



Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 17-075

Date Request Received: 09/07/2017

Date of Response: 09/21/2017

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Request No. STAFF 1-010-SP01

Page 1 of 2

Request from: New Hampshire Public Utilities Commission Staff

Witness: Frederick White, Jody J. TenBrock

Request:

Reference Bates page 42 and beginning on line 14. The Company states that "the contracts which were entered into in 2007 (actual date was December 17, 2007) and the contracted quantities were consistent with the then current and then foreseeable operations going forward." Please fully explain what situations existed at the end of 2007 which gave the Company the insight or knowledge to contract for coal and coal deliveries for the next five consecutive years and how the Company believed at the time that this was prudent for its customers.

Response:

ORIGINAL RESPONSE:

Given the historical and forecast capacity factors of PSNH's coal-fired power plants, Merrimack and Schiller, it was prudent to enter into the subject shipping contract in 2007.

As seen in the attachment showing the coal consumption at Merrimack and Schiller stations from 2000 to 2017, for many years, going even much further back than 2000, Merrimack burned on average about 1.2 million tons of coal per year and Schiller burned approximately 400,000 tons of coal per year with the vast majority of that coal being imported from Venezuela and Colombia. For example, of these quantities, the annual quantity of foreign sourced coal in 2004 through 2007 was, on average, about 875,000 tons, or the equivalent of about 23 cargoes, of foreign-origin coal each year. In comparison, the total tonnage to be moved under the subject shipping contract was for approximately 990,000 tons of coal over a five year period, equivalent on an average annual basis to 198,000 tons per year.

(Note; The re-powering of Schiller Unit 5 from coal-fired to wood-fired in December, 2006 resulted in an approximate reduction of 125,000 tons of coal consumption per year going forward.)

While the first news of shale gas was just breaking in 2008, the extent of its production and its impact on the electric markets was unforeseen by electric, coal and natural gas market participants, pundits and others. The Commission's Order No. 25,920 finding the Company's decisions regarding the construction of the Scrubber at Merrimack Station to be prudent supports the reasonableness of the Company's decision in 2007 to enter into the subject agreement. PSNH's coal burn began declining gradually in 2008 and then more precipitously declined in 2009 until the present.

SUPPLEMENTAL RESPONSE:

The cost to PSNH's customers was one of the primary factors considered by the Company when entering into the CSL contract. There were significant projected and actual savings to PSNH's customers from

sourcing coal from Venezuela versus domestic U.S. sources of low sulfur coal.

The spreadsheet provided as Attachment Staff 1-010-SP01(a) shows the savings to PSNH's customers from 2008 through 2011 to be over \$70 million from purchasing Venezuelan coal versus low sulfur Central Appalachia coal sources, the nearest and least cost domestic supply area of this type of coal. These savings were achieved through engaging several shippers in transporting the Venezuelan coal, including Canadian Steamship Lines (CSL).

Also provided as Attachment Staff 1-010-SP01(b) is a spreadsheet showing the 2007 forecast savings of entering into the CSL shipping contract to transport Venezuelan coal. At the time the contract was entered into the projected savings were over \$19 million via that one contract alone.

Cost Savings From Venezuelan Coal Purchases 2008-2011

	(\$ per net ton)			
Year:	2008	2009	2010	2011
<u>Central Appalachia Coal</u>				
0.7% Sulfur	\$104.18	\$56.40	\$67.16	\$77.94
Barge	\$25.00	\$25.00	\$25.00	\$25.00
Rail	\$12.00	\$12.00	\$12.00	\$12.00
Delivered Cost	\$141.18	\$93.40	\$104.16	\$114.94

	Year:			
	2008	2009	2010	2011
<u>Venezuelan Coal</u>				
Venezuelan Tons Purchased by PSNH	691,776	422,905	267,242	397,094
Delivered Venezuelan Coal	\$ 82.35	\$ 76.36	\$ 76.21	\$ 73.50
Savings Venezuela vs. Central App Coal	\$58.83	\$17.04	\$27.95	\$41.44
Savings from taking Venezuelan Coal	\$ 40,696,606	\$ 7,204,539	\$ 7,470,082	\$ 16,454,583
Total Savings 2008-2011 =	\$ 71,825,809			

Forecast Savings
Venezuelan vs. Central Appalachia Coal
2007 CSL Charter Party

(\$ per net ton)

Year:	2008	2010	2011	2012
Central Appalachia Coal*				
-0.7%, 12500 BTU	\$46.01	\$44.91	\$46.66	\$47.44
Barge	\$25.00	\$25.00	\$25.00	\$25.00
Rail	\$12.00	\$12.00	\$12.00	\$12.00
Delivered Cost	\$83.01	\$81.91	\$83.66	\$84.44

	4 Cargoes		6 Cargoes		6 Cargoes		6 Cargoes	
	2008	2010	2011	2012	2011	2012	2011	2012
Venezuelan Coal								
Venezuelan Tons to be Moved Under CSL contract	160,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000
Venezuelan Coal	\$ 52.83	\$ 46.15	\$ 47.74	\$ 47.40	\$ 47.74	\$ 47.40	\$ 47.74	\$ 47.40
Freight Rate	\$ 12.56	\$ 13.03	\$ 13.24	\$ 13.47	\$ 13.24	\$ 13.47	\$ 13.24	\$ 13.47
Delivered Cost	\$ 65.39	\$ 59.18	\$ 60.98	\$ 60.87	\$ 60.98	\$ 60.87	\$ 60.98	\$ 60.87

Savings per ton - Venezuelan Vs Central App Coal	\$17.62	\$22.73	\$22.68	\$ 23.57
Savings from taking Venezuelan Coal	\$ 2,819,200	\$ 5,455,200	\$ 5,443,200	\$ 5,656,800
Total forecast savings 2008-2011 =	\$ 19,374,400			

* Coal prices from 2007 JD Energy forecast.