

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 10-121

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
RECONCILIATION OF ENERGY SERVICE AND STRANDED COSTS FOR
CALENDAR YEAR 2009

MOTION TO COMPEL

New Hampshire Sierra Club [NHSC] moves, pursuant to Puc 203.09 (i) for an Order requiring Public Service Company of New Hampshire [PSNH] to fully respond to the NHSC Data Requests.

MEMORANDUM

Merrimack Station is a fifty year old coal fired power plant, with add on pollution control equipment for nitrous oxides [NO_x] and particulate matter [PM] and a wet flue gas desulphurization [FGD] system under construction for sulfur dioxide [SO₂]. The plant is a major source of pollutants regulated by the Clean Air act, including NO_x, PM and SO₂, and, the hazardous air pollutant mercury [Hg], each with serious and substantial public health consequences.

Merrimack Station is also the largest single New Hampshire source of the greenhouse gas carbon dioxide [CO₂].

The control of these pollutants has costs; will have costs in the future; and, the costs per kWh for rate payers will grow because of future legislative, administrative and judicial decisions. The operational, maintenance and capital costs of the pollution control equipment on this antiquated power plant will increase to meet these demands.

These pollution control costs should be identifiable, precisely quantified and be a transparent component of each and every PSNH filing with the Public Utilities Commission that has ratepayer consequences, including this and future Reconciliation and Stranded Cost Recovery and Energy Service dockets.

The determination of the issue whether PSNH should recover its “actual, prudent and reasonable costs” under RSA 369-B: 3, IV[b] [1] [a] demands a careful examination of the prudence of environmental compliance costs. The examination must not only review the prudence of the reconciliation year costs, but, must also include a careful assessment of future costs. For example, and, hypothetically, a careful prudence review must examine whether maintenance was deferred on the selective catalytic recovery system [SCR] for the control of NO_x by spending only XX 2009 dollars when that

deferred maintenance may cause much higher, operational, maintenance and capital costs in the future? Was it prudent to spend XXX 2009 maintenance dollars on the SCR knowing that more stringent future emissions limits may require a future substantial capital investment in an air heater replacement? Was it prudent to spend XXX 2009 dollars on the electrostatic precipitator [ESP] when it should have been replaced by a bag house because of the anticipated Regional Haze Program emission limits? Was it prudent to continue construction of the FGD system without the concurrent capital investment in SO₃ abatement strategies that would have permitted the cost effective use of activated carbon injection to reduce Hg emissions to the level required by RSA 125: O? The retrospective analysis of environmental compliance expenses in the reconciliation process of this old, dirty, coal fired power plant must include an analysis of future expenses, both operational and capital. To do otherwise is like looking through the wrong end of a telescope; not only short-sighted, but penny wise and pound foolish.

The point is that PSNH environmental responsibilities under the Clean Air Act and New Hampshire Multiple Pollution Reduction Program have serious and substantial costs and that the prudence of those costs, current and future, has a very important place in the reconciliation process.¹

The NHSC Data Requests specifically address the environmental costs of Merrimack Station; the prudence of those costs, both as to each pollutant; in the aggregate; and, whether the public good is served by the continued expenditure of rate payer funds on the ever growing cost of environmental compliance when alternative, more environmentally friendly, energy generation options are available. RSA 369:1.

NHSC understands that the PSNH partial objections to Data Requests 1, 2, 4, 5, 6, 8, 9, and 10 relate only to the data beyond 2009, e.g., requests for information for 5 years, 10 years and 40 years. NHSC, therefore, assumes that PSNH will provide the 2009 data as requested.²

In Staff Data Requests, Set 1, 1-44, Staff asked, without objection, that PSNH make the 5 year and 10 year O & M and capital budgets for Merrimack Station available. Therefore, PSNH should be ordered to make the same 5 and 10 year information, including the environmental compliance cost information requested in the NHSC Data Requests, available to NHSC.

¹ The proper application of the reconciliation process for environmental compliance costs requires PSNH to do several things: 1] be absolutely forthright about plant upgrade and life extension projects and the corresponding environmental responsibilities, including permitting obligations; and, 2] create discrete line items for environmental costs in its PUC financial filings, together with a discoverable audit trail that fully support the O & M and capital costs.

² In accordance with Puc 203.09 (i) (4), this was confirmed by a telephone conversation with PSNH Attorney Robert A. Bersak on July 27, 2010.

NHSC choose the 40 year time frame based upon the PSNH Petition in DE 10-122 for authorization to issue long term bonds with a 40 year maturity secured by mortgages on the plant. Those 40 years will have environmental costs that should be assessed for prudence, including in each and every reconciliation docket.

In accordance with Puc 203.09 (i) (4), NHSC made a good faith effort to resolve the discovery issues with PSNH. [See footnote 2]

The NHSC Data Requests follow:

1. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. At Attachment RAB-3, appended to the testimony of Robert A. Baumann, PSNH 2009 Energy Service Reconciliation, For the 12 Months Ended December 31, 2009, at line 39, it states that the NH-RPS costs totaled \$9,358,000. What amount of those costs is attributable to Merrimack Station? What cost did the NH-RPS purchases add to the Merrimack Station energy service [ES] rate per kWh in 2009? What cost is budgeted for NH-RPS purchases add to Merrimack Station ES rate for the next 5 years? The next 10 years. The next 40 years?
2. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. At Attachment RAB-3, appended to the testimony of Robert A. Baumann, PSNH 2009 Energy Service Reconciliation, For the 12 Months Ended December 31, 2009, at line 40, it states that the RGGI costs totaled \$6,983,000. What amount of those costs is attributable to Merrimack Station? What cost did the RGGI purchases add to the Merrimack Station energy service [ES] rate per kWh in 2009? What cost is budgeted for RGGI purchases add to Merrimack Station ES rate for the next 5 years? The next 10 years. The next 40 years?
3. [PSNH generally objected to this Data Request]. The United States Congress is working on cap and trade legislation that, if enacted, will impose costs on the emission of carbon dioxide [CO₂]. What position has PNSH and its parent company Northeast Utilities taken on this legislation? Please detail the position. Has PSNH done budget projections regarding the costs to Merrimack Station that may result from federal cap and trade legislation? If yes, please provide the budget projections and the data that supports the projections. If PSNH has not done such budget projections, please explain why not.
4. [PSNH had a partial objection to his Data Request but agreed to provide the 2009 information]. A review of Attachment RAB-3, appended to the Baumann testimony, does not provide any detail regarding the costs for emission control equipment at Merrimack Station, including the costs of the MK1 and MK2 selective catalytic recovery systems [SCR] for the reduction of nitrogen oxides [NO_x]. Please provide the 2009 operating and maintenance costs [O&M] and capital costs for NO_x compliance

for each MK1 and MK2. Please specifically detail the basis of the costs. What did these costs add to the ES rate? What O&M and capital costs are budgeted for the next 5 years? The next 10 years? The next 40 years? Please provide the data that supports these budget projections. Does PSNH anticipate future, more stringent, NO_x compliance costs because of administrative or judicial orders and state and federal regulation and programs?³ Has PSNH budgeted for these anticipated costs? If not, why not?

5. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. Have the heat rate and efficiency projects described by the William H. Smagula response to Data Request Q-STAFF-059 caused the Merrimack Station firing rate to increase? Have the projects caused NO_x emission rates to increase in tons per year [TPY]? By how much? Will the increases require increased O&M and capital budget costs? Please specifically detail the basis of the costs. Are other heat rate and efficiency projects planned? What effect will these projects have on budgeting?

6. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. A review of Attachment RAB-3, appended to the Baumann testimony, does not provide any detail regarding the costs for emission control equipment at Merrimack Station, including the costs of the MK1 and MK2 electrostatic precipitator systems [ESP] for the reduction of particulate matter [PM]. Please provide the 2009 operating and maintenance costs [O&M] and capital costs for PM for each MK1 and MK2. Please specifically detail the basis of the costs. What did these costs add to the ES rate? What O&M and capital costs are budgeted for PM the next 5 years? The next 10 years? The next 40 years? Please provide the data that supports these budget projections. Does PSNH anticipate future, more stringent, PM compliance costs because of administrative or judicial orders or state and federal regulation and programs? [see footnote 1] Has PSNH budgeted for these anticipated costs? If not, why not?

7. [PSNH generally objected to this Data Request]. Have the heat rate and efficiency projects described by the William H. Smagula response to Data Request Q-STAFF-059 caused the Merrimack Station firing rate to increase? Have the projects caused PM emission rates to increase in TPY? By how much? Will the increases require increased O&M and capital budget costs? Please specifically detail the basis of the costs. Are other heat rate and efficiency projects planned? What effect will these projects have on budgeting?

8. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. A review of Attachment RAB-3, appended to the Baumann testimony, does not provide any detail regarding the costs for the purchase of SO₂ credits and

³For example, New Source Performance Standards [NSPS], New Source Review [NSR], NO_x RACT modification and the pending Regional Haze SIP. MK2 is a BART eligible Targeted EGU in the NH Regional Haze SIP. MK2 is the largest NH contributor to regional haze.

other SO₂ environmental compliance costs at Merrimack Station. Please provide the operating and maintenance costs [O&M] and capital costs for SO₂ for each MK1 and MK2. Please detail the basis of the costs. What did these costs add to the ES rate? What O&M and capital costs are budgeted for SO₂ the next 5 years, including the cost of the wet flue gas desulphurization system, balance of plant equipment, turbine-generator systems and site work⁴? The next 10 years? The next 40 years? Please provide the data that supports these budget projections. Does PSNH anticipate future, more stringent, SO₂ compliance costs because of administrative or judicial order or state and federal regulation?⁵ Has PSNH budgeted for these anticipated costs? If not, why not?

9. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. PSNH has abandoned its testing and experimentation with activated carbon injection [ACI] to reduce the emissions of the hazardous air pollutant mercury [Hg] at Merrimack Station.⁶ A review of Attachment RAB-3, appended to the Baumann testimony, does not provide any detail regarding the costs for Hg emission control equipment at Merrimack Station. Please provide the 2009 operating and maintenance costs [O&M] and capital costs for Hg for each MK1 and MK2. Please specifically detail the basis of the costs. What do these costs add to the ES rate? What O&M and capital costs are budgeted for the next 5 years? The next 10 years? The next 40 years? Please provide the data that supports these budget projections. Does PSNH anticipate future, more stringent, Hg compliance costs because of state and federal regulation, including compliance with RSA 125-O 11-18 and the maximum achievable control technology [MACT] required by the Clean Air Act? Has PSNH budgeted for these anticipated costs? If not, why not?

10. [PSNH had a partial objection to this Data Request but agreed to provide the 2009 information]. RSA 125-O:14 contains prescriptive language specific to determining baseline Hg input based on the sum of annual input pound averages derived from average mercury content of monthly samples of the coal combusted traditionally and average annual coal throughput for certain baseline years. Merrimack 1 has traditionally used a 2/1/1 blend of 50% high sulfur, 25% Bailey [mid-sulfur], and, 25% South American [low sulfur]. MK2 has traditionally used 100% Bailey [mid-sulfur]. Schiller uses 100% South American [low sulfur]. The total Hg baseline input, including Schiller, is 326 pounds per year.⁷ Should Merrimack Station not be able to achieve the 80% Hg

⁴ See June 7, 2006, letter of William H. Smagula, Director-Generation, PSNH, to NHDES-ARD which describes these projects as FGD related.

⁵ For example, if Merrimack Station is subject to NSPS, the SO₂ removal rate may be as high as 97%. The application of BART to MK2, in the Regional Haze program, may increase the SO₂ removal rate to well above 90%.

⁶ ACI was expected to be a significantly less expensive mercury reduction system. The program was apparently abandoned because the MK2 SCR catalyst promotes the conversion of SO₂ to SO₃. SO₃ limits the effectiveness of ACI.

⁷ PSNH and NHDES-ARD have not yet reached agreement on the Hg baseline.

reduction required by RSA 125-O: 1-18, what coal blend will PSNH be required to use to reduce Hg on the input side? Will a changed coal blend increase fuel costs? By how much? Has PSNH made budget calculations for increased fuel costs? If not, why not?

11. [PSNH generally objected to this Data Request]. RSA 125-O: 11-18 requires that SO₂ emissions be reduced 90%. Referring to Data Request 10 above regarding the coal blends traditionally used at Merrimack Station, if the SO₂ removal rate is not achieved by the FGD system or if a state or federal regulation or program requires a higher removal rate and a lower sulfur coal blend, will the change increase fuel costs? By how much? Has PSNH made budget calculations for increased fuel costs? If not, why not?

12. [PSNH did not object to this Data Request]. The Stipulated Settlement Agreement in Docket DE 09-091, provided that there would be an opportunity, during the 2009 reconciliation process, to review the investigation of third party liability for costs of the foreign material outage. \$13,200,000 of purchased power costs were passed on to ratepayers in the 2008 reconciliation process. What is the status of that investigation? Why wasn't a report of the investigation part of the filing and testimony in the current docket?? What proposed adjustments, if any, were made in the 2009 reconciliation presentation to account for any recovery of the 2008 purchased power costs from third parties? The reconciliation testimony and Attachments of William H. Smagula, MK2-Unit Outage List, state that MK2 was down from August 1, 2009, until December 6, 2009, as a "Planned Annual Outage". The reconciliation testimony and Attachments presented by Robert A. Baumann provide no specific detail of the costs attributable to the foreign material outage. Was the August 1, 2009, to December 6, 2009, outage attributable to the foreign material damage? If yes, please specifically detail the work done; who did the work; the total cost of the work; and, any costs that are included in the reconciliation presentation intended for ratepayer recovery, including damage replacement and repair, purchased power costs and all other costs caused by or attributable to the foreign material damage, including PSNH personnel and overhead costs.

13. [PSNH generally objected to this Data Request]. Please provide an explanation of how the continuing payment of substantial O&M and capital costs for this 50 year old coal fired power plant for environmental compliance, as detailed in response to Data Requests 1-10 above, financed by first mortgage bonds with up to a 40 year maturity, is in the public good. Docket DE 10-122. See RSA 369:1 Coal fired power plants have substantial environmental consequences as compared to other, cleaner sources of generation, therefore, please specifically address the environmental costs of Merrimack Station in your discussion of PSNH compliance with RSA 369:1 and the public good.

Wherefore, NHSC respectfully moves that the Public Utilities Commission order PSNH to fully respond to the Data Requests, together with whatever other relief proper in the premises.

7/28/10

Respectfully submitted,

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No.18301

Certificate of Service

NHSC served this Motion pursuant to Puc 203.11.

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