

THE STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

DE 11-250

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Investigation of Merrimack Station Scrubber Costs and Cost Recovery

**OBJECTION BY THE OFFICE OF THE CONSUMER ADVOCATE
TO THE EXCESSIVE DATA REQUESTS OF PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE TO OCA EXPERT WITNESSES AND MOTION TO
DIRECT PSNH RESUBMIT A REASONABLE NUMBER OF REQUESTS**

NOW COMES the Office of the Consumer Advocate (OCA), and respectfully moves this Honorable Public Utilities Commission (Commission or PUC) to find PSNH's two hundred twenty six data requests directed to OCA expert witnesses unduly burdensome due to their vast number. The OCA moves the Commission to waive Rule 203.09(d) requiring an individual objection to each individual data request and direct PSNH to resubmit a reasonable number of data requests. In support of this objection and motion, the OCA states:

1. On January 16, 2014 PSNH filed one hundred nine numbered data requests directed to OCA expert witnesses Matthew Kahal and Stephen Eckberg. Re *PSNH Investigation of Merrimack Station Scrubber Costs and Cost Recovery*, DE 11-250 (January 16, 2014). Attached as Exhibit A.
2. The Commission adopts New Hampshire's liberal standards of discovery. Absent some privilege and subject to control to prevent harassment, full discovery is favored even against third parties and State agencies. *In Re*

PSNH, DE 13-108 (Order No. 25,595) citing *Yancey v. Yancey*, 119 N.H. 197 (1979).

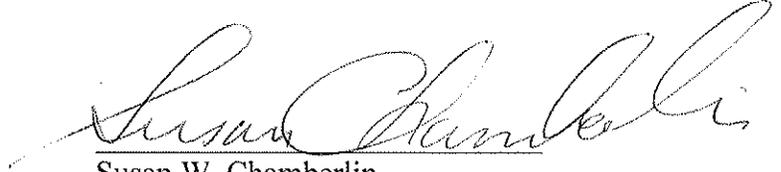
3. Consistent with its quasi-judicial nature, the Commission may limit discovery when necessary to promote justice. *In Re PSNH*, DE 13-108, Order No 25,595 (Nov 15, 2013) (“Consistent with Superior Court Rule 35(b) regarding scope of discovery, we require parties to show that the information being sought in discovery is relevant to the proceeding or is reasonably calculated to lead to the discovery of admissible evidence.”); *Riddle Spring Realty Co. v. State*, 107 N.H. 271 (1966) (“In this State, the lodestar has always been whether pretrial discovery will contribute to the orderly dispatch of judicial business.”) The excessively large number of data requests leaves the impression that the questions are intended to obstruct the orderly dispatch of justice rather than contribute to it.
4. In New Hampshire civil proceedings, Superior Court Rule 23(b) restricts the number of written interrogatories to 25. (“A party may propound more than one set of interrogatories to an adverse party, but the total number of interrogatories shall not exceed 25, unless the court otherwise orders for good cause shown after the proposed additional interrogatories have been filed with the court.”) The OCA asks the Commission to exercise its discretion to require PSNH file a shorter revised list of relevant questions or make a representation that “good cause” requires more than two hundred individual questions.

5. Under Superior Court Rule 23(b) the number of questions is calculated to include subquestions. (“ In determining what constitutes an interrogatory for the purpose of applying this limitation in number, it is intended that each question be counted separately, whether or not it is subsidiary or incidental to or dependent upon or included in another question, and however the questions may be grouped, combined or arranged.”) Including subquestions, PSNH propounded approximately 226 questions to OCA’s expert witnesses.
6. In addition, not including subquestions, PSNH filed over 350 data requests to the parties of this docket. (TransCanada 176; Conservation Law Foundation 104, Sierra Club 59 and NEPGA 19.)
7. The volume of data requests raises the question as to whether these data requests have reached the level of “harassment” that is intended to overburden the parties and prevent the Commission from reaching the merits of the case.
8. The OCA called counsel to PSNH in an attempt to informally resolve the dispute. PSNH objects to the motion.

WHEREFORE, the OCA respectfully requests that this honorable Commission:

- A. Grant the OCA’s Objection to the vast number of data requests;
- B. Direct PSNH to review its requests and limit them to a reasonable number;
- C. Grant such other relief as may be just and equitable.

Respectfully submitted,

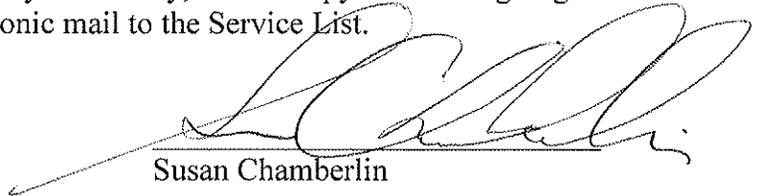


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January 22, 2014

Certificate of Service

I hereby certify that on this 22nd day of January, 2014 a copy of the foregoing
Objection and Motion was sent by electronic mail to the Service List.



Susan Chamberlin

STATE OF NEW HAMPSHIRE
before the
PUBLIC UTILITIES COMMISSION

Docket No. DE 11-250

Public Service Company of New Hampshire
Investigation of Merrimack Station Scrubber Project and Cost Recovery

Discovery for Office of the Consumer Advocate

References to “you” refer to Mr. Matthew Kahal or Mr. Stephen Eckberg, as indicated and appropriate.

Mr. Kahal

1. To the extent not otherwise requested herein, produce your entire file pertaining to this matter, whether in hard copy or electronic form.
2. Have you ever testified in a prudence case before a public utilities commission? If so, please list the relevant cases. Please provide copies of all testimony you have filed related to a prudence review.
3. 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.
4. 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.
5. 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.
6. Page 4 - Please describe your understanding of the basis for the preliminary estimate of the installation cost for the scrubber of \$250 million and the basis for the revised estimate of \$457 million.
7. Page 5 - You indicate that an update to the Summer 2008 study “would have drastically altered the Summer 2008 results, indicating that, on an expectational basis, the Clean Air Project no longer appeared to be economically viable.”
 - a. Did you or others at the OCA conduct an analysis that led you to believe the study results would have changed drastically?
 - b. If so, what were the results? If not, what is the basis for this opinion?
8. Page 6, Line 10 – You testify that in late 2008 and early 2009 there was “a severe economic downturn portending the deepest recession since the Great Depression of the 1930s.”
 - a. As a result of that economic recession, was there a significant loss of jobs in the United States?
 - b. As a result of that economic recession, were programs to create jobs an important public policy goal in New Hampshire?
 - c. Did the Scrubber Project create jobs in the midst of the severe economic recession?
 - d. If the New Hampshire Legislature felt that it was in the public interest to continue the scrubber project in order to preserve jobs during the recessionary period you discuss notwithstanding its knowledge of the \$457 Million cost estimate, would it still be your opinion that PSNH was imprudent in pursuing installation of the scrubber?
9. 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.

10. Page 7, Line 16 – You preface your testimony with the phrase, “As the Company's statements have suggested... .” Please identify with specificity the Company’s statements that you are referring to.

11. Page 7, Line 23 – You testify “I have identified at least three potential alternative actions by PSNH that could meet the required mercury emissions reduction target and minimize the ratepayer burden objectives that could have been pursued if authorized by the lawful authority”
 - a. Please explain what you mean by the phrase “if authorized by the lawful authority.”
 - b. If any of the three potential alternative actions you identify were NOT authorized by the lawful authority, would you agree that such alternative was not available to PSNH?
 - c. If you respond that an “unauthorized” alternative was still available to PSNH, please explain your response in detail.

12. Page 8, Line 4 – You testify that PSNH could have retired Merrimack Station. Upon such retirement, do you agree PSNH would still be the owner of Merrimack Station absent a sale or other transfer of the asset to some other party? **[PSNH asks this question subject to its pending Motions to Strike. If the Commission grants the relevant motion, PSNH will withdraw this question.]**

13. 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.

14. Page 8 - You indicate that a study “likely would have demonstrated to policymakers a need” for the divestiture or retirement of Merrimack.
 - a. Did you or the OCA conduct an analysis of the feasibility and costs associated with plant divestiture and retirement?
 - b. Is it your testimony that policymakers did not receive such studies during the 2009 time period?

- c. If so, what were the results? If not, what is the basis for your conclusion
15. Page 8, line 8 – You testify “None of these options were even considered by PSNH because the underlying studies that likely would have demonstrated to policymakers a need and merits for such action were not undertaken.”
- Please provide all documents and identify all factors upon which you rely in making the assertion that the suggested options were not considered by PSNH.
 - You state that PSNH did not consider the suggested options because of the results of the underlying studies. Please provide all documents and identify all statements relied upon by you that support your contention why PSNH did not consider the options you outlined.
16. Page 8, Line 14 – You testify, “I conclude that some portion of the scrubber costs appear to be imprudent, but it is difficult at this time to determine the exact amount.” Is it correct that you do not quantify any specific level of costs as being potentially imprudent?
17. Page 8, line 23 – You testify “An appropriate remedy should take into account the circumstances and context of PSNH management's decision-making, including legal or regulatory mandates and market uncertainties.”
- Is it your testimony that the Scrubber Law might indeed be a legal mandate requiring PSNH to install the scrubber?
 - If it was found that the scrubber installation at Merrimack Station does not reflect a utility management choice among a range of options, would any of your suggested remedies be appropriate?
18. Page 8, line 25 – You testify “it may be the case that the continued operation of the scrubbed Merrimack plant (after July 1, 2013, the Project compliance deadline) provides some benefits to customers.”
- Have you quantified the potential benefits to customers discussed in this portion of your testimony?
 - If so, please provide all calculations and supporting workpapers regarding such quantification.
19. Page 9, line 1 – You testify “the appropriate imprudence remedy may depend upon decisions over the long-run treatment of Merrimack, e.g., potentially pursuing divestiture as suggested in a recent Staff report on default service.” Please describe in detail how a future divestiture of Merrimack Station would impact the prudent costs of complying with the requirements of the Scrubber Law
20. Page 9, line 10 – You testify “This section then discusses potential alternatives that the Company might have pursued (assuming lawful authorization) that could have mitigated

an uneconomic outcome.” Please explain in detail what you mean by the parenthetical “(assuming lawful authorization).”

21. Page 10, line 8 – You testify “This law was amended in June 2006, effectively requiring that coal-fired units achieve an 80 percent reduction in mercury emissions.” Please explain what you mean by your testimony where you say the law “effectively requires” an 80 percent emissions reduction.
22. Page 10, line 18 – You testify “The 2006 Act specified wet scrubbing as the appropriate control technology.” Please explain what you mean by “specified wet scrubbing.”
23. Page 11, line 16 – You testify “Most important, the electric utility industry at that time was experiencing very rapid cost escalation for major construction projects, particularly those pertaining to coal-fired generation, as the Company noted in its September 2, 2008 status report. For that reason, I believe that PSNH, at a minimum, understood that the \$250 million cost estimate was very uncertain and subject to a potentially large upward revision.” Please specify the time period when you believe that PSNH “understood that the \$250 million cost estimate was very uncertain.”
24. Page 13 - Please explain the relationship between the size of a capital project relative to the size of the Company and the prudence of an investment.
25. Page 14 - You indicate that the default service customers of PNSH are a “diminishing portion” of its total retail service, and that this was known to PSNH in 2008 and 2009
 - a. What is the basis for the opinion that this was known to PSNH in 2008?
 - b. In 2009?
 - c. Provide all documents you rely upon that you claim support your opinion
26. Page 14 - You state that as of late 2010 most of the Clean Air Project investment had become a “sunk” cost. Please define what you mean by a “sunk” cost in the context of the scrubber investment.
27. Page 15 - Please provide an explanation of the relevance of the 2013 Liberty Consulting Report to the prudence of the scrubber project.
28. Page 15 - Do you agree that the 2013 Liberty Consulting Report is based on a current and future view of the market and not on the status of the market in the 2008/2009 which you state is the critical time period for an analysis of the economic viability of the scrubber project?
29. Page 16 - You indicate that “the Clean Air Project is essentially a dead weight loss for customers” Please define the term “dead weight loss” and explain what it means in this context.

30. 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.
31. If the decision was made by the appropriate authority not to pursue the Clean Air Project:
- Do you dispute that there would have been a loss of jobs during the “great recession”?
 - Do you dispute that there would there have been a loss of jobs permanent jobs at Merrimack Station?
 - Do you dispute that there would have been a permanent loss of well-paying union jobs? If you do dispute these job losses, please explain in detail why.
 - If you do not dispute that such job losses would have occurred, have you quantified how many jobs would have been lost, and the impact of such job losses on the local economy?
32. Page 21 - You state that the 12 sensitivity cases from the 2008 PSNH analysis show that the modeled benefits of the scrubber are “highly volatile.” Please explain to what extent the results of an analysis need to change with its underlying assumptions for the analysis to be considered “highly” volatile.
33. Page 22 - Please provide all gas forecasts on which you relied to support your position that the gas prices used in the September 2008 study on the economic viability of the scrubber project were too high.
34. Page 22, line 12 – Your testimony states “even though compliance is not required until July 1, 2013.”
- What “compliance” are you referring to in this statement?
 - Is it your testimony that the law did not intend for emissions reductions to occur as soon as possible?
 - What do you mean by “required” in this statement?
35. Page 22, line 16 – You testify “An important concern is the potential loss of default load due to both economic conditions and migration to competition. This does not alter the Merrimack plant's economic viability... .” Please explain in detail what you mean when you testified that “This does not alter the Merrimack plant's economic viability...”
36. Page 23, line 3 – You testify “the summer of 2008, when the study was prepared, was a time when gas prices were spiking both in the spot market and futures market It turned out that these spot and futures price spikes were short lived, although that was not necessarily known at the time.”
- What do you mean by your testimony “although that was not necessarily known at the time”?
 - Was it possible for any reasonable person to know with certainty in real time that a price spike is occurring, that prices will not remain flat, or that prices will not continue to rise?

- c. If so, please explain in detail how a reasonable person would know that a price spike is occurring?
37. 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.”
38. Page 23 - You indicate that in the Summer of 2008 PSNH should have considered the possibility that gas prices in the future “could have a tendency to return to historical norms.”
- a. Provide any and all documents you rely upon to support this opinion with evidence from market expectations as of the Summer of 2008?
- b. What do you consider “historical norms” for natural gas prices. What is your basis for that assertion?
- c. Is it unreasonable for PSNH to consider the possibility in the Summer of 2008 that gas prices would continue on the upward trend? If so, please explain why.
39. Page 24 - Is it your position that historic commodity prices are always indicative of future prices? If so, please explain.
40. Page 24, line 3 – You testify that, “Setting aside the summer of 2008, the historical norm for spot wellhead gas during this decade was typically in the range of about \$4 to \$6 per Mcf.”
- a. Is it your opinion that during the summer of 2008, a reasonable participant in the gas market would know that gas prices were not going to continue to remain at a high, or even higher, level?
- b. If so, please explain in detail how a reasonable entity would know that.
- c. In May, 2009, the CEO of TransCanada told investors that “we would say that our gas price outlook for the longer term is somewhere in the 6 to 10 range. And you could see over that period, gas prices going well above 10... .”?
- i. Assuming that the CEO of TransCanada did indeed make the quoted statement in May, 2009, is it your opinion that was an imprudent forecast?
- ii. Explain your response to the previous question.
- iii. Do you agree that the CEO of TransCanada has access to more information concerning the future direction of gas prices in 2008 than you did?
- iv. Do you agree that the CEO of TransCanada is better qualified to predict future gas prices than you are?
41. Page 26 - Is it your position that a company should not realize a shareholder benefit when undertaking a large capital project? If so, please explain.
42. Page 27, line 2 – You refer to “a retirement scenario.”
- a. In such a retirement scenario, who would be the owner of Merrimack Station?
- b. If the scrubber law requires the owner of Merrimack Station to install and have operational scrubber technology by July 1, 2013, how would the owner be able to comply with this statutory requirement if it did nothing to install the scrubber

before July 1, 2013?

[PSNH asks this question subject to its pending Motions to Strike. If the Commission grants the relevant motion, PSNH will withdraw this question.]

43. Page 27 - Please provide any capacity factor forecasts on which you relied to support your position that the capacity factor assumptions used in the September 2008 study on the economic viability of the scrubber project were “very aggressive”.
44. Page 27, Line 22-23 - You state that the assumed plant capacity factors used in certain analyses “while obviously not impossible, this seems like a very optimistic assumption favoring the Merrimack plant”.
 - a. Please provide the basis upon which you render the opinion that this is an “optimistic” assumption.
 - b. Please provide all related documents upon which you base your opinion.
 - c. Considering the demonstrated high capacity factors Merrimack Station has demonstrated explain why you believe this performance cannot be repeated?
 - d. Please explain specific equipment reliabilities which contribute to your opinion.
45. Page 29 - Please provide all documents you are relying upon to support your position that the \$9 million in capital additions contained in the September 2008 study is not reflective of future large scale spending on coal-plant environmental compliance.
46. Page 29 - Please provide documents you are relying upon to support your position that the assumed CO2 emissions costs contained in the September 2008 study were “relatively modest”.
47. Page 30, line 22 - You testify “As a technical matter, the magnitude of the default load, by itself, does not determine whether or not the decision to scrub and continue to operate the Merrimack plant is an economic decision, as compared to the retirement decision. That assessment is unaffected by the magnitude of the default load as the Company's model correctly suggests.” Please explain in more detail this concept.
48. 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.
49. Page 32, line 8 – You testify, “That assumption was consistent with published forward prices, but at the same time it was anomalous.”
 - a. Please explain what you mean when you say “That assumption was consistent with published forward prices”

- b. Please explain what you mean when you say “it was anomalous.”
- c. How would a reasonable person know with certainty in 2008 that the situation was “anomalous”?

50. Page 32, line 10 – You testify, “The study was submitted to the Commission just weeks before the onset of the great financial crisis which played out over the next six to nine months and the accompanying sharp economic recession.”

- a. Are you aware that State Representative Mary Beth Walz, (D-Bow) stated:

The scrubber project will create jobs:

The project will generate over 300 temporary construction jobs. It will also create 5-10 new permanent jobs and preserve 100 existing jobs during a time of economic recession.

- b. If jobs during a “sharp economic recession” are an important public policy matter, could the legislature mandate that a large construction project go forward regardless of whether it passes the economic tests which form the basis of your testimony?
- c. You indicated that you were one of the co-founders and principals, Vice President and President of Exeter Associates. Has the United States government been one of Exeter Associates largest clients?
- d. If so, do you dispute that federal laws, the Federal Acquisition Regulations and/or the Defense Acquisition Regulations impose myriad public policy requirements on government contracts that seek to address public policy concerns?
- e. Do all of the federal public policy requirements placed on government contractors pass a rigorous economic analyses test that you hold the scrubber project to?
- f. If the scrubber project was mandated to go forward by the Legislature for public policy reasons such as the creation of “shovel ready” jobs during a recession, why would “prudent management call[] for fracking in gas projections”?

51. Page 33, line 5 – You testify “I recalculated the net benefits from retiring the Merrimack plant (with no scrubber) using updated natural gas prices (i.e., for the year 2011 escalated at 2.5 percent per year through 2027).” If you did the net benefits calculation you discuss in the quoted testimony with the scrubber deemed to be a legally mandated sunk cost of \$422 million, what would the result be? Provide a copy of that analysis. **[PSNH asks this question subject to its pending Motions to Strike. If the Commission grants the relevant motion, PSNH will withdraw this question.]**

52. Page 33 - You note that “[A] \$2 per MMBtu [natural gas] price reduction translates into a \$235 million customer savings from plant retirement”

- a. Were the costs associated with retiring Merrimack accounted for in this calculation?
- b. If not, can you explain how you estimated the customer savings from plant retirement without accounting for the costs of plant retirement **[PSNH asks this question subject to its pending Motions to Strike. If the**

Commission grants the relevant motion, PSNH will withdraw this question.]

53. Page 33 - You state that a “proper update [of the 2008 PSNH analysis] would likely show large economic losses from investing in the Clean Air Project and operating Merrimack.”
 - a. Have you conducted this updated analysis?
 - b. If so, what assumptions were used and what were the results? Provide a copy of that analysis.
54. Page 33 - You state that “[b]y year-end 2008, about \$40 million had been expended on the project.” Explain the basis for this statement
55. Page 33 - You state that you performed an updated analysis using the PSNH model with updated natural gas prices.
 - a. Please explain what you mean by “updated natural gas prices.”
 - b. Provide all spreadsheets in native form and any additional assumptions and data sources you used to complete this analysis.
56. Page 34 - Do you agree that an industry accepted approach to an analysis of the economic viability of the scrubber project should include only going-forward costs and not sunk costs? If not, please explain why you don’t agree.
57. 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?
58. Page 36 - Please describe your understanding of the definition of a prudence standard in the context of your statement that “PSNH’s failure to update its Summer 2008 study and assessment (which study was very uncertain to begin with) in the face of market and economic changes, that were both drastic and rapidly moving, was unreasonable and imprudent”.

59. 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 desulfurization 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.
60. Do you agree that a significant part of the justification for Entergy Louisiana’s Little Gypsy Project was the fuel diversity benefits it offered?
61. 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?
62. Do you agree that relative to other utilities, ELL’s natural gas dependency is high, and if so, that this dependency on natural gas-fired resources exposes customers to risk relating to changes in natural gas prices?

63. Page 40 - You reference the results of a study conducted by Entergy Louisiana, for which you were a participant. Provide the detailed assumptions, methodology and results underlying the referenced study.
64. Page 40, Line 7 – You testify “Costs that are committed (i.e., unavoidable) and “sunk” would not be relevant to the cancellation versus continued construction decision. Such costs therefore should be excluded from an economic viability study.”
- a. Did you exclude “such costs” from your analyses regarding the Scrubber project?
 - b. If so, please provide details of how you calculated such costs.
 - c. Please quantify all “such costs” that you identified and excluded from your analyses.
 - d. Please provide all calculations and workpapers relating to your calculation of “such costs.”
65. 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?
66. Page 45, line 10 – You quote from an Entergy Louisiana application: “This increase in expected supply is the result of a structural change in the natural gas market driven by the increased production of domestic gas through unconventional technologies. The recent success of unconventional gas production technologies (e.g., hydraulic fracturing and horizontal drilling) has altered the supplyside fundamentals such that there now exists an expectation of much greater supplies of economically priced natural gas in the long-run.”
- a. Were you aware that in May, 2009, in response to a question regarding unconventional gas, the CEO of TransCanada told investors: “I’ve looked back

over the last 15 years and if people --there have been many interesting new sources of gas come along. That at the time they come along, people proclaim that they're going to change the world. And they get pretty significant, some of them, but in the grand scheme of things, they're just one more source of supply. And I would particularly highlight coal bed methane. Coal bed methane was really going to have a dramatic effect and a lot of us thought it would never exceed 1 Bcf a day in western Canada. And it struggles to maintain 700 million a day. So, that in fact, has turned out to be the case. Looking broadly across North America, there's clearly some shale plays that are going to generate very impressive volumes. But I would argue that they are just the latest place that industry looks to replace declining production.”?

- b. Do you consider TransCanada to be a major player in the North American gas market?
- c. Do the forecasts and statement of TransCanada influence the gas market place?
- d. Was the CEO of TransCanada unreasonable or imprudent in making the quoted statement in May 2009?
- e. Is it your opinion that there remained significant uncertainty regarding the impact of unconventional gas on prices during the 2009 time period?

67. 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?
- 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, and 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."?
- 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.”?

68. Page 50, line 13 – You testify, “by early to mid-2009, only a small percentage of the \$457 million budget would have been expended.”
- a. Do you know what contractual commitments had been made by PSNH by mid-2009?
 - b. Did you review the contracts which had been executed by mid-2009?
 - c. By the term “expended” as used by you in the quoted testimony equate to “sunk.”
 - d. Did you perform any analyses to support your testimony that “only a small percentage” of the project budget would have been expended? If so, please provide your quantification of the percentage of the project budget that would have been expended by mid-July 2009, along with all supporting documents and workpapers.
69. In your 35 years of consulting experience, have you ever advised a client to ignore the law? If so, please identify and provide details of all such instances.
70. Page 95 - You display the results of analysis that estimates net benefits to PSNH customers using alternative natural gas price projections. Please provide the specific calculations underlying these estimates, including any spreadsheets or computer codes that were used to conduct these analyses
71. Please provide copies of all studies, reports, analyses or testimony performed by or on behalf of Exeter Associates during the 2005 to 2010 time frame that discuss in any way the price of gas.

Mr. Eckberg

72. Page 3, Line 8-9 - You assert that assumptions used at the time the investment decision was made were not “unreasonable” and that on Page 4, Line 24-25, that “it is not OCA’s position that the costs incurred for the truck wash were imprudent”. With these statements, you claim that the cost for the truck wash facility be recovered over a unique period of time separate from the Scrubber. What authority did you rely on to support your opinion that a special or different recovery period should apply to the truck wash facility?
73. Page 3, line 15 – You testify “The Company’s response to TS-01, Q-TECH-011 dated 9/21/2012 which I include as Attachment SRE-4 provides the Company’s assumptions regarding the number of trucks carrying coal from the seacoast to Merrimack Station and the estimated number returning to the seacoast carrying gypsum.”

- a. Do you admit the Company's assumptions at the time were reasonable and prudent?
 - b. If you do not so admit, explain the basis for your answer and cite all facts supporting your position.
74. Page 3, line 18 – You testify “Based on trucking rates known at the time the decision was made, the Company estimated there would be a net economic benefit to customers when the trucking cost savings is compared to the incremental revenue requirement for the truck wash facility.”
- a. Do you admit the Company's assumptions at the time were reasonable and prudent?
 - b. If you do not so admit, explain the basis for your answer and cite all facts supporting your position
75. Page 4 - Lines 17-20: You recommend a disallowance of \$2,409,873 for the truck wash due to an assertion that “this component of the Clean Air Project is not used and useful in providing service to customers.” Please confirm that it is also OCA's opinion that, should the truck wash prove to be “used and useful” by OCA's metric of increased usage of the truck wash for transporting gypsum, then full recovery of this amount should be granted.
76. Page 6, Lines 1-2 - You testify that a payment made to the New Hampshire Fish and Game Department should be disallowed.
- a. Are you aware that the NE Cottontail was an endangered species in NH?
 - b. Are you aware that DNA from NE Cottontail was found in an area at Merrimack Station required to be converted to a designed, engineered, and partially constructed contractor parking lot?
 - c. Are you aware that to sustain the schedule of the CAP that the contractor parking lot was needed to be completed by late 2008 or early 2009?
 - d. Are you aware that in order to resolve NHF&G concerns about NE Cottontail habitat that may have impacted the scrubber project, PSNH developed an agreement to fund the NH Non-Game Program to enhance NE Cottontail development in numerous NU transmission right-of-ways?
 - e. Are you aware that the Project would have had critical aspects of its construction program hindered resulting in modified design at a cost greater than \$50,000, if the agreement with NHF&G had not been reached?
 - f. Are you aware that the \$50,000 was to be paid over a five-year period to support the NE Cottontail Program?
Since this cost was only the result of construction of the CAP, please explain where this State of NH agency cost should be charged, if it is not to the CAP?
77. Page 8 - lines 18-25 - You recommend the application of the “used and useful analysis” from DE 13-108 to the partial disallowance of scrubber currently in-service at Merrimack Station. Please explain OCA's assumptions regarding the relationship between capacity

factor and scrubber operations and therefore why capacity factor is a valid proxy for the revenue requirements of an in-service scrubber.

General Questions

78. Is it OCA's position that if PSNH suspended and cancelled the scrubber project after prudently incurring costs, but before the scrubber actually provided service to consumers, PSNH would be able to recover the costs it had expended? If not, why not?
79. Is it OCA's position that if PSNH suspended and cancelled the scrubber project after prudently incurring costs, but before the scrubber actually provided service to consumers, PSNH would be able to recover the costs it had expended? If not, why not?
80. Please provide copies of all economic analyses in the possession of OCA concerning the flue gas scrubber at Merrimack Station.
81. Please provide copies of all economic analyses in the possession of OCA concerning the ability of PSNH to request a "variance" under RSA 125-O:17.
82. Please provide all fuel price forecasts relating to the price of coal, oil and natural gas available to OCA from 2005 through 2012.
83. Please provide a copy of any document provided to any elected or appointed government official in New Hampshire by OCA related to "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.
84. Please identify any individual employed by or otherwise compensated by OCA to work on its behalf concerning "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.
85. Please provide a copy of any document provided to any elected or appointed government official in New Hampshire by OCA related to Senate Bill 152 and House Bill 496 in 2009.
86. Please identify any individual employed by or otherwise compensated by OCA to work on its behalf concerning Senate Bill 152 and House Bill 496 in 2009.
87. Please provide all documents exchanged between OCA and the U.S. Environmental Protection Agency from 2006 to the present related to the "affected sources" as defined in RSA 125-O:12, I.
88. Please provide copies of any and all correspondence that OCA had with NHDES that pertains to the "affected sources" as defined in RSA 125-O:12, I.

89. Please provide copies of any and all documents that OCA provided to DES, any legislator or any state official concerning the "affected sources" as defined in RSA 125-O:12, I.
90. Please provide copies of any and all documentation that OCA has regarding estimates of newly proposed coal and natural gas combined cycle generating stations in the 2008-2009 time frame.
91. Please provide copies of any and all documentation in OCA's possession regarding the forward market for natural gas delivered to New England in the 2008 through 2011 time frame.
92. Please provide any and all documentation in OCA's possession related to the bus bar costs of power for a new coal or natural gas combined cycle plant in New England during the 2008 to 2012 time period.
93. Who if anyone attended hearings or testified before the Legislature on behalf of OCA relating to the consideration of House Bill 1673 during the 2006 legislative session? Provide copies of all documents provided to the legislature by OCA.
94. Who if anyone testified before the Legislature on behalf of OCA relating to the consideration of House Bill 496 and/or Senate Bill 152 during the 2009 legislative session? Provide copies of all documents provided to the legislature by OCA.
95. Is it OCA's opinion that a person of requisite skill and experience would deem compliance with applicable law to be a reasonable goal? If not, please explain why not.
96. Is it OCA's opinion that a highly trained specialist would deem compliance with applicable law to be a reasonable goal? If not, please explain why not.
97. Does OCA contend that the Scrubber Law, RSA 125-O:11 - 18 does not mandate the installation and operation of scrubber technology at Merrimack Station?
98. Does OCA contend that installation and operation of scrubber technology at Merrimack Station resulted from a discretionary decision made by PSNH management?
99. Does OCA agree that if a decision had been made to divest Merrimack Station during the 2008 to 2010 time period, the new owner would have been subject to the requirements of the Scrubber Law? If not, explain your answer in full.
100. Does OCA contend that if a decision had been made to divest Merrimack Station during the 2008 to 2010 time period, a willing buyer would have been available? If so, please detail the price that OCA believes a reasonable buyer would have offered, an explanation of the foundation for that price, and a statement of any and all conditions to purchase such buyer would reasonably have required.

101. Does OCA agree that if PSNH had the legal ability to retire Merrimack Station and did so, it would still be the owner of that facility, absent a divestiture? If OCA does not agree, please provide the reasoning for such disagreement.
[Note: this question is asked subject to PSNH's pending Motions to Strike. If the Commission rules in PSNH's favor on the relevant Motion, PSNH will withdraw this question].
102. Is it OCA's position that the Scrubber Law included a not to exceed price of \$250 Million?
- a. If so, please identify with specificity where that not to exceed price is located in the Scrubber Law.
 - b. Does OCA agree with the contention that in 2006 the legislature mandated for PSNH to install the scrubber without placing a limit on the costs?
 - c. Is it OCA's position that the words of the law itself do not control?
103. The purpose clause of the Scrubber Law, RSA 125-O:11 finds installation of the scrubber to be in the public interest of the citizens of New Hampshire and the customers of the affected sources; it also refers to the careful and thoughtful balancing of the cost and benefits. OCA discusses some of the costs, but not the potential benefits.
- a. Please provide a listing of all possible "benefits" that the Legislature may have included in the referenced "balancing."
 - b. Do you agree that maintenance of a tax base for state and property taxes is such a potential "benefit"? If your response to this question is no, please explain.
 - c. Do you agree continued viability of the rail line from Nashua to Concord is such a potential "benefit"? If your response to this question is no, please explain.
 - d. Do you agree fuel diversity in electric generation in the region is a potential "benefit"? If your response to this question is no, please explain.
 - e. Do you agree reliability of the electric grid in the region is a potential "benefit"? If your response to this question is no, please explain.
 - f. Do you agree the lessening of the state's dependence upon other sources of electrical power which may, from time to time, be uncertain is such a potential "benefit"? If your response to this question is no, please explain.
 - g. Do you agree the retention in-state of energy expenditures is a potential "benefit"? If your response to this question is no, please explain.
 - h. Do you agree the creation of jobs is such a potential "benefit"? If your response to this question is no, please explain.
 - i. Do you agree the retention of jobs is such a potential "benefit"? If your response to this question is no, please explain.
104. Is OCA intending to challenge in any manner the final reports produced by Jacobs Consultancy Inc. which was retained by the NHPUC to monitor and report on

PSNH's Clean Air Project at Merrimack Station? If so, please explain and identify in detail all areas of the Jacobs' reports you are challenging.

105. Does OCA agree that the price of natural gas has historically demonstrated high volatility?
106. Does OCA agree that economic analyses of the scrubber project performed in the 2008 to 2009 time period would have required educated guesses about what the energy market might be going forward over the subsequent five to ten years?
107. Does OCA agree that during the 2008-2010 period, the United States was experiencing a severe economic recession? If so, does OCA agree that during that recession, the creation and preservation of jobs was a very significant public policy goal for the state of New Hampshire?
108. Provide copies of any requests for documents under the Freedom of Information Act related to Merrimack Station or the Scrubber Project during the period 2005 to present that OCA made to any federal agency and all responses received pursuant to those requests.
109. Did OCA have any discussions with and state or federal agencies related to Merrimack Station or the Scrubber during the period 2005 to present? If so please provide details of such conversations, including but not limited to
 - a. The identity of the agency;
 - b. The identity of agency officials who participated in or were present at the discussions;
 - c. The dates of those discussions;
 - d. The subject matter of those discussions;
 - e. The location of those discussions;
 - f. The reason for those discussions; and
 - g. Copies of all documents produced by OCA at those discussions or received from the agency.