

THE STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 11-250

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Investigation of Merrimack Station Scrubber Project and Cost Recovery

Post Hearing Brief of TransCanada

Introduction and Background

TransCanada Power Marketing Ltd. and TransCanada Hydro Northeast Inc. (together, “TransCanada”), intervenors in this proceeding, hereby submit their post-hearing brief in this important matter.

This matter arose as a result of the passage of a law in 2006 that Public Service Company of New Hampshire (“PSNH” or the “Company”) was involved in “crafting”, that it “spearheaded,” that it testified in favor of, a law that it “embraced.” Exh. 27-1 at 2; Exh. 46 at 52:8. This law involved the significant capital investment in PSNH’s then-40 year old 420 MW coal-fired generating facility in Bow. The legislative history of the Scrubber Law shows that PSNH provided information to public officials indicating that the project could be built for a cost that would not exceed \$197 million (2005\$) or \$250 million (2013\$) and that most of those costs would be mitigated by the savings in SO₂ emission allowances. Exh. 20-2 at bates pages 38 and 40. The law specifically referred to “a careful, thoughtful balancing of cost, benefits, and technological feasibility” (RSA 125-O:11, VIII), to “cost effective reductions in sulfur dioxide, sulfur trioxide, small particulate matter, and improved visibility (regional haze)” (RSA 125-O:11, II), and to the installation of the scrubber being done “with reasonable costs to

consumers.” RSA 125-O:11, V. That law also contained a variance provision, RSA 125-O:17, which allowed the owner of the facility to request a variance from the mercury emissions reduction requirements, including an alternative reduction requirement in the event of economic infeasibility. It contained a provision limiting the cost recovery of the scrubber project to default service customers and a provision that said PSNH “shall be allowed to recover all prudent costs of complying with the requirements of the [mercury emissions] subdivision in a manner approved by the public utilities commission.” RSA 125-O:18. The law was passed in May of 2006.

In the spring of 2008 PSNH learned that the estimated cost of the project had escalated to \$457 million.¹ Exh. 20-4 at bates page 48. On June 18, 2008, PSNH failed to alert the Legislative Restructuring Oversight Committee about this price increase, as required by RSA 125-O:13 IX (compelling the Company to provide “updated cost information”). Exh. 20-7 at bates pages 58-59. One week later, PSNH alerted the Northeast Utilities (“NU”) Risk and Capital Committee (“RaCC”) about the increase in the cost estimate. It further provided an economic study of the project, including a break-even number indicating that there had to be a price spread of at least \$5.29 per MMBtu between the price of natural gas and coal for the project to be economic. Exh. 20-10 at bates page 92. PSNH assumed that the price of natural gas would be \$11/MMBtu, escalated at 2.5% from 2012 until 2027. PSNH provided the same analysis to the NU Board of Trustees (“Board”) on July 15, 2008. Exh. 42. This analysis also demonstrated that difference between the price of natural gas and coal over the prior 15 years had only been \$3.18. Exh. 42 at 9.

¹ An April 2008 progress update to the Northeast Utilities Risk and Capital Committee indicates that PSNH knew that the project cost had increased to at least \$425 million. Exh. 23-2 at bates page 431. PSNH knew as of May 2008 that the estimate for the project had risen to \$457 million. Exh. 20-4 at bates page 48.

On July 30, 2008, PSNH met with Public Utilities Commission (“PUC” or the “Commission”) Staff and the Office of Consumer Advocate (“OCA”). PSNH did not include the break-even price spread of \$5.29 in this presentation and it further limited the historical information; for example, it did not show that the price spread had been \$3.18 over the prior 15 years. Exh. 39 at 16. In early August NU made a filing with the Securities and Exchange Commission indicating the increase in the estimate of the project. Exh. 41 at 1.

The Commission sent PSNH a letter on August 22, 2008 directing PSNH to file a comprehensive status report, including a detailed cost estimate, analysis of the effect on energy service rates, and an analysis of the effect on those rates if Merrimack Station were not in the mix of facilities operated by PSNH. Exh. 41 at 1. PSNH made that filing on September 2, 2008 in docket DE 08-103. Exh. 27-1, 27-9. That filing included the information requested by the Commission but did not include any information on the break-even spread between the price of natural gas and coal or on the historical average of that spread. Exh. 27-9. While its internal presentations indicated that “[n]et customer benefit is most sensitive to expected future natural gas and coal prices and the relevant spread between the two commodities,” the September 2008 filing failed to even reference the importance of this spread. Exh. 42 at 7, Exh. 27-9. Without holding a hearing or opening a full proceeding and without allowing interventions the Commission issued an order on September 19, 2008 in that docket, Order No. 24,898, in which it determined that it lacked the authority to make a determination whether the project was in the public interest.²

² A group of commercial ratepayers appealed the Commission’s decision in Docket DE 08-103, arguing, *inter alia*, that the Commission misunderstood its authority under RSA 125-O to review PSNH’s expenditures in advance of a prudence determination. The Supreme Court did not rule on the substance of the appeal, rather it dismissed the case on standing grounds, indicating that “any potential injury the petitioners may suffer would arise only in a subsequent rate setting proceeding.” *Appeal of Stonyfield Farm*, 159 N.H. 227, 231 (2009).

If this Commission approves a request to incorporate costs from the Scrubber into rates, any order in this docket would implicitly (or explicitly) rely on the Commission’s legal conclusions in Docket DE 08-103. Therefore,

In September of 2008 the world experienced an unprecedented financial crisis. Lehman Brothers failed in September of 2008 and in October the head of the International Monetary Fund warned that the world financial system was teetering on the brink of a “systemic meltdown”. Exh. 24 at 10 (bates page 294) (Harrison and Kaufman testimony). Natural gas prices “declined sharply” during this period of time. Exh. 24 at 11(bates page 295) (Harrison and Kaufman testimony).

In response to motions for rehearing in DE 08-103 the Commission issued an order on November 12, 2008 in which it denied motions for rehearing but said:

We note here that although RSA 125-0:17 provides PSNH the option to request from DES a variance from the statutory mercury emissions reductions requirements for reasons of “technological or economic infeasibility,” it does not provide the Commission authority to determine at this juncture whether PSNH may proceed with installing scrubber technology. RSA 125-0:17 does, however, provide a basis for the Commission to consider, in the context of a later prudence review, arguments as to whether PSNH had been prudent in proceeding with installation of scrubber technology *in light of increased cost estimates and additional costs from other reasonably foreseeable regulatory requirements* such as those cited by the Commercial Ratepayers, which include the Clean Air Act, 42 U.S.C. § 7401 et seq., and the Clean Water Act, 33 U.S.C. §1251 et seq. Order No. 24,914 at 13-14.

Order No. 24,914 (No. 12, 2008) (emphasis added).

During the 2009 New Hampshire Legislative Session two bills related to the scrubber project were introduced: SB 152 (which would have required a study of whether the scrubber was in the interest of retail customers of PSNH and whether it was the least cost option)³ and HB 496 (which would have limited PSNH’s recovery of the costs of the scrubber to the original \$250

the Commission’s underlying decisions in DE 08-103 may be ripe for reconsideration and appeal if the Commission permits PSNH to recover any of the costs associated with the Scrubber. *Id.*

³ SB 152 (2009), available at <http://www.gencourt.state.nh.us/legislation/2009/SB0152.html>. Regarding judicial notice of legislative history, see *Order on the Office of Consumer Advocate’s Motions to Strike Rebuttal Testimony*, Order No. 25,714 at 8 (Sept. 8, 2014).

million estimate).⁴ The hearing before the Senate Committee on SB 152 was held on March 13, 2009 and a vote by the full Senate finding the bill inexpedient to legislate occurred on April 8, 2009.⁵ The House Committee held a hearing on HB 496 on March 5, 2009 and the full House found the bill inexpedient to legislate on March 24, 2009.⁶ PSNH provided a presentation and extensive testimony to the Legislature in connection with SB 152, but did not include any information related to the break-even number required to make the project economic. Exh. 32. Importantly, notwithstanding the dramatic changes in the economy, PSNH relied on its summer 2008 analysis in its March 2009 presentations and testimony. Exh. 32; Tr. Day 6 AM at 57:18-21; *see infra*.

On October 14, 2011 PSNH filed the joint testimony of Robert A. Baumann and William H. Smagula in DE 11-215, a docket opened for the 2012 Energy Service Rate, indicating that the scrubber project was placed in service on September 28, 2011 and seeking recovery of the scrubber expenditures. The Commission issued a letter on November 15, 2011 saying it would open a separate docket in which to consider the in-service status, PSNH's prudence, the appropriate rate treatment and the costs of the Scrubber Project and that the October 14, 2011 filing would be treated as PSNH's petition initiating the separate docket. On December 1, 2011 the Commission issued an Order of Notice opening this docket.

In this case, PSNH's analysis regarding project economics was deficient, the Company's failures to update the relevant analyses before giving affirmative statements to decisionmakers was patently unreasonable, and its lack of candor to the tribunal was inexcusable. For all of

⁴ HB 496 (2009), available at <http://www.gencourt.state.nh.us/legislation/2009/HB0496.html>

⁵ Docket of SB 152 (2009), available at http://gencourt.state.nh.us/bill_Status/bill_docket.aspx?lsr=395&sy=2009&sortoption=billnumber&txtsessionyear=2009&txtbillnumber=SB152

⁶ Docket of HB 496 (2009), available at http://gencourt.state.nh.us/bill_Status/bill_docket.aspx?lsr=596&sy=2009&sortoption=billnumber&txtsessionyear=2009&txtbillnumber=hB496

these reasons, PSNH should not be granted full recovery, including its approximately 9.8% rate of return. Tr. Day 7 PM at 26:10-13.

Analysis

I. PSNH HAS FAILED TO MEET THE LEGAL STANDARD FOR A PRUDENT UTILITY THAT THE COMMISSION MUST APPLY IN THIS CASE

A. Prudence Review Legal Standard

The authority to conduct this prudence review derives from RSA 125-O:18, which says that PSNH “shall be allowed to recover all prudent costs of complying with the requirements of the [mercury emissions] subdivision in a manner approved by the public utilities commission,” the broader prudence authority set forth in RSA 378:28 (indicating that rates of return on any plant, equipment, or capital improvement must be found to be “prudent, used and useful”), and a series of court cases and orders interpreting the prudence standard cited in part below.⁷ As the Commission has noted and as is explained in more detail below, in undertaking this analysis it will take into consideration what a prudent utility knew or should have known at the time that important decisions were made with regard to this project.

A prudent utility acts as a “reasonable person of requisite skill and experience.” *Re Public Service Company of New Hampshire*, 83 NH PUC 54 (1998). In this case, the Commission has indicated that:

⁷ By using the word “prudent” in RSA 125-O:18 and requiring that the Commission do a prudency review of this project, the Legislature signaled its desire to incorporate the scope and breadth of a traditional prudency review. *Stormy Weathers, Inc. v. Fed. Deposit Ins. Corp.*, 834 F. Supp. 519, 522 (D.N.H. 1993) (“[W]here a statute borrows a term of art whose interpretation is derived from ‘the legal tradition and meaning of centuries of practice,’ it is presumed, absent some indication to the contrary, that the statute adopts the accepted customary definition of the term.”); Am. Jur. 2d Statutes § 143 (updated Nov. 2014) (“[T]erms of art in a statute are to be taken in their technical sense because they have a definite meaning, which is supposed to have been understood by those who were or ought to have been learned in the law.”). To accept PSNH’s argument and limit the scope of this review because the law was a “mandate” would run contrary to legislative intent evidenced by the use of the word “prudent” in RSA 125-O:18. By choosing this term the Legislature is presumed to have accepted the customary definition of prudence and the scope of review associated with this term reflected in the case law and Commission decisions cited herein.

[Prudence] is the degree of care required by the circumstances under which the action or conduct is to be exercised and judged by what is known, or could have reasonably been known, at the time of the conduct. In other words, whether an action will be considered prudent depends on whether the action would be considered reasonable by a person with similar skills and knowledge under similar circumstances. It is a term often used interchangeably with what is considered “reasonable” under the circumstances. The Commission must determine whether decisions were made in a reasonable manner in light of the conditions or circumstances that were known or reasonably should have been known when the decision was made.

Order Denying Third Motion for Rehearing, Order No. 25,565 at 20 (Aug. 27, 2013) (quoting *Duke Energy Indiana, Inc.*, Cause No. 43114 IGCC 4S1, PUR slip copy at 108, 2012 WL 6759528 at *108 (IURC December 27, 2012)). One of the factors relevant to a determination of reasonable care under the circumstances is whether the utility exercised “the requisite degree of learning, skill, and ability of that calling with reasonable and ordinary care; furthermore, the specialist within a profession may be held to a standard of care greater than that required of the general practitioner.” *Re Public Service Company of New Hampshire*, 81 NH PUC 531 (1996) (quoting 57A Am. Jur. 2d, Negligence § 190). It is thus “the Commission’s responsibility and obligation under the law ...to determine whether PSNH conducted itself with the level of care expected of highly trained specialists... .” *Public Service Company of New Hampshire*, 87 NH PUC 876, 886 (2002).

A utility is imprudent and costs may not be passed on to customers when it “has exhibited inefficiency, improvidence, economic waste, abuse of discretion, or action inimical to the public interest.” *Re Public Service Company of New Hampshire*, 81 NH PUC 531 (1996) (citing *Appeal of Seacoast Anti-Pollution League*, 125 N.H. 708 (1985)); *see also Appeal of Easton*, 125 N.H. 205, 215 (1984); *Re Public Service Company of New Hampshire*, 87 NH PUC 876, 886 (2002). “[P]rudence is commonly associated with diligence and contrasted with negligence.” *Order Denying Third Motion for Rehearing*, Order No. 25,565 at 19-20 (Aug. 27, 2013) (citing *Utility*

Property Tax Abatements and Limitation of Expenses, Order No. 21,712, 80 NH PUC 390, 392-93 (1995)); *see also Public Service Company of New Hampshire*, 87 NH PUC 876, 886 (2002); *Re Public Service Company of New Hampshire*, 81 NH PUC 531 (1996).

One element of prudent utility behavior is whether the utility performed an adequate analysis and considered alternative options. The Oregon Public Utility Commission recently disallowed costs of investments in the utility's coal fleet, and in so doing said: "Based on our findings that Pacific Power failed to reasonably examine alternative courses of action and perform adequate analysis to support its investments, we conclude that a partial disallowance is warranted. Pacific Power's imprudent and inadequate analysis put ratepayers at risk." *See In the Matter of Pacificorp, dba Pacific Power, Order*, Order No. 12,493 at *31 (Ore. PUC Dec. 20, 2012), *available at* <http://apps.puc.state.or.us/orders/2012ords/12-493.pdf> (last visited August 25, 2014). In so doing, the Commission must take into account "the competing interests of the company and its investors and of the customers who must pay the rates to provide the revenue permitted." *Appeal of Conservation Law Foundation of New England*, 127 N.H. 606, 638 (1986); *See RSA 373:17-a*.

B. The Scrubber Law Did not Absolve PSNH of Decisionmaking Responsibility

Although PSNH has argued that the law was a mandate that left it no discretion on whether to proceed or to take alternative paths, the Commission has consistently rejected that argument as a means of avoiding a full review of PSNH's decisions associated with this project. The Commission has made it clear that the existence of the law and the requirements contained in it did not relieve PSNH of all decision-making responsibility. As the Commission has noted:

No utility may proceed blindly with the management of its assets or act irrationally with ratepayer funds; *PSNH had a duty to its ratepayers* to consider the appropriate response, possibly even including a decision to no longer own and operate Merrimack Station, when facing changing circumstances. As Order No.

24,914 made clear, the scope of our eventual prudence review would encompass those issues.

Order Denying Third Motion for Rehearing, Order No. 25,565 at 7 (Aug. 27, 2013) (emphasis added); *see also Order Approving Joint Stipulation and Agreement*, Docket No. DG 99-050 Order No. 23,362 (Dec. 7, 1999) (providing for recovery of some of Northern Utilities' expenses for a cancelled liquefied natural gas facility).

The practical and common sense options discussed at length in the Commission's orders to date include retirement of the facility, divestiture of the facility, and seeking a variance from the requirements of the law.⁸ PSNH had choices with respect to the advocacy it undertook and the information it provided to the Commission and the Legislature; rather, PSNH failed to provide and update complete information to decisionmakers, refused to consider any option other than to proceed with the project, and chose to oppose anyone who suggested otherwise.

Other options available to PSNH included proposing, supporting or remaining neutral on legislation that would have required a further analysis of the project or a delay in the project or taking a similar position before the Commission in Docket DE 08-103.⁹ By omitting or ignoring the evidence before it and by providing only limited information to the Legislature and Commission, PSNH acted contrary to what the Commission should expect of a utility in its position. *Order Denying Third Motion for Rehearing*, Order No. 25,565 at 20 (Aug. 27, 2013)

⁸ In Order No. 25,546, the Commission said: "This does not mean, however, that the possibility of retirement of Merrimack Station is immaterial to our analysis." *Order Denying Second Motion for Rehearing and Clarifying Scope*, Order No. 25,546 at 7 (July 15, 2013). That Order continues, "Likewise, under RSA 369-B:3-a, PSNH retained the management discretion to retire Merrimack Station in advance of divestiture. Consequently, we have never construed RSA 125-O to mandate that PSNH continue with the Scrubber's installation if continuing would require PSNH to engage in poor or imprudent management of its generation fleet." *Id.* at 8.

⁹ PSNH urged the Commission in Docket DE 08-103 to hurry up and decide the issue so that there was no delay in building the project. For example in the letter dated September 2, 2008, PSNH said: "Any delay in this project will result in added costs, while, conversely, an accelerated schedule will save money... We respectfully ask the Commission's assistance in complying with the law by expediting the resolution of this inquiry." Exh. 27-1 at 3.

(quoting *Duke Energy Indiana, Inc.*, Cause No. 43114 IGCC 4S1, PUR slip copy at 108, 2012 WL 6759528 at *108 (IURC December 27, 2012)); *see infra*, Part I.C.

The Commission has noted that PSNH clearly had the authority and the responsibility to make decisions about the Scrubber, and that this docket is about those decisions.¹⁰ As the Commission has noted, a prudence review examines the full scope of management discretion: “We are not persuaded by PSNH’s arguments, however, that that our prudence review is limited to these questions alone [whether PSNH managed the construction in a prudent manger]. The scope of our prudence review is determined by the management discretion that PSNH had under existing law and, as a result, must be more comprehensive than a simple inquiry into whether PSNH did an adequate job of managing the funds expended to construct the Scrubber.” *Order Denying Second Motion for Rehearing and Clarifying Scope*, Order No. 25,546 at 7 (July 15, 2013).

To accept PSNH’s argument that the scrubber law was a mandate that gave the Company no choice but to build the project and that this mandate absolved PSNH of the requirement to evaluate alternatives, exercise prudent decisionmaking, and provide reasonable and correct information would require that the Commission ignore principles of statutory construction. First, PSNH’s construction leads to an absurd result: Regardless of the cost of the project, PSNH claims it had an obligation to build it. The Commission has already rejected this argument, at

¹⁰ “We have emphasized PSNH’s decision-making responsibilities from the outset of proceedings in Docket DE 08-103...” *Order Denying Third Motion for Rehearing*, Order No. 25,565 at 6-7 (Aug. 27, 2013). That Order went on to cite the DE 08-103 order (24,898) that said RSA 125-O:17 (which the Commission later said should have been cited as RSA 125-O:18) did “provide a basis for the commission to consider, in the context of a later prudence review, arguments as to whether PSNH had been prudent in proceeding with the installation of scrubber technology in light of increased cost estimates and additional costs from other reasonably foreseeable regulatory requirements...” *Id.* at 7 (quoting Order No. 24,898). In Order No. 25,565 the Commission once again emphasized that PSNH had a decision to make: “From the outset of proceedings before this Commission, we have characterized PSNH as having made a decision to proceed with the Scrubber project.” *Id.* at 7.

least in part because it would defy common sense.¹¹ To read the law as PSNH would have the Commission read it, that it was a mandate pure and simple, would violate the principle of statutory construction requiring the Commission to avoid an absurd or illogical result, which in this case would again be to build the project regardless of cost. *State v. N. of the Border Tobacco*, 162 N.H. 206, 212 (2011) (citing *Residents Defending Their Homes v. Lone Pine Hunter's Club*, 155 N.H. 486, 488 (2007)).

Second, as we have noted elsewhere in this brief, RSA 125-O was based on specific information in the fiscal note on the legislation and in letters from the Department of Environmental Services Commissioner to House and Senate Committee Chairs that PSNH said the cost of the project would not exceed \$250 million (2013\$). In reliance on this information, the law specifically indicates that the project would be done “at a reasonable cost to customers,” would result in “cost effective reductions in sulfur dioxide, sulfur trioxide, small particulate matter,” and was based on “a careful, thoughtful balancing of cost, benefits, and technological feasibility.” RSA 125-O:11. As the New Hampshire Supreme Court has noted on many occasions, laws must be construed consistent with the spirit and objectives of the legislation as a whole, which in this instance means construing the requirement to construct the project consistent with the legislative history and specific references in the statute to cost. *Town of*

¹¹ Order No. 25,445 at 25-26:

PSNH’s interpretation that the law required installation of the Scrubber irrespective of cost would have allowed PSNH, or another utility owner, to install scrubber technology costing many billions, a decision which flies in the face of common sense and would violate the principle of statutory interpretation that one avoid an illogical or absurd result when construing legislative language. *In re Johnson*, 161 N.H. 419, 423 (2011) citing *Weare Land Use Assoc. v. Town of Weare*, 153 N.H. 510, 511-12 (2006); and *In re Alex C.*, 161, N.H. 231, 235 (2010) citing *State v. Gubitosi*, 157 N.H. 720, 723-24 (2008). It would not comport with the statute’s express understanding that the mercury reduction requirement was part of a balanced approach that could be accomplished at a reasonable cost to consumers. Finally, to read the variance provision as PSNH urges would lessen from PSNH, or any other utility owner, the obligation to engage at all times in good utility management. See *Public Service Company of New Hampshire*, Order No. 20,794, 78 NH PUC 149, 160 (1993); and *West Swanzey Water Company, Inc.*, Order No. 25,203 (March 25, 2011) at 7.

Order Regarding TransCanada's Motions to Compel, Order No. 25,445 at 25-26 (Dec. 24, 2012).

Newington v. State of N.H., 162 N.H. 715, 747 (2011) (citing *City of Manchester Sch. Dist. V. City of Manchester*, 150 N.H. 664, 669 (2004)). Further, the law must be consistently construed with respect to the variance provision contained in RSA 125-O:17 and the prudence review provision in RSA 125-O:18. *Id.* For these reasons the Commission should not allow PSNH's mandate argument to limit a full review of the evidence presented and application of the principles of prudency review discussed above.

C. A Prudent Utility Must Provide Appropriate, Correct, and Reliable Information to its Decisionmakers; Failure to do so is Imprudent

In order for the relationship between a regulated utility and the regulator to work, a public utility must provide appropriate, correct, and reliable information to decision-makers; it must be forthright in its dealings with the regulator. Public utilities are different from other business entities: they are granted a right to provide a particular (and in some cases exclusive) service, and they are given an opportunity to earn an authorized rate of return from rates that are approved by the Commission. *See Appeal of Conservation Law Foundation of New England*, 127 N.H. 606, 633 (1986) (discussing the ratemaking process as balancing “the interests of ratepayers who desire the lowest possible rates and investors who desire rates that are higher”). In exchange for that right, the utility must be held to a high standard of forthrightness and candor. In the competitive market, companies do not receive an authorized a rate of return; nor are they given the right to provide monopoly services. As such, utilities are obligated to provide dependable and forthright communications to regulators and decisionmakers. *See LeFlore Broadcasting Co. v. F.C.C.*, 636 F.2d 454, 461-62 (D.C. Cir. 1980) (“[E]ffective regulation is premised upon the agency’s ability to depend upon the representations made to it by its licensees” and “Where public policy demands complete and accurate disclosure... it may suffice to show nothing more that the misrepresentation were made with disregard for their truth.”).

Mr. Reed confirmed this view of a utility's obligations, indicating as follows in response to questions from Attorney Sheehan:

Q. Is it part of a utility's prudence obligation to be candid with such updates and presentations to the regulator?

A. Yes. I think being candid with your regulator, especially when you're presenting information in a regulatory proceeding, is important.

Q. And is that also true for presentations made to policymakers, such as legislators?

A. Yes, I think being candid and forthcoming is important. I'll leave it at that.

Tr. Day 7 AM at 134:16-135:2. Mr. Reed also testified that a company has the obligation to correct misstatements made by others in reliance on the utility's information. Tr. Day 7 AM at 135:10-136:16. Similarly, Mr. Frantz testified about his expectation that company information be accurate. Tr. Day 2 AM at 125:24-126:2. For example, Mr. Frantz testified that "I think that it would have been reasonable to expect all the fairly high-level, important, pertinent information to have been mentioned" in the course of a meeting with Staff regarding the Scrubber project. He also indicated that if a utility lied, "that would probably give the Commission possible grounds for a disallowance. . . . A number of options would be available for the Commission." Tr. Day 2 AM at 124:18-24; *accord*, Testimony by Mr. Kahal, Tr. Day 3 at 85:19-86:16.

Several regulatory tribunals have recognized that utilities owe a "duty of candor" to decisionmakers, and that a company's recovery can be limited as a result of related failures. In a recent case, the Massachusetts Department of Public Utilities recognized that "full disclosure of information by regulated companies is essential for the Department to properly fulfill its function of regulating in the public interest." *Petition of Bay State Gas Co.*, 2012 WL 5448763 at *63 (Mass D.P.U. Nov. 1, 2012). In the *Bay State Gas* case, the utility received knowledge of an income tax credit in August 2009 and received the credit in October 2009, but failed to alert the

DPU of that credit during the pendency of a rate case for which the record closed in September 2009. *Id.* The refund would have reduced Bay State's rate base, decreasing its revenue requirement. *Id.* at 64. Bay State argued that the information not produced was immaterial. The DPU found that a regulated utility must "make full disclosure to the Department" and that "[t]he determination of materiality requires an assessment, on a case-by-case basis, of the significance of information within the context of a particular case." *Id.* at *63. The DPU recognized that the materiality standard could result in "over-inclusive disclosure," but that "the need to insure adequate disclosure outweighs a possible burden to companies in making such disclosure." *Id.* Importantly, the Department noted that the materiality decision must be made by the regulator, *not* the regulated utility. *Id.* The DPU considered Bay State's failure to disclose when it set the return on equity. *Id.* at 64. *See also Aquarion Water Company of Massachusetts*, D.P.U. 11-43, at *220 (March 30, 2012) (Department finding that a company's failure to disclose material facts in a rate proceeding can warrant a reduction in authorized return on equity).

Similarly, the Wisconsin Public Service Commission recently found that Wisconsin Power and Light's (WP&L) lack of candor to the tribunal associated with transmission constraints was "inconsistent with the regulatory compact between WP&L and the Commission." *Application of Wisconsin Power & Light Co. for Authority to Adjust Electric and Natural Gas Rates*, 2010 WL 5069409 at *2 (Dec. 2010). In that case, the utility identified significant transmission constraints in November 2009 for a wind project permitted in July of that year. *Id.* at 5. Wisconsin Power & Light did not alert the Commission regarding the transmission constraints until July 2010. *Id.* at 6. The Commission disallowed nearly half of the fuel costs that resulted from the transmission constraints and it also stated that "WP&L's lack of candor also implicates its respect for and willingness to comply with the regulatory compact. That compact

between the regulator and the utility depends on the full disclosure of information to provide fundamental fairness for both the utility and ratepayers.” *Id.* at 6; *see also Spring Valley Water Co.*, 1990 WL 597017 (N.Y.P.S.C. Oct. 3, 1990) (identifying information available only to the utility and not to the commission that the utility failed to disclose regarding approval of a property sale and adjusting rates accordingly). These cases support the conclusion that failure to be forthright can result in disallowance.

II. PSNH ACTED IMPRUDENTLY WITH RESPECT TO ITS ECONOMIC ANALYSES AND COMMUNICATIONS WITH DECISIONMAKERS

A. PSNH Imprudently Withheld Critical Information from Decisionmakers Regarding the Gas/Coal Price Spread Necessary for the Project to Result in Economic Benefits to Customers

As PSNH management told the NU Board on July 15, 2008, the Scrubber Project required a minimum spread of \$5.29 per MMBtu between the price of natural gas and coal for the project to be economic. The Board presentation refers to the “required customer break-even level of \$5.29/MMBtu” (Exh. 20-10 at bates page 114) and to the gas/coal spread that was “required to create customer benefits” (Exh. 20-10 at bates page 115). PSNH also told the Board that the 15 year average of that spread had been \$3.18, more than \$2 less than what was required to make the project economic. In other words, based on the historical averages it was very likely that the “required” spread would not be realized. According to the OCA witness Matthew Kahal, PSNH’s study “demonstrated that there was a fairly high degree of risk to consumers associated with the Project.” Tr. Day 3 AM at 11:2-4. Because coal prices were historically “fairly constant” (Tr. Day 1 PM at 104:4-6 (Frantz)), the economics of the project hinged on the price of natural gas, which Mr. Frantz testified was “[o]ne of the most volatile commodities out there” (Tr. Day 2 AM at 135:19-20). The break-even price “was a fundamental piece of data that told you what the threshold price would be. In other words, you didn’t have to run an economic

analysis; you had a number. And then you could periodically check to see, well, was that \$5.29 – how close to the line is that?” Tr. Day 5 PM at 39:12-18 (testimony by Mr. Hachey).

PSNH tasked Terrance Large, an engineer, with the important task of considering natural gas prices and developing the economic assumptions associated with the project. Mr. Large has told the PUC that planning had limited value. Docket DE 10-161, Tr. Day 1 PM at 115:14-15¹² (indicating, about Integrated Resource Planning, that “sadly it has very limited value”). Mr. Large’s belief was apparently shared by his boss, Gary Long, the President of PSNH.¹³ Mr. Large came up with a natural gas price estimate through 2027 based on dispatch prices for the first four months of 2008. In other words, PSNH asked its in-house engineer to take a back-of-the-envelope look at the economics of a \$457 million project for which it had hired many other experts and outside firms. PSNH did not spend a penny on an expert to do a professional forecast of natural gas prices, even though it knew that the project economics – and customer benefits – turned on the gas/coal spread. Tr. Day 6 AM at 140:22-141:17.

Mr. Large testified that as PSNH moved into the “external communications phase” after the presentation to the Board on July 15, 2008, it took the internal presentations it had created and worked to “scale them down.” Tr. Day 6 AM at 50:19. On July 30, 2008 Mr. Large and other PSNH representatives met with Staff and the OCA.¹⁴ The presentation Mr. Large provided to regulators *excluded* vital information, including:

¹² Available at <http://www.puc.state.nh.us/Regulatory/CASEFILE/2010/10-261/TRANSCRIPTS-OFFICIAL%20EXHIBITS-CLERKS%20REPORT/10-261%202012-04-27%20TRANSCRIPT%20OF%20HEARING%20HELD%20ON%204-12%20DAY%201-PM%20SESSION.PDF>

¹³ See Exh. 27 at 72:24 (“long term forecasts are typically not reliable”); Exh. 46 at 75 (“And I guess I learned a long time ago, don’t predict the future because you’re always wrong.”); Exh. 20-27, bates page 1078 (“Prices have gone down, and as I said, I’ve seen many cycles of up and down. I mean, if you want to bet the farm on the prices today, I certainly wouldn’t. But, you know, so prices are low now, which is good. It’s kind of an offset to the recession. But no one expects that to hold.”).

¹⁴ Attending the meeting with Staff: Mr. Mullen, Mr. McCluskey, Attorney Ross, Attorney Hatfield, and Mr. Traum. Tr. Day 1 PM at 82:20-83:2; Ex. 39.

- Any reference to the “required customer break-even level of \$5.29/MMBtu” (Exh. 20-10 at bates page 114), the spread “required to create customer benefits” (Exh. 20-10 at bates page 115)
- Any reference to the gas/coal spread average of \$3.18 over the last 15 years (Exh. 20-10 at bates page 114); and
- A complete historical chart of natural gas prices (Exh. 20-11 at bates page 145), providing instead a chart that showed only more favorable recent history.

At trial Mr. Frantz confirmed that he didn’t think Staff was “given all exactly the same facts as given to the Board of Trustees.” Tr. Day 2 AM at 125:2. In response to questions from the Commissioners, Mr. Frantz indicated that Staff would have preferred to have the full story.

Q. And, do you know if there is anything that you've been shown that would have changed the testimony provided to the Commission?

A. I think the most significant one is probably the breakeven price, though, as far as the economics.

Tr. Day 2 AM at 120:10-14 (questioning by Commissioner Iacopino). Mr. Frantz further indicated that the difference between the information provided to NU and the information provided to Staff “is concerning to Staff at this time.” Tr. Day 2 AM 119:15. While Mr. Frantz testified that Staff understood that the difference between coal and gas prices was important to the economics of the scrubber, PSNH failed to indicate to staff the degree of sensitivity involved. Tr. Day 1 PM at 85:24-86:4. PSNH has made much of Mr. Mullen’s note that the project was “most sensitive to the Coal/Natural Gas price spread,” but that statement is qualitatively different from indicating that the project required a price spread between natural gas and coal that exceeded by more than two dollars the historic difference between the two commodities. As Mr. Frantz also testified this proceeding is “about the data that was available and shared and not shared.” Tr. Day 2 AM at 110:3.

The question regarding why Staff and the OCA were not provided with the \$5.29 break-even analysis was first raised in written testimony in December 2013. Exh. 20 at 11-12. Mr.

Large and other PSNH officials provided lengthy written rebuttal testimony in this case in July of 2014. But Mr. Large waited until the hearing, on October 22, 2014, to declare that he had shared information regarding the required price spread information orally with the PUC Staff and the OCA at the confidential meeting on July 30, 2014. He did so by engaged in a lengthy soliloquy (nearly six pages long with one interruption) that begins by him asking whether he can “provide maybe some comprehensive context” to Attorney Sheehan regarding the July 2008 meeting. Tr. Day 6 AM 48:20-54:16.

The weight of the evidence does not support Mr. Large’s testimony. First, Mr. Frantz testified that PSNH did not share this information with the Staff during the meeting (Tr. Day 1 PM at 107:17, 22; 108:19, 23), Mr. Mullen’s notes of the meeting do not indicate that this information was provided to the Staff (Exh. 39), and the slide presentation that was provided to the Staff, in contrast with the slide presentation that was provided to the Board of Trustees, does not have that information in it (Exh. 20-11 at bates page 129).¹⁵ Before Mr. Large testified, Mr. Frantz indicated that knowledge of the \$5.29 spread could have changed Staff’s testimony in this docket. Tr. Day 2 AM at 120:10-14. Moreover, if in fact information about the gas/coal spread of \$5.29 that was “required to create customer benefits” had been presented during the meeting, it seems likely that the OCA, which was well represented at the July 2008 meeting, would have included that information in its filings with the Commission in DE 08-103. *See* Tr. Day 4 PM at 62-65 (questioning by PSNH indicating that “smart” people represented Staff and the OCA at the July 2008 meeting). Finally, as PSNH is well aware, the Commission’s rules require petitioners

¹⁵ “Our analysis shows that customer economics are most sensitive to the coal/natural gas price spread and far less sensitive to capital cost or RGGI cost increases.” Ex. 39 at presentation page 15. The underlining regarding “most sensitive” is by Mr. Mullen. Tr. Day 1 PM at 84:21-85:5. The presentation didn’t show that it was “highly” sensitive, just compared with other sensitivities. It also didn’t show how sensitive it was (e.g., the \$5.29 spread provides a clear idea of how sensitive, and when benefits no longer accrue to customers). Staff and the OCA were not provided the spread required to make the project economic. Tr. Day 2 AM at 135:2-4.

such as PSNH to submit written testimony that sets forth the facts relied upon and other relevant facts. N.H. Admin. R. Puc 203.06(d)(1)-(2). Mr. Large's failure to put this important fact in his written prefiled rebuttal testimony in July of 2014 (which would have allowed Staff and the parties to do further discovery)¹⁶ suggests that the Commission should give his testimony on this issue little if any weight.

Furthermore, PSNH failed to provide the \$5.29 spread analysis in its September 2008 filing with the Commission, a filing in which it was supposed to provide "a comprehensive status report on its installation plans, a detailed cost estimate for the project, an analysis of the anticipated effect of the project on energy service rates, and an analysis of the effect on energy service rates if Merrimack Station were not in the mix of fossil and hydro facilities operated by PSNH." Exh. 41 at 1. The September 2, 2008 filing in DE 08-103 (Exh. 27-1 and Exh. 27-9) includes many references to assumptions and sensitivity analyses but very little reference to natural gas prices. PSNH told the Commission that "the sensitivity analyses indicated the economics of the project are most sensitive to variations in the future price of coal, and far less sensitive to variations in the capital cost or equivalent CO2 allowance cost." Exh. 27-9 at 14. However, PSNH omitted any reference to the sensitivity of the project to future price of natural gas or that a particular spread in those prices was required to create customer benefits -- in contrast with what it told the NU Board a little over a month earlier. Similarly, PSNH lists the primary assumptions used in its analysis but does not include natural gas among those primary assumptions, even though that was clearly a critical part of the analysis that PSNH did for the Board. *Id.* The failure to make the Commission aware of the price spread between natural gas

¹⁶ See Mr. Hachey's testimony to the effect that TransCanada went into this proceeding believing it had a complete understanding of the Staff/OCA/PSNH meeting based on the discovery that had been done. Tr. Day 4 PM at 52:6-14.

and coal that was “required to make the project economic” was an unreasonable and material imprudent failure on PSNH’s part, evidencing a clear lack of candor.

Similarly, PSNH failed to provide to the Oversight Committee or to the full Legislature any information about the break-even number that it had in its possession, information that was apparently not made public until PSNH responded to a Staff data request in this docket in the summer of 2012. Exh. 20-10. PSNH never shared the break-even number or natural gas price sensitivity with the Legislative Oversight Committee on Electric Restructuring, which it was required to report to under RSA 125-O:13, IX (requiring that the owner of the affected source “shall report...on the progress and status of complying with the requirements of paragraphs I and III, relative to achieving early reductions in mercury emissions and also installing and operating the scrubber technology including any updated cost information.”). It also failed to provide this information to the full Legislature in March 2009 when it considered SB 125. Tr. Day 6 AM at 144:8-23. SB 152 would have required that the Commission investigate, among other things: “[w]hether it is in the interest of retail customers of PSNH ... to complete the scrubber project, or whether alternatives should be considered to meet the energy needs of PSNH customers.” Exh. 32. A break-even number for the project to create customer benefits was clearly relevant to the Legislature’s decision and material to the cost benefit analysis of the project. As Mr. Hachey testified, this number “would have been a very valuable piece of information, for example, to Mr. Janeway, when he brought his bill to have a study done...” Tr. Day 5 PM at 39:24-40:3.

PSNH applied a double standard by which it communicated key information – the NU Board and RACC were explicitly presented with key information while the Legislature and Commission were left to employ clairvoyance to interpret the partial information PSNH

provided. This use of this double standard was unreasonable and imprudent, evidencing an extreme lack of candor.

B. PSNH's Failure to Update its Economic Analysis after September 2008 was Imprudent

After its initial filings in September 2008, PSNH imprudently failed to update its economic analyses and natural gas assumptions about what circumstances were “required to create customer benefits.” Tr. Day 6 AM at 140:22-141:1 (Large). PSNH claims that it used the “best information available and knowable at the time” when it undertook the summer 2008 forecasts. Tr. Day 6 AM at 143:5-9 (Testimony of Mr. Large regarding what was knowable at the time of the Summer 2008 analysis). Even if the Commission were to accept this as true, PSNH’s failure to update that information was imprudent given the size of the investment for the company,¹⁷ given that PSNH was the only entity with knowledge about how critical the assumption on the price of natural gas was to the economics of the project, and given PSNH’s own advocacy around the Scrubber during this time period.

It is undisputed that natural gas prices plummeted significantly during the second half of 2008 and first part of 2009 so that as of April 2009, when the Legislature acted on SB 152, as Mr. Large admitted under cross examination, gas prices had “diminished...significantly” from the prices PSNH had used in its assumption. Tr. Day 6 PM at 43:18. Henry Hub gas prices fell from a height of \$12.69 in the summer of 2008 to \$3.96 by March of 2009. Tr. Day 2 AM at 71:14; Exh. 53. Mr. Frantz confirmed this both in his prefiled testimony and during the hearing, when he said that there was a “a rather significant drop” in gas prices during this period of time,

¹⁷ Tr. Day 3 AM at 11:5-15 (testimony of Mr. Kahal): “My testimony also makes the point that this is a very, very large project as compared to the size of the Company. This is \$457 million compared to a capitalization at that time of \$1.1 billion. So, this is almost a 50-percent increase in the Company's asset base. That has enormous implications, both for shareholders and for the default service customers that are going to be expected to pay for this very expensive project.”

Tr. Day 2 AM at 115:14-16; Exh. 7, Attachment SEM 8. As Mr. Hachey noted, the falling of gas prices in the fall of 2008 was a “caution sign” that PSNH ignored.¹⁸ Tr. Day 5 AM at 82:12-13; *see also* Exh. 24-4, bates page 377 (testimony of Drs. Harrison and Kaufman).

As the Legislature considered study of the scrubber expenditure, the country had recently fallen into unprecedented economic turmoil. Exh. 24 at 10:8-11:21 (Harrison and Kaufman testifying that “the country (and indeed the world) was experiencing a financial crisis of a scale unseen in generations.”); *see also* Tr. Day 3 AM at 16:2: (“concerns have to do with basically the cratering of financial markets that occurred during that time period, which raised the cost of capital to utilities, at least for a period of time, and the developments in natural gas markets on the supply side, the so-called ‘fracking revolution’ that was taking place, and, you know, also, the very, very sharp downturn in economic activity that took place during that time, which frankly, at that time, none of us knew where that was going to go. It was a very unstable and scary period of time.”). However, PSNH failed to update its economic analysis of the scrubber when, at the same time, it was advocating the scrubber as a benefit to ratepayers in March 2009. Tr. Day 6 AM at 32:21-33:1.

There can be no question that PSNH’s failure to update its economic study was unreasonable. PSNH’s witness, Mr. Reed, testified that during late 2008 and early 2009:

There was a large degree, a very large degree of uncertainty with regard to natural gas prices. We saw, of course, there was also a change in the capital cost estimate for the project. Both of those contribute to uncertainty. So, I think it is appropriate and important to conduct analyses that capture that.

Tr. Day 7 AM at 154:5-12. Mr. Kahal agreed, indicating:

[W]ithin a very, very short period of time, within weeks or a couple of months after September 2nd, the world totally changed. The world was different in the

¹⁸ Mr. Hachey’s testimony should be given appropriate weight since he had significant experience in the industry, including “assessing capital projects at generating stations, doing the economic assessment.” Tr. Day 5 PM at 75:5-7; *see also* Tr. Day 4 PM at 9:8-10:8.

fourth quarter of 2008 as compared to the third quarter of 2008. . . . There were dramatic changes in commodity markets and dramatic changes in gas markets and in the long-term outlook for the price of gas, which is a critical input in the Company's study.

Tr. Day 3 AM at 11:19-24, 12:2-6.¹⁹ As Mr. Kahal indicated, after gas prices had fallen “on the order of 40 percent or more,” “the Company at that point should have made that information available to the decision-makers and made an appropriate recommendation as to how to proceed. That’s the imprudence that I find for the Company: The failure to update its analysis and reconsider the merits of the project.” Tr. Day 3 AM at 12:14-15, 12:19-13:1.

This failure to update the analysis appears even more eye-opening when it is compared with the protective steps that PSNH’s affiliate, Yankee Gas, took during the same exact time period. Exh. 37.²⁰ On November 13, 2008, Yankee Gas, a natural gas utility in Connecticut, *asked* the Connecticut Commission for more time to re-evaluate its sales forecast due to “*significant economic and energy price market changes and outlooks*” since October 1, 2008. Exh. 37 at bates page 3 (emphasis added). Then, when it filed its forecast on March 2, 2009,²¹ PSNH’s affiliate said that natural gas prices “saw a plunge in 2008 and are expected to remain below recent history for the next several years” and that “prices are likely to remain depressed because of the newly discovered and exploitable supply response available from the unconventional sources (shale plays).”²² Exh. 37 at bates page 17. By comparison PSNH, which

¹⁹ See also Tr. Day 3 AM at 89:21-24 (Kahal testimony) to the effect that PSNH should have reassessed by the fourth quarter of 2008, or, at the very latest, the first quarter of 2009.

²⁰ Exhibit 37 is a document that TransCanada discovered on its own on the eve of the merit hearing in this matter and that should have been provided in response to data requests.

²¹ The hearing on SB 152 was held on March 13, 2009 and during that hearing Mr. Long reassured the Senate Committee that at every step of the way PSNH had affirmed pricing to ensure it is in line with the marketplace and that independent firms had been retained to provide market analysis and price benchmarking in 2005, 2006, 2007, 2008 and 2009, but never revealed the price spread required to make the project economic and didn’t update any of the analyses that were done in the summer of 2008. Exh. 32 at bates page 24.

²² There are a number of documents in the record that support the fact that fracking and the impact that it was likely to have on natural gas prices, was something that an industry specialist, a person with the requisite degree of learning, skill, and ability of that calling with reasonable and ordinary care should have been aware of. See Exh. 47;

was on the brink of investing \$457 million that it fully expected to recover, thus more than doubling its rate base and consequently the return it would earn on rate base,²³ never asked for time to re-evaluate assumptions or market conditions, and never did such a re-evaluation, and instead resisted any and all attempts to do any further analysis. Meanwhile, PSNH minimized the import of natural gas prices to the economics of the project in its September 2008 filing, further making it difficult for decisionmakers to understand, without the benefit of PSNH's candor, how lower natural gas prices would impact project economics.

As Mr. Kahal testified, Yankee Gas provided the type of update that he would have expected. Tr. Day 3 AM at 18:20-19:12. The Yankee Gas document references exactly the types of market changes that Mr. Kahal and Drs. Harrison and Kaufman referenced in their testimony. *See, e.g.*, Tr. Day 3 AM at 19:13-21:1; Exh. 24 at 11:1-8. This includes information regarding price depression as a result of unconventional sources of natural gas. Tr. Day 3 AM at 20:1-16.

PSNH has argued, throughout this proceeding, that the Legislature had the ability to reconsider the scrubber expenditure in winter/spring 2009, and that the Legislature's failure to pass either SB 152 or HB 496 means that the Legislature expressly confirmed that it was in the public interest for it to spend \$457 million.²⁴ Exh. 12 at bates page 15. Intrinsic in this conclusion is the Legislature's reliance on information provided by PSNH regarding project economics and status. As Mr. Kahal concluded, "Unfortunately, those opinions and statements from the Legislature were set forth without the Legislature really having a proper updated study and

Exh. 20-23 at bates page 1000; Exh. 48; Exh. 49; Exh. 50; Exh. 51. Again, this knowledge of the impact of fracking on gas prices is supported by what PSNH's affiliate, Yankee Gas, filed with the Connecticut Commission. Exh. 37.
²³ Tr. Day 2 Am at 96:24-97:1 (Testimony of Mr. Frantz).

²⁴ In fact, as the Commission recognized in Order No. 25,565 and as the legislative history shows, the Legislature's decision to kill the 2009 legislation "may signal that the Legislature believed that the Commission already had the authority to review PSNH's decision-making in which case the legislation would have been unnecessary...." *Order Denying Third Motion for Rehearing*, Order No. 25,565 at 11 (Aug. 27, 2013). See TransCanada's *Motion Regarding Scope of Proceedings Related PSNH's Options for Action Regarding RSA 125-O and Motion to Compel* at paragraph 11 (Aug. 25, 2014) for specific citations to and quotations from the legislative history.

recommendation from the Company, so that the Legislature had incomplete information.” Tr. Day 3 AM at 88:8-17. In fact, PSNH knew or should have known that its June 2008 study and conclusions were no longer reasonable and required updating – it even updated analyses relating to construction of the project. Tr. Day 1 AM at 81:16-82:7 (Testimony of Mr. Smagula). Instead, as set forth below, PSNH continued to make affirmative statements regarding the project’s economic viability in the winter of 2009.

1. PSNH Unreasonably and Imprudently Relied on its Summer 2008 Analysis in its SB 152-Advocacy; by Relying on its Summer 2008 Analysis, PSNH Far Underestimated the Rate Impacts of the Scrubber

PSNH’s failure to update its economic analyses did not prevent it from advocating that the project was economic in March 2009. During a presentation to the Legislature, PSNH indicated that “[i]nstallation of the scrubber at \$457M *continues to be a better option for PSNH customers than purchasing replacement energy in the open market.*”²⁵ Exh. 20-24, bates page 1022 (emphasis added). In March, when discussing the scrubber with Legislators, Mr. Long drew conclusions not only about the competitiveness of Merrimack Station, but also about the rate impacts of the scrubber investment, stating, “[b]ut it’s very competitive, and the plant will continue to be very competitive. You can see on that chart, that I don’t want to trivialize point three cents a kilowatt hour, but it’s well, well within the variations that you get in fuel costs, and its well within the market value, the market differential between our plant and the market.” Exh. 20-27, bates page 1071 (Testimony of Gary Long to the Senate Energy Committee (March 13, 2009)). In so concluding, PSNH relied on outdated analyses that far underestimated customer impacts of the Scrubber.

²⁵ However, the NERA analysis demonstrates otherwise. See *infra*, Part II.C and Exh. 24-12 (demonstrating that 4 of the 6 market purchase examples for March 2009 show a loss to ratepayers if the scrubber project went forward).

In September 2008 and in February and March of 2009, PSNH provided the exact same Scrubber-related customer impact estimate of \$ 0.0033 per kWh. Exh. 23-5, bates page 494Exh. 32, bates page 4, 16; Exh. 20-27, bates page 1071; Exh. 27-15; Tr. Day 7 PM at 16:13-17:7, 18:5-21, 20:11-15. PSNH's claims regarding the scrubber rate impacts in March 2009 were unreasonable given what PSNH knew or should have known about the marketplace. Circumstances changed so dramatically between those time periods that the same rate impact would have been impossible, based on PSNH's own filings. These market impacts included changes in the SO2 markets and expected demand for PSNH default service. In both cases, PSNH should have recognized and communicated to decisionmakers that the impacts to customers would increase substantially – the rate impact would have been at least double what Mr. Long reported to the Legislature. In failing to update its rate impact analysis during the Legislature's consideration of SB 152, PSNH acted unreasonably and imprudently.

i. PSNH Unreasonably Failed to Acknowledge that Updated SO2 Prices Would Cause Customer Rate Impacts to Escalate

SO2 prices have an inverse relationship with rates for the purposes of scrubber economics: higher SO2 prices mean a lower rate impact for customers. Tr. Day 7 PM at 14:10-14. The September 2008 rate analysis assumed an SO2 price of approximately \$500/ton.²⁶ Tr. Day 5 PM at 114:2-5. Evidence provided at trial indicated that the SO2 price in the summer of 2008 did not exceed \$200. Exh. 117. By March 2009, SO2 prices had dropped precipitously, from the “high” of \$200. *See id.* The price that NERA used for its March 2009 analysis was \$50. Tr. Day 7 AM at 63:7-12.

However, while PSNH testified that it “regularly” monitored SO2 prices as part of [its] compliance obligations,” it did not make any adjustments to its estimated rate impacts in the

²⁶ There is some reason to believe that this value is higher than it might have been. For example, NERA assumed an SO2 price in Fall 2008 of \$194. Tr. Day 7 AM at 62:18-63:2.

spring of 2009. Tr. Day 5 PM at 114:19-22. When asked about SO₂ at the Legislative hearing in March 2009, Mr. Long did not indicate that SO₂ prices were 1/10 of the value that had been estimated to determine rate implications. Mr. Long testified, “So we got a huge reduction in sulfur, which means we avoid having to buy sulfur credits on the market, on the cap and trade market. So that produces economic value, its an offset to the cost. Not an entire offset, **but it helps offset the cost and so, yeah, it’s a very good thing for us.**” Exh. 20-27, bates page 1079 (Testimony of Gary Long to the Senate Energy Committee (March 13, 2009)) (emphasis added).²⁷ In contrast, Mr. Large testified in October 2014 that the offset was “miniscule.” Tr. Day 6 AM at 8-11.

PSNH’s 2010 filing with the Commission demonstrates that the change in SO₂ prices dramatically impacted the expected impact on customers. *See* Exh. 23-13. According to PSNH,

the avoided costs associated with SO₂ emissions reductions have decreased significantly over the past 2 years, consistent with the decrease in the price of SO₂ allowances. The avoided costs value of reduced SO₂ emissions was approximately \$30 million per year two years ago and is now approximately \$3 million per year. ***This change in SO₂ emissions reduction value also accounts for at least \$0.003 per kWh of the increase.***

Exh. 23-13 at bates pages 663-64 (emphasis added). The 2010 analysis assumed that SO₂ prices would be \$215/ton in 2012 and \$110/ton in 2013-2015. Exh. 23-13 at bates page 663. If PSNH had recalculated the customer rate impact in March 2009, presumably an increase of *at least* \$0.003 per kWh would have applied; after all, for its 2009 analysis, NERA estimated that SO₂ prices would be \$50 per allowance, escalating at 2.5%. Tr. Day 7 AM at 63:7-12. Therefore, the rate impact that PSNH should have reported in March 2009 was at least \$0.006 per kWh.

²⁷ The record indicates that Mr. Long was asked to provide follow-up information regarding SO₂ prices. Exh. 20-27 at bates page 1079. However, PSNH did not provide any evidence that it fulfilled that request; its data response regarding information provided to legislators regarding SB 152 does not include any such information. Exh. 32.

ii. PSNH Unreasonably Failed to Acknowledge that Reduced Demand Would Cause Customer Rate Impacts to Increase

Similarly, because RSA 125-O limited recovery of scrubber expenses to default service customers, PSNH knew or should have known that the level of demand for PSNH's default service dictated rate impacts on customers. Exh. 14 (Chung Rebuttal Testimony) at 3:17 ("The primary driver behind the increase in the ongoing Scrubber costs rate is lower projected sales due to increased migration since the development of the exhibits in the June 15, 2012 testimony."); Tr. Day 3 PM at 106:1-13. Typically, "[m]igration assumptions are based on the most recent actual load data available at the time the rate adjustment analysis is prepared." Exh. 78 (Data Response TC 6-258).

By mid- to late-2008, PSNH knew or should have known that demand for its default service was becoming an issue. *See* Exh. 20-29 at bates page 1108-09 (Testimony of Mr. Large and Mr. Errichetti in Docket DE 10-261 indicating that migration first became an issue for PSNH in late 2008), and bates page 1112 (Testimony of Mr. Baumann in Docket No. DE 10-160, dated July 30, 2010, indicating that "PSNH's ES load obligation over the past 24 months has declined significantly, due primarily to the migration of some customers (mostly larger customers) to third party supply . . .). While PSNH assumed demand of 8.7 million MWh in its summer 2008 analysis, even by December 2008 it was estimating a nearly 15% lower energy service demand. Exh. 133 (estimating 2009 retail MWh sales of 7.4 million MWh). By May 2009, only two months after Mr. Long testified to the Legislature regarding rate impacts, PSNH was estimating demand of only 6.7 million MWh for 2009 (approximately a 23% decrease). *Testimony of Robert A. Baumann* in Docket DE 08-113 (May 20, 2009).²⁸

²⁸ TransCanada asks that the Commission take official notice, pursuant to N.H. Puc R. 203.27, of Mr. Baumann's testimony.

In its 2010 filing, PSNH indicated that migration has played a large role in the increase of rate impacts to customers. According to PSNH,

ES sales levels have dropped significantly over the past two years, from an annual level of over 8 million MWh²⁹ to 5½ million MWh, due to the weakened economy, conservation efforts, and customer migration to competitive suppliers. *This drop in sales accounts for at least \$0.003 per kWh of the increase.*

Ex. 23-13 at bates pages 663-64 (emphasis added). Demand in 2010 was approximately 37% less than demand in 2008, and that reduction resulted in a \$0.003 per kWh increase in rates. A 15-23% reduction in demand would have resulted in an increase to the rate impact reported by PSNH in March 2009.

PSNH advocated that the Legislature should move “full speed ahead” on the scrubber expenditure, failing to mention any potential doubling (or more) of the rate impacts as the result of reduced demand for PSNH’s default service and changes in the markets for SO₂. A prudent utility would have taken these impacts into account when reporting to the Legislature or to the Commission regarding the economics of the project. *See* Tr. Day 2 AM at 98:18-20.

2. In Its Spring 2009 Advocacy for the Scrubber Expenditure, PSNH also Unreasonably Overstated the Sunk Costs of the Project to the Legislature

In advocating against a study of the Scrubber Project in March 2009, PSNH overstated the cost to cancel the project by almost double what it now claims and nearly eight times what Staff’s expert Jacobs says were the sunk costs as of that point in time. In March of 2009 PSNH said that customers “could be on the hook” for \$230 million and that \$230 million “will have to be recovered” if the project was cancelled. Exh. 20-24, bates pages 1027, 1101. PSNH now claims that cancellation as of March 2009 would have cost only \$130 million. Exh. 31. Higher

²⁹ The demand level assumed in the September 2008 filing was 8.7 million MWh. Tr. Day 6 AM at 118:10-14. By the time PSNH provided its September 2008 rate impact analysis to the PUC, it was already estimating 8.1 MWh demand for 2009. *See Testimony of Robert A. Baumann* in Docket DE 08-113 (Sept. 12 2008).

cancellation costs are important because they indicate that it is more economic to finish the project than to “pause” it, as SB 152 sought to do. Tr. Day 7 AM at 37:6-11.

In March 2009, PSNH gave a powerpoint presentation indicating:

- PSNH customers could be *on the hook* for \$300 million in stranded costs, with nothing to show for it
 - \$230M for scrubber costs already committed
 - \$63M for undepreciated cost of Merrimack Station in 2013

Exh. 20-24, bates page 1027 (emphasis added). In the same presentation PSNH indicated that the \$230 million “*will have to be recovered* from PSNH customers whether or not the scrubber installation is completed.” Exh. 20-24, bates page 1101 (emphasis added). Mr. Long also testified to the Legislature orally that “we already have contractual commitments *where we’ve spent up to \$230 million.*” Exh. 20-27, bates page 1068. These statements mean just one thing: customers would have to pay hundreds of millions of dollars if the project was cancelled.

However, PSNH’s post-construction cancellation report, dated March 28, 2014, indicates that the cancellation costs in March 2009 were \$129 million, a full \$100 million less than PSNH indicated to the Legislature during its presentation. Ex. 31; Tr. Day 1 AM at 74:18-20. The Jacobs early termination analysis indicates that in March 2009 PSNH’s total termination expense would have been \$36 million, a far greater discrepancy between what PSNH told the Legislature and what was actually the case.³⁰ Exh. 60 at 2. PSNH now indicates that it did not do a cancellation analysis during the construction of the scrubber and that the sums reported to the Legislature were not “how much had been spent” but rather was “the sum of all the values of all the purchase orders that have been issued.” Tr. Day 1 PM at 38:12-20, 64:1-4. However, this is a

³⁰ None of the parties were able to engage in discovery regarding the Jacobs report because of when that report was distributed. The Jacobs witnesses did testify that this report was “strictly focused on the contracts that were let [sic] at the time” and did not include the costs of money invested in the project, or the Company’s labor. Tr. Day 2 PM at 14:19-15:7.

distinction without a difference given the purpose for which the information was provided – PSNH told the Legislature that if the project was cancelled, PSNH ratepayers would be “on the hook” for \$230 million in sunk costs. If PSNH meant to claim that at some point in the future it would have \$230 million in recoverable sunk costs, it could have said so. At the time it made these written and oral statements, PSNH was the only entity with the information necessary (e.g. purchase orders, accounting figures, budgets, etc.) to analyze how much had been spent to date. No one else could have contested this information or provided an alternative analysis.

C. If PSNH had revisited the economics of the Scrubber Expenditure in March 2009, the project would have been found to be uneconomic

If PSNH had undertaken the economic analysis recommended by Mr. Kahal, Mr. Hachey and other witnesses, it would have demonstrated that the project would have been found to have been uneconomic in March 2009.

As we now know, natural gas prices fell in late 2008 and early 2009. Exh. 24-4, bates page 377. Further, the natural gas projections available to PSNH showed a dramatic decrease in prices between February 2008 and March 2009. Exh. 122. EVA forecasts show that a reconsideration of PSNH’s analysis would have been significantly different in March 2009 than it was in the summer of 2008.³¹ The Boston City Gate 2012 price estimate for February 2008 was \$6.95/\$9.53/\$14.12 (low/base/high). Exh. 122 at 53, 62, 74. Meanwhile, the same projection in March 2009 was \$7.70/\$8.00/\$9.49 (low/base/high). Exh. 122 at 116, 123, 130 (the EVA report indicates that \$9.49 is the base case, \$8.00 is low, and \$7.70 in 2012 is the high; given the other values in the charts, this is likely a typo). PSNH should have considered the significantly narrower margin of uncertainty, together with substantially lower prices, that were in the EVA forecasts before making statements to the Legislature regarding the economics of the project,

³¹ The March 2009 forecast was not provided to the parties until mid-way through the merits hearing in this case. See *Motion Regarding Outstanding Discovery* (Oct. 31, 2014).

especially given how sensitive that analysis was to natural gas prices. Further, Yankee Gas' analysis, presumably in reliance at least in part on EVA projections, supported the conclusion that PSNH should have considered the changes in this projected margin. Exh. 37 at bates page 17 (indicating that natural gas prices are "expected to remain below recent history for the next several years" and that "prices are likely to remain depressed because of the newly discovered and exploitable supply response available from the unconventional sources (shale plays).").

PSNH's post-hoc analysis, performed by NERA, supports the conclusion that a March 2009 analysis would have demonstrated that the project was uneconomic. To be clear, PSNH did not engage NERA to undertake a contemporaneous economic study to support the investment in the scrubber. Instead, it hired NERA to demonstrate that the investment would have been considered economic *had* PSNH engaged in the appropriate study. NERA was directed regarding what time period their study should consider, Tr. Day 6 Late PM at 16:17-23, and relied on PSNH for many of their assumptions. Exh. 24-6 at bates page 307. Further, NERA created a scenario based entirely on NYMEX futures even though it indicated that such contracts are "often unavailable or highly illiquid." Exh. 24-6, bates page 379.

Only two of six NERA "market purchase" scenarios show the project being economic in March 2009. These scenarios required low environmental costs and no reliance on long term futures. Exh. 24-12. Because any individual scenario cannot be considered in a vacuum, the report cannot be used to find that one number was an appropriate assessment of project economics. Tr. Day 7 AM at 31:20-32:7. Instead, it is the range provided in the report that is important. *Id.* From the results of the NERA analysis, even if all of NERA's assumptions are

maintained, the scrubber was an uneconomic investment compared with the market purchase option as of March 2009.³²

Furthermore, several of NERA's assumptions fail to appropriately account for the cost of the scrubber option. First, NERA's capacity factor assumptions are significantly higher than would have been reasonable under the circumstances, making the coal plant appear to be more economic. The capacity factor applied in the NERA report is higher than the capacity factor for Merrimack Station in any year between 2004 and 2008.³³ Exh. 82; Tr. Day 7 AM at 61:3-16. A coal plant's capacity factor would be reduced as a result of cap-and-trade regulation, falling natural gas prices, and falling demand associated with economic downturns. Tr. Day 7 AM at 57:19-59:23. However, notwithstanding these market changes, NERA applied that same capacity factor for its March 2009 analysis. Second, the "low" environmental cost analysis assumed that there would be no carbon regulation other than RGGI. However, a March 2009 report drafted by Dr. Harrison indicated that "[m]ost commentators expect the federal government to develop a cap-and-trade program for greenhouse gas ("GHG") emissions in the 11th Congress, although there are of course uncertainties regarding any prediction of potential future legislation." Exh. 132 at 377.

NERA's assumptions about the "high" cost analysis are also flawed. In its 2014 testimony, NERA emphasized the "uncertainties" associated with the federal legislation, but provides only one set of assumptions – that fifty percent of all allowances will be given away at the beginning of the relevant time period. Tr. Day 6 Late PM at 13:21-2. Dr. Harrison testified that "all federal proposals at the time contemplated that an entity like PSNH would receive a significant amount of "free allowances." Tr. Day 6 Late PM at 12:3-5. However, in March 2009,

³² Mr. Long indicated the opposite to the Legislature in March 2009. Exh. 20-24, bates page 1022.

³³ Note that the Capacity Factor PSNH relied upon for its own Summer 2008 study was even higher – 86%. Tr. Day 6AM at 41:5-8.

Dr. Harrison opined that at least one proposal in the House of Representatives “would provide no free allowances to covered entities, and would auction all allowances instead.” Exh. 132 at 378. That same report included a “high” cost case in which all allowances would be auctioned³⁴ Exh. 132 at 425. Regarding that case, Dr. Harrison indicated, “we included a scenario in which all allowances would be auctioned, which would mean no free allocation . . . in order to provide a wide range of possible outcomes. *This approach (100 percent auctioning) has been proposed in the House of Representatives (Markey).*” *Id.* (emphasis added). The NERA witnesses testified that the “high” cost PSNH scenario was really akin to the “mid” cost scenario in the March 2009 report, but this assertion fails in face of those witnesses’ continued emphasis on the importance of taking the myriad “uncertainties” in play into account during the relevant time period. Rather, at least in part, NERA used hindsight to conclude that lower CO2 numbers were reasonable. Tr. Day 7 AM at 64:3-13; *see also* Exh. 24 at 300:20-22 (indicating that Congress did not pass CO2 regulations).

Finally, while the market purchase scenario clearly shows the market option as being more economic than scrubber construction, the second alternative that NERA considered – construction of a natural gas plant – is implausible because it would have been impermissible under the law. Exh. 24 at 288, n.2 (“Solely for the purposes of this analysis, we make the assumption that PSNH had the discretion to go forward with the Scrubber Project as well as to develop a natural gas facility or to rely on market purchases.”). New Hampshire law did not allow PSNH to construct a regulated natural gas plant. Tr. Day 2 AM at 116:2-7. Further, assumptions regarding that gas plant are unreasonable in that they employed transportation adders provided by PSNH for delivery to Bow, New Hampshire; NERA was unable to indicate whether those adders would have been the same if natural gas were delivered to a facility

³⁴ A contemporaneous Synapse presentation shares that opinion. *See* Exh. 97 at bates page 65.

elsewhere in ISO-NE. Tr. Day 7 AM at 52:12-53:4. With respect to whether the scrubber would bring PSNH's customers more benefits than a natural gas plant, NERA did not actually conclude that PSNH's *own customers* would bear the risks or reap the benefits of the construction of such a facility – the NERA report considers only the cost of the replacement power. Tr. Day 7 AM at 56:13-20. Therefore, NERA's analysis supports the conclusion that the project would have been uneconomic in 2009.

PSNH attempts to rely on the NERA testimony and report to conclude that its Summer 2008 analysis was correct, and that the project would be economic for customers. According to NERA, one cannot “completely ignore the current state of the market and not also consider scenarios that account for the price increases of early 2008.” Exh. 24 at 320:7-11. Presumably the same would be true of any economic conclusions drawn in early 2009 – that one cannot “ignore the current state of the market” – e.g., that prices had fallen precipitously. Exh. 24 at 290:1-8, 320:9-10. Unfortunately, this is exactly what PSNH did.

D. PSNH's Methodology for Assumption of Gas Prices was Flawed

The methodology that PSNH used to come up with the critical assumption of an \$11 per MMBtu price for natural gas prices that was included in the analysis presented to the RaCC and the Board and to the Commission in DE 08-103 was inconsistent with the least cost integrated resource plan (“IRP”) that PSNH itself presented to the PUC less than a year before. In discovery, PSNH indicated the following regarding the \$11 per MMBtu price assumption:

The referenced \$11 per MMBtu price assumption was based on actual reported Natural Gas Prices for dispatch at PSNH generating units at the time the analysis was performed (2008), as prepared by the NU Fuel Purchasing Department, rather than any specific forecast. The \$11 was assumed to continue until 2012, after which it was escalated at 2.5%. Forecasts available at the time (including those relied upon by FERC Staff in its presentation to the FERC Commissioners dated June 19, 2008, which are included in Deposition Exhibit 9 at Bates pages 21 and

22) support the base assumption and escalation, but were not used directly nor relied upon in preparing the referenced MMBtu price.

Exh. 20-21 at bates page 992. The PSNH IRP provided to the PUC in September 2007 and introduced in this hearing by PSNH as an exhibit said that projections for long range planning should use a blend of market based and fundamental forecasting. Exh. 73 at 159-160. PSNH even used that blend when it updated the PUC on the scrubber in 2010 (Exh. 23-8 at bates page 662). PSNH failed to use the methodology blending market based and fundamental forecasting described in its 2007 LCIRP when putting together the assumptions used for the scrubber analysis in the summer of 2008. Tr. Day 6 PM at 16:8-10.³⁵ The only time PSNH *did not* use that blend was in the assumption that formed the basis of the presentations to the RaCC and the Board and its September 2008 filing. This was clearly inconsistent with what it had told the Commission in the 2007 LCIRP was the appropriate way to do long term forecasting and thus contrary to the then in-effect least cost integrated resource planning requirements. *See* RSA 378:41 (repealed in 2014).

The 2007 IRP explained why using a forecast or a blend of forecasting and market-based prices was better for forecasting purposes than the use of NYMEX prices:

In recent history, the norm has been that the forward market-based prices exceed the fundamental prices. The reason for these differences can be debated, but a basic theory is that the current forward market prices incorporate a degree of risk premium based on near-term supply and demand concerns, such as hurricanes, extreme weather impact on natural gas inventories, etc. Fundamental forecasts, on the other hand, are more reflective of long run expectations regarding commodity market infrastructure.

³⁵ As Mr. Frantz testified, NYMEX isn't a forecast:

Q. You've seen an EVA forecast. You've seen other forecasts that are done with narrative around it and looking at much more than that. That's not a forecast, is it?

A. No. These were based on contract prices for NYMEX. Forecasts, in the short-term, contract prices are probably the best way to go, because that's people putting money down, buyers and sellers. The problem with those types of contracts is they only go out two, three, four years or so, depending on the structure of the contract. And, long-lived projects, such as this, go out long beyond the actual contract periods for futures.

Tr. Day 2 AM at 61:14-62:2.

Exh. 73 at 160. Mr. Hachey confirmed this when he said:

Well, if futures prices are inflated, hyped for some reason, because there's a hurricane coming or -- you know, that's trader -- trader games can start hyping prices and pushing up prices because the buyers are worried and that sort of thing. And I think what the forecasters are really doing is taking a calm view of the market, not an inflated view, not a deflated view, and saying, look, these are the -- assuming a competitive market, then -- and of course, we believe it is -- then you go right back to market fundamentals, which is the intersection of the supply and the demand curves.

Tr. Day 5 PM at 52:8-22. Moreover, as Mr. Kahal testified the \$11 gas price “is a figure way outside of historic norms.” Tr. Day 3 AM at 62:1-3. Thus PSNH’s use of what amounted to a peak price of natural gas as the basis for an assumption of natural gas prices through 2027 (see Exh. 20-10 at bates page 91) was unreasonable and imprudent for a project of this scope, a project with a break-even number about which it was fully aware. As Mr. Hachey testified on cross examination by PSNH’s counsel, referring to his prefiled testimony: “A ‘company taking such a significant risk on behalf of ratepayers should have exhaustively researched natural gas supply developments and been aware of this looming issue.’” Tr. Day 4 PM at 135:5-9. Mr. Hachey also testified that using NYMEX prices to vet a major capital investment is not a good course of action because NYMEX prices are used to lock in prices to backstop a transaction; its use as a forecasting tool becomes less useful into the future. Tr. Day 5 AM at 81:5-82:7; *accord* Testimony of Drs. Harrison and Kaufman, Exh. 24-6 at bates page 379 (“Short-term prices are for two years from the Analysis Date (longer futures are often unavailable or highly illiquid).”). The natural gas assumption underlying PSNH’s reporting to the Commission and the Legislature was unreasonable and imprudent.

E. PSNH's Failure to Share PowerAdvocate Report was Imprudent

In the summer of 2008 PSNH had in its possession a draft report by PowerAdvocate that put forth some significant red flags about the advisability of proceeding with investing in a coal-fired power plant. That draft report said that the Merrimack Station cost estimate was on the high end of the cost per kWh range similar to other FGD retrofit projects; that capital construction costs for new generation remained at historic levels with no clear understanding of whether or not a peak had been reached; and that there were significant levels of uncertainty around projected carbon regulations and effects of a tight labor market. Exh. 27-7 at bates page 73. The report concluded that there were no good and reliable indicators to follow for investment decisions. *Id.* This report was never shared with or mentioned to the Staff or the Commission. Tr. Day 1 AM at 54 (Testimony of Mr. Smagula). PSNH's failure to share the findings in this draft report with the Commission or the Legislature is also imprudent.

F. PSNH's Failure to Disclose that the Original Cost Estimate was Preliminary or Conceptual was Imprudent

During the 2006 Legislative Session, several state agencies indicated that the scrubber would result in a not-to-exceed cost of \$250 million. For example, DES Commissioner Nolin indicated in January 2006 that "Based on data shared by PSNH, the total capital cost for this full redesign will not exceed \$250 million dollars (2013\$) or \$197 million (2005\$), a cost that will be fully mitigated by the savings in SO2 emission allowances." Ex. 20-2, bates page 38. This same assertion was repeated – without correction – in April 2006. *Id.* at 40. PSNH's failure to correct Commissioner Nolin's statements was imprudent. Further, the same assertion regarding the cost of the project was contained in the bill's fiscal note. Exh. 20-2, bates page 35 ("PSNH estimates that the installation will be at a cost not to exceed \$250 million in 2013 dollars..."); *See generally* Exh. 20-1 and 20-2 at bates pages 33-41, 46; Exh. 55 at 4; Exh. 79 at 33.

Hearing evidence supported the conclusion that PSNH should have corrected the above-referenced statements. As the Jacobs witnesses testified, they would not have presented the information about the original estimate of \$250 million to the Legislature as a “not to exceed” number; rather, they would have indicated that it was a conceptual estimate that has a plus and minus associated with it. Tr. Day 2 PM at 60:1-4; *see also* Exh. 59. Similarly, Mr. Kahal concluded that “understood that the \$250 million cost estimate was very uncertain and subject to a potentially large upward revision.” Exh. 17 at 11:19-20. Mr Reed testified about the need to be candid with the regulator and the Legislature, Tr. Day 7 AM at 134:16 – 135:2, and in response to a question from Staff about statements to the Legislature that the project would not exceed \$250 million said that: “Do I think it’s good regulatory practice to keep the record as correct as possible? Yes. If I saw that type of statement made, and I thought it was material to the matter being considered, I would seek to correct it.” Tr. Day 7 AM at 136:12-16.

This is also of particular importance given the scrubber law’s reference to “a careful, thoughtful balancing of cost, benefits, and technological feasibility” (RSA 125-O:11, VIII), to “cost effective reductions in sulfur dioxide, sulfur trioxide, small particulate matter, and improved visibility (regional haze)” (RSA 125-O:11, II), and to the installation of the scrubber being done “with reasonable costs to consumers.” RSA 125-O:11,V. It must also be considered in the context of conflicting information in the record like Exh. 58: “PSNH considered the Sargent & Lundy report to be all inclusive” and the fact that the Staff witnesses from Jacobs Consultancy, who repeatedly referred to the \$250 million estimate in 2006 as a preliminary or conceptual estimate, could not explain why PSNH said in response to a data request that it considered the original estimate to be “all inclusive.” Tr. Day 2 PM at 42:16. Such statements by

PSNH in the 2006 time frame and later in response to data requests show a disturbing pattern of inconsistencies and a failure to be forthright, to set the record straight.

III. GIVEN PSNH'S FAILURES IN THIS CASE, IT SHOULD NOT BE ALLOWED FULL RECOVERY

If the Commission agrees that PSNH's actions were imprudent it has a range of options available to it. If it was imprudent to proceed with the project after a particular date the Commission could limit PSNH's recovery to the amount that it had spent on the project as of that point in time. Mr. Hachey suggested that the Commission should limit recovery to the amount PSNH had spent as of September of 2008 because as of that point in time it should have put a halt to any further spending "until the economics could be further studied." Exh. 20 at 30. There are a range of times between September of 2008 and April of 2009 when information about the state of the economy and the downfall of natural gas prices became apparent; those dates can be correlated to amounts the Company argues it would allegedly be due had the project been cancelled. *See* Exh. 31. In the event that the Commission does not accept Mr. Hachey's argument that the Project should have been halted in September 2008, there is a strong argument that at least as of November of 2008, when PSNH's affiliate had recognized what was happening with markets and natural gas prices and asked for more time to study those issues, PSNH should have paused further spending until the economics could be further studied. Certainly as of March of 2009 the project should have been reconsidered: When the SB 152 hearings were held before the Legislature, the price of natural gas had plummeted, SO₂ prices had dropped, and migration was on the rise. PSNH, if it had conducted itself with the level of care expected of a highly trained industry specialist, should have known that the break-even point it had represented to the NU Board in the summer of 2008, but never shared with any regulator or public official, could not be realized absent a significant reversal in all economic markers.

As Mr. Kahal testified, Tr. Day 3 AM at 79-83, there are potentially many moving parts in the determination of damages. Mr. Kahal went on to say that if the Commission feels that the Company's management behavior was inappropriate or imprudent one approach would be to reduce the Company's return on equity as applied to the scrubber and the deferral as well. Tr. Day 3 AM at 86:5-16; *see also supra* at Part I.C (regarding candor).

TransCanada submits that the Commission should find the Company imprudent and disallow recovery of a significant portion of its investment in the scrubber project. Taking this action would be consistent with the basic prudence principles articulated above. The evidence in this case supports the conclusion that PSNH failed to consider and provide contemporaneous material information to regulators and decisionmakers. PSNH should have put a halt to the project until it could be further studied. At the very least, PSNH should have provided correct, updated information to decisionmakers regarding project economics. PSNH owed a duty of candor to this Commission, to the legislature, and to ratepayers to provide relevant, material, and honest information and assessments, a duty it failed to fulfill, and the Company should suffer consequences for its conduct.

IV. THE PUC NEED NOT TAKE FURTHER ACTION REGARDING PSNH'S REQUEST FOR AN ADVERSE INFERENCE

In Order No. 25,687 in this docket the Commission sanctioned TransCanada for its refusal to provide natural gas price forecast information from non-party affiliates and thereby its failure to fully answer two data requests from PSNH. In doing so the Commission struck portions of Mr. Hachey's testimony (Exh. 20 shows which portions of the testimony were struck) and said it was "prepared to draw adverse inferences where appropriate." Order 25,587 at 4. In fashioning this sanction the Commission said that it strove to "tailor the sanction to the harm flowing from the missing information." Order 25,587 at 8. In that Order the Commission also

said that it would allow the parties to submit legal arguments “[a]t the appropriate time during the hearing... about what adverse inferences should or should not be drawn... .” Order 25,587 at 11. In the Order Denying PSNH’s Motion to Reconsider Order No. 25,687, Order No. 25,697, the Commission said that it was “inappropriate to draw inferences broadly and out of context.” Order No. 25,697 at 3.

During the course of the hearing PSNH asked the Commission to draw adverse inferences several times. When it first did so PSNH asked for a broad application of the adverse inference that would have prohibited TransCanada from “supporting or opposing any of its designated claims or defenses, any of its arguments dealing with gas price forecasts or fracking...” Tr. Day 1 AM at 85:24 – 86:2. Staff Attorney Sheehan told the Commission that while it could have ordered what PSNH was asking for it chose not to and that the sanction it did impose “is a bit narrower...it’s only when a gas report, for example, from TransCanada would otherwise be relevant to whatever the question is.” Tr. Day 1 AM at 87:20-24. The Commission then overruled the objection from PSNH “largely for the reasons... stated by Attorney Sheehan.” Tr. Day 1 AM at 90:18-20.

PSNH later attempted to prevent TransCanada from asking questions concerning articles about fracking and natural gas prices that were being introduced during TransCanada’s cross examination of Mr. Frantz. The Commission denied this motion from PSNH, but then later allowed PSNH to come back and ask additional cross examination questions of Mr. Frantz after redirect had been done. Tr. Day 2 AM 33:23-37:7, 132. In response to another similar objection from PSNH that same morning the Commission ruled that questions on cross examination were allowed “as long as the questions don’t attempt to bring in the testimony that was struck....” Tr. Day 2 AM at 44:10-11. From there on when PSNH objected on the grounds of adverse inference

or issues associated with the adverse inference ruling came up the Commission often indicated that it would consider when and how to apply the adverse inference during the course of its deliberations. *See, e.g.*, Tr. Day 5 PM at 95:18-22. Then, when Mr. Hachey testified on direct examination about the Yankee Gas documents that TransCanada found the day before hearings began, a document that contained references to gas forecasts PSNH's affiliate relied upon that had not been provided to the parties, and that showed at least in part what PSNH's affiliates knew about implications of shale gas development in the U.S. on natural gas prices, PSNH moved to strike that portion of Mr. Hachey's summary and the Commission granted that motion. Tr. Day 4 PM at 13:7-17:16.

PSNH itself asked Mr. Hachey many questions about natural gas price forecasts and fracking. When CLF objected to the introduction of many documents that PSNH's counsel used in cross examining Mr. Hachey, beginning with Exh. 93, including TransCanada documents that PSNH obtained but that were not complete documents, did not include information explaining what the documents were, and pertained to time frames that were later than 2008 (the time frame that was the primary subject of Mr. Hachey's testimony), the Commission denied the request. Tr. Day 6 AM at 9:12-17:10. Without testimony regarding what conclusions can be drawn from the documents submitted by PSNH, it is impossible to know whether any of the statements even support PSNH's claims. Later in the hearings PSNH asked for an adverse inference after it asked the NERA witnesses about price forecasts contained in but not struck from Mr. Hachey's testimony and asked them to assume hypothetically that TransCanada had in its possession price forecasts that were contrary to Mr. Hachey's price curves Tr. Day 7 AM at 110:1-111:11. The Commission took this under advisement.

To the extent that the Commission is contemplating applying an adverse inference to its review of Mr. Hachey's testimony, such an inference would presumably indicate that TransCanada had information or forecasts that supported PSNH's conclusion that natural gas prices would affirm PSNH's summer 2008 analysis and that such prices would remain high notwithstanding the impacts of fracking (as referenced by PSNH's affiliate, Yankee Gas) and the economic meltdown of late 2008 and early 2009. In the end, such a conclusion is irrelevant to the Commission's consideration in this docket because this case concerns only what PSNH knew or should have known during the relevant time periods. What TransCanada knew or did not know regarding the market for natural gas as that market would impact PSNH's customers is simply not relevant to this Commission's inquiry.

During the hearing, TransCanada sought to follow the Commission's directives concerning the adverse inference. TransCanada understood the sanction that had been imposed, the testimony from Mr. Hachey that had been struck, and endeavored to steer clear of any testimony on direct or redirect that would violate those orders. TransCanada submits that the Commission has already struck certain elements of Mr. Hachey's written and oral testimony, tailoring the sanction to the harm flowing from the missing information and resisting attempts to draw the inference broadly or out of context. Mr. Hachey's testimony regarding fracking has already been struck; given the lack of relevance regarding statements by TransCanada, there is no need to reach the question of adverse inferences.

Conclusion

This case is for many reasons a precedent setting case. It is by far the most significant prudence matter the Commission has considered in many years. It presents a unique opportunity for the Commission to outline what it expects of a utility as part of the regulatory compact, both

with regard to the level of information that should be provided to the Commission and the level of information that should be provided to public officials and ultimately the public and the ratepayers. TransCanada urges the Commission to use this docket as an opportunity to let PSNH know how important it is to be forthright with the Commission and all public officials in order for monopoly regulation to work properly.

Respectfully submitted,

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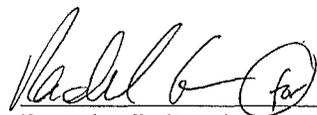
November 14, 2014



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Certificate of Service

I hereby certify that on this 14th day of November, 2014 a copy of the foregoing motion was sent by electronic mail to the Service List.



Douglas L. Patch