

Public Service Company of New Hampshire  
Docket No. DE 11-250

Date Request Received: 07/25/2014  
Request No. TC 6-040  
Request from: TransCanada

Date of Response: 09/02/2014  
Page 1 of 1

Witness: William H. Smagula

---

**Request:**

Reference your testimony concerning conclusions drawn by Legislators and the Public Utilities Commission regarding going forward with the Scrubber in spite of "higher costs", as well as your testimony on page 23 regarding fuel diversity. Please provide copies of any and all studies regarding the economic viability of coal plants in the ISO-NE region produced by or obtained by PSNH, its affiliates, or parent companies from 2005 through 2011.

**Response:**

PSNH has objected to this question. Notwithstanding and without waiving that objection, PSNH is providing the following response:

PSNH has previously provided in response to discovery requests in this proceeding a number of analyses of Merrimack Station pertaining to the Scrubber Project. To the best of its knowledge, PSNH has not conducted nor have any other studies in its possession that are related to economic viability of any ISO-NE coal plants. In addition to those studies, the following items may provide information relevant to this question:

**PSNH's 2007 Least Cost Integrated Resource Plan** available at:  
<http://puc.nh.gov/Regulatory/Docketbk/2007/07-108.htm>

**PSNH's 2010 Least Cost Integrated Resource Plan** available at:  
<http://puc.nh.gov/Regulatory/Docketbk/2010/10-261.html>

**Avoided Energy Supply Costs in New England: 2007 Final Report** available at:  
<http://www.mass.gov/eea/docs/dpu/energy-efficiency/avoided-energy-supply-costs-in-new-england/2009-av-eng-scs.pdf>

**Avoided Energy Supply Costs in New England: 2009 Report** available at:  
<http://www.synapse-energy.com/Downloads/SynapseReport.2007-08.AESC.Avoided-Energy-Supply-Costs-2007.07-019.pdf>

**Avoided Energy Supply Costs in New England: 2011 Report** available at:  
<http://www.synapse-energy.com/Downloads/SynapseReport.2011-07.AESC.AESC-Study-2011.11-014.pdf>

Public Service Company of New Hampshire  
Docket No. DE 11-250

Date Request Received: 07/25/2014

Request No. TC 6-149

Request from: TransCanada

Date of Response: 08/29/2014

Page 1 of 1

Witness: David Harrison, Noah Kauffman

---

**Request:**

Reference page 10 of your testimony. Please provide copies of any and all fuel price forecasts or forecasts of electricity prices produced by or available to NERA, its affiliates or parent companies in 2008 and 2009.

**Response:**

Please see PSNH's objection to this question. Notwithstanding and without waiving that objection, PSNH is providing the following response:

Any organization or individual can produce a price forecast, and the number of "available" forecasts are too numerous to list in one place. We often make use of the long-term forecasts developed by the U.S. Energy Information Administration (EIA) because we are familiar with the methodology EIA uses to generate its forecasts. EIA's forecasts are used in developing our range of price forecasts for our Scrubber Project analysis, and they were also used to produce the forecasts cited by TransCanada witness Michael Hachey in his testimony.

Public Service Company of New Hampshire  
Docket No. DE 11-250

Date Request Received: 07/25/2014  
Request No. TC 6-157-SP01  
Request from: TransCanada

Date of Response: 08/29/2014  
Page 1 of 1

Witness: David Harrison, Noah Kaufman

---

**Request:**

Provide a list of natural gas price forecasts known to you (e.g., IHS Global Insight, EVA, Deloitte, Seer, Exxon-Mobil, Infonun, etc...). Which of these would have been available to PSNH between 2006 and 2009?

**Response:**

We often come across natural gas price forecasts in our projects, but in general we would not use the information in our analyses unless we trusted the source of the information. We often make use of the long-term forecasts developed by the U.S. Energy Information Administration (EIA) because we are familiar with the methodology EIA uses to generate its forecasts. On pages 18-19 of our testimony (and Attachments 6, 7 and 8) we describe the range of natural gas price projections used in our study, and the sources that we used to develop these forecasts. All sources were published prior to either mid-2008 or early-2009. We do not know what access PSNH had to particular projections between 2006 and 2009.

Public Service Company of New Hampshire  
Docket No. DE 11-250

Date Request Received: 07/25/2014  
Date Supplement Request Received: 07/25/2014  
Request No. TC 6-192-SP01  
Request from: TransCanada

Date of Response: 08/08/2014  
Date of Supplement Response: 09/03/2014  
Page 1 of 2

Witness: James J. Vancho, Terrance J. Large

---

**Request:**

Reference pages 1-2 of your testimony. With respect to non-Scrubber capital projects at PSNH:

- a. Please explain how economic assumptions are developed (i.e. fuel and energy forecasts and the frequency these assumptions are revised/updated for specific projects).
- b. Please provide a list of capital projects developed during 2006-2010 and their respective capitalization periods.
- c. Please provide all forecast assumptions for natural gas, electric and coal developed for the capital projects listed in subsection (b)
- d. To the extent input assumptions set forth in part (c) are different from the assumptions associated with the Scrubber, please explain those differences.

**Response:**

**Original response:**

A. Typically, large projects are managed by a project manager or director from the business unit sponsoring the project and would be evaluated by a multi-disciplinary project team (finance, regulatory, legal, etc.). Economic assumptions are developed collaboratively by the project team and other subject matter experts in various departments depending on the particular assumption.

With respect to the frequency of assumption updates, up until project approval, project analyses utilize the latest available information, assuming any updates are material. Following project approval, assumptions are rarely updated, but as actual project cost data becomes known or significant changes occur, it may become necessary for a "re-approval" should the approved budget be exceeded.

PSNH has objected to parts B, C, and D of this question.

**Supplemental response:**

B. During the period in question, PSNH had over 10,000 capital projects, with approximately 1000 involving its fossil-fueled generating units. There were only two fossil generation projects during this time period that met the criteria necessary for review approaching the process that the Scrubber Project underwent:

- i. Replacement of the dockside coal unloader at Schiller Station, and
- ii. Replacement of the HP/IP turbine at Merrimack Unit 2.

Both of these projects underwent detailed review by the NHPUC in several prior dockets, including Docket Nos. DE 06-125 and DE 08-145. The coal unloader project followed the recommendation of a consultant hired by PUC Staff.

C. With the energy price of our units being generally favorable when the projects listed in subsection (b) were constructed as compared to market energy prices, reliability and efficiency were the main determinants in their capital expenditure justification. More simplistic cost/benefit analyses focusing on the difference between our cost of generation and market prices of energy were used to justify those projects. For the Schiller coal unloader, an analysis involving fuel costs was performed using three potential costs of foreign and domestic coal -- a \$70 low price; an \$80 likely price; and, a \$100 high price (per ton), which were escalated at 2.5% per year for 20 years.

D. Please see the response to subsection (c), above. The escalation of fuel costs at 2.5% per year was the same assumption used with the Scrubber (see PSNH's September 2, 2008 Report to the Commission in Docket No. DE 08-103.)

Public Service Company of New Hampshire  
Docket No. DE 11-250

Date Request Received: 07/25/2014  
Request No. TC 6-210  
Request from: TransCanada

Date of Response: 09/02/2014  
Page 1 of 1

Witness: James J. Vancho, Terrance J. Large

---

**Request:**

Reference pages 4-5 of your testimony regarding economic analyses undertaken by PSNH and page 6 of your testimony in response to Mr. Hachey's testimony. Please provide copies of any and all studies regarding the economic viability of coal plants in the ISO-NE region produced by or obtained by PSNH, its affiliates, or parent companies from 2005 through 2014.

**Response:**

PSNH has objected to this question. Notwithstanding and without waiving that objection, PSNH is providing the following response:

Please see PSNH's response to TC 6-040.