067
Dist FCS	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Pipeline	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900	182,900
Storage and Peaking														
Tenn 501	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256
GSS 600045	5,549	5.549	5,549	5,549	5,549	5,549	5,549	5,549	5.549	5,549	5,549	5,549	5,549	5,549
GSS 300171	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584
GSS 300169	2,035	2.035	2,035	2,035	2.035	2.035	2,035	2.035	2.035	2,035	2.035	2.035	2,035	2,035
GSS 300168	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383
GSS 300100	5,256	5.256	5,256	5,256	5,256	5,256	5,256	5.256	5.256	5,256	5,256	5,256	5,256	5,256
TETCO 40022	13,957	13,957	13,957		13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957
				0										
TETCO 40051	0	932	932	0	932	932	932	932	932	932	932	932	932	932
TETCO 40018	647	647	647	0	647	647	647	647	647	647	647	647	647	647
COL FS 3801	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513
LNG Exeter	1,200	1,500	1,500	400	7,153	14,358	15,000	15,000	14,288	14,551	10,701	14,000	14,000	14,000
LNG Prov	8,549	16,181	16,181	6,225	37,000	50,351	58,461	49,709	50,000	63,000	26,700	28,185	58,000	49,000
LNG Scott Road	100	100	100	100	100	10,000	10,000	10,000	6,000	6,000	1,860	6,000	2,709	2,868
Newport LNG	0	0	0	0	120	688	800	688	677	710	680	620	688	665
Total Storage & Peaking	48,029	56,893	56,893	30,301	83.485	114,509	123,373	114,509	110.077	123,373	79,053	87.917	114,509	105,645
	.0,020	55,556	55,550	00,001	55,.56	,555	0,0.0	,555	,	0,0.0	. 5,556	٠.,٠.٠	,	
TOTAL PIPELINE & STORAGE	230,929	239,793	239,793	213,201	266,385	297,409	306,273	297,409	292,977	306,273	261,953	270,817	297,409	288,545

Note: Includes non-exempt transportation

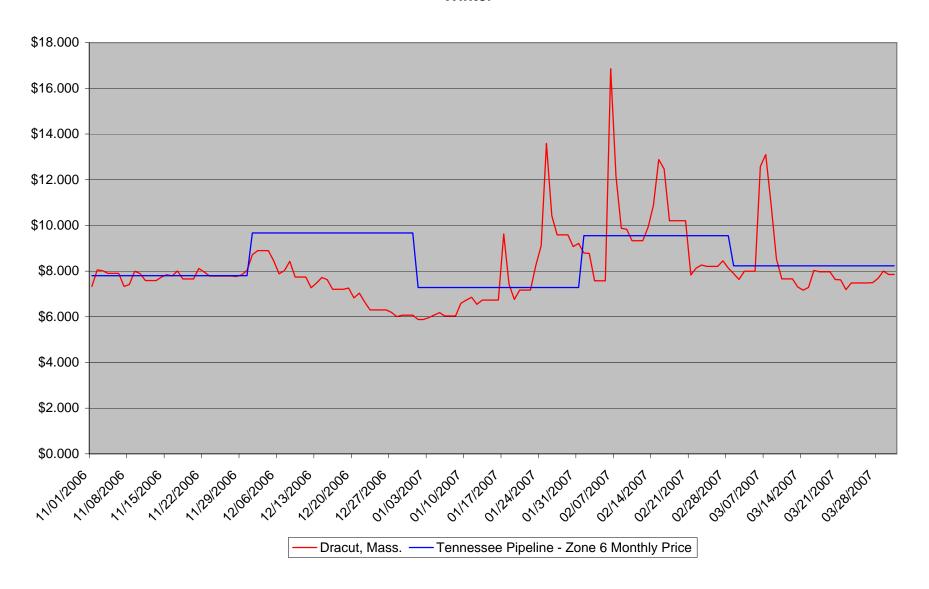
COLD SNAP ANALYSIS National Grid - Rhode Island DTH

2010-2011 Gas Year

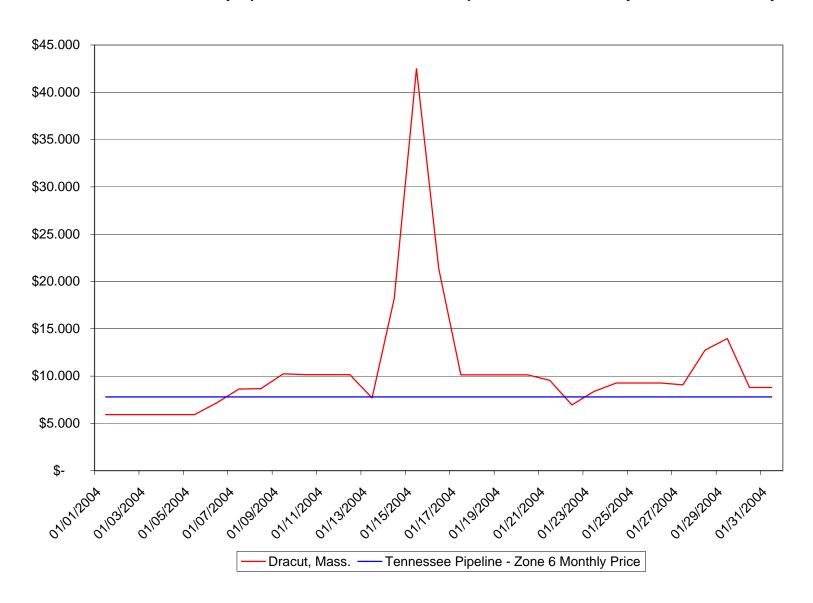
Heatload = 4,477/degree day

Baseload = 27,621/day														
REQUIREMENTS														
Date	05-Feb	06-Feb	07-Feb	08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb
Degree Days	46	48	48	42	54	61	63 309.672	61	60	63	53	55	61 300,718	59
Sendout for Sales	233,563	242,517	242,517	215,655	269,379	300,718	309,672	300,718	296,241	309,672	264,902	273,856	300,718	291,764
RESOURCES														
Tenn Zn0	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432	9,432
Tenn Zn1	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903	19,903
Tenn Z0 New	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600	11,600
Dracut	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Tetco Stx	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198	13,198
Tetco Wla	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716	15,716
Tetco Ela	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134	7,134
Tetco Etx	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886	9,886
Tetco to NF Hubline	882	882	882	882	882	882	882	882	882	882	882	882	882	882
	18,000 6,656													
Algonquin only Tetco to Dominion	530	530	530	530	530	530	530	530	530	530	530	530	530	530
Tetco to B&W	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072
Dominion Tetco	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662	3,662
Col Maumee	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619	29,619
Broadrun	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873
Col Tet M3	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554	3,554
Col Transco	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806	3,806
Trans Wharton	310	310	310	310	310	310	310	310	310	310	310	310	310	310
ANE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Niagara	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067
Dist FCS	10,000	10,000	10,000	8,200	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Pipeline	192,900	192,900	192,900	191,100	192,900	192,900	192,900	192,900	192,900	192,900	192,900	192,900	192,900	192,900
Starono and Booking														
Storage and Peaking														
Tenn 8995 Tenn 501	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256	4,256
GSS 600045	5,549	5.549	5.549	5,549	5.549	5,549	5,549	5.549	5,549	5,549	5,549	5,549	5,549	5,549
GSS 300171	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584	2,584
GSS 300169	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035	2,035
GSS 300168	1.383	1.383	1.383	1,383	1.383	1.383	1,383	1.383	1.383	1,383	1.383	1,383	1,383	1,383
GSS 300170	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256	5,256
TETCO 40022	13,957	13,957	13,957	0,200	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957
TETCO 40051	0	932	932	0	932	932	932	932	932	932	932	932	932	932
TETCO 40018	647	647	647	0	647	647	647	647	647	647	647	647	647	647
COL FS 3801	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513	2,513
LNG Exeter	1,200	1,500	1,500	100	7,267	16,318	15,000	13,000	12,000	12,000	6,000	10,000	12,000	13,000
LNG Prov	1,183	8,905	8,905	779	30,000	44,388	54,660	45,706	46,229	59,660	25,030	25,844	54,000	43,992
LNG Scott Road	100	100	100	100	100	8,000	8,000	10,000	6,000	6,000	1,860	6,000	2,706	2,760
Newport LNG	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Storage and Peaking	40,663	49,617	49,617	24,555	76,479	107,818	116,772	107,818	103,341	116,772	72,002	80,956	107,818	98,864
TOTAL PIPELINE AND STORAGE	233,563	242,517	242,517	215,655	269,379	300,718	309,672	300,718	296,241	309,672	264,902	273,856	300.718	291,764
. C	_00,000	,	,	_ 10,000	_00,010	300,110	200,012	300,110		J00,01 Z	_0-,002	_, 0,000	200,1 10	201,104

Dracut, MA Daily Pricing and Tennessee Pipeline Zone 6 Monthly Pricing For 2006/2007 Winter



Dracut MA Daily Spot Prices and Tennessee Pipeline Zone 0 Monthly Price For January 2004



Comparison of Direct Commodity Cost With and Without Connexion Project Using 2007/2008 GCR Gas Cost Assumptions

(Includes all demand volumes including injection requirements, price locked supplies at NYMEX prices)

Total delivered to the City Gate Gas Supply Costs

Including Connexion Project Excluding Connexion Project	\$19,926,113 \$19,959,208	\$29,405,403 \$29,893,690	\$27,441,327 \$28,134,013	\$27,730,584 \$28,144,700	\$25,345,098 \$25,209,339	\$22,858,416 \$23,004,797	\$12,911,319 \$13,174,386	\$10,089,171 \$10,638,065	\$9,724,837 \$9,337,111	\$9,922,969 \$10,028,937	\$10,578,816 \$10,583,952	\$16,957,078 \$17,087,642	\$222,891,131 \$225,044,253
Diiference - Commodity Savings	-\$33,095	-\$488,287	-\$692,686	-\$414,116	\$135,759	-\$146,380	-\$263,067	-\$548,895	\$387,726	-\$105,968	-\$5,135	-\$130,564	-\$2,153,122
Detailed delivered to the City Gate Gas Su													
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
Tennessee Zn 0													
Delivered Mmbtu	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	178,369	216,352	282,960	292,392	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	178,369	216,352	282,960	292,392	
Locked \$/Mmbtu	\$9.581	\$10.046	\$10.246	\$10.157	\$9.950	\$8.095	\$7.925	\$8.020	\$0.000	\$0.000	\$0.000	\$8.358	
NYMEX \$/Mmbtu Del	\$7.302	\$8.189	\$8.600	\$8.671	\$8.457	\$7.823	\$8.082	\$8.039	\$8.342	\$8.244	\$8.450	\$8.666	
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex	\$2,066,039	\$2,394,341	\$2,514,450	\$2,371,703	\$2,472,812	\$2,213,633	\$2,363,219	\$2,274,761	\$1,487,883	\$1,783,690	\$2,390,904	\$2,533,766	
Total Delivered Cost	\$2,066,039	\$2,394,341	\$2,514,450	\$2,371,703	\$2,472,812	\$2,213,633	\$2,363,219	\$2,274,761	\$1,487,883	\$1,783,690	\$2,390,904	\$2,533,766	
TENN ZONE 1													
Delivered Mmbtu	88,653	469,547	613,448	498,560	484,066	31,145	0	0	0	0	0	0	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	88,653	469,547	0	498,560	484,066	31,145	0	0	0	0	0	0	
Locked \$/Mmbtu	\$10.159	\$10.537	\$10.736	\$10.647	\$10.443	\$8.612	\$7.925	\$8.020	\$0.000	\$0.000	\$0.000	\$8.358	
NYMEX \$/Mmbtu Del	\$7.762	\$8.641	\$9.047	\$9.118	\$8.906	\$8.284	\$8.541	\$8.499	\$8.799	\$8.702	\$8.906	\$9.120	
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex	\$688,120	\$4,057,199	\$0	\$4,545,867	\$4,311,310	\$258,014	\$0	\$0	\$0	\$0	\$0	\$0	
Total Delivered Cost	\$688,120	\$4,057,199	\$0	\$4,545,867	\$4,311,310	\$258,014	\$0	\$0	\$0	\$0	\$0	\$0	
TENN CONNEXION													
Delivered Mmbtu	348,000	359,600	359,600	336,400	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	348,000	359,600	359,600	336,400	359,600	348,000	359,600	348,000	359,600	359,600	348,000	359,600	
Locked \$/Mmbtu	\$9.419	\$9.883	\$10.084	\$9.994	\$9.788	\$7.932	\$7.762	\$7.858	\$7.960	\$7.905	\$8.085	\$8.195	
NYMEX \$/Mmbtu Del	\$7.139	\$8.026	\$8.437	\$8.508	\$8.295	\$7.661	\$7.920	\$7.877	\$8.179	\$8.082	\$8.287	\$8.503	
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex	\$2,484,415	\$2,886,295	\$3,034,011	\$2,862,221	\$2,982,803	\$2,665,935	\$2,848,020	\$2,741,113	\$2,941,241	\$2,906,283	\$2,883,952	\$3,057,767	
Total Delivered Cost	\$2,484,415	\$2,886,295	\$3,034,011	\$2,862,221	\$2,982,803	\$2,665,935	\$2,848,020	\$2,741,113	\$2,941,241	\$2,906,283	\$2,883,952	\$3,057,767	
TENN DRACUT													
Delivered Mmbtu	29,700	37,310	42,194	33,908	14,043	0	0	0	0	0	0	0	
Delivered Mmbtu Locked	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered at Nymex	29,700	37,310	42,194	33,908	14,043	0	0	0	0	0	0	0	
Total Delivered Cost	\$253,199	\$348,569	\$410,162	\$331,839	\$134,668	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

TETCO STX Delivered Mmbtu Locked Volumes NYMEX Volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	274,620	283,774	283,774	265,466	283,774	274,620	283,774	274,620	283,774	283,774	274,620	283,774
	0	0	0	0	0	0	0	0	0	0	0	0
	274,620	283,774	283,774	265,466	283,774	274,620	283,774	274,620	283,774	283,774	274,620	283,774
	\$9.564	\$10.446	\$10.652	\$10.349	\$9.950	\$8.093	\$7.925	\$8.189	\$8.292	\$8.236	\$8.417	\$8.527
	\$7.117	\$8.195	\$8.615	\$8.688	\$8.470	\$7.732	\$7.995	\$7.951	\$8.257	\$8.159	\$8.366	\$8.585
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$1,954,452	\$2,325,448	\$2,444,825	\$2,306,452	\$2,403,441	\$2,123,413	\$2,268,664	\$2,183,470	\$2,343,136	\$2,315,209	\$2,297,579	\$2,436,225
	\$1,954,452	\$2,325,448	\$2,444,825	\$2,306,452	\$2,403,441	\$2,123,413	\$2,268,664	\$2,183,470	\$2,343,136	\$2,315,209	\$2,297,579	\$2,436,225
TETCO ELA Delivered Mmbtu Locked Volumes NYMEX Volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	14,658	23,658	54,628	26,219	3,543	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	14,658	23,658	54,628	26,219	3,543	0	0	0	0	0	0	0
	\$9,5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
	\$7,6828	\$8.7602	\$9.1760	\$9.2481	\$9.0319	\$8.3057	\$8.5657	\$8.5224	\$8.8257	\$8.7282	\$8.9340	\$9.1507
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$112,614	\$207,249	\$501,267	\$242,475	\$32,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TETCO WLA Delivered Mmbtu Locked Volumes Daily priced volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	238,943 0 238,943 \$9,5639 \$7,6569 \$0 \$1,829,557	208,721 0 208,721 \$10.4461 \$8.7302 \$0 \$1,822,180	218,630 0 218,630 \$10.6519 \$9.1475 \$0 \$1,999,914	68,115 0 68,115 \$10.3485 \$9.2198 \$0 \$628,007	35,591 0 35,591 \$9.9505 \$9.0028 \$0 \$320,420 \$320,420	182,294 0 182,294 \$8.0933 \$8.2698 \$0 \$1,507,529	0 0 0 \$7.9247 \$8.5305 \$0 \$0	0 0 0 \$8.1893 \$8.4870 \$0 \$0	0 0 0 \$8.2915 \$8.7912 \$0 \$0	0 0 0 \$8.2362 \$8.6935 \$0 \$0	0 0 0 \$8.4167 \$8.8999 \$0 \$0	0 0 0 \$8.5275 \$9.1171 \$0 \$0
TETCO ETX Delivered Mmbtu Locked Volumes NYMEX Volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	NOV 296,580 0 296,580 \$9.5639 \$7.1322 \$0 \$2,115,261 \$2,115,261	DEC 306,466 0 306,466 \$10.4461 \$8.1967 \$0 \$2,511,997 \$2,511,997	JAN 306,466 0 306,466 \$10.6519 \$8.6125 \$0 \$2,639,426 \$2,639,426	FEB 286,694 0 286,694 \$10.3485 \$8.6845 \$0 \$2,489,803 \$2,489,803	MAR 306,466 0 306,466 \$9.9505 \$8.4683 \$0 \$2,595,251 \$2,595,251	APR 296,580 0 296,580 \$8.0933 \$7.7551 \$0 \$2,300,008 \$2,300,008	MAY 306,466 0 306,466 \$7.9247 \$8.0151 \$0 \$2,456,356 \$2,456,356	JUN 296,580 0 296,580 \$8.1893 \$7.9718 \$0 \$2,364,267 \$2,364,267	JUL 306,466 0 306,466 \$8.2915 \$8.2751 \$0 \$2,536,038 \$2,536,038	AUG 306,466 0 306,466 \$8.2362 \$8.1776 \$0 \$2,506,158 \$2,506,158	SEP 296,580 0 296,580 \$8.4167 \$8.3834 \$0 \$2,486,361 \$2,486,361	OCT 0 0 0 \$8.5275 \$8.6001 \$0 \$0 \$0

TETCO - NF

Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost	0 \$7.8443 \$0	10,584 \$8.8416 \$93,579	13,012 \$9.2486 \$120,342	7,938 \$9.3191 \$73,975	102 \$9.1075 \$929	0 \$8.4589 \$0	0 \$8.7154 \$0	0 \$8.6727 \$0	0 \$8.9719 \$0	0 \$8.8757 \$0	0 \$9.0788 \$0	0 \$9.2926 \$0
M3 DELIVERED Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost	0 \$8.3183 \$0	6,656 \$9.1993 \$61,231	14,697 \$9.5795 \$140,790	7,123 \$9.6454 \$68,704	0 \$9.4477 \$0	0 \$8.3098 \$0	0 \$8.5514 \$0	0 \$8.5112 \$0	0 \$8.7930 \$0	0 \$8.7024 \$0	0 \$8.8937 \$0	0 \$9.0950 \$0
MAUMEE_SUPP Delivered Mmbtu Locked Volumes Basis Locks NYMEX Volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	877,130 0 0 877,130 \$9.5639 \$7.6252 \$0 \$6,688,261 \$6,688,261	892,912 0 0 892,912 \$10.4461 \$8.5179 \$0 \$7,605,718	884,421 0 0 884,421 \$10.6519 \$8.9058 \$0 \$7,876,481	828,703 0 0 828,703 \$10.3485 \$8.9730 \$0 \$7,435,990 \$7,435,990	847,049 0 0 847,049 \$9.9505 \$8.7713 \$0 \$7,429,742 \$7,429,742	888,570 0 0 888,570 \$8.0933 \$8.2157 \$0 \$7,300,253	8,000 0 8,000 \$7,9247 \$8.4622 \$0 \$67,698	18,639 0 0 18,639 \$8.1893 \$8.4211 \$0 \$156,962 \$156,962	14,000 0 14,000 \$8.2915 \$8.7087 \$0 \$121,922 \$121,922	2,000 0 2,000 \$8.2362 \$8.6163 \$0 \$17,233	10,000 0 10,000 \$8.4167 \$8.8114 \$0 \$88,114	350,539 0 0 350,539 \$8.5275 \$9.0168 \$0 \$3,160,757 \$3,160,757
BROADRUN_COL Delivered Mmbtu Locked Volumes NYMEX Volumes Locked \$/Mmbtu NYMEX \$/Mmbtu Del Deliverd Cost Locked Delivered Cost Nymex Total Delivered Cost	171,998 0 171,998 \$9.5639 \$7.6252 \$0 \$1,311,513	306,063 0 306,063 \$10,4461 \$8.5179 \$0 \$2,607,008 \$2,607,008	299,190 0 299,190 \$10.6519 \$8.9058 \$0 \$2,664,528 \$2,664,528	206,144 0 206,144 \$10.3485 \$8.9730 \$0 \$1,849,740 \$1,849,740	140,623 0 140,623 \$9,9505 \$8.7713 \$0 \$1,233,450 \$1,233,450	296,190 0 296,190 \$8.0933 \$8.2157 \$0 \$2,433,418 \$2,433,418	12,396 0 12,396 \$7,9247 \$8,4622 \$0 \$104,898 \$104,898	17,396 0 17,396 \$8.1893 \$8.4211 \$0 \$146,494 \$146,494	6,396 0 6,396 \$8.2915 \$8.7087 \$0 \$55,701	18,396 0 18,396 \$8,2362 \$8,6163 \$0 \$158,505	10,396 0 10,396 \$8.4167 \$8.8114 \$0 \$91,604	146,614 0 146,614 \$8.5275 \$9.0168 \$0 \$1,321,996 \$1,321,996
COLUMBIA_AGT Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost DOMINION TO B & W Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost	0 \$8.5033 \$0 0 \$8.2508	11,050 \$9.4024 \$103,896 2,120 \$9.2446 \$19,598	17,931 \$9.7903 \$175,550 1,590 \$9.6606 \$15,360	7,550 \$9.8575 \$74,424 1,060 \$9.7327 \$10,317	0 \$9.6558 \$0 0 \$9.5164 \$0	0 \$8.4947 \$0 0 \$8.8535 \$0	0 \$8.7412 \$0 0 \$9.1157	0 \$8.7001 \$0 0 \$9.0720 \$0	0 \$8.9877 \$0 0 \$9.3779 \$0	0 \$8.8953 \$0 0 \$9.2796	0 \$9.0904 \$0 0 \$9.4871 \$0	0 \$9.2958 \$0 0 \$9.7056 \$0
DOMINION TO TETCO FTS Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost TRANSCO AT WHARTON	\$0 0 \$8.2905 \$0	2,662 \$9.1779 \$24,432	17,743 \$9.5611 \$169,643	12,027 \$9.6276 \$115,791	0 \$9.4283 \$0	0 \$8.3500 \$0	0 \$8.5935 \$0	0 \$8.5529 \$0	0 \$8.8370 \$0	0 \$8.7457 \$0	0 \$8.9385 \$0	\$0 \$9.1414 \$0
Delivered Mmbtu Delivered \$/Mmbtu Delivered Cost	0 \$8.2905 \$0	310 \$9.1779 \$2,845	620 \$9.5611 \$5,928	310 \$9.6276 \$2,985	0 \$9.4283 \$0	0 \$8.3500 \$0	0 \$8.5935 \$0	0 \$8.5529 \$0	0 \$8.8370 \$0	0 \$8.7457 \$0	0 \$8.9385 \$0	0 \$9.1414 \$0

AECO/TENNESSEE - ANE II												
Delivered Mmbtu	30,000	31,000	31,000	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000
Delivered Locked Mmbtu	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	30,000	31,000	31,000	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000
Delivered locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$6.5789	\$7.4590	\$7.8665	\$7.9371	\$7.7252	\$7.1866	\$7.4468	\$7.4034	\$7.7069	\$7.6094	\$7.8153	\$8.0321
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$197,368	\$231,230	\$243,861	\$230,176	\$239,482	\$215,599	\$230,851	\$222,103	\$238,915	\$235,891	\$234,460	\$248,996
Total Delivered Cost	\$197,368	\$231,230	\$243,861	\$230,176	\$239,482	\$215,599	\$230,851	\$222,103	\$238,915	\$235,891	\$234,460	\$248,996
NIAGARA TO TENNESSEE	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Delivered Mmbtu	29,625	30.613	30.613	28.638	30,613	0	0	0	0	0	0	0
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	29,625	30,613	30,613	28.638	30,613	0	0	0	0	0	0	0
Locked \$/Mmbtu	\$9.5639	\$10,4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8,1893	\$8.2915	\$8,2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$7.6055	\$8.4328	\$8.8158	\$8.8822	\$8.6830	\$8.0837	\$8.3282	\$8.2875	\$8.5728	\$8.4811	\$8.6747	\$8.8785
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$225,313	\$258,153	\$269,878	\$254,368	\$265,814	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Delivered Cost	\$225,313	\$258,153	\$269,878	\$254,368	\$265,814	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TETCO TO B&W												
Delivered Mmbtu	0	8,288	19,270	12,018	7,828	0	0	0	0	0	0	0
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	0	8,288	19,270	12,018	7,828	0	0	0	0	0	0	0
Delivered locked \$/Mmbtu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NYMEX \$/Mmbtu Del	\$8.2451	\$9.3250	\$9.7408	\$9.8129	\$9.5966	\$8.8680	\$9.1280	\$9.0847	\$9.3880	\$9.2905	\$9.4963	\$9.7130
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$0	\$77,285	\$187,705	\$117,931	\$75,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Delivered Cost	\$0	\$77,285	\$187,705	\$117,931	\$75,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIGAS FCS		101.000	470 474	400.000	101.150						10.015	
Delivered Mmbtu	0	191,292	179,474	190,038	104,159	0	236,096	0	0	0	12,845	236,096
Locked Volumes	0	0	0	0	0	0						
NYMEX Volumes	0	191,292	179,474	190,038	104,159	0						
Locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	07 000	AT 000	00.440	00.050	# 0.040	00.440
NYMEX \$/Mmbtu Del	\$7.085	\$7.895	\$8.270	\$8.335	\$8.140	\$7.660	\$7.900	\$7.860	\$8.140	\$8.050	\$8.240	\$8.440
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0						
Delivered Cost Nymex Total Delivered Cost	\$0 \$0	\$1,510,250 \$1,510,250	\$1,484,250 \$1,484,250	\$1,583,967 \$1,583,067	\$847,854 \$847,854	\$0 \$0	¢1 00E 1E0	\$0	\$0	\$0	\$10E 942	\$1,000 GEO
Total Delivered Cost	\$0	\$1,510,250	\$1,464,250	\$1,583,967	\$647,654	ΦU	\$1,865,158	\$0	\$0	\$0	\$105,843	\$1,992,650
HUBLINE	•	07.504	FF 060	40.005	•	220 002	00.405	•	•	•	_	044.000
Total Delivered Vol	0	27,521	55,889	13,685	0	223,907	83,485	0	0	0	0	244,838
Delivered \$/Mmbtu	\$8.4526	\$9.3346	\$9.7149	\$9.7808	\$9.5830	\$8.2204	\$8.4620	\$8.4218	\$8.7036	\$8.6130	\$8.8043	\$9.0056
Total Delivered Cost	\$0	\$256,899	\$542,953	\$133,850	\$0	\$1,840,616	\$706,454	\$0	\$0	\$0	\$0	\$2,204,920

Total delivered to the City Gate Gas Supp Total Pipeline Costs	\$19,959,208	ng Connexion \$29,893,690	Project Capacit \$28,134,013	\$28,144,700	\$25,209,339	\$23,004,797	\$13,174,386	\$10,638,065	\$9,337,111	\$10,028,937	\$10,583,952	\$17,087,642	\$225,195,839
Detailed delivered to the City Gate Gas Supply Costs													
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
Tennessee Zn 0													
Delivered Mmbtu	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	292,392	292,392	282,960	292,392	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	282,960	292,392	292,392	273,528	292,392	282,960	292,392	282,960	292,392	292,392	282,960	292,392	
Locked \$/Mmbtu	\$9.581	\$10.046	\$10.246	\$10.157	\$9.950	\$8.095	\$7.925	\$8.020	\$0.000	\$0.000	\$0.000	\$8.358	
NYMEX \$/Mmbtu Del	\$7.302	\$8.189	\$8.600	\$8.671	\$8.457	\$7.823	\$8.082	\$8.039	\$8.342	\$8.244	\$8.450	\$8.666	
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex Total Delivered Cost	\$2,066,039 \$2,066,039	\$2,394,341 \$2,394,341	\$2,514,450 \$2,514,450	\$2,371,703 \$2,371,703	\$2,472,812 \$2,472,812	\$2,213,633 \$2,213,633	\$2,363,219 \$2,363,219	\$2,274,761 \$2,274,761	\$2,439,018 \$2,439,018	\$2,410,593 \$2,410,593	\$2,390,904 \$2,390,904	\$2,533,766 \$2,533,766	
Total Delivered Cost	\$2,000,039	\$2,394,341	\$2,514,450	φ2,3/1,703	\$2,472,012	φ2,213,033	\$2,303,219	\$2,274,761	\$2,439,016	\$2,410,595	\$2,390,904	\$2,555,766	
TENN ZONE 1		504.055	500 500	400.000	407 700	50.704	•			•			
Delivered Mmbtu	0	564,255	560,529	493,988	467,792	50,724	0	0	0	0	0	0	
Locked Volumes NYMEX Volumes	0	0 564,255	0	0 493,988	0 467,792	0 50,724	0	0	0	0	0	0	
Locked \$/Mmbtu	\$10.159	\$10.537	\$10.736	\$10.647	\$10.443	\$8.612	\$7.925	\$8.020	\$0.000	\$0.000	\$0.000	\$8.358	
NYMEX \$/Mmbtu Del	\$7.762	\$8.641	\$9.047	\$9.118	\$8.906	\$8.284	\$8.541	\$8.499	\$8.799	\$8.702	\$8.906	\$9.120	
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex	\$0	\$4,875,539	\$0	\$4,504,179	\$4,166,366	\$420,212	\$0	\$0	\$0	\$0	\$0	\$0	
Total Delivered Cost	\$0	\$4,875,539	\$0	\$4,504,179	\$4,166,366	\$420,212	\$0	\$0	\$0	\$0	\$0	\$0	
TENN CONNEXION													
Delivered Mmbtu	0	0	0	0	0	0	0	0	0	0	0	0	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Locked \$/Mmbtu	\$9.419	\$0.000	\$10.084	\$9.994	\$9.788	\$7.932	\$7.762	\$7.858	\$7.960	\$7.905	\$8.085	\$8.195	
NYMEX \$/Mmbtu Del	\$7.139	\$8.026	\$8.437	\$8.508	\$8.295	\$7.661	\$7.920	\$7.877	\$8.179	\$8.082	\$8.287	\$8.503	
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delivered Cost Nymex	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Delivered Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TENN DRACUT													
Delivered Mmbtu	29,700	34,636	86,286	37,137	30,690	0	0	0	0	0	0	0	
Delivered Mmbtu Locked	0	0	0	0	0	0	0	0	0	0	0	0	
Delivered at Nymex	29,700	34,636	86,286	37,137	30,690	0	0	0	0	0	0	0	
Total Delivered Cost	\$253,199	\$323,587	\$838,774	\$363,439	\$294,308	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TETCO STX													
Delivered Mmbtu	395,940	409,138	409,138	382,742	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
NYMEX Volumes	395,940	409,138	409,138	382,742	409,138	395,940	409,138	395,940	409,138	409,138	395,940	409,138	
Locked \$/Mmbtu NYMEX \$/Mmbtu Del	\$9.564 \$7.117	\$10.446 \$8.195	\$10.652 \$8.615	\$10.349 \$8.688	\$9.950 \$8.470	\$8.093 \$7.732	\$7.925 \$7.995	\$8.189 \$7.951	\$8.292 \$8.257	\$8.236 \$8.159	\$8.417 \$8.366	\$8.527 \$8.585	
Deliverd Cost Locked	\$7.117	\$6.195 \$0	\$0.015 \$0	\$0.000 \$0	\$8.470 \$0	\$7.732 \$0	\$7.995 \$0	\$7.951 \$0	\$8.257 \$0	\$8.159 \$0	\$6.366 \$0	\$6.565 \$0	
Delivered Cost Locked Delivered Cost Nymex	\$2,817,878	\$3,352,771	\$3,524,886	\$3,325,383	\$3,465,219	\$3,061,482	\$3,270,902	\$3,148,071	\$3,378,272	\$3,338,008	\$3,312,591	\$3,512,486	
Total Delivered Cost	\$2,817,878	\$3,352,771	\$3,524,886	\$3,325,383	\$3,465,219	\$3,061,482	\$3,270,902	\$3,148,071	\$3,378,272	\$3,338,008	\$3,312,591	\$3,512,486	
	Ψ=,σ,σ.σ	JO,002,. 1 1	JO,02 .,000	\$0,0 2 0,000	20, .00,210	\$0,00.,.0 <u>2</u>	30,2. 0,002	40,0,071	JO,0. 0,2/2	\$0,000,000	20,0.2,001	20,0 .2, .00	

MAUMEE_SUPP												
Delivered Mmbtu	888,570	908,024	913,109	843,846	873,257	888,570	229,426	256,811	14,000	2,000	10,000	581,053
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Basis Locks	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	888,570	908,024	913,109	843,846	873,257	888,570	229,426	256,811	14,000	2,000	10,000	581,053
Locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$7.6252	\$8.5179	\$8.9058	\$8.9730	\$8.7713	\$8.2157	\$8.4622	\$8.4211	\$8.7087	\$8.6163	\$8.8114	\$9.0168
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$6,775,493	\$7,734,440	\$8,131,971	\$7,571,869	\$7,659,621	\$7,300,253	\$1,941,455	\$2,162,643	\$121,922	\$17,233	\$88,114	\$5,239,267
Total Delivered Cost	\$6,775,493	\$7,734,440	\$8,131,971	\$7,571,869	\$7,659,621	\$7,300,253	\$1,941,455	\$2,162,643	\$121,922	\$17,233	\$88,114	\$5,239,267
BROADRUN_COL												
Delivered Mmbtu	287,328	306,063	299,190	276,444	275,927	296,190	74,238	55,363	6,396	18,396	10,396	150,336
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	287,328	306,063	299,190	276,444	275,927	296,190	74,238	55,363	6,396	18,396	10,396	150,336
Locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$7.6252	\$8.5179	\$8.9058	\$8.9730	\$8.7713	\$8.2157	\$8.4622	\$8.4211	\$8.7087	\$8.6163	\$8.8114	\$9.0168
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$2,190,923	\$2,607,008	\$2,664,528	\$2,480,545	\$2,420,245	\$2,433,418	\$628,219	\$466,220	\$55,701	\$158,505	\$91,604	\$1,355,557
Total Delivered Cost	\$2,190,923	\$2,607,008	\$2,664,528	\$2,480,545	\$2,420,245	\$2,433,418	\$628,219	\$466,220	\$55,701	\$158,505	\$91,604	\$1,355,557
COLUMBIA_AGT												
Delivered Mmbtu	0	8,376	15,257	8,977	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$8.5033	\$9.4024	\$9.7903	\$9.8575	\$9.6558	\$8.4947	\$8.7412	\$8.7001	\$8.9877	\$8.8953	\$9.0904	\$9.2958
Delivered Cost	\$0	\$78,754	\$149,371	\$88,491	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DOMINION TO B & W												
Delivered Mmbtu	0	3,662	12,395	25,594	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$8.2508	\$9.2446	\$9.6606	\$9.7327	\$9.5164	\$8.8535	\$9.1157	\$9.0720	\$9.3779	\$9.2796	\$9.4871	\$9.7056
Delivered Cost	\$0	\$33,854	\$119,743	\$249,098	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DOMINION TO TETCO FTS												
Delivered Mmbtu	0	2,120	1,590	1,060	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$8.2905	\$9.1779	\$9.5611	\$9.6276	\$9.4283	\$8.3500	\$8.5935	\$8.5529	\$8.8370	\$8.7457	\$8.9385	\$9.1414
Delivered Cost	\$0	\$19,457	\$15,202	\$10,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TRANSCO AT WHARTON												
Delivered Mmbtu	0	310	620	310	0	0	0	0	0	0	0	0
Delivered \$/Mmbtu	\$8.2905	\$9.1779	\$9.5611	\$9.6276	\$9.4283	\$8.3500	\$8.5935	\$8.5529	\$8.8370	\$8.7457	\$8.9385	\$9.1414
Delivered Cost	\$0	\$2,845	\$5,928	\$2,985	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

AECO/TENNESSEE - ANE II												
Delivered Mmbtu	30,000	31,000	31,000	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000
Delivered Locked Mmbtu	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	30,000	31,000	31,000	29,000	31,000	30,000	31,000	30,000	31,000	31,000	30,000	31,000
Delivered locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$6.5789	\$7.4590	\$7.8665	\$7.9371	\$7.7252	\$7.1866	\$7.4468	\$7.4034	\$7.7069	\$7.6094	\$7.8153	\$8.0321
Delivered Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$197,368	\$231,230	\$243,861	\$230,176	\$239,482	\$215,599	\$230,851	\$222,103	\$238,915	\$235,891	\$234,460	\$248,996
Total Delivered Cost	\$197,368	\$231,230	\$243,861	\$230,176	\$239,482	\$215,599	\$230,851	\$222,103	\$238,915	\$235,891	\$234,460	\$248,996
NIAGARA TO TENNESSEE	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Delivered Mmbtu	0	4,000	11.000	7.743	0	0	0	0	0	0	0	0
Locked Volumes	0	4,000	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	0	4,000	11,000	7.743	0	0	0	0	0	0	0	0
Locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933	\$7.9247	\$8.1893	\$8.2915	\$8.2362	\$8.4167	\$8.5275
NYMEX \$/Mmbtu Del	\$7.6055	\$8.4328	\$8.8158	\$8.8822	\$8.6830	\$8.0837	\$8.3282	\$8.2875	\$8.5728	\$8.4811	\$8.6747	\$8.8785
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$0	\$33,731	\$96,974	\$68,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Delivered Cost	\$0	\$33,731	\$96,974	\$68,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Bollvered Good	ΨΟ	ψου, το τ	ψου,στ -	ψου, 110	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ
TETCO TO B&W												
Delivered Mmbtu	0	8,288	19,270	12,018	12,846	0	0	0	0	0	0	0
Locked Volumes	0	0	0	0	0	0	0	0	0	0	0	0
NYMEX Volumes	0	8,288	19,270	12,018	12,846	0	0	0	0	0	0	0
Delivered locked \$/Mmbtu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NYMEX \$/Mmbtu Del	\$8.2451	\$9.3250	\$9.7408	\$9.8129	\$9.5966	\$8.8680	\$9.1280	\$9.0847	\$9.3880	\$9.2905	\$9.4963	\$9.7130
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Delivered Cost Nymex	\$0	\$77,285	\$187,705	\$117,931	\$123,278	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Delivered Cost	\$0	\$77,285	\$187,705	\$117,931	\$123,278	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIGAS FCS												
Delivered Mmbtu	0	126,407	198,016	119,887	144,650	0	26,779	0	69,686	0	228,480	236,096
Locked Volumes	0	0	0	0	0	0						
NYMEX Volumes	0	126,407	198,016	119,887	144,650	0						
Locked \$/Mmbtu	\$9.5639	\$10.4461	\$10.6519	\$10.3485	\$9.9505	\$8.0933						
NYMEX \$/Mmbtu Del	\$7.085	\$7.895	\$8.270	\$8.335	\$8.140	\$7.660	\$7.900	\$7.860	\$8.140	\$8.050	\$8.240	\$8.440
Deliverd Cost Locked	\$0	\$0	\$0	\$0	\$0	\$0						
Delivered Cost Nymex	\$0	\$997,983	\$1,637,592	\$999,258	\$1,177,451	\$0						
Total Delivered Cost	\$0	\$997,983	\$1,637,592	\$999,258	\$1,177,451	\$0	\$211,554	\$0	\$567,244	\$0	\$1,882,675	\$1,992,650
HUBLINE												
Total Delivered Vol	0	24,847	76,749	39,421	0	236,824	244,838	0	0	158,196	11,045	244,838
Delivered \$/Mmbtu	\$8.4526	\$9.3346	\$9.7149	\$9.7808	\$9.5830	\$8.2204	\$8.4620	\$8.4218	\$8.7036	\$8.6130	\$8.8043	\$9.0056
Total Delivered Cost	\$0	\$231,938	\$745,605	\$385,567	\$0	\$1,946,799	\$2,071,829	\$0	\$0	\$1,362,548	\$97,243	\$2,204,920