

Public Service Company of New
Hampshire
Docket No. DE 10-257

Data Request STAFF-02

Dated: 05/16/2011
Q-STAFF-003
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N.H.P.U.C. Case No.	DE 10-257
Exhibit No.	#10
Witness	Kanel 2
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Witness: Frederick White
Request from: New Hampshire Public Utilities Commission Staff

Question:
Reference Baumann/White joint technical statement, item 3. Please explain the factors causing the "lower dispatch prices" and the relationship to the changes in fuel expense and/or operation.

Response:

Lower dispatch prices at Newington are based on lower fuel (gas) prices and lower delivery basis estimates between the December, 2010 and May, 2011 filings. Lower dispatch prices combined with higher electricity market prices result in increased generation. Although megawatt-hours are produced at a lower average rate, the increased quantity results in overall higher costs.

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Witness: Frederick White
Request from: New Hampshire Public Utilities Commission Staff

Question:

Reference Baumann/White joint technical statement, item 3. Please provide the assumptions used regarding the operation and dispatch of Newington Station and explain how those assumptions impact the forecasted ES costs. Have there been any changes to the planning assumptions used for Newington Station as compared to the assumptions used in the earlier part of this proceeding? If so, please explain in detail. In your response, please separately address the use of oil and natural gas as the primary fuel. Please also explain the variations in GWh generation and energy expense for Newington Station for the months of January – March 2011 as compared to the December 16, 2010 forecast.

Response:

The dispatch of Newington in the modeling used for the purposes of ES rate setting is based on the economics of operating Newington to produce energy (variable operating costs, primarily fuel), versus energy market prices (the alternative source of energy). Newington's delivered fuel costs and market energy prices are based on a consistent set of market prices as quoted on a given day. When Newington economically dispatches in the model its energy margin (energy market revenue net variable operating costs) flows to ES customers. Energy market revenues are modeled either in the form of avoided market energy costs; or in a case where Newington's generation is surplus to ES load, as a component of "ISO-NE Net" modeled on lines 33 & 34 of RAB-2, page 3 (surplus sales). Newington's variable operating costs are explicitly modeled on line 18. A planning assumption update in the May filing decreased the daily delivery adder used to model gas delivered to the station. Other assumptions remained unchanged.

Regarding gas or oil usage, the dispatch algorithm "chooses" the most economic delivered fuel between the two, and the associated MW output; e.g. - MW output is limited to 310 MW when burning only gas.

The December, 2010 filing assumed 33 GWh of generation at a variable operating expense of \$2.3 million (incl. RGGI) for the Jan – Mar, 2011 period. Actual Newington generation for the same period was 58 GWh at a variable operating expense of \$5.9 million. The increases were due to market prices higher than forecast making Newington generation economic in more hours than forecast. Additionally, Newington at times is dispatched by ISO-NE to provide operating reserves, the modeling of which is not attempted in the ES forecast.