

# **Attachment A**

**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 Sierra Club**

References to “you” refer to Dr. Ranajit Sahu.

“Sierra Club” or “SC” means the Sierra Club and all Sierra Club local chapters, including but not limited to the New Hampshire Sierra Club and the Upper Valley Sierra Club, and all subsidiary and affiliated entities, and their officers, employees, witnesses, agents, and attorneys.

**Dr. Sahu**

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 and provide copies of all testimony you have filed related to a prudence review.
3. In preparing your testimony, did you review Merrimack Station's environmental compliance history? If so, please explain what you did, summarize your findings, and identify the information you relied upon.
4. Page 1: You testify that “[i]t is clear from the record that PSNH either: (a) had a rather narrow view of financial scenario planning; or (b) had a vested interest in sinking a large amount of new capital (via the Scrubber Project) into an otherwise aging coal plant, thereby prolonging its already long life; or (c) both of the above”.
  - a. What do you mean by “vested interest?”
  - b. What do you mean by “sinking a large amount of new capital?”
  - c. What specific parts of “the record” do you contend provide indications of the allegations in (a) and (b)? Provide copies.
5. Page 3: You state that PSNH “did not consider these risks.” Please provide any and all evidence you possess or rely upon that you assert in any way supports this statement.
6. Page 4: You state that prudence would “in part” consider future costs and risks. Please provide the basis for your understanding of how prudence will be determined in this proceeding. Provide any and all documents you are relying upon to support your opinion.

7. Page 4: Would a prudent utility always consider future costs and perform economic analyses before proceeding with any environmental expenditure? Explain the basis for your answer and provide any and all documents you are relying upon to support your opinion.
8. Page 4, footnote 1: You testify that the scrubber project was “highly unusual” because its primary purpose was to reduce mercury rather than sulfur oxides.
  - a. Are you aware of any other scrubber project that had mercury reduction as its primary goal? Please list all such projects.
  - b. Are you aware of any other state or federal law mandating the installation of specific technology at a specific location within a specific time period requiring mercury reduction? If so, please identify all such laws and the specific locations they apply to.
9. Page 4, footnote 1: You testify that “the whole decision is perplexing”. What decision are you referring to? Explain what you mean.
10. Page 4, footnote 1: You testify that “mercury reduction could have been effected at each plant.” Did the scrubber law require mercury reduction to be so effected at each plant? If so, please identify where the scrubber law provided for that. If not, what did the scrubber law require?
11. Page 4, footnote 2: You state that PSNH’s “current argument” is that the scrubber law contained a legal mandate from the legislature requiring the installation of the scrubber.
  - a. What were PSNH’s previous arguments regarding the scrubber law?
  - b. Do you assert PSNH’s position has changed? How so?
  - c. Please identify all such arguments and provide specific citations thereto, and copies of all documents where you assert such arguments are found.
12. Page 5: You testify that “having reviewed the record, it is my opinion that PSNH, in the summer of 2008 did not properly (or at all) consider the ramifications of proceeding with the scrubber project in light of known and anticipated additional environmental costs.”
  - a. What record are you referring to? Identify it and produce it. Specify which precise portions of the record you contend support your assertions.
  - b. Which specific costs are you referring to? Which were anticipated and which were “known?”
  - c. What were the actual costs? Identify them and explain why a prudent utility would have reconsidered based on those costs.
13. Pages 5-9: You list a series of “air and water quality requirements that would impact coal plants” (p 5) and you assert that you saw “no evidence that PSNH properly considered any of the potential (and now real) regulatory impacts” of those requirements. For each requirement, answer the following:
  - a. Was the regulation or rule actually adopted? If so, when?

- b. Was it adopted in a manner that made it applicable to Merrimack Station? If so, provide a specific explanation for the basis of your assertion and all documents you rely upon in support of your assertion.
  - c. What costs, if any, did that rule or regulation add to the Scrubber project? Explain the basis for your answer and provide any documents you rely upon that support your position.
  - d. If costs were added, what is the specific impact of that cost? Explain the basis for your answer and provide any documents you rely upon that support your position.
14. Page 5: You testify that prudent planning includes a consideration of “the consequences of proceeding.” Does prudent planning also include a consideration of the consequences of not proceeding? If a utility were subject to criminal and civil penalties for not proceeding, would those be considerations in the prudent planning process?
15. Page 7: You testify "that regulation of greenhouse gases is, in fact, coming to pass. On September 20, 2013, the U.S. Environmental Protection Agency announced its first steps under President Obama’s Climate Action Plan to reduce carbon pollution from power plants." Has the EPA to date proposed any carbon pollution standards that apply to Merrimack Station? If so, please identify such standards and supply a copy.
16. Page 7: Are you aware that the "first steps" (2013) in reducing carbon pollution you refer to are not in fact applicable to MK Station?
17. Page 8: You say “the above is not an exhaustive list.” Identify all other environmental regulations you claim PSNH should have considered in 2008 or earlier that in any way support the opinions you are offering here.
18. Page 9: You testify that PSNH made an “imprudent decision to implement the Scrubber Project.” Are all the factors that you are relying upon to support that assertion contained in your pre-filed testimony? If not, identify any other factors you are relying upon to support that assertion
19. Page 9: You testify that you have “seen no evidence that PSNH properly considered any of the potential (and now real) regulatory impacts” you previously identified.
- a. If PSNH had “properly considered” such impacts, what should or would PSNH have then done? Explain your answer in detail.
  - b. Provide all documents you rely upon to support your answer.
20. Page 9: – you testify that “PSNH faces the situation that its already over-capitalized coal plants face further large future regulatory costs, making them likely unviable for future generation.”
- a. Explain to which coal plants you refer and why you refer to them as “over-capitalized.”

- b. Please provide the basis for your statement that PSNH's coal plants are "over-capitalized". Identify any generally accepted standard of capitalization you rely upon, and provide any and all documents you rely upon to support your assertion.
  - c. Regarding PSNH's coal plants facing "further large future regulatory costs", describe and quantify these certain costs.
  - d. Explain why PSNH's coal plants are "likely unviable for future generation." Provide any analysis that supports this conclusion.
21. Page 9: You testify that a prudent utility would consider costs that "might" occur in the future. Would a prudent utility include consideration of the possibility that:
- a. Conditions concerning the production of gas via fracking may change? If not, explain your basis.
  - b. There may not be an excess of natural gas available to export? If not, explain your basis.
  - c. Domestic demand for natural gas may increase? If not, explain your basis.
  - d. Natural gas reserves may not be as large as previously thought? If not, explain your basis.
  - e. Natural gas reserves may be too costly to extract? If not, explain your basis.
  - f. Environmental laws may become more stringent and it is not possible to extract gas? If not, explain your basis.
  - g. If any of these possibilities were to occur, what impact would there be on the price of natural gas?
22. Page 9: You testify that the environmental costs you reference are "now real." Is there an existing final mandate for PSNH to install closed cycle cooling at Merrimack Station?
23. Page 10: You allege that, if properly accounted for, the regulatory factors described in your testimony would have "led PSNH to conclude that its aging coal plants might simply not be viable."
- a. Did you perform any calculations to support these conclusions?
  - b. If so, what were the results of your calculations? If not, why not?
  - c. Provide the calculations and all materials related to the calculations.
24. Were regulations regarding cooling water intake structures in effect in 2008? In 2009? In 2010? In 2011? In 2012? In 2013?

**General Questions for Sierra Club**

25. Provide any and all documents related to positions SC has taken, including the development of such positions, regarding any pollution control projects at the "affected sources" as defined in RSA 125-O:12, I (including the Scrubber), including, but not limited to:

- a. Board meeting minutes or notes (formal or informal);
  - b. Meeting minutes or notes of any Board subcommittees or special committees;
  - c. Notes or minutes from any committees within SC,
  - d. Any internal notes or memoranda of any SC employee, agent, officer or board member; and
  - e. Any electronic mail message, including attachments, or any other electronic communications.
26. Is it SC'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?
  27. Please provide copies of all economic analyses in the possession of SC concerning the flue gas scrubber at Merrimack Station.
  28. Please provide copies of all economic analyses in the possession of SC concerning the ability of PSNH to request a "variance" under RSA 125-O:17.
  29. Please provide all fuel price forecasts relating to the price of coal, oil and natural gas available to SC from 2005 through 2012.
  30. Please provide a copy of any document provided to any elected or appointed government official in New Hampshire by SC related to "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.
  31. Please identify any individual employed by or otherwise compensated by SC to work on its behalf concerning "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.
  32. Please provide a copy of any document provided to any elected or appointed government official in New Hampshire by SC related to Senate Bill 152 and House Bill 496 in 2009.
  33. Please identify any individual employed by or otherwise compensated by SC to work on its behalf concerning Senate Bill 152 and House Bill 496 in 2009.
  34. Please provide all documents exchanged between SC 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.
  35. Please provide copies of any and all correspondence that SC had with NHDES that pertains to the "affected sources" as defined in RSA 125-O:12, I.
  36. Please provide copies of any and all documents that SC provided to DES, any legislator or any state official concerning the "affected sources" as defined in RSA 125-O:12, I.

37. Please provide copies of any and all documentation that SC has regarding estimates of newly proposed coal and natural gas combined cycle generating stations in the 2008-2009 time frame.
38. Please provide copies of any and all documentation in SC's possession regarding the forward market for natural gas delivered to New England in the 2008 through 2011 time frame.
39. Please provide any and all documentation in SC'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.
40. Who if anyone attended hearings or testified before the Legislature on behalf of SC relating to the consideration of House Bill 1673 during the 2006 legislative session? Provide copies of all documents provided to the legislature by SC.
41. Who if anyone testified before the Legislature on behalf of SC 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 SC.
42. Is it your 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.
43. Is it your opinion that a highly trained specialist would deem compliance with applicable law to be a reasonable goal? If not, please explain why not.
44. Does SC have any requirement, such as but not limited to a corporate compliance program, that mandates compliance with applicable laws? If so, please provide copies of all documents describing such programs.
45. Does SC contend that the Scrubber Law, RSA 125-O:11 – 18 does not mandate the installation and operation of scrubber technology at Merrimack Station?
46. Does SC contend that installation and operation of scrubber technology at Merrimack Station resulted from a discretionary decision made by PSNH management?
47. Does SC 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.
48. Does SC 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 SC 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.
49. Does SC 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 SC 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].

50. Is it SC'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 SC 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 your position that the words of the law itself do not control?
  
51. 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. SC 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
  
52. Is SC 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.
  
53. Does SC agree that the price of natural gas has historically demonstrated high volatility?

54. Does SC 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?
55. Does SC agree that during the 2008-2010 period, the United States was experiencing a severe economic recession? If so, does SC agree that during that recession, the creation and preservation of jobs was a very significant public policy goal for the state of New Hampshire?
56. Do you agree that SC has an anti-fracking campaign?
  - a. If so, please describe what that program is, and what SC's goals are for that program.
  - b. If SC is successful with that program, would that success likely impact the cost of natural gas, and if so, how?
57. Do you agree that SC has a "Beyond Gas" campaign?
  - a. If so, please describe what that program is, and what SC's goals are for that program.
  - b. If SC is successful with that program, would that success likely impact the cost of electricity, and if so, how?
58. Do you agree that SC has a "Beyond Coal" campaign?
  - a. Do you agree that one goal of that program is the elimination of coal-fired electric generation?
  - b. Under what circumstances, if any, would SC not object to the continued operation of Merrimack Station?
59. Please provide copies of all SC's media releases, web site postings, blogs, twitter posting and the like concerning any of the "affected sources" as defined in RSA 125-O:12, I (including the Scrubber) from 2005 to present.

# **Attachment B**



February 27, 2014

Robert A. Bersak  
Assistant Secretary  
and Chief Regulatory Counsel  
Public Service Company of New Hampshire  
780 N. Commercial Street, Manchester, NH 03101  
Manchester, NH 03105-0330  
(603) 634-3355  
Robert.Bersak@psnh.com

RE: Docket No. DE 11-250  
Investigation of Merrimack Station Scrubber Project and Cost Recovery

Dear Bob Bersak:

Please find enclosed the Sierra Club's supplemental responses to certain of PSNH's first set of data requests (Questions 6, 10, 11, 31, and 33) to the Sierra Club in the above-captioned docket.

Sincerely,

/s/  
Zachary M. Fabish  
Attorney for the Sierra Club  
50 F Street NW, 8<sup>th</sup> Floor  
Washington, D.C. 20001  
(202) 675-7917  
zachary.fabish@sierraclub.org

Enclosures

Cc: DE 11-250 Service List

Witness: Ranajit Sahu  
Request from: Public Service Company of New Hampshire

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Question 6:

6. Page 4: You state that prudence would “in part” consider future costs and risks. Please provide the basis for your understanding of how prudence will be determined in this proceeding. Provide any and all documents you are relying upon to support your opinion.

Response to Question 6:

Sierra Club objects to Question 6 on the grounds that it impermissibly calls for a legal conclusion.

Supplemental Response to Question 6:

Subject to and without waiving the objections above, Sierra Club responds that Ranajit Sahu understands that a prudent utility would be one that would act reasonably in managing ratepayer funds for the benefit of ratepayers based on the best information reasonably available to it.

Witness: Ranajit Sahu  
Request from: Public Service Company of New Hampshire

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Question 10:

10. Page 4, footnote 1: You testify that “mercury reduction could have been effected at each plant.” Did the scrubber law require mercury reduction to be so effected at each plant? If so, please identify where the scrubber law provided for that. If not, what did the scrubber law require?

Response to Question 10:

Sierra Club objects to Question 10 on the grounds that it is argumentative and impermissibly calls for a legal conclusion.

Supplemental Response to Question 10:

Subject to and without waiving the objections above, Sierra Club responds that relevant sections of RSA 125-O provide for mercury reductions from the coal-burning electric power plants in the state and for reductions in the aggregated mercury content of the coal burned at these plants, including RSA 125-O:11.

Witness: Ranajit Sahu  
Request from: Public Service Company of New Hampshire

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Question 11:

11. Page 4, footnote 2: You state that PSNH’s “current argument” is that the scrubber law contained a legal mandate from the legislature requiring the installation of the scrubber.
  - a. What were PSNH’s previous arguments regarding the scrubber law?
  - b. Do you assert PSNH’s position has changed? How so?
  - c. Please identify all such arguments and provide specific citations thereto, and copies of all documents where you assert such arguments are found.

Response to Question 11:

Sierra Club objects to Question 11 on the grounds that it seeks information in the possession of PSNH. PSNH argues in its briefing that it was unable to do anything other than install a scrubber. PSNH is knowledgeable as to any other arguments it has made, and it is both irrelevant and unduly burdensome to seek such information from some other party.

Supplemental Response to Question 11:

Subject to and without waiving the objections above, Sierra Club responds that the selected phrase from Ranajit Sahu’s testimony referenced in Question 11 makes no statement as to the substance or existence of “previous arguments regarding the scrubber law,” by PSNH; the word “current” is intended to be interpreted literally, as meaning “at this point in time,” and is not meant to express any implications beyond that.

Witness: Mark Kresowik

Request from: Public Service Company of New Hampshire

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Question 31:

31. Please identify any individual employed by or otherwise compensated by SC to work on its behalf concerning "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.

Response to Question 31:

Sierra Club objects to Question 31 on the grounds that it is vague and ambiguous as to the term "work on its behalf concerning 'An ACT relative to the reduction of mercury emissions,'" is not reasonably calculated to lead to the discovery of evidence relevant to any cause or claim in this docket, is overly broad in that it would seek production of information unrelated to any cause or claim in this docket, fails to be limited as to time, and fails to be limited as to relevant subject matter.

Supplemental Response to Question 31:

Subject to and without waiving the objections above, Sierra Club responds as follows: Sierra Club employee Cathy Corkery performed work on behalf of Sierra Club concerning "An ACT relative to the reduction of mercury emissions" that took effect on June 8, 2006.

Witness: Mark Kresowik  
Request from: Public Service Company of New Hampshire

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Question 33:

33. Please identify any individual employed by or otherwise compensated by SC to work on its behalf concerning Senate Bill 152 and House Bill 496 in 2009.

Response to Question 33:

Sierra Club objects to Question 33 on the grounds that it is vague and ambiguous as to the term “work on its behalf concerning Senate Bill 152 and House Bill 496 in 2009,” is not reasonably calculated to lead to the discovery of evidence relevant to any cause or claim in this docket, is overly broad in that it would seek production of information unrelated to any cause or claim in this docket, fails to be limited as to time, and fails to be limited as to relevant subject matter.

Supplemental Response to Question 33:

Subject to and without waiving the objections above, Sierra Club responds as follows: Sierra Club employee Cathy Corkery performed work on behalf of Sierra Club concerning New Hampshire Senate Bill 152 and House Bill 496 in 2009.