

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Public Service Company of New Hampshire

Investigation of Merrimack Station Scrubber Project and Cost Recovery

Docket No. DE 11-250

LEGAL BRIEF OF THE OFFICE OF THE CONSUMER ADVOCATE

I. INTRODUCTION

The Public Utilities Commission (Commission) opened Docket No. DE 11-250 *In Re: Public Service Company of New Hampshire*, Investigation of Merrimack Station Scrubber Project and Cost Recovery, to consider cost recovery for the wet flue gas desulphurization system (Scrubber Project) installed at Merrimack Station. *Order of Notice*, (September 1, 2012). Merrimack Station is a coal-fired electricity generation facility owned by Public Service Company of New Hampshire (PSNH or Company). *Id.* PSNH seeks to recover through default energy service rates approximately \$422 million, the cost to construct the Scrubber Project, plus \$104m of deferred cost recovery. Exh 14 bates 704 lines 4-6.

II. ARGUMENT

A. PSNH Was Obligated To Act Prudently In Response To Legislative Action.

1. Prudent Utility Action Is Required At All Times

The Commission defines prudent utility action as follows:

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 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 when the decision was made.

Order No. 25,565(August 27, 2013) at 20, *citing Duke Energy Indiana Inc.*, Cause No.43114 IGCC 4 SI 2012 WL 6759528, Indiana Utility Regulatory Commission (“IURC”) at 108 (December 27, 2012)

RSA 125-O:11-18 addresses the public interest standard of the Scrubber Project while expressly preserving the prudence analysis for the Commission:

If the owner is a regulated utility, the owner shall be allowed to recover all prudent costs of complying with the requirements of this subdivision in a manner approved by the public utilities commission. During ownership and operation by the regulated utility, such costs shall be recovered via the utility's default service charge. In the event of divestiture of affected sources by the regulated utility, such divestiture and recovery of costs shall be governed by the provisions of RSA 369:B:3-a.

RSA 125-O:18.

2. The Public Interest Finding In RSA 125-O:11-18 Does Not Relieve PSNH Of Its Obligation To Monitor And Disclose To Decision Makers Changes In Economic And Energy Markets.

PSNH argues that the detailed and mandatory nature of the public interest finding in RSA 125-O:11-18, requiring PSNH to build a wet flue gas desulphurization unit, explains PSNH’s belief that it must build the Scrubber without regard, analysis or disclosure of changing economic and market conditions to decision makers. Exh 27-1 Attch 7. This assertion ignores the many references throughout RSA 125-O:11-18 to “cost-effective reductions,” “reasonable costs to consumers” and “a careful and thoughtful balancing of costs, benefits and technological feasibility.” Exh 23-3 bates 441. It is unreasonable for PSNH to believe that RSA 125-O: 11-18 relieved it of all responsibility for monitoring and disclosing to decision makers the most dramatic and startling changes in economic conditions faced in New England since the Great Depression. Exh 17 p 32, l 10-17. Mr. Kahal states “...within weeks or a couple of months after

September 2nd, the world totally changed... There were dramatic changes in commodity markets, and dramatic changes in gas markets, and in the long term outlook for the price of natural gas, which is a critical input to the Company's study." Tr Day 3 AM p 11-12.

Between September 2, 2008 and October 15, 2010 the time during which PSNH did no economic analysis or updates, economic conditions continued to change. These conditions were part of or related to the changing commodity markets and natural gas markets discussed above. While PSNH may not have foreseen these changes in 2006, during its multi-year Scrubber construction project from 2006 to September 2011, PSNH management should have had a system in place that required collection, analysis of data, and timely disclosure to decision makers of the impact of these changing conditions on the Scrubber Project. PSNH management did not have such a system. Exh 27 at 86-87. Therefore PSNH did not inform and candidly disclose to decision makers the impact of changing conditions on the economics of the Scrubber Project. For example:

- a. Changes in customer migration rates;
- b. Changes in SO2 allowance markets;
- c. Widespread adoption of hydraulic fracturing technology in gas production;
- d. Changes in Merrimack plant capacity factors; and
- e. Changes in energy sales due to the economic recession; and
- f. Potential environmental regulatory changes.

These market factors were continuously and rapidly evolving after the September 2008 report PSNH filed with the Commission. While each of these elements may have been included in disparate regulatory filings, PSNH did not analyze them in terms of their impact on the Scrubber Project. Each of these changing economic conditions affected the viability of the Merrimack

plant. By 2010, according to PSNH consultant Mr. Reed, the Merrimack plant had become a “high risk plant” with regard to environmental regulation and with regard to fuel costs. Tr Day 7 p 147-148. By mid - 2010, Merrimack plant “is ‘economically challenged’ by the significant downturn in gas prices...as well as environmental regulation.” *Id.* These drastic changes in the economic status of the Merrimack plant should have been communicated to decision makers as they occurred, not some time afterwards.

The success of hydraulic fracturing, along with a severe economic recession, lowered natural gas prices, which lowered competitive wholesale electric energy prices, which increased the attractiveness of competitive options for consumers. This, in turn, inexorably increased PSNH migration rates, and lowered the number of kWh of Energy Service consumption over which Scrubber cost revenue requirements could be recovered, thereby increasing the cost per kwh impact for the remaining “non shopping” customers. In addition, the Merrimack plant capacity factor declined from over 80% assumed in the September 2008 study to approximately 40%. Exh 70. Continued public policy focus on coal plant pollution control made more environmental costs for the Merrimack plant likely in the future. Exh 23, bates 444, ftnt 2. It is not until October 15, 2010 that PSNH mentions, in the context of the Scrubber Project, that changes in migration rates and changes in SO2 allowance markets are driving an increased rate impact on energy service customers. Ex 23-13. By this time, the majority of the Scrubber construction is complete. *Id.* If PSNH had this information before October 15, 2010, knew of its impact on the Scrubber Project economics but failed to disclose it to decision makers, then PSNH is imprudent for failing to do so.

3. PSNH Fails To Meet Its Burden Of Showing Prudent Action.

The New Hampshire statutory scheme of utility regulation places the burden of proving the necessity of a requested rate increase upon PSNH, the applicant. RSA 378:8. It is not enough for PSNH to point to RSA 125-O:11-18 and demand full compensation. If this were sufficient for meeting PSNH's regulatory burden, there would be no need for the Commission's prudence review. Previously, this Commission ruled, and the Supreme Court upheld that ruling, that the Commission had the authority to determine "...at a later time the prudence of the costs of complying with the requirements of RSA 125-O:11-18 and the manner of recovery for prudent costs." *Appeal of Stonyfield Farm, Inc.*, 159 N.H. 227, 230 (2009) *citing* RSA 125-O:18. A public utility continues to have an obligation to engage in good utility management practices while complying with acts of the legislature. Order No. 25,565 (Aug. 27, 2013) at 7. This Commission holds that "[n]o 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." *Id.*

4. PSNH's Failure To Update Its 2008 Study Denied Decision Makers Of Key Information.

PSNH wrongly and unreasonably contends that the legislature's public interest determination made economic updates and reanalysis of the Scrubber Project unnecessary (and, indeed, even irrelevant), even in the face of extraordinarily deteriorating economic conditions. Exh 27 at 114-115. ("It would be a waste of time and resources to continually update projections...") PSNH witnesses concede that the Company did not undertake a study or update its previous analysis of the Scrubber Project and its likely impact on customer rates between

September 2, 2008 and October 15, 2010. Exh 23 at Bates pgs 411-412. PSNH argues that the legislature's failure to pass a bill in March 2009 revisiting the Scrubber Project decision relieved it of any obligation to update its studies in the face of changing economic conditions. *Id.* If the Commission were to accept PSNH's argument, Commission authority over utility management prudence would be significantly narrowed, removing from the Commission the authority to review utility actions over time in complying with legislation. Such a restriction in Commission authority was not authorized through RSA-O: 11-18 and should not be allowed by interpretation. Moreover, PSNH's position posits an absurd "Catch 22" in that the Company's unwillingness to perform a study update (thereby denying essential information to decision makers) may have been the very reason why the legislature declined to revisit the issue.

The record of this proceeding is full of testimony identifying the changing economic conditions between September 2, 2008 and October 15, 2010. PSNH witnesses Drs. Kaufman and Harrison (outside consultants with NERA) state the following:

The comparative costs of the Scrubber Project hinge on long-term forecasts of energy prices and other related goods and services, which are notoriously uncertain and difficult to project even under relatively stable market conditions. But market conditions in the United States in mid-2008 to early-2009 were far from stable. In the context of the government bailout of Bear Stearns in March 2008 and the failure of Lehman Brothers in September 2008, the country (and indeed the world) was experiencing a financial crisis of a scale unseen in generations. In October 2008, the head of the International Monetary Fund warned that the world financial system was teetering on the "brink of systemic meltdown." Not surprisingly, energy markets were characterized by extreme volatility in 2008 and 2009. As shown in Attachment 4, average monthly Henry Hub natural gas prices approximately doubled between late 2007 and mid-2008, and then declined sharply through early-2009. These sharp price swings reflected major uncertainties in natural gas markets, including the effects of the overall economic decline on natural gas demand as well as the supply effects of expanded use of advanced technologies to drill for shale gas (notably horizontal drilling and hydraulic fracturing, typically referred to as "fracking"). These developments raised many questions in mid-2008 as well as in early-2009.

Exh 22 at bates pgs 294-295.

Given this high level of economic uncertainty, regardless of legislative action, PSNH maintained the obligation to exercise good utility practice and study the impact of these market changes on the Scrubber Project as a major capital investment.

The definition of good utility practice reflects the level of expertise expected of utility management at the time management decisions are made. One such definition accepted by this Commission in the 2008-2009 timeframe is the following:

Good Utility Practice: Those practices, methods and acts that are commonly used in the independent energy industry in the Northeastern portion of the United States at the time in question to design, construct, equip, operate, measure, forecast, schedule, test and maintain the relevant facilities and related equipment lawfully and with safety, reliability, efficiency, economy and expedition or, in the absence of such practices, methods and acts, those practices, methods and acts that, at the time in question, in the exercise of reasonable judgment in light of the facts then known, would have been expected to accomplish the desired result consistent with Applicable Law, good business practices, safety, reliability, efficiency, economy and expedition. Good Utility Practice is not intended to require optimum practices, methods or acts, but rather includes a range of acceptable practices, methods or acts that are expected within the energy industry to accomplish the desired results, having due regard for, among other things, preservation of manufacturers' warranties and operating instructions and the requirements of governmental authorities.

Re: Concord Steam Corporation, Docket DG 08-1 07, Settlement Agreement Exh A p 2.(filed Feb 9, 2009). See Exh 23, Atch 14.

While adherence to the applicable law is certainly an important factor in good utility practice, it is not the only factor. Utility management cannot blindly adhere to a narrow interpretation of law while ignoring "...those practices, methods and acts that, at the time in question, in the exercise of reasonable judgment in light of the facts then known, would have been expected to accomplish the desired result consistent with Applicable Law, good business practices, safety, reliability, efficiency, economy and expedition." *Id.* By ignoring the unquestionably deteriorating economic and energy market conditions and failing to study the effects of those changes on the Scrubber Project, PSNH failed to exercise reasonable judgment in light of facts then known and thereby failed to engage in good utility practice.

It was unreasonable for PSNH to rely on the legislature's failure to act in March 2009 as a justification for its own failure to study the impact of changing economic conditions on the Scrubber Project. The Commission previously noted, "We find unhelpful, however, testimony that gives the witness's opinion of the reason for the Legislature's decisions to pass the Scrubber law and not to pass the 2009 bills...Legislative intent is a legal question that turns on the language of the statutes or bills and the traditional sources of legislative history (cites omitted)." Order No 25,714 (September 8, 2014) at 9. PSNH, as a sophisticated business entity with its own legal consultants and professional lobbyists (See Exh 25) well understood the legal uncertainties of relying on a vote of Inexpedient to Legislate (ITL) as a substantive position of the legislature. Failure to pass legislation means that existing legislation remains in force, unchanged. The Commission's authority to conduct a prudence review remained in force. PSNH's obligation to prudently comply with existing law and engage in good utility practice, including an obligation to consider and report on changing market conditions and the impact of those changes on the Scrubber Project also remained in force.

5. Prudent Utility Management Requires Analysis Of Significant Changes in Economic Conditions Prior To Major Financial Investment.

As of March 2009, major construction of the Scrubber Project had not yet begun. PSNH did not receive a required construction permit until March 9, 2009. Ex 12-16. The construction permit, also referred to as the Temporary Permit "... allows the facility to construct and operate a device based on the terms and conditions specified in the permit," *Id.* A prudent utility manager engaging in good utility practice would have considered, as a matter of course, the impact of changing and uncertain economic conditions on a major investment before actually spending that money. This was particularly true in this instance given the slack and flexibility that PSNH decided to build into its construction schedule. It is unreasonable and imprudent for PSNH to

fail to update and reanalyze the impact of rapidly changing economic and energy market conditions on the Scrubber Project, even if the legislature declined to modify existing law.

PSNH's own corporate management policies require careful consideration of changing economic conditions that could result in a negative impact on utility investments. PSNH witness Mr. Large testified at length about the process required for capital project risk assessment under Northeast Utilities System (NU) policy. Transcript Day 6, AM, October 22, 2014 at 56-83. NU maintained a Capital Project and Approval Policy and Procedures (CaPP) manual. Exh 118. This CaPP manual "sets out the requirements for the development of Capital Projects Proposals," describing with specificity the information required for project evaluation, approval and monitoring by the NU Risk and Capital Committee (RaCC). Exh 118, "Purpose and Scope" at 2. PSNH paid scant attention to several steps of its own corporate internal risk assessment processes, showing little to no concern about creating an explicit exit strategy, or actively monitoring the market forces surrounding the Scrubber Project throughout its lifecycle. *Id* at 63-68.

Commission Staff consultant Jacobs Consultancy (Jacobs) relied on the NU CaPP project review procedures for its favorable prudence review of PSNH actions. Jacobs testified as follows:

Q. What key assessments and conclusions support your overall opinion regarding the New Hampshire Clean Air Project?

A. Our key assessments and conclusions supporting our overall opinion are as follows:
Large Project Review Process - Northeast Utilities and PSNH procurement, risk review, approval, and contracting strategy processes are well developed for projects of this size. Northeast Utilities' Large Project Review Process calls for numerous internal assessments, risk mitigation factors considerations, approvals.

Exh 16 Jacobs testimony at p 12-13.

Jacob's reliance on the NU CaPP procedures as a key indication of PSNH management prudence is misplaced. PSNH did not follow its own internal risk assessment procedures for the Scrubber Project. The CaPP analysis does not stop once a project is "mandated by law" or otherwise determined to be Non-Discretionary. Exh 118 at p 3 (c) ("Capital projects are considered to be Non-Discretionary when the company is obligated to make the investment in order to comply with: federal, state or local laws...") If this were true, the CaPP manual would state that projects mandated by law are exempt from analyzing possible alternatives, identifying flexibility in capital spending, anticipating contingent liabilities, and providing an explicit exit strategy. Exh 118 at 8. The CaPP does not exempt non-discretionary projects from these requirements because prudent utility management must still consider each of these project elements throughout the lifecycle of every major construction project, whether or not undertaken to comply with state law.

The NU CaPP manual requires the following:

Each Capital Project Proposal will detail a project- specific monitoring plan to occur throughout the development life cycle of each Capital Project including identification of triggering events, which, upon occurrence, could result in a request for re-approval of the project."

Id.

PSNH concedes that it failed to monitor changing economic conditions affecting the Scrubber Project between September 2, 2008 and October 15, 2010. Exh 23 at Bates pgs 411-412. PSNH argues that the reapproval process required by CaPP occurred in June 2008 when the projected amount of capital spending almost doubled from \$250m to \$457m. Transcript Day 6, AM, October 22, 2014 at 75. However, the increase in capital costs was only one of several significant triggering events that occurred throughout the lifecycle of the Scrubber Project and specifically between Sept 2, 2008 and March 9, 2009.

As stated by the NERA witnesses, natural gas prices doubled between late 2007 and mid-2008, and then declined sharply through early-2009 Exh 22 at Bates pgs 294-295. PSNH captured close to the highest natural gas prices in their September 2008 report and then ignored the sharp declines immediately following the issuance of that report in late 2008 and in early 2009. In October 2008 there were warnings that the world financial system was teetering on the "brink of systemic meltdown." *Id.* PSNH captured some of the market changes in the increased capital construction costs estimate but ignored the implication that large declines in natural gas prices indicated a changing market, in this case "the supply effects of expanded use of advanced technologies to drill for shale gas (notably horizontal drilling and hydraulic fracturing, typically referred to as 'fracking')". Exh 22 at bates pgs 294-295. PSNH assumed that the high natural gas prices of September 2008 would be the new normal over the life of the Scrubber Project and never reviewed this conclusion or looked again at the developing evidence demonstrating that this assumption was not true. While the Northeast Utilities' Large Project Review Process *calls* for numerous internal assessments and risk mitigation considerations, PSNH failed to adhere to all of those requirements throughout the lifecycle of the Scrubber Project. Therefore a key element to Jacob's favorable prudence finding is unsupported.

PSNH ignored the unmistakable sharp downward trend in natural gas markets even though PSNH had identified the price of natural gas as the single most important key financial sensitivity to its projections concerning the Scrubber Project. Exh 17-3 bates 106. Had PSNH done an economic analysis using its own model before major capital expenditures had taken place in March 2009, PSNH would have captured the dramatic drop in natural gas prices in early 2009 and concluded that the Scrubber Project was not economically viable. OCA Witness Matthew Kahal explains this imprudence of PSNH management as follows:

My testimony explains why, even though I could accept what the Company did in the summer of 2008, I believe that the Company should have undertaken updates over the ensuing three months, six months, nine months. And had they done that with the fall in gas prices that was taking place -- and I show that the fall in gas prices on the order of 40 percent or more, depending upon what measure one uses -- then that would have -- an updated study would have resulted in a finding that, in fact, the Project was uneconomic. And 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.

Transcript Day 3 AM, October 16, 2014 at 12-13.

The severe drop in natural gas prices (both in spot markets and NYMEX forward markets extending out several years, Exh 17-7 bates 165) is a triggering event *in addition to* the triggering event of the increase in construction costs under NU's own risk management policies. Such a major change in a key financial sensitivity should have triggered a reassessment of the Scrubber Project's economics. Exh 118 at 8 "Monitoring Plan."

6. PSNH Had A Duty To Alert Decision Makers Of The Known Risk Drivers Of The Scrubber Project In Adherence To The Regulatory Compact.

A high level of candor and disclosure of risks as well as benefits of significant capital investments to decision makers is a fundamental concept of the regulatory compact for public utility monopolies. Specifically,

The bedrock principle behind utility regulation is the so-called "regulatory compact," which arises out of a "bargain" struck between the utilities and the state. As a quid pro quo for being granted a monopoly in a geographical area for the provision of a particular good or service, the utility is subject to regulation by the state to ensure that it is prudently investing its revenues in order to provide the best and most efficient service possible to the consumer. At the same time, the utility is not permitted to charge rates at the level which its status as a monopolist could command in a free market. Rather, the utility is allowed to earn a "fair rate of return" on its "rate base." Thus, it becomes the Commission's primary task at periodic rate proceedings to establish a level of rates and charges sufficient to permit the utility to meet its operating expenses plus a return on investment which will compensate its investors.

798 *Indiana Gas Co., Inc. v. Office of Utility Consumer Counselor* ("Indiana Gas I"), 575 N.E.2d 1044, 1046 (Ind.Ct.App.1991) *citing*; *City of Evansville v. Southern Indiana Gas and Elec. Co.* (1975), 167 Ind.App. 472, 339 N.E.2d 562, 570; *United States Gypsum, Inc. v. Indiana*

Gas Co., Inc. 735 N.E.2d 790, 797 (Ind 2000); *PacifiCorp v. Public Service Com'n of Wyo.* 103 P.3d 862 (December 13, 2004) at 872.

After the Commission issued its Request for Information on August 22, 2008, PSNH publically presented the \$457m cost projection to decision makers in New Hampshire. Exh 27-1. At that time the Commission, its staff and members of the Legislative Oversight Committee on Electric Utility Restructuring, the Senate Energy and Economic Development Committee and the House Science Technology and Energy Committee understandably were focused on the increased capital costs for the Scrubber project. Exh 12-12. PSNH presented little to no information to the legislature on the importance of natural gas prices to the economics of the Scrubber Project and there was little to no discussion that gas prices were extremely volatile and far above historical norms) at that time. Exh 32; Exh 25-2 (“The Economic Impacts of Constructing a Scrubber at Merrimack Station.”); Tr Day 6 AM October 22, 2014 at 139-141.

PSNH, however, had been studying this new cost estimate and the importance of the gas/coal price spread internally at NU since at least June 2008. Exh 23-3, bates 438. Included in the PSNH June 25, 2008 presentation to the NU Risk and Capital Committee is a chart identifying “Financial Sensitivities.” *Id.* The discussion points state simply that “Net customer cost is most sensitive to expected future natural gas and coal prices,” not the capital costs of the Scrubber Project. *Id.* PSNH was well aware by September 2008 that construction costs were not the most important driver of economic risk for the Scrubber Project. Exh 23-3 bates 444. By September 2008 PSNH was confident that the new construction cost estimate was robust and well supported since it was able to incorporate actual vendor bid information. Exh 23-3 at 438; Ex 27 at 161. And yet this information is not emphasized in PSNH’s September 2008 report to the PUC. Exh 27-1.

The NU Risk and Capital Committee presentation reiterates in the “Key Financial Takeaways” that “Customer value of scrubber installation [is] extremely sensitive to future expected natural gas/coal spread.” Exh 23-3 bates 447. Comparatively, “...capital costs estimates have meaningful headroom before rendering investment uneconomic.” *Id.* By allowing the focus of the decision makers – the PUC and the legislature - to remain on capital costs, PSNH failed to focus decision makers on the true risk drivers of the Scrubber Project, the real “Financial Sensitivities” of natural gas prices. PSNH had a duty to alert decision makers of the known risk drivers of the Scrubber Project.

If PSNH wished to accept for its shareholders the entirety of an investment risk and reward that is “essentially a long spread position on natural gas/ coal with carbon and construction risk” (Exh 23-3 bates 447), then PSNH would have had a reduced duty to disclose key Financial Sensitivities to others. However, having accepted the protection of the “regulatory compact” as a vertically-integrated utility, PSNH must be held to a greater level of candor and disclosure to decision makers than an unregulated competitive supplier. Indeed, given PSNH’s view that the Scrubber is a legislative mandate, rather than a discretionary investment, this is all the more reason for PSNH to keep policy makers fully informed of important changes. This omission demonstrates a lack of candor and failure of good utility management practice by PSNH.

7. PSNH Imprudently Accelerated The Scrubber Effective Date Without A Rigorous Cost Benefit Analysis.

PSNH witness Mr. Chung discusses a cost deferral estimate to be recovered from customers of \$104m. Exh 14, bates 704 lines 4-6. The very large size of this deferral is due partly to regulatory lag, as the prudence docket was opened in 2011. However, a substantial

amount of the deferral accumulated before the legislative effective compliance date of July 1, 2013. RSA 125-O:11-18. While the legislation contains early completion incentive provisions to benefit consumers, PSNH did not undertake any kind of cost benefit analysis to determine if accelerating the scheduled completion would create net benefits for consumers. Exh 23 bates 411-412. A thorough prudent analysis would likely have shown that the greatly accelerated completion date (nearly two years) was not cost/beneficial to customers and instead only succeeded in imposing unnecessary deferral costs on ratepayers. PSNH's unilateral action to accelerate the effective in-service date of the Scrubber cost consumers tens of millions of dollars in deferral costs which dwarf any alleged savings of avoided Allowance for Funds Used During Construction ("AFUDC"). Prudently-incurred deferral costs should be determined from the legislative effective date of July 1, 2013 and not the accelerated effective date of September 2011. Where a showing of prudence associated with the accelerated construction is absent, PSNH should be required to recalculate its deferral balance using an effective start date of July 1, 2013 (adjusted to include any AFUDC or other savings that the Company can show resulted from construction acceleration.) Pointing to the legislative incentive provisions is insufficient. If the intent of the legislation is to create benefits for consumers, PSNH had an obligation to investigate whether its actions would create actual ratepayer benefits.

B. The Commission May Not Include A Return On Plant Which Is Not Used And Useful.

1. Plant Must Be Used And Useful To Be Part Of Rate Base

In addition to prudence, PSNH must demonstrate that the Scrubber Project is "used and useful," before being authorized to earn a return on any prudently incurred investment. RSA 378:28 ("The commission shall not include in permanent rates any return on any plant,

equipment, or capital improvement which has not first been found by the commission to be prudent, used, and useful.”).

The distinction between prudence and “used and useful” is significant. The New Hampshire Supreme Court states:

“[t]he second principle of rate base inclusion or exclusion derives directly from the statutory description of allowable rate base property as “used and useful.” RSA 378:27, :28. ... While prudence judges an investment or expenditure in the light of what due care required at the time an investment or expenditure was planned and made, usefulness judges its value at the time its reflection in the rate base is under consideration. Under the “used and useful” principle, the commission is not asked to second-guess what was reasonable at some time in the past, but rather to determine what can reasonably be done now with the fruits of investment.

Appeal of CLF, 127 NH 606 (1986) at 637-638.

Simply stated, “The prudence test determines whether cost recovery is allowed at all, while the used and useful analysis determines the portion of prudently incurred costs on which the utility is entitled to a return.” *Western Massachusetts Electric Company*, D.P.U. 85-270 at 25-27 (1986). Similarly,

The principle of prudence entails the uncertainty that is inherent in any backward-looking judgment, and the principle of usefulness is commonly described as allowing a rate-setting commission substantial flexibility for pragmatic judgments about what should or should not be regarded as useful. See *Appeal of CLF*, at 673-74. This flexibility mirrors the need to provide an opportunity for the exercise of expert judgment in giving due recognition to the two competing interests that come to the fore in any contested rate proceeding, the interests of investors who would like a guaranteed return on any investment and the interests of customers who would like low rates.

Appeal of Gary McCool, 128 N.H. 124 (N.H. 1986), at 141-142.

PSNH failed to meet its burden in demonstrating that the Scrubber Project is used and useful in three areas:

- 1) Overcapacity: The Scrubber Project was initiated as a pollution control device on a base load plant. Ex 27-1 at 1. In 2006 when RSA 125-O:11-18 became effective, through 2008, Merrimack had a capacity factor of about 80%. Exh 70 at bates 100. By 2013 Merrimack

had a capacity factor of about 40%. *Id* The Merrimack plant and the attached Scrubber, now have an overcapacity of about 40% because Merrimack is no longer a base load plant. In the monthly tabulation of Merrimack station operation for the 12 months ending July 2014, Merrimack averages 160 MW per hour. Exh 65. Compared to the estimates contained in PSNH's September 2008 study, (Exh 27-1) which assumed that the plant, once scrubbed, would operate over its remaining life at about 85% or over 400 MW per hour, the plant overcapacity is significant.

2) Truck wash: PSNH originally conceived the truck wash as money saving device through which PSNH could use the same trucks to both bring in coal and remove gypsum, a byproduct of scrubber operation. Exh 66-67. However, PSNH now uses rail to bring in coal as the type of coal transported by truck, Venezuelan coal, is no longer available. Exh 57 ("Coal trucking between Schiller Station and Merrimack Station has not occurred since April 13, 2012 due to the unavailability of Venezuelan coal.") As the truck wash is not used and useful, PSNH should not earn a return on its costs.

3) Secondary Waste Water Treatment Plant: PSNH supported its decision to invest in a secondary wastewater treatment plant as a way to avoid costly delay in the environmental permit process. Exh 16 at 35. However, PSNH now proposes to rely on its primary waste water treatment facility and use the Secondary Waste Water Treatment Plant as back up. Exh 61 at 26 ("Moreover, PSNH has indicated that it wishes to be authorized to discharge its FGD wastewater to the Merrimack River after treating it only with its primary physical-chemical treatment system") The original prudence of this decision is questionable as the Secondary facility exceeded the permitted requirements at the time. *Id*. However, even if the original investment passes the prudency review, the fact that PSNH seeks to remove the Secondary

Waste Water Treatment Plant from its EPA permit means the Scrubber Secondary Waste Water Treatment facility is overbuilt and not used and useful.

2. The Commission Should Reduce PSNH Shareholder Return So Shareholders Share The Risk Of Economic Forces Reducing Asset Value

Pursuant to RSA 363-17-a “the commission shall be the arbiter between the interests of the customer and the interests of the regulated utilities.” It is the Commission’s statutory responsibility to consider the relevant factors that have created an imbalance between the interests of utility customers and utility shareholders and devise a means for bringing those interests back into balance. “The determinations of reasonable rate of return, prudence, and usefulness alike require the exercise of judgment and discretion in determining the recognition that is appropriately due to 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 CLF* at 674. The Commission is authorized to lower the return to shareholders to reflect the reduced capacity factor of the Scrubber and the Merrimack plant. Merrimack’s reduced performance is an outcome that would have been expected by PSNH had PSNH studied the changing market dynamics between September 2008 and October 2010 discussed above. The Commission also should disallow a return on the truck wash and Secondary Waste Water treatment facility as these investments do not pass the used and useful test.

3. The Commission Must Exercise Its Judgment To Bring Into Balance The Competing Interests Of Ratepayers And Shareholders.

Typically, commissions recognize system overcapacity when a utility initially seeks a determination that an investment should be put into rate base. For the Scrubber itself, the timing of the overcapacity determination is consistent with tradition as the Scrubber investment has yet to be accepted into rate base. It is the Merrimack plant, to which the Scrubber is now an integral

part, which draws an objection regarding rate base exclusion as this original investment has long been an accepted part of PSNH generation asset rate base. However there is no legitimate reason why a utility should continue to receive a return on a plant that is nearing the end of its economic life and is significantly reduced in its capacity as used and useful to ratepayers.

Reducing a utility's rate of return due to overcapacity is not new. For example in *New Jersey Power and Light*, 810 F 2d 1168 (1987), the District Court concurring opinion states:

The obvious danger in not examining both ends of the continuum--both the prudence of the investment and whether the end result of the investment was used and useful--is to build in pressures for building excess generating capacity. The "used and useful" rule operates as a restraining principle, reminding utility managers that they must assume the risk of economic forces working against an investment which is prudent at the time it is made...Requiring an investment to be prudent when made is one safeguard imposed by regulatory authorities upon the regulated business for benefit of ratepayers. As I see it, the "used and useful" rule is but another such safeguard. The prudence rule looks to the time of investment, whereas the "used and useful" rule looks toward a later time. The two principles are designed to assure that the ratepayers, whose property might otherwise of course be "taken" by regulatory authorities, will not necessarily be saddled with the results of management's defalcations or mistakes, or as a matter of simple justice, be required to pay for that which provides the ratepayers with no discernible benefit. [1]

New Jersey Power and Light, 810 F 2d 1168 (1987) at 1191; rem'd for hearing consistent with decision(STARR, Circuit Judge, concurring).

In Vermont under the used and useful standard, uneconomic costs associated with an investment or purchase decision are shared between ratepayers and shareholders. *Re Green Mountain Power*, 184 PUR 4th (February 27, 1998) ("[T]his Board has a well-founded policy of disallowing recovery of a portion of a company's investment in facilities that are not used and useful; that similar positions are followed in other jurisdictions; that these policies are judicially approved; and that they are expected by investors, *citing Docket 5132*, 83 PUR 4th at 601(May 15, 1987). Under traditional, well-settled ratemaking policy, ratepayers are only required to pay a utility company a fair return on facilities and invested capital actually "used and useful" for production of service to the ratepayers. *Entergy Gulf States, Inc. v Louisiana Public Service*

Commission, 730 So.2d 890 (La. 1999) *citing Gulf States Utils. Co. v. Louisiana Pub. Serv. Comm'n*, 364 So.2d 1266, 1269 (La.1978).

C. The Commission Must Quantify The Disallowance To Reflect Utility Management Imprudence And Investment Which Is Not Used And Useful.

1. After March 2009 (At The Latest) PSNH Knew Or Should Have Known That Further Investment Likely Would Result In Huge Ratepayer Losses

Mr. Kahal testified that had PSNH done an updated study in late 2008 or early 2009 which took into consideration energy market and economic changes, “their updated study would have shown huge ratepayer losses associated with the project.” Tr Day 3 AM October 16, 2014 at 92. PSNH provided an estimate of termination costs as of April 1, 2009 of about \$140m. Exh 28 Atch 3 p 16. Jacobs Consultancy provided an Early Termination Analysis estimating that 9% of total costs had been incurred by March 2009, or about \$38m. Exh 60 at 2. Therefore a Commission finding that investments made after March 2009 were imprudent results in a disallowance of a range between \$290m - \$365m, before consideration of the more than \$100 million claimed deferral balance and any Merrimack and Scrubber Project benefits post July 1, 2013.

It is not known, however, how the Legislature would have responded to the information of large ratepayer losses. Tr Day 3 AM October 16, 2014 at 92. None- the- less, PSNH must be held accountable for failing to adequately disclose key Financial Sensitivities of the Scrubber Project to decision makers; failing to study Scrubber Project economics throughout the construction period of the project; and failing to adequately keep decision makers informed of critical implications of changing economic and market conditions. Other state commissions have solved this conundrum by using a percentage reduction. The Idaho Commission states:

[W]e found that Pacific Power's failure to perform appropriate analyses to determine the cost-effectiveness of its investments was imprudent. For those same reasons... we were unable to quantify, with any precision, the amount of harm caused to ratepayers by Pacific Power's actions. As a result, we chose to impose a one-time 10 percent disallowance to the investments associated with Pacific Power's rate base.

In the Matter Of Idaho Power Company, Request for General Rate Revision. 304 P.U.R.4th 320 (April 13, 2013) WL 1619516.

Similarly the Oregon Public Utility Commission held:

While we do not expect a utility to engage in a never-ending process of reconsideration of its investment decisions, with major resource investments such as these, a reasonable utility would consider changing conditions that significantly impact the financial viability of the investments. The evidence in the record shows substantial changes in the economics of Pacific Power's investments if assumptions had been updated just prior to the time of at least two significant milestones: contract signing and the start of construction. With updated analyses, Pacific Power would have had more refined estimates of market prices, gas prices, capital costs, and costs of other regulations, among other factors... We are unable to easily calculate the precise amount of a proper disallowance in this case, however. Quantifying the impact of Pacific Power's imprudence has been hindered by the very actions that underlie our finding of imprudence—the utility's inadequate analysis and decision-making... Pacific Power seeks recovery, on a company-wide basis, of approximately \$661 million in its emission control investments. The Oregon-allocated share of those investments is approximately \$170 million. Accepting the fact that it is impossible, on this record, to precisely quantify the impact of Pacific Power's imprudence, we conclude sufficient evidence exists to support a 10 percent (\$17 million) disallowance.

In the Matter of Pacifcorp, dba Pacific Power, Request for a General Rate Revision, 2012 WL 6644237, Or.P.U.C., 2012 (December 20, 2012)

A significant measure of disallowance sends a strong signal that the Commission will not tolerate incomplete or anything less than full candor regarding high risk utility investments whether undertaken in response to existing legislation or independently. Should the Commission implement a flat percentage disallowance, a 25% or \$105m disallowance more appropriately reflects the egregious nature of PSNH management imprudence.

2. Return on Scrubber Overcapacity, The Truck Wash And The Secondary Wastewater Treatment Facility Must Be Disallowed As Not Used And Useful

In addition to an imprudence disallowance, the Commission should also reduce shareholder return to reflect the significant reduction in capacity factor of the Merrimack plant, including a finding that the truck wash and the Secondary Wastewater Treatment facility are not used and useful. Mr. Brennan's testimony uses an averaging methodology to reflect the reduced capacity factor of the Merrimack Plant and a corresponding reduction in return on equity of \$11.6m. Tr Day 3 AM at 97; 133-137; Exh 64. Mr. Brennan summarizes the recommendation as follows "The OCA is seeking a balanced solution to an unfair situation where PSNH is receiving 100% return and 100% cost on a facility that is in the late stages of its life cycle and has high excess capacity...a portion of the rate base will be reduced going forward to share the risk with stockholders..." Tr Day 3 AM at 97; 101-102.

Regarding the investment in the truck wash, the entire \$2,293,725 should be removed from rate base. Exh 67. The truck wash is not being used as of April 13, 2012. Exh 57. Shareholders may not earn a return on this element of their investment. As discussed above, the second principle of rate base inclusion or exclusion derives directly from the statutory description of allowable rate base property as "used and useful. *Appeal of CLF* at 142; RSA 378:27, 28.

The same principle applies to the Secondary Waste Water Treatment Facility. This facility is not reasonably required for plant operation. Therefore the \$36.4m investment should be removed from rate base. In September 2011, PSNH received a draft permit from the Environmental Protection Agency (EPA) for its primary waste water treatment system at the Merrimack plant. Exh.61, *Relevant Background Information Regarding Merrimack Station's*

Draft Permit at 5. On its own initiative, PSNH installed a Secondary Waste Water Treatment facility. *Id.* PSNH spent approximately \$36.4m to install the Secondary Waste Water Treatment facility. *Id.* at 41; Jacobs Consultancy “New Hampshire Clean Air Final Report” September 10, 2012 at 57. PSNH is now arguing to the EPA that the Secondary Waste Treatment facility should not be a requirement and that its primary treatment facility should remain as the basis of its permit to operate. Tr. Day 7 PM, October 23, 2014 at 61. Therefore the \$36.4m investment is duplicative, representing overcapacity and should be removed from rate base.

3. Alternatively, The Commission May Hold A Proceeding After The Conclusion Of DE 14-238, PSNH Determination Regarding PSNH's Generation Assets, To Determine Whether Divestiture Results In An Offset To A Disallowance.

In response to cross examination by Staff counsel, Mr. Kahal provided a summary of the factors the Commission could consider regarding a disallowance. Tr. Day 3 AM October 16, 2014 at 80-81. Should the Commission make an imprudence finding and wish to weigh this quantification against benefits received and the value from divestiture, these are the factors to consider in a future proceeding. This calculation consists of adding together the Scrubber investment plus deferral costs, and then netting out prudently incurred cancelation costs and net ratepayer benefits, defined as the market value of energy and capacity provided by the plant minus the plant's variable operating costs, which were provided from July 1, 2013 until divestiture. *Id.* To this number is added the value received from any divestiture sale. *Id.* Ratepayers receive no rate benefit from the Scrubber prior to its statutory compliance deadline of July 1, 2013 because the Merrimack plant would have been allowed to operate without the Scrubber up to that time. *Id.* at 83-84.

III. CONCLUSION

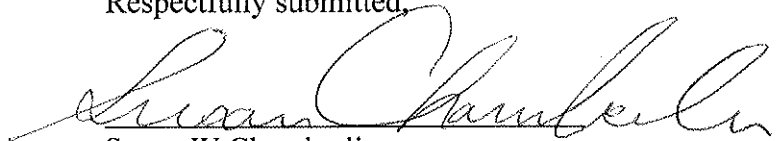
Had PSNH merely alerted the legislature of the extreme financial sensitivity of the Scrubber Project to natural gas prices, those decision makers could have undergone their own review of publically available data on natural gas prices. Having failed to focus the decision makers on the Scrubber Project's sensitivity to natural gas prices, PSNH had an even more compelling reason to monitor natural gas prices and price trends on its own. PSNH admittedly failed to do so. Exh 23 at bates pgs 411-412. PSNH unconvincingly justifies this failure by stating that if the legislature had directed the Company to perform studies, PSNH would have done so. Tr Day 6 Early PM p 46, lines 12-23. This is circular reasoning. The legislative discussion in March 2009 about capital costs and the possibility of construction delay does not replace the requirement for PSNH to initiate a discussion with decision makers about plummeting natural gas prices and the impact of such market trends on the economic viability of the Scrubber Project.

Mr. Kahal testified regarding the legislative actions in March 2009, "Unfortunately, those opinions and statements from the legislature were set forth without the Legislature really having a proper updated study and recommendation from the company, so the legislature had incomplete information." Tr Day 3 AM October 16, 2014 at 88. The legislature was not informed as to the importance and perhaps even the existence of sharply declining gas prices. The legislature understandably relied on PSNH as the expert to provide them with this information. As a vertically integrated utility protected in substantial part from the competitive market place, PSNH had a responsibility to inform decision makers of the Scrubber Project's key Financial

Sensitivities and/or monitor those key Financial Sensitivities itself, without waiting for a legislative or regulatory directive to do so.

PSNH also fails to demonstrate that all of the Scrubber project is used and useful. A portion of the reduced capacity of the Scrubber as an integral part of the Merrimack plant plus the truck wash and Secondary Waste Water Treatment facility are not used and useful. The Commission should exclude these costs from rate base or reduce utility return on equity to reflect this failure of PSNH to meet its regulatory burden of showing all assets as used and useful.

Respectfully submitted,



Susan W Chamberlin
Consumer Advocate
Office of the Consumer Advocate
21 South Fruit Street, Suite 18
Concord, NH 03301
(603) 271-1173

Certificate of Service

I hereby certify that a copy of this brief was provided via electronic mail to the individuals included on the Commission's service list for this docket.

11/14/14
Date



Susan W Chamberlin