



State of Rhode Island and Providence Plantations

DEPARTMENT OF ATTORNEY GENERAL

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*Patrick C. Lynch, Attorney General*

January 30, 2008

*Via Electronic Transmission and Regular Mail*

Laura S. Olton  
National Grid  
280 Melrose Street  
Providence, RI 02907

**Re: Docket No. 3789 National Grid – Long Range Gas Supply Plan**

Dear Laura:

Enclosed please find the Division of Public Utilities and Carrier's Data Requests in connection with National Grid's Long Range Gas Supply Plan that was filed with the Commission on October 26, 2007.

Please contact me if you have any questions.

Very truly yours,

Paul J. Roberti  
Assistant Attorney General  
Chief, Regulatory Unit

Enclosure

cc: Luly Massaro  
Service List  
Thomas Ahern, Administrator

**The Division of Public Utilities  
Data Requests Regarding  
The New England Gas Company's  
Long Range Gas Supply Plan  
Filed October 26, 2007**

*Docket No. 3789*

- 1-1. Re: Design Hour criteria for portfolio planning. Please:
- a. Identify each pipeline contract that only allows for uniform hourly deliveries of the contracted daily demand and provide the specific language in each contract under which such uniform hourly delivery requirements are imposed;
  - b. Provide the date upon which each "new pipeline contract" that requires uniform hourly deliveries became effective.
  - c. Identify each "legacy contract" that provides for higher peak hour take levels as long as daily volumes are within contract demand volumes;
  - d. Indicate the expiration date for each "legacy contract" that provides for higher peak hour take levels;
  - e. Identify the daily contract capacity available under each contract which allows higher peak hour take levels; and
  - f. Provide the maximum hourly take available under each contract that allows higher peak hour take levels.
- 1-2. Please identify each area within the Company's Rhode Island operations in which "the Company has no LNG production and the pipeline has a delivery constraint" that is less than the forecasted demand within that area.
- 1-3. For each year included in the Company's long range plan, please provide the Company's forecasted demand for each area within its system which "has no LNG production and the pipeline has a delivery constraint". For each other area for which planning is performed, for each year, reconcile the forecasted demands for the identified areas within the Company's Rhode Island system with its forecasted total system supply requirements for:
- a. Design Peak Hour demands;
  - b. Design Peak Day Demand;

- c. Cold Snap Requirements;
- d. Design Winter Requirements;
- e. Annual Normal Weather Supply Requirements

- 1-4. With respect to design winter requirement, please provide a load duration curve for the Company's forecasted design winter requirements showing the number of days that each level of loading experienced by the Company during a design winter would be expected to endure.
- 1-5. With respect to the Company's "cold snap" analysis, please provide a load duration curve for the Company's forecasted "cold snap" requirements showing the number of days that each level of loading experienced by the Company during a "cold snap" would be expected to endure.
- 1-6. With respect to "LNG restock," please provide the information upon which the Company relies to assess the numbers of trucks and experienced drivers expected to be available during the winter periods of each forecast year included in its long range planning study.
- 1-7. Please document the referenced U.S. Department of Transportation limits on the number of hours drivers can work during the most sever cold spells.
- 1-8. Please provide analyses that demonstrate the dollar impacts of using a 1 in 50 year criteria (as opposed to a 1 in 100 year criteria) for planning the Company's gas supply for design day and design winter on its forecasted overall gas supply costs for each forecast year addressed in the Company's long range gas supply plan.
- 1-9. Please provide data upon which the Company relies from "research" that documents a significant correlation between temperatures in the U.S. and sea surface temperature changes.
- 1-10. Please provide the data and analyses upon which the Company relies to assess the correlation between temperatures in Rhode Island and sea surface temperature changes.
- 1-11. Please provide the data, assumptions and analyses upon which the Company relies to assess the relationship between wind speeds and sendout requirements during periods of extreme cold temperatures.
- 1-12. Please provide the data, assumptions and analyses upon which Company relies to support its assessment that high wind speeds in conjunction with extreme cold temperatures could increase sendout requirements on a design day by as much as 10%.

- 1-13. Please provide the data upon which the Company relies to assess expected wind speeds on a design day, as well as any changes in those wind speed expectations in recent years.
- 1-14. Please document the referenced “more recent outbreaks of severe cold weather” that have “included very high winds.” For each referenced outbreak, please provide:
  - a. The dates affected
  - b. The wind speeds experienced on each day of the affected period
  - c. The degree days reported for each affected day
  - d. The system sendout required on each affected day
- 1-15. Please provide the data, analyses, and studies upon which the Company relies to support a “historical normal wind speed of approximately 9 mph.”
- 1-16. Please provide the data and analyses upon which the Company relies to support its assessment that “...even during relatively warm winter conditions, the load typically would run about 1200 Dth high on weekdays than on the average day (which includes weekends). Also, as part of the response to this request, please demonstrate that the referenced 1200 Dth is part of the Company’s weather sensitive load and not a difference that is attributable to non-weather sensitive load components that may be added on weekdays.
- 1-17. Please provide the data and analyses upon which the Company relies to support the assertion that “Experience has shown that marginal use per heating degree day is noticeably higher than the average.”
- 1-18. Please provide the data and analyses upon which the Company relies to support the assessment that mid-winter marginal use per degree day has increased longer-term.”
- 1-19. Please identify each instance in the last 10 years in which the occurrence of “severe cold” has occurred on a weekend day or holiday, and provide the date, average temperature, and average wind speed on each day identified.
- 1-20. Please document and explain the manner in which the Company arrived at 4,400 HDD as a new standard for design winter conditions.
- 1-21. Please document the analyses relied upon to convert the Company’s forecasted load requirement by month under normal weather for each forecast year included in the Long Range Gas Supply Plan to design weather planning load.

- 1-22. Please provide the data and analyses the Company has relied upon to compute measure of average sendout for the month of July that was used in its determination of “non-heat based load.”
  
- 1-23. Please explain why the Company’s development of “non-heat based load” is based on average sendout for the month of July as opposed to average sendout for two or more summer months, and reconcile that methodology with the assumptions and methods used to develop the Company’s most recent forecast of loads under normal weather conditions.