

Witness: David A. Errichetti  
Request from: New Hampshire Public Utilities Commission Staff

**Question:**

Please provide the following information in the same format as the response to NSTF-01, Q-STAFF-002 in DE 08-113.

- Please provide information supporting the price assumptions used for coal, wood, oil and gas prices for the twelve-month ES period.
- Please provide information detailing how much of PSNH's needed fuel supply is under contract for the upcoming twelve-month ES period and how much will be subject to purchases at the then-current market price. Please discuss each fuel separately.
- For what periods of time are the fuel supplies for each of the fossil plants under contract?
- Please provide the information used by PSNH in determining the forecast of peak and off-peak energy prices.
- Please provide an analysis of the major components of the preliminary increase in the ES rate. Please quantify each of the components in terms of cents per kWh

**Response:**

- Please see the following table\*.

Fuel Prices Used in Preliminary 2010 ES Rate Calculation

	Delivered Coal Prices (\$/Ton)				Delivered Wood (\$/Ton)	Delivered Oil (\$/bbl)	NYMEX Natural Gas (\$/MBTU)
	Merrimack 1	Merrimack 2	Schiller 4	Schiller 6	Schiller 5	Newington	New England
Jan '10	101.99	93.74	116.11	116.11	37.65	66.95	6.76
Feb	101.99	93.74	116.11	116.11	37.65	67.08	6.78
Mar	101.99	93.74	116.11	116.11	37.65	67.20	5.88
Apr	101.99	93.74	116.11	116.11	37.65	67.38	5.54
May	101.99	93.74	116.11	116.11	37.65	67.55	5.60
Jun	101.99	93.74	116.11	116.11	37.65	67.75	5.71
Jul	101.99	93.74	116.11	116.11	37.65	67.95	5.83
Aug	101.99	93.74	116.11	116.11	37.65	68.15	5.92
Sep	101.99	93.74	116.11	116.11	37.65	68.33	6.00
Oct	101.99	93.74	116.11	116.11	37.65	68.48	6.15
Nov	101.99	93.74	116.11	116.11	37.65	68.78	6.61
Dec	101.99	93.74	116.11	116.11	37.65	69.08	7.63

The monthly New England natural gas price is the sum of the NYMEX Henry Hub contract and the Tetco M-3 basis contract.

- All of PSNH's coal supply required for the subject period is under contract. Sufficient residual oil is in inventory to meet Newington Station's projected capacity factor. Natural gas will be purchased as needed at prevailing market prices if more competitively-priced than residual oil to fuel Newington Station.
- All of Merrimack and Schiller Stations' coal supply is under contract through calendar year 2010, and the majority of supply is under contract through 2011. Spot market purchases will be made as necessary in support of Newington Station operation.

d. The following table provides the monthly forward market peak and off-peak prices used to develop the hourly ISO-NE spot market price forecasted. These are based on closing NYMEX electricity prices for New England. The prices for October through December were differentiated using the monthly gas prices shown in part a.

ISO-NE Forward Market Energy (\$/MWh)

	On-Peak	Off-Peak
Jan '10	62.96	51.25
Feb	62.96	51.25
Mar	54.47	43.75
Apr	54.47	43.75
May	52.25	41.45
Jun	55.95	42.22
Jul	62.47	45.92
Aug	62.47	45.92
Sep	55.58	42.92
Oct	58.58	45.44
Nov	62.91	48.81
Dec	67.03	52.00

e. The attached table compares the average cost of providing energy service during January through December 2009 with the average cost reflected in the preliminary 2010 ES rate calculation. The 2009 summary is a blend of actual data for January through August and the revised forecast data for September through December provided in the September 24, 2009 filing in Docket DE 09-180

The table includes the following 5 columns:

- (a) Total Cost - This is the cost (\$000) for the expense category taken from the applicable filing.
- (b) MWH (sales) - This is the volume of customer sales for which the expense category is applicable. This number is used as the denominator in column (c) to develop an average rate. For the variable charge categories (Fossil energy, Vermont Yankee, IPPs, and Purchases & Sales) the value represents the net output of the applicable resource(s), after accounting for delivery efficiency. For the remaining fixed charge categories (e.g. F/H O&M, Depr. & Taxes and Return on rate base) the value is the total customer sales during the period.
- (c) ¢/kwh - This is the average cost of the category [column (a) divided by column (b)].
- (d) % of ES - For the variable charge categories only, this value is the portion of the total sales provided by the applicable resource(s). This percentage is used to calculate the "Average Cost of Fossil Fuel, Vermont Yankee, IPPs and Purchases".
- (e) Inc / (Dec) - This is the increase or (decrease) from the 2009 average expense to the 2010 average expense.

	(a)	(b)	(c)	(d)	(e)
Summary of Forecasted Energy Service Cost For January 2009 Through December 2009	TOTAL COST	MWH (sales)	c/kwh	% of ES	
Fossil energy costs	\$ 145,258	3,625,037	4.01	57%	
F/H O&M, Depreciation & Taxes	139,850	6,408,919	2.18		
Return on rate base	43,007	6,408,919	0.67		
ISO-NE Ancillary, Capacity, NH RPS and RGGI	50,465	6,408,919	0.79		
Vermont Yankee	7,391	172,023	4.30	3%	
IPP costs	21,973	440,107	4.99	7%	
Purchases and Sales	248,637	2,171,752	11.45	34%	
Return on ES deferral	(497)	6,408,919	(0.01)		
Merrimack Incremental O&M costs, net of proj. proceeds	5,480	6,408,919	0.09		
Merrimack projected RPC insurance proceeds	(6,150)	6,408,919	(0.10)		
2008 actual ES under/(over) recovery	(41,475)	6,408,919	(0.65)		
Total Estimated Energy Service Cost	\$ 613,939	6,408,919	9.58		
Total Estimated Revenue	614,005	6,408,919	9.58		
Average Cost of Fossil Fuel, Vermont Yankee, IPPs and Purchases			6.60		
Average Cost of Other Charges			3.62		
Impact of 2007 Over-Recovery			(0.65)		
Total Average Cost (cent/kwh)			9.58		

Summary of Forecasted Energy Service Cost For January 2010 Through December 2010	TOTAL COST	MWH (sales)	c/kwh	% of ES	Inc / (Dec)
Fossil energy costs	\$ 166,238	4,045,909	4.11	68%	0.10
F/H O&M, Depreciation & Taxes	142,129	5,978,999	2.38	0	0.20
Return on rate base	42,635	5,978,999	0.71		0.04
ISO-NE Ancillary, Capacity, NH RPS and RGGI	51,513	5,978,999	0.86		0.07
Vermont Yankee	7,397	158,372	4.67	3%	0.37
IPP costs	30,086	482,889	6.23	8%	1.24
Purchases and Sales	123,585	1,291,830	9.57	22%	(1.88)
Return on ES Deferral	105	5,978,999	0.00	0%	0.01
Merrimack Incremental O&M costs, net of proj. proceeds	(3,000)	5,978,999	(0.05)		(0.14)
Merrimack projected RPC insurance proceeds	(3,800)	5,978,999	(0.06)		0.03
2008 ES Over/Under Recovery	(66)	5,978,999	(0.00)		0.65
Total Forecasted Energy Service Cost	556,888	5,978,999	9.31		(0.27)
Average Cost of Fossil Fuel, Vermont Yankee, IPPs and Purchases			5.47		(1.13)
Average Cost of Other Charges			3.84		0.22
Impact of 2008 Over-Recovery			(0.00)		0.65
Total Average Cost (cent/kwh)			9.31		(0.27)