

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

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| ORIGINAL |
| N.H.P.U.C. Case No. <u>DE 11-250</u> |
| Exhibit No. <u>103</u> |
| Witness <u>Matthew Kahal</u> |
| DO NOT REMOVE FROM FILE |

Date Received: January 16, 2014
Request No.: PSNH 1-3

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 3, Line 9 – You testify, “My assignment is to evaluate the Company’s prudence with respect to management’s decisions to proceed with and complete this project, given the circumstances and market conditions confronting the Company.”

- a. Is it your contention that the Scrubber Law did not require PSNH install and have operational scrubber technology to control mercury emissions at Merrimack Units 1 and 2 no later than July 1, 2013?
- b. If that is your contention, please explain in detail the basis for that contention.

Response:

- a. No. Mr. Kahal is not expressing a legal opinion on PSNH’s obligations regarding the scrubber.
- b. Not applicable.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-4

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 3, Line 16 – You testify, “ My testimony is limited to the Company’s prudence from a planning perspective, i.e., whether, given circumstances at the time, it was appropriate to proceed with and complete this very expensive project.”

- a. Is it your contention that PSNH had discretion whether or not scrubber technology had to be installed and operational at Merrimack Station no later than July 1, 2013?
- b. If that is your contention, please explain in detail the basis for that contention.

Response:

- a. See response to question (3).
- b. See response to question (3).

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-5

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 4, Line 8 – You testify, “The Company’s obligation is to obtain for its customers reliable electric service at the lowest reasonable cost, and this includes the cost of the scrubber.”

- a. Is it your contention that the Company has an obligation to ignore governing law if such law raised the ultimate cost of service to customers?
- b. If that is your contention, please explain in detail the basis for that contention.

Response:

- a. No. Also see response to question (3).
- b. Not applicable.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-9

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 6, Line 16 – You testify that “PSNH’s management acted unreasonably by failing...to give careful consideration to the logical alternatives.” Please identify all of the “logical alternatives” available to PSNH under the law.

Response: Some of the “logical alternatives” are discussed in Mr. Kahal’s testimony. Mr. Kahal is not expressing a legal opinion on the feasibility of the options. That would be for the Commission and/or New Hampshire legislature to determine.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-13

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 8, Line 6 – You testify that an option available to PSNH was “Divest the Merrimack plant (if possible), with the buyer determining how best to comply with any legislature requirements”:

- a. Please explain in detail what you mean by “(if possible)”.
- b. If PSNH divested the Merrimack Plant as suggested in this testimony, do you agree that the buyer become the owner of that generating plant?
- c. In your opinion, if any new owner of Merrimack Station was required to install and have operational scrubber technology at Merrimack Units 1 and 2 no later than July 1, 2013, was it likely that there would be a buyer willing to take on that obligation? If so, please describe in detail why, and include a discussion of any and all conditions such a buyer would likely impose, as well as a discussion of the impact the obligation to install and operate a scrubber would have on the price such a buyer would be willing to pay for the Merrimack plant.

Response:

- a. This means that if divestiture is legally and practically feasible, and if there is a qualified buyer for the plant.
- b. That would be Mr. Kahal's assumption.
- c. The OCA objects to this question on the grounds that it calls for speculation. Notwithstanding this objection, Mr. Kahal can state that the business plans of the hypothetical buyer are not known. One option for a buyer might be to operate Merrimack as a coal plant, which presumably may require compliance with the Scrubber law. Mr. Kahal cannot express an opinion on the buyer's legal obligation.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-30

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 16, line 22 – You testify about the “prudence standard.” In your opinion, is it ever prudent for a utility to ignore the law? If so, please explain when in detail.

Response: It is not Mr. Kahal's position that it is prudent for a utility to intentionally ignore the law.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-37

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 23, line 3 - You indicate that the \$11 gas price used by the company was “an accident of timing.” Please explain what you mean by the term “an accident of timing.”

Response: It was an “accident of timing” (or “bad luck”) in the sense that mid-2008 was a time period when gas prices (spot and NYMEX forwards) were increasing to extraordinarily high levels as compared with both historical experience and post mid-2008 gas market behavior. Importantly, this was a largely unexplained price increase that was not caused by an obvious physical supply disruption (e.g., Hurricanes Katrina/Rita in 2005). The “accident of timing” in this case was the PSNH’s revision in the scrubber construction cost from \$250 million to \$457 million which coincidentally occurred at essentially the same time. For example, had the Company’s study taken place in Summer 2009 rather than 2008, there undoubtedly would have been an entirely different study result.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-48

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 32, line 3 – You testify “The Company’s Summer 2008 economic viability study, submitted on September 2, 2008, was technically defensible and not unreasonable as a “snap shot” evaluation of investing \$457 million in the Clean Air Project.” Please explain in more detail you mean when you say “not unreasonable as a ‘snap shot’ evaluation.

Response: This means that the Company prepared an economic viability study, based on generally valid economic concepts, that purports to show that the Scrubber Project was preferable to plant retirement (and therefore market-sourced replacement power) over its remaining life. However, this was a snapshot in that it reflected facts and circumstances as of that specific point in time, i.e., Summer 2008. A study based on information either prior to Summer 2008 or after that time period likely would be different. This was recognized by Entergy Louisiana which updated its Little Gypsy Project study whenever it obtained important new information that could materially alter project economics.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-57

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 35, line 12 – You testify “Instead, the Company decided to proceed with its scrubber project capital spending expeditiously, completing the project almost two years in advance of the statutory compliance date.”

- a. Do you dispute that the scrubber law expressly desired to achieve reductions in mercury emissions as soon as possible?
- b. Do you dispute that in the Scrubber Law, the Legislature included an entire statutory section on “Economic Performance Incentives” (RSA 125-O:16) intended to incent emissions reductions as soon as possible?
- c. Do you agree that compliance with the law is of utmost importance when considering the prudence of a utility's actions?
- d. Do you disagree with the Commission's holding in this proceeding that “PSNH is not responsible for the Legislature's actions”? (Order No. 25,566 at p. 5)
- e. Is it your testimony that PSNH was imprudent for attempting to diligently comply with the law?

Response:

- a. Objection. The request seeks a legal conclusion. The law speaks for itself, and Mr. Kahal cannot express a legal position. Mr. Kahal also cannot express a position on what the law “desired.”
- b. Please see response to question PSNH 1-57 (a).
- c. Mr. Kahal does not dispute the importance of legal compliance.
- d. Please see response to question PSNH 1-57 (a).
- e. No. Mr. Kahal maintains that PSNH was imprudent for failing to diligently track changing economic and market conditions, update its economic viability study, and keep the Commission and legislature informed of these crucial and fast changing circumstances.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-59

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 37, line 23 – You testify about a Louisiana project (Entergy Louisiana LLC's ["ELL"] "Little Gypsy Project") where, "That project ultimately was suspended and canceled, with essentially all project abandonment costs recovered by the utility."

- a. Do you agree that ELL's Little Gypsy Project did not involve the installation of a wet flue gas desulphurization system (scrubber) at an existing coal-fired generating station?
- b. Do you agree that ELL's Little Gypsy Project did involve the conversion of an existing natural gas-fired generating station to one that burned coal or coke?
- c. Your résumé at Attachment MIK-1 indicates that you have testified about construction work in progress (CWIP) many times. Do you consider yourself to have expertise regarding CWIP?
- d. Does Louisiana have an anti-CWIP statute?
- e. Are you aware of NH RSA 378:30-a, which reads:
 - **378:30-a Public Utility Rate Base; Exclusions.** – Public utility rates or charges shall not in any manner be based on the cost of construction work in progress. At no time shall any rates or charges be based upon any costs associated with construction work if said construction work is not completed. All costs of construction work in progress, including, but not limited to, any costs associated with constructing, owning, maintaining or financing construction work in progress, shall not be included in a utility's rate base nor be allowed as an expense for rate making purposes until, and not before, said construction project is actually providing service to consumers.
- f. Did the canceled Louisiana project ever "actually provid[e] service to consumers"?
- g. Is it your opinion that Entergy Louisiana, LLC would have taken the same action as it did if it was legally unable to recoup "over \$200 million in plant investment which became abandonment costs? If so, please explain why in detail.
- h. You reference the results of a study conducted by Entergy Louisiana, for which you were a participant. Please provide the detailed assumptions, methodology and results underlying the referenced study.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-59

Date of Response: February 7, 2014
Witness: Matthew Kahal

Response:

- a. Yes.
- b. Yes.
- c. Yes, in a ratemaking and financial context.
- d. Mr. Kahal is not aware of such a statute.
- e. No.
- f. No.
- g. Mr. Kahal does not know what actions Entergy Louisiana management would take under an entirely different set of factual circumstances.
- h. The study results are presented in the testimony of Entergy Louisiana witness Anthony Walz in Docket U-30192, Phase III. The details of the study are confidential but the study is described generally in his testimony.

The study is a 40-year NPV analysis involving two scenarios. The first scenario includes the "to-go" costs of the Little Gypsy Project, with the revenue requirements calculated annually over the remaining life. Energy costs were calculated at the Entergy System level using the Entergy production costing model ("Prosym"). The Little Gypsy non-fuel costs and the Prosym fuel/energy costs were summed for each year and the 40-year NPV value calculated. The second scenario eliminates the Little Gypsy Project and replaces it with a generic combined cycle unit. The same methodology is followed, with the replacement combined cycle unit (non-fuel) revenue requirements calculated each year of the study period and the Entergy System fuel/energy costs calculated using Prosym. The 40-year NPV for the "No Little Gypsy Project" scenario was then calculated. The NPVs of the two scenarios were compared to determine the most economical alternative. It is Mr. Kahal's understanding that the updated study employed in the retirement decision showed a \$94 million NPV net loss for the Little Gypsy Project.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-61

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Do you agree that Entergy's Little Gypsy Project was undertaken in large part to add supply diversity to the ELL generation portfolio and reduce reliance on gas-fired resources?

Response: Yes.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-65

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 44, line 3 – You testify that the Louisiana PSC “issued an order on May 22, 2009 approving the long-term suspension” of the Entergy Louisiana project.

- a. Are you aware that in the spring of 2009, the New Hampshire legislature decided NOT to enact legislation that would have amended or changed the Scrubber law?
- b. Did the Louisiana legislature enact any legislation specifically impacting the Entergy Louisiana project?
- c. If the Louisiana PSC had determined that it did not want “*a pause in or cancellation of the project*” is it your opinion that Entergy Louisiana would have terminated its project anyway?
- d. Do you dispute that the New Hampshire House Committee on Science, Technology and Energy on March 19, 2009, stated in its Majority Report concerning House Bill 496 that “*The majority was also concerned that the passage of this bill would lead to a pause in or cancellation of the project. This would not only have significant environmental ramifications but also would lead to the loss of several hundred short term and long term jobs related to the construction and operation of the scrubber.*”?
- e. If the Louisiana PSC had issued an order stating that cancellation of the Entergy Louisiana project “*would not only have significant environmental ramifications but also would lead to the loss of several hundred short term and long term jobs related to the construction and operation of the*” project, is it your opinion that Entergy Louisiana would still have terminated the project?

Response:

- a. No. Mr. Kahal does not know whether the asserted statement is correct.
- b. Yes. The legislature enacted legislation that would permit securitization financing of cancelled plant costs, if permitted and approved by the Commission.
- c. No. Mr. Kahal does not know what actions Entergy Louisiana management would take under an entirely different set of factual circumstances.
- d. Mr. Kahal has no knowledge of the cited report.

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-67

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Page 46, line 18 - You also testify that "In mid-2008, ELL found itself in a circumstance very similar to PSNH," referring to Entergy Louisiana's "Little Gypsy Project." Similarly, on page 9, line 12, you testify "Section V of my testimony describes similar circumstances in another state jurisdiction (Louisiana) in which the electric utility chose to cancel a major coal-fired project under development, thereby avoiding an imprudent and uneconomic investment."

- a. Was the similar circumstance pursued by ELL pursuant to a state law directing the installation of specific technology at a specific location?
- b. Was ELL subject to felony criminal conviction and/or civil penalties for failing to comply with a law mandating the project under consideration?
- c. Did the state legislature enact statutory findings determining that the Little Gypsy Project was in the public interest?
- d. Did the state legislature enact a statutory finding that the Little Gypsy Project should be completed "as soon as possible"?
- e. Did the state legislature dictate the precise technology that had to be installed in ELL's Little Gypsy Project?
- f. Did the state legislature dictate the precise location for the Little Gypsy Project?
- g. Did the state legislature specify a date in law by which the Little Gypsy Project had to be completed?
- h. Did the state legislature provide statutory incentives to ELL for early completion of the Little Gypsy Project?
- i. Do you agree that when the Louisiana PSC approved the Little Gypsy Project, it did so knowing that the cost of the Little Gypsy Repowering Project over its useful life ultimately could exceed the cost of an alternative Combined Cycle Gas Turbine?
- j. Do you agree that the Louisiana PSC found, that the fuel diversity benefit provided by the Little Gypsy Project was sufficiently important that the Project should be certified despite the risk that the cost of the Project over its useful life ultimately could exceed the cost of a CCGT?
- k. Is it true that the Little Gypsy Project had been delayed in 2008 in order to obtain additional environmental permitting?

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-67

Date of Response: February 7, 2014
Witness: Matthew Kahal

- l. Is it true that the Little Gypsy Project faced increasing commodity prices?
- m. Is it true that delays in the Little Gypsy Project created additional financing costs and additional costs for AFUDC to ELL?
- n. Is it true that at the same time ELL was pursuing the Little Gypsy Project, it was engaged in other costly projects requiring the company's capital, such as the replacement of the steam generator at its Waterford Nuclear Plant at an estimated cost of over \$1/2 Billion and storm costs from hurricanes during 2008 of nearly \$1/2 Billion?
- o. Are you aware that ELL informed the Louisiana PSC that "the projects that ELL needs to complete and ELL's need to ensure that it has adequate liquidity to address storm events counsel against undertaking an investment of the size of the [Little Gypsy] Repowering Project at this time given its declining economics."?
- p. Is it true that ELL reported to the Louisiana PSC that in 2008 "gas prices also were increasing and reaching record high levels"?
- q. Is it true that ELL reported to the Louisiana PSC that "Gas prices continued to trend upward for the remainder of the Summer of 2008"?
- r. Is It true that ELL reported to the Louisiana PSC that the Little Gypsy Project would provide a physical hedge against high natural gas prices?
- s. Is it true that ELL reported to the Louisiana PSC in 2009 that "Until very recently, natural gas prices were expected to increase substantially in future years."?
- t. Is it true that ELL reported to the Louisiana PSC that "The upward trend in natural gas prices continued into the summer of 2008 when Henry Hub prices reached a high of \$13.32/mmBtu."?
- u. Is it true that ELL reported to the Louisiana PSC that, "it should be noted that it is not possible to predict natural gas prices with any degree of certainty,an d ELL cannot know whether gas prices may rise again."?
- v. Are you aware that in its Order No. U-30192 issued on March 19, 2008, that the Louisiana PSC noted "one cannot predict with certainty the ultimate cost of . . . natural gas prices over the next 30 years."?

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

Date Received: January 16, 2014
Request No.: PSNH 1-67

Date of Response: February 7, 2014
Witness: Matthew Kahal

- w. Is it true that when the Louisiana PSC made the statement in the prior question, that it cited to your testimony as a Staff Witness for that proposition?
- x. Is it true that ELL told the Louisiana PSC that “The portion of [Project cancellation costs] attributable to contract cancellation costs is only an estimate, as ELL must negotiate with many of the Project vendors in order to determine the actual cancellation costs.”?
- y. Is it true that ELL told the Louisiana PSC that if the Little Gypsy Project was suspended, “if the Project were to be restarted... there could be additional costs beyond those contemplated by the current Project estimate such as, for example, storage costs and costs to treat and protect fabricated materials so that they would be available for use when the Project resumed.”?
- z. Is it true that ELL told the Louisiana PSC that “A suspension or multi-year delay in the Project would affect the permits in other, more significant ways. ELL would be required to seek renewal of existing permits, permit extensions, or new permits for the Project, including new air permits. Moreover, it is possible that any extensions, renewals, or new permits would contain new provisions that would have a significant effect on the economics or technological feasibility of the Project.”?

Response:

- a. No.
- b. Objection. The request seeks legal conclusions regarding criminal law and civil penalties.
- c. Objection. The request seeks legal conclusions regarding Louisiana statutes.
- d. Objection. See response to question PSNH 1-67 (c).
- e. Objection. See response to question PSNH 1-67 (c).
- f. Objection. See response to question PSNH 1-67 (c).
- g. Objection. See response to question PSNH 1-67 (c).
- h. Objection. See response to question PSNH 1-67 (c).

DE 11-250
Public Service Company of New Hampshire
Investigation of Scrubber Costs & Cost Recovery
OCA's Responses to PSNH's Data Requests – Set #1

- i. Objection. The request asks for speculation regarding what the Louisiana PSC knew. The Order speaks for itself.
- j. Objection. See answer to (i).
- k. Yes.
- l. Yes.
- m. Yes. Financing costs and AFUDC are the same.
- n. Yes.
- o. Since no citation is provided, Mr. Kahal cannot confirm the accuracy of the quoted language.
- p. See response to question PSNH1-67 (o).
- q. See response to question PSNH 1-67 (o).
- r. See response to question PSNH 1-67 (o)
- s. See response to question PSNH 1-67 (o).
- t. See response to question PSNH 1-67 (o).
- u. See response to question PSNH 1-67 (o).
- v. Objection. The Order speaks for itself.
- w. Mr. Kahal does not dispute the assertion.
- x. See response to question PSNH1- 67 (o).
- y. See response to question PSNH 1-67 (o).
- z. See response to question PSNH 1-67 (o).

DE 13-108
Public Service Company of New Hampshire
2012 Energy Service/Stranded Cost Recovery Charge Reconciliation
OCA's Responses to the Commission Staff Data Requests – Set #1

Date Received: January 16, 2014
Request No.: Staff 1-4

Date of Response: February 7, 2014
Witness: Matthew Kahal

Request: Reference page 6, lines 7-9. Please reconcile the statement about “increasingly obvious” “...sharp downturns in commodity markets, particularly for natural gas (spot and forwards)...” with your statement on page 23, lines 5-6 that “[i]t turned out that these spot and futures price spikes were short lived, although that was not necessarily known at the time.”

Response: These are two statements in Mr. Kahal’s testimony that refer to different points in time. The sharp downturn in commodities markets (referenced at page 6), particularly natural gas, began to take place in late 2008 and early 2009—shortly after PSNH prepared its economic viability study. The statement on page 23 referred to the sharp price escalation or “spikes” in the first half of 2008, extending through the summer of that year. At that time (i.e., Spring/Summer 2008) it was not necessarily clear that the very high (by historical standards) prevailing gas prices would be short-lived. This is precisely why Mr. Kahal does not specifically contest PSNH’s use of \$11 per MMBtu (escalated) in its Summer 2008 study (although PSNH should have recognized that this assumption was subject to uncertainty and critical importance). The first statement (at page 6, lines 7-8) is why PSNH should have revisited its study and gas price path assumptions by early 2009.