

**STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION**

DE 08-145

FREEDOM LOGISTICS, LLC AND HALIFAX-AMERICAN ENERGY COMPANY

Petition for Investigation into Modifications at Merrimack Station

Order Denying Petition

ORDER NO. 25,008

September 1, 2009

APPEARANCES: Downs Rachlin Martin, PLLC by N. Jonathan Peress, Esq. on behalf of Freedom Logistics, LLC and Halifax-American Energy Company; Melissa A. Hoffer, Esq. on behalf of Conservation Law Foundation; Robert A. Bersak, Esq. on behalf of Public Service Company of New Hampshire; the Office of Consumer Advocate by Meredith A. Hatfield, Esq. on behalf of residential ratepayers; and Suzanne G. Amidon, Esq. on behalf of Commission Staff.

I. PROCEDURAL HISTORY

On November 13, 2008, Freedom Logistics, LLC (Freedom) and Halifax-American Energy Company, LLC (Halifax) (collectively, Petitioners) filed a petition and supporting exhibits requesting that the Commission initiate a proceeding to determine, pursuant to RSA 369-B:3-a, whether it is in the public interest of retail customers of Public Service Company of New Hampshire (PSNH) for PSNH to modify Merrimack Station (Merrimack) by investing in capital improvements, including replacement of a steam turbine, that increase Merrimack's net power output. The Petitioners assert that the increase in power output was undertaken to offset the power consumption requirements of scrubber technology being installed to control mercury emissions.

The Petitioners stated that PSNH plans to install scrubber technology at Merrimack Station to control mercury emissions pursuant to RSA 125-O:11 through 18 (Mercury Reduction

Law), and that the installation of scrubber technology will decrease Merrimack's net generation capability and reduce efficiency at the station. The Petitioners contend that, as a result, PSNH intended to modify Merrimack for the purpose of restoring generation capacity.

According to the petition, the September 2, 2008 Report filed by PSNH in Docket No. DE 08-103, *Investigation of PSNH Installation of Scrubber Technology Station*, (Report) contained no discussion regarding the extent to which the installation of the scrubber technology will reduce Merrimack's generation capacity. The Petitioners further state that the Report did not distinguish between the costs associated with the scrubber and those associated with the restoration of generation capacity. Petitioners argue that PSNH has the legal obligation to identify the activities and costs associated with the restoration of generation capacity. In addition, the Petitioners claim that the power restoration modification of Merrimack requires PSNH to seek the Commission's approval based upon a finding that the modification is in the public interest of PSNH's retail customers pursuant to RSA 369:B:3-a.

The petition states that, although the Mercury Reduction Law does not mandate that PSNH restore the generating capacity to Merrimack pre-scrubber levels, it does say that PSNH may invest in capital improvements at Merrimack that increase its net capability "within the requirements and regulations enforceable by the state or federal government or both." RSA 125-O:13, IV. Because the restoration of power capacity is optional, the Petitioners assert that the "plenary authority of the Commission to determine whether modifications are in the public/ratepayers' interest applies to the activities to restore lost capacity at the [Merrimack] Station." Petition at 1.

On November 24, 2008, PSNH filed a motion to dismiss, and on December 5, 2008 the Petitioners filed an objection. PSNH, on December 15, 2008, filed a motion to strike the

Petitioner's objection. On December 24, 2008, the Petitioners filed an objection to PSNH's motion to strike

On January 5, 2009, the Commission issued an order of notice scheduling a prehearing conference for January 16, 2009. The Office of Consumer Advocate (OCA) filed a letter on January 6, 2009 stating that it would be participating in the docket on behalf of residential ratepayers pursuant to RSA 363:28. On January 13, 2009, the Conservation Law Foundation (CLF) filed a petition to intervene. PSNH objected to CLF's petition at the prehearing conference.

At the prehearing conference, the Commission directed the parties and Staff to develop a proposal on how to proceed with the docket. The Commission concluded that the matter could be resolved by the filing of stipulated facts and briefs. Hearing Transcript of January 16, 2009 at 59. On March 27, 2009, Staff filed a letter explaining that the parties had failed to reach an agreement as to the facts and recommending that the Commission direct the parties to file a stipulation of facts. On April 2, 2009, the Commission issued a secretarial letter directing the parties to file a stipulation of facts by April 8, 2009. In addition, the Commission granted CLF's petition to intervene, and stated that all other motions and objections were held under advisement.

Stipulated facts were filed by the Petitioners, PSNH and CLF on April 8, 2009, together with a recommendation that the Commission schedule briefs. On May 4, 2009, the Commission issued a secretarial letter requiring that briefs be filed by May 22, 2009. The Commission directed that the briefs address the following two legal issues:

1. Whether the actions described in the stipulated facts amount to modifications for purposes of RSA 369-B:3-a, and, if so,

2. Whether PSNH was permitted to undertake those actions without Commission approval pursuant to RSA 125-O:13, IV.

On May 22, 2009, PSNH filed its brief, and CLF filed a brief on behalf of itself and the Petitioners.

II. STIPULATED FACTS

The following facts are stipulated by Freedom, Halifax and PSNH:

1. PSNH conducted a planned outage of Merrimack Unit 2 from April 1 to May 22, 2008 (April-May Outage).

2. During the April-May Outage, PSNH performed the capital projects, and what it characterizes as operation and maintenance projects, and other balance of plant maintenance described in PSNH's response to Data Request TS-01, Q-Staff-002.

3. PSNH's new HP/IP turbine was designed to increase the fossil fuel generation efficiency and net generating output of Merrimack Unit 2.

4. Costs accrued thus far in connection with the work described in PSNH's response to Data Request TS-01, Q-Staff-001 . . . are \$11.4 million dollars [*sic*].

5. The new turbine is expected to increase the net capability of Merrimack Unit 2 by a base of 6 megawatts (MW) to an upper range of 13 MW, resulting in net capability increases of 1.87% to 4.06%. According to PSNH, a potential increase of up to 4.175 additional MW could be realized from the new turbine if additional potential efficiencies are achieved.

6. The turbine being replaced was originally installed in 1968. The salvage value in 2008 was \$34,645.

7. The parasitic load of the scrubber will cause the net power output (as measured in MW) from Merrimack Station to be reduced.

8. No changes in the types of coal to be burned at the Station are expected due to the new turbine.

9. In April 2006, the turbine upgrade was approved by PSNH personnel at an estimated cost of \$9 million to \$15 million.

III. POSITIONS OF THE PARTIES

A. Freedom Logistics, LLC, Halifax-American Energy Company and Conservation Law Foundation

CLF filed a brief on behalf of itself and Petitioners. CLF contended that the installation of a new HP/IP turbine and certain other work at Merrimack conducted during the April-May Outage constitute substantial modifications to Merrimack that were undertaken for the purpose of accommodating the operation of the wet flue gas desulphurization system mandated by RSA

125-O *et seq.* CLF Brief at 2. According to CLF, the work PSNH did at Merrimack during the April-May Outage increased the output of Merrimack in the range of 6 to 17.175 megawatts (MWs). *Id.* CLF states that, during the April-May Outage, PSNH removed the then-installed HP/IP turbine and replaced it with a new HP/IP turbine and conducted additional work as set forth in the stipulated facts. According to CLF, PSNH said that it installed the new turbine to increase turbine efficiency, increase output and reduce maintenance outages. *Id.* at 4. CLF also said that the cost of the modifications to Merrimack related to the turbine replacement was \$11.4 million, as of February 20, 2009. *Id.*

CLF noted that PSNH filed a petition with the Commission seeking approval of the modification pursuant to RSA 369-B:3-a when PSNH sought to convert its Unit 5 coal-fired boiler at Schiller Station to a wood-burning unit. CLF argued that the modification at Schiller was similar to the maintenance at Merrimack because it also involved the installation of a new, purportedly more efficient boiler.¹ CLF Brief at 4. With respect to the conversion of Schiller, CLF pointed out that the Commission agreed that the conversion was a modification within the meaning of RSA 369-B:3-a. CLF Brief at 5. CLF asserted that “[p]ursuant to the Commission’s precedent in the Schiller matter, installation of a new boiler—similar to PSNH’s replacement of the key components of MK2, the turbine and generator, in addition to other work—constitutes a modification under RSA 369-B:3-a. Accordingly, PSNH was obligated, just as it was in the Schiller matter, to seek the Commission’s approval in advance of undertaking the modification.” CLF Brief at 5.

CLF stated that the increased capacity created by the new turbine will not be offset by the scrubber until the scrubber is complete and fully operational. Further, according to CLF, the

¹ See Docket No. DE 03-166, Public Service Company of New Hampshire Petition for Authority to Modify Schiller Station Order No. 24,276 (February 6, 2004) 89 NH PUC 70.

Commission previously found that construction or acquisition of new generation capacity by PSNH appears to require prior legislative authorization. *See* Docket No. DE 04-072, *Public Service Company of New Hampshire 2004 Least Cost Integrated Resource Plan*, Order No. 24,695 (November 8, 2006) 91 NH PUC 527, 540. Therefore, CLF claimed that PSNH proceeded with the expansion of the capacity at Merrimack without obtaining the necessary approval of either the Legislature or the Commission.²

According to CLF, the Commission's approval pursuant to RSA 369-B:3-a is one of the state regulatory approvals PSNH needed pursuant to RSA 125-O: 13, *supra*, before increasing its net capacity to account for the scrubber's parasitic load. CLF Brief at 6. CLF urged the Commission to reject PSNH's attempt to use RSA 125-O as a "shield to avoid Commission review of what amounts to a substantial modification to increase PSNH's capacity, absent Legislative authorization for any increase in excess of what may be necessary to offset scrubber power demand" CLF Brief at 6. CLF argued that PSNH's authority under RSA 125-O:13, IV to invest in improvements to increase net capacity at Merrimack is dependent on 1) the actual scrubber technology having been installed and, 2) obtaining all necessary approvals, including the Commission's approval under RSA 369-B:3-a. CLF Brief at 7-8. In addition, CLF said that PSNH, pursuant to RSA 125-O:13, IV, can only increase its capacity as much as its pre-scrubber capability is reduced by the operation of the scrubber, and no more. CLF Brief at 8. CLF states that "it appears that PSNH has increased MK2's capacity well beyond the amount reasonably anticipated to address scrubber parasitic load [citations omitted] and certainly for the time period following the April-May Outage until the scrubber is operational" in excess of its authority under the Mercury Reduction Law. *Id.*

² The brief also references representations PSNH purportedly made to the Department of Environmental Services and the Site Evaluation Committee. The parties here stipulated to certain facts which are used in this order and, therefore, those references are omitted.

Finally, CLF argued that the Legislature did not find it in the public interest that PSNH increase its capacity at Merrimack to offset the power reduction caused by the installed scrubber technology. *Id.* at 9. CLF requested that the Commission find that: 1) PSNH's action to expand capacity at Merrimack is a modification within the meaning of RSA 369-B:3-a; and 2) nothing in RSA 125-O exempts PSNH from seeking the public interest determination pursuant to RSA 369-B:3-a.

B. Public Service Company of New Hampshire

1. Standing

In its brief, PSNH reiterated the argument it made in its motion to dismiss that the Petitioners lack standing to seek the relief requested. PSNH said that neither petitioner demonstrated that it has a right, duty, privilege, immunity or other substantial interest that may be affected by the matter presented. PSNH Brief at 4. The Company pointed out that, even if the Petitioners were competitors of PSNH, the New Hampshire Supreme Court has noted that “[i]njury resulting from competition is rarely classified as a legal harm but rather is deemed a natural risk in our free enterprise economy.” *Valley Bank v. State*, 115 N.H. 151, 154 (1975) [citation omitted]. PSNH Brief at 5.

Citing the Commission's procedural rules, PSNH also pointed out that the Petitioners' filing does not meet the requirements of the rule governing motions for declaratory judgment because the petition does not implicate the legal rights or responsibilities of the Petitioners. *See* New Hampshire Code Admin. Rule Puc 207.01(c)(3). According to PSNH, because RSA 369-B:3-a involves the public interest of retail customers of PSNH, and not of competitors, the legal rights and responsibilities of the Petitioners are not implicated in the question of whether the replacement of the turbine at Merrimack 2 is a modification within the meaning of the law.

Therefore, PSNH concluded that, pursuant to Puc 207.01(c)(3), the Commission should dismiss Petitioners' filing for lack of standing.

2. Whether Work Conducted in April-May Outage is Subject to RSA 369-B:3-a

In its brief, PSNH claimed that the Mercury Reduction Law eliminates any requirement for the Commission to make a preliminary public interest determination under RSA 369-B:3-a for capital improvements made by PSNH at Merrimack that increase its net capability to offset power consumption requirements of the scrubber technology. According to PSNH, RSA 125-O:13, IV gives the Company authority to make such capital improvements to mitigate the loss of net power output attributable to the scrubber. PSNH Brief at 8. PSNH noted that the parties had agreed in the stipulation of facts that the parasitic load of the scrubber will cause a reduction in the net power output from Merrimack. PSNH further observed that, because the Mercury Reduction Law gives PSNH authority to make these improvements, PSNH will only be subject to the traditional post-installation "prudent-investment rule" determination. *Id.* at 9.

The Company asserted that the turbine and all the related improvements are already installed, and are used and useful. PSNH stated that it filed its annual application for reconciliation of energy service and stranded cost charges on May 1, 2009 (Docket No. DE 09-091), and that one of the matters to be reviewed in that docket is the prudence of the Company's decision to replace the HP/IP turbine at Merrimack. PSNH argued that the precise inquiry that the Petitioners seek in the instant docket – whether the modification at Merrimack to restore the diminution in capacity resulting from the installation of scrubber technology are in the public interest – will be considered by the Commission in Docket No. DE 09-091. PSNH Brief at 9-10.

According to PSNH, the plain meaning of RSA 125-O:13, IV is clear when the overall statutory scheme of the Mercury Reduction Law is considered. PSNH argued that the Mercury

Reduction Law mandates the installation of scrubber technology at Merrimack, and gives PSNH the option and authority to make capital improvements that increase the station's net capability to offset the power consumption requirements of the scrubber. The Company asserted that the statutory language is plain and unambiguous. Consequently, because RSA 125-O:13, IV allows PSNH to make such capital improvements at Merrimack, PSNH concluded that it is unnecessary to consider whether or not the turbine replacement project was either routine maintenance or a modification that might fall within the purview of RSA 369-B:3-a. PSNH Brief at 11.

PSNH noted that, as a utility, it has the responsibility to prudently operate its fossil/hydro generating assets, and that part of that responsibility is the periodic maintenance of those assets to ensure that they will continue to produce energy and capacity safely, reliably and economically. According to PSNH, capital projects that increase the efficiency of PSNH's generating assets and which do not materially impact the capacity or footprint of the plant have been routinely performed as part of the utility's prudence obligation. *Id.* at 12.

In its brief, PSNH stated that the Commission's current practice includes a requirement that PSNH comply with the Fossil Fuel Generation Efficiency Standard contained in the Energy Policy Act of 2005. Public Law No. 109-58, 119 Stat. 594 (2005). *See* Order No. 24,893 (September 15, 2008) in Docket No. DE 06-061, *Investigation into Standards in Energy Policy Act of 2005*. PSNH Brief at 12. That standard requires that "each electric utility shall develop and implement a 10 year plan to increase the efficiency of its fossil fuel generation." [citation omitted] *Id.*, at 12-13. PSNH noted that the Commission, in Order No. 24,893 (September 15, 2008), determined "[w]e also agree that further consideration of fossil fuel generation efficiency is not necessary because the Commission reviews fossil fuel generation efficiency in connection with PSNH's annual stranded cost charge and energy service charge reconciliation The

scrutiny given to PSNH's generation operations constitutes the Commission's implementation of a fossil fuel generation efficiency standard" Order No. 24,893 at 7. The Company noted that the parties had agreed in the stipulated facts that the new HP/IP turbine will increase the net generating output at Merrimack. Consequently, PSNH concluded that the replacement of the turbine with a more efficient one conformed to the Commission's implementation of a fossil fuel generation efficiency standard in Order No. 24,893. PSNH Brief at 14.

PSNH claimed that RSA 369-B:3-a cannot be reasonably interpreted to require pre-approval of capital projects at PSNH's generating stations that do not materially impact the capacity or footprint of the plant. Otherwise, the Commission would have to pre-approve virtually every capital activity that occurs during plant maintenance outages – both scheduled and unscheduled. The Company said that it has historically performed similar replacements at generating stations as part of regularly scheduled maintenance.³ PSNH maintained that, despite the fact that the capital investment at Merrimack increased net power output, the capital investments that took place in the April-May Outage are in the nature of routine maintenance. PSNH Brief at 15.

In conclusion, PSNH argued that the Commission should dismiss the petition due to 1) Petitioners' lack of standing, 2) the inapplicability of RSA 369-B:3-a as a means to review capital improvements made at Merrimack intended to increase the station's net output to offset the power requirements of the scrubber pursuant to RSA 125-O:13, IV, 3) the fact that those improvements are used and useful and subject to a prudence review in Docket No. DE 09-091, and 4) that notwithstanding RSA 125-O:13, IV, the capital improvements made during the April-May Outage constitutes routine maintenance outside the scope of RSA 369-B:3-a.

³ PSNH listed examples of such improvements. See PSNH Brief at 14.

IV. COMMISSION ANALYSIS

In this proceeding we asked the parties to brief the following questions:

1. Whether the actions described in the stipulated facts amount to modifications for purposes of RSA 369-B:3-a, and, if so,
2. Whether PSNH was permitted to undertake those actions without Commission approval pursuant to RSA 125-O:13, IV.

Our analysis of these legal questions turns on our interpretation of two statutes:

RSA 369-B:3-a. Divestiture of PSNH Generation Assets. . . . PSNH may divest its generation assets if the commission finds that it is in the economic interest of retail customers of PSNH to do so, and provides for the cost recovery of such divestiture. Prior to any divestiture of its generation assets, PSNH may modify or retire such generation assets if the commission finds that it is in the public interest of retail customers of PSNH to do so, and provides for the cost recovery of such modification or retirement.

RSA 125-O:13 Compliance.

I. The owner shall install and have operational scrubber technology to control mercury emissions at Merrimack Units 1 and 2 no later than July 1, 2013. The achievement of this requirement is contingent upon obtaining all necessary permits and approvals from federal, state and local regulatory agencies and bodies; however, all such regulatory agencies and bodies are encouraged to give due consideration to the general court's finding that the installation and operation of scrubber technology is in the public interest.

IV. If the net power output (as measured in megawatts) from Merrimack Station is reduced, due to the power consumption requirements or operational inefficiencies of the installed scrubber technology, the owner may invest in capital improvements at Merrimack Station that increase its net capability, within the requirements and regulations of programs enforceable by the state or federal government, or both.

Beginning with the first question briefed, we address whether certain capital improvements made at Merrimack Station are "modifications" so as to trigger our review pursuant to RSA 369-B:3-a. The capital improvements at issue center around the replacement of the 1968 vintage HP/IP turbine at Merrimack Station with a new HP/IP turbine. When interpreting a statute we begin with the plain meaning of the language used. Further, consistent with New Hampshire Supreme Court precedent, "[w]e will follow common and approved usage

except where it is apparent that a technical term is used in a technical sense.” *Appeal of Public Service Company of New Hampshire*, 125 N.H. 46, 52 (1984).

Thus, we begin with the meaning of the word modify used in RSA 369-B:3-a. The word “modify” means “to change in form or character: alter.” Webster’s II New College Dictionary, 2005 (3rd edition). Petitioners, PSNH and CLF agreed to the Stipulated Facts filed in this docket, including the following:

5. The new turbine is expected to increase the net capability of Merrimack Unit 2 by a base of 6 megawatts (MW) to an upper range of 13 MW, resulting in net capability increases of 1.87% to 4.06%. According to PSNH, a potential increase of up to 4.175 additional MW could be realized from the new turbine if additional potential efficiencies are achieved.

Achieving an increase of 1.87% to 4.06% in Merrimack’s energy output by replacing a turbine installed in 1968 with a new, more efficient turbine does not change the form or character of Merrimack Station. Such action, moreover, is generally consistent with the federal standard for fossil fuel generation efficiency adopted in Order No. 24,893. The actions undertaken here by PSNH to change out or replace a turbine – in the same location with a turbine of the same form and type, albeit more efficient – are in the nature of normal operation and maintenance activities and do not rise to the level of a modification of the Merrimack generation assets, which would require prospective Commission approvals. These activities are not material in size or scope, and they do not equate to the construction or acquisition of new capacity. The turbine replacement and the resulting increase in capacity is, however, a matter related to the prudence of PSNH’s operation and maintenance activities, which is the subject of Docket No. DE 09-091 and traditional retrospective review.

We next turn to CLF’s argument that the turbine replacement at Merrimack is comparable to the actions PSNH undertook at its Schiller Unit 5 to enable the unit to burn wood. *See Docket No. DE 03-166*. In that case, PSNH proposed to convert Schiller Station Unit 5, a

45-megawatt coal-fired generation plant to a plant that would primarily burn wood but that could also burn coal. The conversion required replacement of the boiler and development of a substantial wood handling yard. The estimated cost of the conversion at the time of the Commission's initial decision on the petition was almost \$70 million. *See* Order No. 24,276 (February 6, 2004), 89 NH PUC 70, Docket No. 03-166, *Public Service Company of New Hampshire Petition to Modify Schiller Station*. Unlike the case before us, the changes made to Schiller were modifications inasmuch as, among other things, they changed the character of the station by enabling it to burn a different fuel.

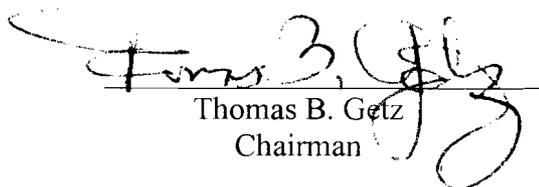
The replacement of the Merrimack turbine increased the efficiency of the unit but the unit will still burn the same fuel as it burned prior to the replacement, and the boiler and fuel cycle are apparently unchanged as a result of this equipment replacement. Accordingly, we find that the replacement of the HP/IP turbine at Merrimack Station does not change the form or character of the generation asset and therefore does not constitute a modification of the plant that requires us to make a prospective determination of the public interest relative to PSNH's ratepayers.

Because we reach this decision based on our interpretation of RSA 369-B:3-a, we need not address the arguments made regarding the Mercury Reduction Law. At the same time, we note that the motion to dismiss, the associated objections, and the motion to strike raise a number of arguments concerning procedural infirmities, notably the standing of the Petitioners to pursue their claim. Because the Petitioners have raised a question of some importance, we address the core issue in controversy pursuant to RSA 365:5 and our authority to conduct an independent inquiry upon our own motion. Thus, we need not address the various procedural arguments.

Based upon the foregoing, it is hereby

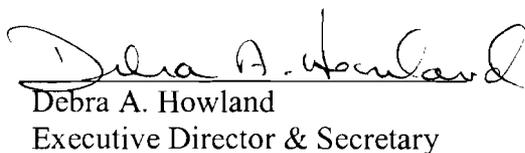
ORDERED, that Freedom Logistics, LLC and Halifax-American Energy Company's petition is hereby DENIED insofar as it seeks a determination that PSNH's turbine replacement at Merrimack Station is a modification pursuant to RSA 369-B:3-a.

By order of the Public Utilities Commission of New Hampshire this first day of September, 2009.


Thomas B. Getz
Chairman


Clifton C. Below
Commissioner

Attested by:


Debra A. Howland
Executive Director & Secretary