



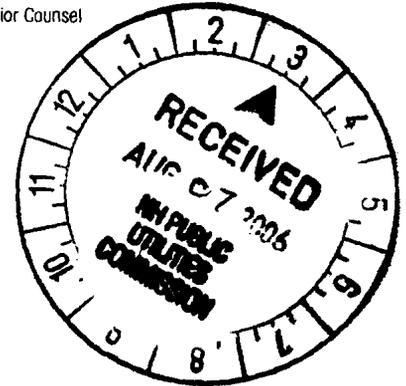
KeySpan Energy Delivery
52 Second Avenue
Waltham, MA 02451
Tel 781 466-5136
Fax 781 290-4965
E-mail tonelli@keyspanenergy.com

Hand Delivered

August 7, 2006

Thomas P. O'Neill
Senior Counsel

Debra A. Howland, Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street
Concord, NH 03301



Re: DG 06-105
EnergyNorth Natural Gas, Inc. d/b/a KeySpan Energy Delivery New England
Integrated Resource Plan

Dear Ms. Howland:

In accordance with the Commission's Order No. 24,531 dated October 21, 2005 in Docket No. DG 04-133/04-175, enclosed is an original and (9) nine copies of EnergyNorth Natural Gas, Inc. d/b/a KeySpan Energy Delivery New England's Integrated Resource Plan dated August 7, 2006. An electronic copy will be sent under separate cover.

Also, please include Steven V. Camerino on the service list as he will also be representing EnergyNorth Natural Gas, Inc. in this matter. Mr. Camerino's contact information is:

Steven V. Camerino, Esq.
McLane, Graf, Raulerson & Middleton
15 North Main Street
Concord, NH 03301
(603) 230-4403 (direct)
(603) 230-4448 (fax)
steven.camerino@mclane.com (e-mail)

If you should have any questions, please do not hesitate to contact me at the above number.

Very truly yours,

Thomas P. O'Neill

TPO:ca
Enclosures

Cc: Office of Consumer Advocate

NHPUC REC07105 AUG 07 2006

**ENERGYNORTH
NATURAL GAS, INC.**

(d/b/a KeySpan Energy Delivery New England)

**INTEGRATED
RESOURCE PLAN**

(November 1, 2006 – October 31, 2011)

DG 06-105

AUGUST 7, 2006

KEYSPAN

Energy Delivery

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EXECUTIVE SUMMARY

This Integrated Resource Plan (“IRP” or “Plan”) for the period November 1, 2006 through October 31, 2011 is filed with the New Hampshire Public Utilities Commission (“Commission”) by EnergyNorth Natural Gas, Inc. d/b/a KeySpan Energy Delivery New England (“EnergyNorth” or the “Company”) in compliance with the Commission’s Order No. 24,531 dated October 21, 2005 in Docket DG 04-133/DG 04-175 approving a settlement among EnergyNorth, the Office of the Consumer Advocate and the Commission Staff.

This IRP demonstrates that the Company’s planning process ensures that it maintains a reliable resource portfolio and energy supply to meet the forecasted needs of its customers at the lowest possible cost. The Plan includes: (i) a step-by-step description of the methodology the Company uses to forecast demand on its system, (ii) a detailed description of the analysis the Company employs to determine its normal and design planning standards, (iii) a detailed description of how the Company develops its resource portfolio to meet customer requirements under design conditions, (iv) a complete inventory of the expected available resources in the Company’s portfolio and a demonstration of the adequacy of the portfolio to meet customer demands under a range of weather and economic conditions, and (v) a description of the Company’s portfolio management activities that minimize the cost of maintaining an adequate portfolio.

The Company’s planning process begins with its methodology for forecasting demand using an econometric demand model to determine annual

incremental growth for the traditional residential, and commercial industrial markets, and specific market analysis for non-traditional markets, including natural gas vehicles and large scale cogeneration projects. The econometric model uses the SAS statistical software package to perform data analysis that relates sales by class to factors such as population, labor force, gross state product and economic forecasts to develop annual incremental sales projections. The Company then deducts any savings expected to be achieved through the implementation of its energy efficiency programs approved by the Commission in Order No. 24,636 dated June 8, 2006 in Docket DG 06-032. The results of the incremental demand forecasting methodology indicate that, over the five year forecast period, sales in the residential market are projected to grow by an average of 167,317 MMBtu per year and sales in the commercial/industrial market are projected to grow by an average of 264,356 MMBtu per year. The Company projects no incremental growth opportunities in non-traditional markets over the forecast period. The savings resulting from the energy efficiency program are projected to reduce growth by 77,573 MMBtu per year over the forecast period for a total net sales gain of 354,100 MMBtu per year. These incremental growth projections are added to the base line, or "springboard," normalized sendout figures from the May 2005 to April 2006 split year to generate the forecasted total demand requirements. The normalized sendout springboard figures are the result of a detailed regression analysis of daily sendout versus daily effective degree days ("EDD") that establishes a strong statistical relationship between weather and load on the Company's system. The

end result of the demand forecasting process projects sendout growth over the forecast period to average 361,175 MMBtu, or 2.5 %, per year under normal weather conditions.

To ensure that the Company maintains adequate supplies in its portfolio to meet customer demand, the planning process continues with a detailed cost-benefit analysis that defines the design year and design day planning standards. This cost-benefit analysis weighs the cost of not having sufficient resources against the cost of maintaining a level of reliability. The cost of not having sufficient resources is measured as the cost of customer outages including re-light costs, damage repair and lost economic output. The cost of maintaining reliability is measured as the cost of procuring an increment of supply to prevent the outage. The results of the analysis help the Company define a design year at 7,670 EDD with a probability of occurrence of 1 in 43.10 years and a design day at 80 EDD with a probability of occurrence of 1 in 40.54 years. Combining the results of the design planning standards definition and the load forecasting process, the Company is projecting design year sendout to increase over the forecast period by an average of 381,725 MMBtu, or 2.5%, per year, and design day sendout to increase by an average of 3,075 MMBtu, or 2.1%, per year. After the forecast of customer requirements are determined, the Company's planning process continues with the design of a resource portfolio to meet those requirements in the most reliable and least cost manner possible. To do this the Company uses the SENDOUT[®] Model (a proprietary linear programming model developed by New Energy Associates) to determine the adequacy of the existing

portfolio in meeting the forecasted requirements and to identify any shortfalls during the forecast period. SENDOUT[®] allows the Company to determine the least-cost, economic dispatch of its existing resources subject to contractual and operating constraints, and identifies the need for, and type of additional resources during the forecast period, if any. The resources available to the Company include domestic long-haul and short-haul transportation contracts, underground storage contracts, Canadian and domestic gas supply contracts, and supplemental resources. The results of this step of the process show that the existing resource portfolio is adequate to meet base case customer requirements in a design winter and on a design day through the 2008/09 heating season, after which it identifies the need for an additional 2,510 MMBtu per day increasing to 26,150 MMBtu per day by the 2010/11 heating season

The next step in the planning process is to test the adequacy of the portfolio design by evaluating how it would perform under high and low alternative demand scenarios, and a cold snap weather scenario. Under the high demand scenario, the Company assumes that the annual sendout requirements under design conditions increase by 614,550 MMBtu per year on average. The Company's resource plan shows that the portfolio can meet this increased demand under design conditions with 40 MMBtus per day in 2007/08 and, 40,000 MMBtus per day in 2009/10 of incremental capacity or citygate delivered supply. In the low demand case, the Company assumes that annual sendout requirements under design conditions increase by 320,300 MMBtu per year on average. The resource plan shows that the portfolio can meet this demand with

no additional incremental capacity or citygate delivered supply through the forecast period. For the cold snap weather scenario, the Company assumes that the coldest seven-day period experienced in the last twenty-three years will occur in January during an otherwise normal winter. The Company's resource plan shows that it has adequate resources available to meet cold snap sendout requirements.

Given that the Company's resource planning process results in a resource portfolio that is adequate to meet the projected requirements of its customers, the final step in the process involves the Company's portfolio management activities that minimize the cost of maintaining an adequate portfolio. These activities are described in detail in Appendix B which is the Company's Portfolio Management Plan that was filed with the Commission on December 8, 2005 in accordance with the Settlement.

In conclusion, EnergyNorth's Integrated Resource Plan demonstrates that the Company's planning process ensures that it maintains a reliable resource portfolio and energy supply to meet the forecasted needs of its customers at the lowest possible cost.