

STATE OF NEW HAMPSHIRE
SUPREME COURT

2010 TERM

No. 2010-0121

In re

Motion for Declaratory Ruling of

Campaign for Ratepayer Rights
Conservation Law Foundation
Freedom Logistics, LLC
Granite Ridge Energy, LLC
Halifax-American Energy Co., LLC
Trans-Canada Hydro Northeast, Inc.
Union of Concerned Scientists
and
Jackson Perry, Petitioners

On Appeal by Petition under RSA 541
From Orders of the
New Hampshire Site Evaluation Committee

**BRIEF OF AMICUS CURIAE TOXICS ACTION CENTER AND NEW HAMPSHIRE
RESIDENTS JANET WARD, JUNE ADINAH, ROBERT HACKWELL, KAREN IRWIN,
CHRISTINE HAMM, STEPHANY MARCHUT LAVALLEE, HESTON SCHEFFEY,
LIZZ VAN SUAN, RON LAJOIE, SHAUNA FERGUSON, SUSAN COVERT, DANIEL
DESFOSES AND JOYCE BLYTHE**

By their Attorney:

Michelle B. Walker, Esq.
Pending Pro Hac Vice
Environmental and Natural Resources Law Clinic
Vermont Law School
P.O. Box 96, 164 Chelsea Street
South Royalton, VT 05068
Phone: (802) 831-1624
mwalker@vermontlaw.edu

In Association With:

Steven Whitley
NH Bar No.17833
Attorney
Baldwin & Callen, PLLC
3 Maple Street
Concord, NH 03301
Phone: (603) 225-2585
SWhitley@nhlandlaw.com

* With significant assistance from Vermont Law School Student Clinicians Dorothy Borden, Elizabeth Newbold, Jonathan Voegele, Henry Tashjian, and Anastasia Douglas.

TABLE OF CONTENTS

TABLE OF CONTENTS.....i

TABLE OF AUTHORITIES.....iv

STATUTORY PROVISIONS.....v

STATEMENT OF INTEREST OF AMICUS CURIAE.....1

STATEMENT OF FACTS.....3

SUMMARY OF THE ARGUMENT.....6

ARGUMENT.....6

 I. AMICUS CURIAE ARE PROPERLY BEFORE THE COURT AND MAY
 PRESENT THE COURT WITH INFORMATION AND COLLECTED DATA
 BEYOND THE ADMINISTRATIVE RECORD.....6

 A. Environmental Considerations And Issues Were Presented By The Parties
 And Addressed By The SEC In Its Decisions.....8

 B. Additional Environmental Information Regarding The Facility Falls Within
 An Exemption For Extra-Record Evidence And Should Be Considered By
 The Court.....11

 II. NEW HAMPSHIRE LAW REQUIRES THE SEC TO FULLY REVIEW
 SIZEABLE ADDITIONS AT ENERGY FACILITIES FOR ENVIRONMENTAL
 IMPACTS.....14

 A. The SEC Must Review And Certify Any Sizeable Addition At Merrimack
 Station, As Well As The Larger Facility.....14

 B. The New Hampshire Legislature Did Not Relieve The SEC Of Its Duties By
 Passing The Scrubber Law.....15

 C. The Environmental Issues Surrounding The Scrubber Project And The
 Facility Demonstrate That Environmental Review Is Necessary To Fulfill The
 Purpose Of The Siting Law.....16

 III. THE SCRUBBER PROJECT AND MERRIMACK STATION
 UNREASONABLY IMPACT THE WATER QUALITY OF THE
 MERRIMACK RIVER, AND THE SEC MUST REVIEW AND MITIGATE
 THESE IMPACTS.....17

A.	The Merrimack River Is Impaired By Mercury.....	17
B.	New Hampshire Has Adopted A Strategy For Significantly Reducing Mercury Discharges To New Hampshire Waters, Including The Merrimack River.....	18
C.	Mercury Will Be Discharged To The Merrimack River After The Scrubber Project Is Complete.....	19
D.	The SEC Has A Duty To Fully Review The Environmental Impact Associated With The Scrubber Project And Merrimack Station And Mitigate Unreasonable Adverse Affects By Imposing Certificate Conditions, Such As Eliminating Mercury Discharges To The Merrimack River.....	21
IV.	NEW HAMPSHIRE CITIZENS ARE UNREASONABLY IMPACTED BY MERRIMACK STATION’S AIR EMISSIONS, AND THE SEC MUST REVIEW AND MITIGATE THESE IMPACTS.....	22
A.	New Hampshire Citizens Are Exposed To Unsafe Levels of Ground Level Ozone.....	22
B.	Merrimack Station Is New Hampshire’s Largest Stationary Source Emitter of NO _x , A Precursor Pollutant To Ozone, And Could Further Reduce NO _x Emissions With Existing Pollution Control Equipment.....	24
C.	The SEC Has A Duty To Fully Review The Environmental Impact Associated With The Scrubber Project And Merrimack Station And Mitigate Unreasonable Adverse Effects By Imposing Certificate Conditions, Such As Maximizing Operation Of The SCR System To Reduce NO _x Emissions.....	27
V.	MERRIMACK STATION UNREASONABLY IMPACTS THE NATURAL ENVIRONMENT BY EMITTING GREENHOUSE GASES THAT INCREASE THE EFFECTS OF CLIMATE CHANGE, AND THE SEC MUST REVIEW AND MITIGATE THESE IMPACTS.....	29
A.	New Hampshire Citizens Will Suffer From the Effects Of Climate Change, And The State Has Prioritized This Important Issue.....	29
B.	Merrimack Station Contributes To And Increases The Effects Of Climate Change With Substantial CO ₂ Emissions.....	32
C.	The SEC Must Review And Consider The Climate Change Impacts From Merrimack Station’s CO ₂ Emissions and Require Mitigation For The Adverse Environmental Effects.....	32
	CONCLUSION.....	34

CERTIFICATE OF SERVICE.....35

TABLE OF AUTHORITIES

Cases

Conservation Law Foundation of New England, Inc. v. Clark, 590 F.Supp. 1467 (D. Mass. 1984).....7, 12

In re Grondin’s Estate, 98 N.H. 313 (1953).....7

Massachusetts v. Env’tl. Prot. Agency, 549 U.S. 497 (2007).....29

Sierra Club v. Wagner, 581 F.Supp.2d 246 (D.N.H. 2008).....7

Valley Citizens for a Safe Environment v. Aldridge, 886 F.2d 458 (1st Cir. 1989).....7, 12

Verizon New England, Inc. v. City of Rochester, 151 N.H. 263 (2004).....7

Whitman v. American Trucking Associations, 531 U.S. 457 (2001).....22

Statutes

RSA 162-H *et seq.*.....3

RSA 162-H: 1.....14, 15

RSA 162-H: 2.....14

RSA 162-H: 5.....14

RSA 162-H: 10.....13, 27

RSA 162-H: 16.....13, 14, 15, 16, 22, 27

RSA 125-O: 1.....31, 32

RSA 125-O: 13.....15, 16

42 U.S.C. § 7409(b).....22

STATUTORY PROVISIONS

RSA 162-H Energy Facility Evaluation, Siting, Construction and Operation

162-H:1 Declaration of Purpose. – The legislature recognizes that the selection of sites for energy facilities, including the routing of high voltage transmission lines and energy transmission pipelines, will have a significant impact upon the welfare of the population, the location and growth of industry, the overall economic growth of the state, the environment of the state, and the use of natural resources. Accordingly, the legislature finds that it is in the public interest to maintain a balance between the environment and the need for new energy facilities in New Hampshire; that undue delay in the construction of needed facilities be avoided and that full and timely consideration of environmental consequences be provided; that all entities planning to construct facilities in the state be required to provide full and complete disclosure to the public of such plans; and that the state ensure that the construction and operation of energy facilities is treated as a significant aspect of land-use planning in which all environmental, economic, and technical issues are resolved in an integrated fashion, all to assure that the state has an adequate and reliable supply of energy in conformance with sound environmental principles. The legislature, therefore, hereby establishes a procedure for the review, approval, monitoring, and enforcement of compliance in the planning, siting, construction, and operation of energy facilities.

162-H:2 Definitions. –

...
II-a. "Certificate" or "certificate of site and facility" means the document issued by the committee, containing such terms and conditions as the committee deems appropriate, that authorizes the applicant to proceed with the proposed site and facility.

...
VII. "Energy facility" means:

(a) Any industrial structure that may be used substantially to extract, produce, manufacture, transport or refine sources of energy, including ancillary facilities as may be used or useful in transporting, storing or otherwise providing for the raw materials or products of any such industrial structure. This shall include but not be limited to industrial structures such as oil refineries, gas plants, equipment and associated facilities designed to use any, or a combination of, natural gas, propane gas and liquefied natural gas, which store on site a quantity to provide 7 days of continuous operation at a rate equivalent to the energy requirements of a 30 megawatt electric generating station and its associated facilities, plants for coal conversion, onshore and offshore loading and unloading facilities for energy sources and energy transmission pipelines that are not considered part of a local distribution network.

(b) Electric generating station equipment and associated facilities designed for, or capable of, operation at any capacity of 30 megawatts or more.

(c) An electric transmission line of design rating of 100 kilovolts or more, associated with a generating facility under subparagraph (b), over a route not already occupied by a transmission line or lines.

(d) An electric transmission line of a design rating in excess of 100 kilovolts that is in excess of 10 miles in length, over a route not already occupied by a transmission line.

(e) A new electric transmission line of design rating in excess of 200 kilovolts.

(f) A renewable energy facility.

(g) Any other facility and associated equipment that the committee determines requires a certificate, consistent with the findings and purposes of RSA 162-H:1, either on its own motion or by petition of the applicant or 2 or more Appellants as defined in RSA 162-H:2, XI.

...

162-H:5 Prohibitions and Restrictions. –

I. No person shall commence to construct any energy facility within the state unless it has obtained a certificate pursuant to this chapter. Such facilities shall be constructed, operated and maintained in accordance with the terms of the certificate. Such certificates are required for sizeable changes or additions to existing facilities. Such a certificate shall not be transferred or assigned without approval of the committee.

II. Facilities certified pursuant to RSA 162-F or RSA 162-H prior to January 1, 1992, shall be subject to the provisions of those chapters; however, sizable changes or additions to such facilities shall be certified pursuant to this chapter.

III. The applications shall be governed by the applicable laws, rules and regulations of the agencies and shall be subject to the provisions of RSA 162-F or RSA 162-H in effect on the date of filing. Notwithstanding the foregoing, an applicant may request the site evaluation committee to assume jurisdiction and in the event that the site evaluation committee agrees to assert jurisdiction, the facility shall be subject to the provisions of this chapter.

IV. [Repealed.]

162-H:10 Public Hearing; Studies; Rules. –

I. Within 30 days after acceptance of an application for a certificate of site and facility, pursuant to RSA 162-H:7, the site evaluation committee shall hold at least one joint public hearing in each county in which the proposed facility is to be located and shall publish a public notice not less than 14 days before said hearing in one or more newspapers having a regular circulation in the county in which the hearing is to be held, describing the nature and location of the proposed facilities. The public hearings shall be joint hearings, with representatives of the other agencies that have jurisdiction over the subject matter and shall be deemed to satisfy all initial requirements for public hearings under statutes requiring permits relative to environmental impact. The hearings shall be for public information on the proposed facilities with the applicant presenting the information to the site evaluation committee and to the public. Notwithstanding any other provision of law, the hearing shall be a joint hearing with the other state agencies and shall be in lieu of all hearings otherwise required by any of the other state agencies; provided, however, if any of such other state agencies does not otherwise have authority to conduct hearings, it may not join in the hearing under this chapter; provided further, however, the ability or inability of any of the other state agencies to join shall not affect the composition of the committee under RSA 162-H:3 nor the ability of any member of the committee to act in accordance with this chapter.

II. Except for informational hearings, subsequent hearings shall be in the nature of adjudicative proceedings under RSA 541-A and may be held in the county or one of the counties in which the proposed facility is to be located or in Concord, New Hampshire, as determined by the site evaluation committee. The committee shall give adequate public notice of the time and place of each subsequent session.

III. The site evaluation committee shall consider and weigh all evidence presented at public hearings and shall consider and weigh written information and reports submitted to it by

members of the public before, during, and subsequent to public hearings. The committee shall grant free access to records and reports in its files to members of the public during normal working hours and shall permit copies of such records and reports to be made by interested members of the public at their expense.

IV. The site evaluation committee shall require from the applicant whatever information it deems necessary to assist in the conduct of the hearings, and any investigation or studies it may undertake, and in the determination of the terms and conditions of any certificate under consideration.

V. The site evaluation committee and counsel for the public shall jointly conduct such reasonable studies and investigations as they deem necessary or appropriate to carry out the purposes of this chapter and may employ a consultant or consultants, legal counsel and other staff in furtherance of the duties imposed by this chapter, the cost of which shall be borne by the applicant in such amount as may be approved by the committee. The site evaluation committee and counsel for the public are further authorized to assess the applicant for all travel and related expenses associated with the processing of an application under this chapter.

VI. The site evaluation committee shall issue such rules to administer this chapter, pursuant to RSA 541-A, after public notice and hearing, as may from time to time be required.

162-H:16 Findings and Certificate Issuance. –

I. The committee shall incorporate in any certificate such terms and conditions as may be specified to the committee by any of the other state agencies having jurisdiction, under state or federal law, to regulate any aspect of the construction or operation of the proposed facility; provided, however, the committee shall not issue any certificate under this chapter if any of the other state agencies denies authorization for the proposed activity over which it has jurisdiction. The denial of any such authorization shall be based on the record and explained in reasonable detail by the denying agency.

II. Any certificate issued by the site evaluation committee shall be based on the record. The decision to issue a certificate in its final form or to deny an application once it has been accepted shall be made by a majority of the full membership. A certificate shall be conclusive on all questions of siting, land use, air and water quality.

III. The committee may consult with interested regional agencies and agencies of border states in the consideration of certificates.

IV. The site evaluation committee, after having considered available alternatives and fully reviewed the environmental impact of the site or route, and other relevant factors bearing on whether the objectives of this chapter would be best served by the issuance of the certificate, must find that the site and facility:

(a) Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in continuing compliance with the terms and conditions of the certificate.

(b) Will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies.

(c) Will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety.

(d) [Repealed.]

V. [Repealed.]

VI. A certificate of site and facility may contain such reasonable terms and conditions as the committee deems necessary and may provide for such reasonable monitoring procedures as may be necessary. Such certificates, when issued, shall be final and subject only to judicial review.

VII. The committee may condition the certificate upon the results of required federal and state agency studies whose study period exceeds the application period.

RSA 125-0:13 Multiple Pollutant Reduction Program: Mercury Emissions

125-O:1 Findings and Purpose. –

I. The general court finds that while air quality has improved in recent years, scientific advances have demonstrated that adequate protection of public health, environmental quality, and economic well-being - the 3 cornerstones of New Hampshire's quality of life - requires additional, concerted reductions in air pollutant emissions. The general court also finds that the state's tradition of environmental leadership - setting an example for similarly feasible air pollution reductions from upwind jurisdictions - is also well served by additional emission reductions.

II. Recent studies and scientific evidence, documented in the New Hampshire Clean Power Strategy issued in January 2001 by the department of environmental services, indicates that significant negative human health and ecosystem impacts continue to be caused by air pollution. The general court finds that the substantial quantities of several harmful air pollutants that continue to be emitted from existing fossil fuel burning steam electric power plants, despite recent reductions in the emission of certain air pollutants from some of these facilities, contribute to these harmful impacts and that additional emissions reductions from these sources are warranted.

III. Specifically, the general court finds that aggressive further reductions in emissions of sulfur dioxide (SO₂), oxides of nitrogen (NO_x), mercury, and carbon dioxide (CO₂) must be pursued. These pollutants are primarily responsible for the human health and ecosystem impacts documented in the New Hampshire Clean Power Strategy issued in January 2001 by the department of environmental services.

IV. The general court finds that, as demonstrated by recent analyses, a high quality-of-life environment has been, and will continue to be, essential to New Hampshire's economic well-being. The general court further finds that protecting New Hampshire's high quality-of-life environment by reducing air pollutant emissions returns substantial economic benefit to the state through avoided health care costs; greater tourism resulting from healthier lakes and improved vistas; more visits by fishermen, hunters, and wildlife viewers to wildlife ecosystems, and a more productive forest and agricultural sector.

V. For the above reasons and others, the general court finds that substantial additional reductions in emissions of SO₂, NO_x, mercury, and CO₂ must be required of New Hampshire's existing fossil fuel burning steam electric power plants. Due to the collateral benefits and economies of scale associated with reducing multiple pollutant emissions at the same time, the general court finds that such aggressive emission reductions are both feasible and cost-effective if implemented simultaneously through a comprehensive, integrated power plant strategy.

VI. The general court also finds that the environmental benefits of air pollutant reductions can be most cost-effectively achieved if implemented in a fashion that allows for regulatory and compliance flexibility under a strictly limited overall emissions cap. Specifically, market-based approaches, such as trading and banking of emission reductions within a cap-and-trade system,

allow sources to choose the most cost-effective ways to comply with established emission reduction requirements. This approach also provides sources with an incentive to reduce air pollutant emissions sooner and by greater amounts, promotes the development and use of innovative new emission control technologies, and specifies to the greatest extent possible performance results regarding environmental improvement rather than dictating expensive, facility-specific, command-and-control regulatory requirements. The general court acknowledges that future federal regulations may mandate some facility-specific requirements regarding mercury reductions.

VII. The general court also finds that energy conservation results in direct reductions in air pollutant emissions. Thus, incentives for energy conservation are an important component of an overall clean power strategy. The general court recognizes that energy conservation expenditures made by utilities using system benefits charge funds can benefit all citizens and ratepayers.

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 at Merrimack Station is in the public interest. The owner shall make appropriate initial filings with the department and the public utilities commission, if applicable, within one year of the effective date of this section, and with any other applicable regulatory agency or body in a timely manner.

II. Total mercury emissions from the affected sources shall be at least 80 percent less on an annual basis than the baseline mercury input, as defined in RSA 125-O:12, III, beginning on July 1, 2013.

III. Prior to July 1, 2013, the owner shall test and implement, as practicable, mercury reduction control technologies or methods to achieve early reductions in mercury emissions below the baseline mercury emissions. The owner shall report the results of any testing to the department and shall submit a plan for department approval before commencing implementation.

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.

V. Mercury reductions achieved through the operation of the scrubber technology greater than 80 percent shall be sustained insofar as the proven operational capability of the system, as installed, allows. The department, in consultation with the owner, shall determine the maximum sustainable rate of mercury emissions reductions and incorporate such rate as a condition of operational permits issued by the department for Merrimack Units 1 and 2. This requirement in no way affects the ability of the owner to earn over-compliance credits consistent with RSA 125-O:16, II.

VI. The purchase of mercury emissions allowances or credits from any established emissions allowance or credit program shall not be allowed for compliance with the mercury reduction requirements of this chapter.

VII. If the mercury reduction requirement of paragraph II is not achieved in any year after the

July 1, 2013 implementation date, and after full operation of the scrubber technology, then the owner may utilize early emissions reduction credits or over-compliance credits, or both, to make up any shortfall, and thereby be in compliance.

VIII. If the mercury reduction requirement of paragraph II is not achieved by the owner in any year after the July 1, 2013 implementation date despite the owner's installation and full operation of scrubber technology, consistent with good operational practice, and the owner's exhaustion of any available early emissions reduction or over-compliance credits, then the owner shall be deemed in violation of this section unless it submits a plan to the department, within 30 days of such noncompliance, and subsequently obtains approval of that plan for achieving compliance within one year from the date of such noncompliance. The department may impose conditions for approval of such plan.

IX. The owner shall report by June 30, 2007 and annually thereafter, to the legislative oversight committee on electric utility restructuring, established under RSA 374-F:5, and the chairpersons of the house science, technology and energy committee and the senate energy and economic development committee, 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. The last report required shall be after the department has made a determination, under paragraph V, on the maximum sustainable rate of mercury emissions reductions by the scrubber technology.

42 U.S.C. § 7409 Air Pollution Prevention of Control

National primary and secondary ambient air quality standards

(b) Protection of public health and welfare

(1) National primary ambient air quality standards, prescribed under subsection (a) of this section shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) of this section shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

STATEMENT OF INTEREST OF AMICUS CURIAE

Amicus Curiae file this brief in support of Appellants Campaign for Ratepayers Rights, Conservation Law Foundation, Freedom Logistics, LLC, Granite Ridge Energy, LLC, Halifax-American Energy Co., LLC, Trans-Canada Hydro Northeast, Inc., Union of Concerned Scientists, and Jackson Perry. Amicus Curiae address in this brief one of Appellants' **Questions Presented**: whether the New Hampshire Site Evaluation Committee erred when it held that Public Service of New Hampshire's installation of a \$457 [m]illion wet flue gas desulphurization system, including a 445 foot smoke stack, at its Merrimack Station in Bow, N.H. and an associated uprate of the capacity of the facility, was not a "sizeable addition" to the existing Merrimack Station facility, and thus did not require review and certification under RSA 162-H:5. Amicus Curiae adopt Appellants' statement of the case and facts and argument to the extent they relate to this question.

The Amicus Curiae are thirteen New Hampshire residents of towns in Merrimack and Hillsborough Counties as well as Toxics Action Center. Various residents live near Merrimack Power Station ("Merrimack Station"). The residents are affected by the pollutants emanating from Merrimack Station, and by general environmental degradation, including poor air and water quality, climate change, and specific pollutants, to which Merrimack Station is a contributor. The residents have an interest, therefore, in seeing that review and certification of the construction and operation of a Flue Gas Desulphurization Scrubber at Merrimack Station by New Hampshire's Site Evaluation Committee is carried out fully and effectively.

The residents all live near Merrimack Station and are concerned that they and their families and communities are living in an area of relatively poor air and water quality, in part due to the operation of Merrimack Station. Specifically, one resident rents a garage in Bow, New

Hampshire about a mile from Merrimack Station and finds that soot is often a problem at the garage. Another resident has suffered or has family members that suffer from chronic bronchitis, difficulty breathing, and other respiratory problems associated with many of the air pollutants emitted by Merrimack Station. A number of the residents either regularly commute or visit counties in southeastern New Hampshire that are not achieving air quality standards for ozone. Numerous residents boat, kayak, canoe in, or visit places along the Merrimack River and are particularly concerned about the water quality in the river. The residents have an interest in swimming in or eating fish from the Merrimack River, but will not do so given their concern over the river's water quality. Finally, the residents enjoy the winter snow sports available in New Hampshire and one resident works in a business that relies on tourism. The residents, while all having various specific interests and concerns, all believe a full review by New Hampshire's Site Evaluation Committee of the sizeable addition occurring at Merrimack Station is appropriate and necessary.

Toxics Action Center is a not-for-profit organization whose mission is to work side-by-side with communities, providing them the skills and resources needed to prevent or clean up pollution at the local level. Since 1987, Toxics Action Center has worked to organize over 625 communities across New England to put together plans and strategies to effectively solve the problems they face. Toxics Action Center trains community members to not only defend their health and safety, but to think strategically and come together for proactive, positive change. Toxics Action Center is working with the residents in New Hampshire noted above regarding their concerns about Merrimack Station and its contribution to the water and air pollution in their communities.

STATEMENT OF FACTS

This case is on appeal from a decision by the New Hampshire Site Evaluation Committee (“SEC”) holding that the Flue Gas Desulphurization Scrubber (the “Scrubber Project”) currently under construction at Merrimack Station is not a “sizeable addition” and therefore does not require certification under the New Hampshire Energy Facility Evaluation, Siting, Construction and Operations Act (“Siting Law”). RSA 162-H, *et seq.* Unless this Court reverses, the SEC will not review the siting, land use implications and environmental effects associated with the construction and operation of the Scrubber Project.

Public Service of New Hampshire (“PSNH”) is building a scrubber at Merrimack Station. The project will cost \$457 million, and will require construction of the tallest man-made structure in New Hampshire. Record at 000087.¹ It will require the construction of the following new facilities and structures: a flue gas desulphurization building, the absorber tower, process storage tanks, a limestone storage silo area, a gypsum storage building, separate limestone and gypsum conveyor systems, a wastewater treatment building, equalization tanks and sludge tanks, fans and ductwork, a flue gas desulphurization substation, a switchyard expansion, a service water pump house, and a truck wash facility. R.000110-111; R.000108.² Many of these structures are solely for treatment of the new wastewater effluent stream, which will contain pollutants the scrubber removes from the plant’s boiler emissions. R.000110-111. The new stack will be 445 feet tall, while Merrimack Station’s highest current structure is 317 feet. R.000117-118. The SEC concluded that the Scrubber Project is not a sizeable addition. R.000019-20.

¹ Hereinafter, the Record will be cited to as “R.”, and refers to the administrative record certified and sent to the Supreme Court from the New Hampshire Site Evaluation Committee.

² According to R. 000102, this represents the most recent and accurate rendering of the expected layout of Merrimack Station in 2013.

A group of parties brought the case before the SEC, since PSNH made no application for certification. These parties (hereinafter, “Appellants” or “Moving Parties”) sought to have the SEC assume jurisdiction over the Scrubber Project, asserting it was a sizeable addition and required review. R.000207-220. Appellants, PSNH, and the SEC have recognized that the analysis at issue concerns more than just the occupation of physical space, and the Siting Law’s purpose and policy goals are important factors in determining whether the Scrubber Project is a sizeable addition. R.000173; R.000558-559; R.000009; R.000143-144; R.000019-21.

In the first hearing before the SEC, the Moving Parties enumerated various environmental issues associated with the Scrubber Project, including the potential disposal of mercury directly into the Merrimack River. R.000514-528. The SEC, in its initial decision, stated that because the Scrubber Project did not require PSNH to purchase additional land, would take place within the already existing industrial site, and was made mandatory by the Scrubber Law, it was not a sizeable addition under the Siting Law. R.000019-20. The SEC discussed and considered the findings it would have to make before issuing a certificate, in order to illustrate the Siting Law’s purpose and how it related the meaning of what a sizeable addition is in this context. R.000020. The SEC concluded from this limited analysis that requiring a certification of the site and facility would not advance any purposes of the Siting Law. R.000021. Specifically, the SEC found that, since the tract upon which Merrimack Station sits is already used for industrial purposes, there would be no unreasonable adverse effects to “aesthetics, ... historic sites, public health or safety[,] air and water quality, or the natural environment.” *Id.* The SEC’s determination regarding the purpose of the Siting Law and the findings it would be required to make for certification explicitly informed its conclusion that the Scrubber Project at Merrimack Station was not a sizeable addition. *Id.* The SEC did not consider any measure of

physical size, except the footprint of the structures, as compared to the previous footprint, and the height of the new stack, compared to the current stack. R.000022-23. The SEC also refused to consider cost a significant factor. R.000022-23. The SEC found that the visual depiction in Stipulated Exhibit B-D, R.000106-108, comparing the current and future site, was unconvincing in light of the purpose of the Scrubber Project and its relationship to the overall site. R.000023.

Appellants moved for a rehearing, alleging the SEC's decision was arbitrary, capricious, unsupported by the facts, and contrary to law, based on its failure to consider the three-dimensional measurements of size, its unsupported decision on certification findings and environmental impacts, and its assessment of costs to the Appellants. R. 000073-75. Peter Bonanno and other registered voters reiterated and expanded upon concern with the Scrubber Project's environmental effects in their motion for a rehearing and petition for SEC review, since they felt environmental issues affecting them personally would not be sufficiently mitigated without review. R.000088. In denying Appellants' motion for rehearing, the SEC explained that the inquiry into environmental aspects of the project was considered for guidance on the question of whether the addition was sizeable. R000009. The SEC confirmed that the findings in its previous decision concerning environmental harm and other considerations under the Siting Law's certification requirements were based on the record in the proceedings before the SEC, and held that statements regarding possible discharges of mercury to the Merrimack River "were not supported by the evidence presented at the hearing." *Id.* The SEC denied both Appellants' motion for rehearing as well as the Bonanno motion for rehearing and petition. R.000007-10.

SUMMARY OF THE ARGUMENT

There are numerous environmental issues arising from the Scrubber Project and the Merrimack Station facility that the SEC must review under the Siting Law. In informing its decision on whether the Scrubber Project is a sizeable addition, the SEC properly looked to the purpose and findings required under the Siting Law, but improperly made judgments of fact and law when there had been inadequate opportunity for discussion and presentation of evidence on those issues. The conclusions drawn by the SEC and the decision made based upon inadequate and incomplete information are not only improper, but set the bar for a sizeable addition at an existing energy facility unreasonably high, while trivializing the effect and utility of the Siting Law. The Scrubber Project is a sizeable addition, and it is within the letter and purpose of the Siting Law. A superficial analysis of the environmental impacts and issues as they relate to the purpose of the Siting Law for a determination of whether the Scrubber Project is a sizeable addition is insufficient. The SEC must conduct a full review of the environmental issues associated with the Scrubber Project and Merrimack Station, and it must certify the Scrubber Project with appropriate and reasonable conditions to limit and reduce adverse effects on New Hampshire's public health, safety, and the natural environment.

ARGUMENT

I. **AMICUS CURIAE ARE PROPERLY BEFORE THE COURT AND MAY PRESENT THE COURT WITH INFORMATION AND COLLECTED DATA BEYOND THE ADMINISTRATIVE RECORD.**

Amicus Curiae are properly before the Court and have relevant arguments for the Court to consider. A brief of amicus curiae may be filed by "leave granted by order of the Supreme Court on motion or when accompanied by written consent of all parties to the case." N.H. SUP. CT. R. 30. This brief is accompanied by written consent of all parties. Amicus parties are not

parties to the litigation at hand, but engage in the action to make useful suggestions to the court. *In re Grondin's Estate*, 98 N.H. 313, 315 (1953)(citation omitted). “[T]he role of an amicus party is to assist the court ‘in cases of general public interest by making suggestions to the court, by providing supplementary assistance to existing counsel, and by insuring a complete and plenary presentation of difficult issues so that the court may reach a proper decision.’” *Sierra Club v. Wagner*, 581 F.Supp.2d 246, 250 at n.1 (D.N.H. 2008)(citation omitted). Amicus briefs are meant to be persuasive to the court, and “are not to be discouraged.” *Grondin's Estate*, 98 N.H. at 315.

Amicus parties should address and speak to issues that were raised or presented in the prior proceeding. *See Verizon New England, Inc. v. City of Rochester*, 151 N.H. 263, 272 (2004) (citation omitted). However, the “fact that review sometimes or often focuses on the initial administrative record does not mean it must, or always, will do so.” *Valley Citizens for a Safe Environment v. Aldridge*, 886 F.2d 458, 460 (1st Cir. 1989). Courts have recognized exceptions and considered evidence outside the administrative record when evidence either confirming or denying agency predictions made in the original decision subsequently becomes available. *Conservation Law Foundation of New England, Inc., v. Clark*, 590 F.Supp. 1467, 1474-75 (D. Mass. 1984)(citation omitted). Additionally, courts may consider extra-record evidence to address factors that the agency should have considered but did not, or to explain an unclear or technical record. *Id.* at 1475. *See also Valley Citizens for a Safe Environment*, 886 F.2d at 460. As discussed below, the issues and information included in this amicus brief were either raised before or addressed by the SEC or provide the Court with additional information that fits within the exceptions noted above. Therefore, the Court should use its discretion to consider this information in its review of the SEC’s rulings in this matter.

A. Environmental Considerations And Issues Were Presented By The Parties And Addressed By The SEC In Its Decisions.

The Moving Parties and PSNH both presented environmental considerations and arguments to the SEC in the proceedings below. According to the record, PSNH was the first party to present environmental issues and considerations to the SEC. R.000173. In recognizing a part of the SEC's review under the Siting Law includes an analysis of environmental impacts and that the Scrubber Law required that it obtain all necessary permits and approvals, PSNH provided the SEC with a summary of the federal, state and local approvals obtained for the Scrubber Project, many of which included environmental permits. R.000167-173. In asking the SEC to reject jurisdiction of the Scrubber Project at Merrimack Station, PSNH represented to the SEC:

[t]he public interest objectives of Committee review under RSA 162-H:1, II—the full and timely consideration of environmental consequences, full and complete disclosure to the public, treatment as a significant aspect of land-use planning in which all environmental, economic and technical issues are resolved in an integrated fashion—have already been accomplished through these rigorous permits and approval processes.

R.000173.

In responding to PSNH's assertion that all environmental issues would be addressed through the permitting and approvals received, the Moving Parties asserted that PSNH's list made no mention of the "potential discharge of mercury laden wastewater directly into the Merrimack River. . . ." and that, although the discharge could have profound environmental, aquatic and human health consequences, PSNH had not submitted applications to federal or state agencies. R.000143-144. Prior to the hearing before the SEC, the parties stipulated that one of the major components of the Scrubber Project was the Waste Water Treatment Building and

associated facilities to treat all liquid discharge flows from the Scrubber Project. R.000102; Stipulated Exhibit F at R.000111.

In the May 8, 2009 hearing before the SEC, the Moving Parties reminded the SEC that PSNH's assertion that it had obtained all necessary environmental permits and approvals was not true. R.000514-523. Specifically, the Moving Parties indicated that PSNH had not, in fact, sought approval for the wastewater discharge associated with the Scrubber Project and presented evidence demonstrating that mercury is particularly difficult to deal with when treating the wastewater from equipment such as that being used in the Scrubber Project. R.000514-517. The Moving Parties also argued that PSNH's proposed wastewater discharge would be to the Merrimack River, a "river that is impaired [for] mercury, which is governed by a . . . Total Maximum Daily Load . . . and which is governed by a fish advisory, due to the unacceptably high concentrations of mercury in the tissues of the fish that live in the river." R.000517-518. In response to a question from Vice-Chairman Getz, the Moving Parties acknowledged that full consideration of environmental issues need not be considered with regard to the threshold question of whether a project is a sizeable addition. R.000525-526. However, counsel for PSNH went on to argue to the SEC that the Scrubber Project "includes a new state-of-the-art wastewater treatment facility, which is intended to assure the removal of mercury contaminants from the wastewater discharge stream . . . and, *there will be no discharge of mercury-ladened wastewater into the Merrimack River.*" R.000546-547 (emphasis added).

Most importantly, the SEC, of its own accord, considered environmental issues in making its determination. In the Order Denying Motion for Declaratory Ruling, the SEC listed various factors supporting its finding that the Scrubber Project does not fit within the definition of a sizeable addition when considering the underlying purpose of the Siting Law. R.000019-21.

One of those factors was “that the Scrubber Project is a pollution control device.” R.000020. The SEC then determined it would be “helpful to consider the statutory findings that have been entrusted to the Committee in such cases when we look at the statute, as a whole, in order to interpret the meaning of the term ‘sizeable addition.’” *Id.* One of the statutory findings the SEC reviewed was “whether the project will have unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment or public health and safety. . . .” R. 000021. In its consideration of this statutory finding, the SEC determined:

...because the Scrubber Project will be installed [in] an area of heavy industrial use, there would not appear to be any unreasonable adverse effects that will occur to the aesthetics of the site, historic sites, public health or safety[,] air and water quality[,] or the natural environment. In fact, the purpose of the ... Scrubber Project is to prevent the emission of pollutants into the air.

Id. The SEC concluded that, in light of the purpose of the Siting Law and findings that would inform the issuance of certificates under the Siting Law, the construction of the Scrubber Project does not constitute a sizeable addition to the existing Merrimack Station facility. *Id.* Therefore, the SEC utilized its understanding, based on the limited information and representations received at the hearing, of the environmental issues and impacts associated with the Scrubber Project to inform its conclusion that the Scrubber Project was not a sizeable addition.

The Moving Parties and New Hampshire residents, in Motions for Rehearing, argued that environmental issues and considerations were not adequately reviewed by the SEC. R.000074; R.000088. Specifically, the Moving Parties indicated the SEC acted contrary to law in determining the Scrubber Project would meet the statutory criteria under the Siting Law without an adequate record for doing so. R.000074. Counsel for PSNH, in the November 25, 2009 hearing before the SEC, stated that although the Moving Parties acknowledged that environmental issues and considerations do not directly pertain to whether a project is a sizeable

addition, the SEC, on its own, addressed the issue and “found that there weren’t environmental considerations of concern.” R.000932. In its Order Denying the Motions for Rehearing, the SEC explained that it had looked at the purpose and findings in the Siting Law to inform its understanding of the term “sizeable addition.” R.000009. The SEC also stated that the determinations made in its initial ruling were attributable directly to the record in this proceeding and that the Moving Parties’ “unsubstantiated claim that the Scrubber Project may potentially result in the discharge of mercury into the Merrimack River was simply not supported by the evidence presented at the hearing.” R.000009.

The record before the SEC indicates that all parties asserted arguments regarding environmental issues and considerations and that the SEC utilized its understanding of the limited information provided to reach conclusions with regard to the environmental effects of the Scrubber Project, which then, in turn, informed its ultimate determination of whether the Scrubber Project was a sizeable addition. The SEC’s conclusions were drawn from a record that includes very little information on the environmental impacts and considerations that would be accounted for in a full review of the Scrubber Project and the facility. This brief seeks to present factual data, from the parties and other sources, indicating that there are significant environmental issues that were not fully considered below and will not be fully addressed unless reviewed by the SEC. This presentation of data and information demonstrates that the purpose behind SEC review under the Siting Law has not, in fact, been fulfilled, and supports the conclusion that the Scrubber Project is a sizeable addition for purposes of SEC jurisdiction.

B. Additional Environmental Information Regarding The Facility Falls Within An Exemption For Extra-Record Evidence And Should Be Considered By The Court.

To the extent the environmental information and considerations provided in this brief were not addressed in the proceedings before the SEC or the briefing below, it fits within an

exemption, giving the Court discretion as to whether it reviews the information. *Valley Citizens for a Safe Environment*, 886 F.2d at 460; *Conservation Law Foundation of New England, Inc.*, 590 F.Supp. at 1475. In particular, the environmental information included serves to provide the Court with evidence that the SEC's sizeable addition decision was improper because it was based on reasoning that the Siting Law's purpose, as detailed by its required findings, supported the conclusion that the Scrubber Project was not a sizeable addition. To draw that conclusion, the SEC relied on an inadequate and incomplete record to determine that "there would not appear to be any unreasonable adverse effects that will occur to the aesthetics of the site, historic sites, public health or safety[,] air and water quality or the natural environment." R.000021. Amicus Curiae believe it is imperative that the Court, in reviewing the SEC's decision, has information before it regarding the various environmental issues and impacts associated with both the Scrubber Project and Merrimack Station.

The environmental information provided in this brief relating to the Merrimack River, mercury and the wastewater treatment and discharge associated with the Scrubber Project serve to provide the Court with evidence that contradicts PSNH's representations and the SEC's adoption of those predictions that mercury will not be discharged to the Merrimack River. It is important to note that the document demonstrating a mercury loading to the Merrimack River is dated *four months after* the SEC made its final decision in this matter.³ Therefore, this information demonstrates that the representations, determinations and predictions made below were not correct as detailed in a document made available to the public after the agency ruled. Further, the record before the SEC was incomplete and unclear with regard to whether mercury will be discharged to the Merrimack River and what such discharge will mean for the health of

³ PSNH, Merrimack Station, NPDES Permit No. NH0001465, NPDES Supplemental Application To Add A Flue Gas Desulfurization Wastewater Treatment System (May 2010), Attachment 1, Projected Maximum Metals Daily Loading, App. at A-1, A-22. The SEC's Order Denying Motions for Rehearing is dated January 15, 2010.

the Merrimack River and those who either use it or would like to. Therefore, the extra-record evidence provided in this brief seeks to aid the Court in better understanding the environmental issues and considerations where the record below is inadequate and unclear.

The environmental information provided in this brief relating to air emissions from Merrimack Station serve to provide the Court with evidence of factors the SEC should have investigated and considered before drawing conclusions regarding environmental effects, but did not. The SEC utilized limited environmental information to determine that there would be no unreasonable impact to human health and the natural environment, which then informed its decision that the Scrubber Project was not a sizeable addition. The SEC, in essence, based their ultimate decision on a determination made from inadequate and incomplete information. The Siting Law makes clear that the findings required to be made by the SEC must follow a “full review of the environmental impact of the site or route, and other relevant factors. . . .” RSA 162-H:16, IV. The SEC chose to look at the findings required under the Siting Law to help determine whether the Scrubber Project was or was not a sizeable addition, and drew an improper conclusion from an incomplete record. Because the SEC, unlike a trial court, has an obligation to seek out relevant information, an error resulted from the failure to seek out and consider relevant environmental information not within the scope of the record before it. RSA 162-H:10, IV. The extra-record evidence included in this brief serves to provide the Court with information on various factors the SEC should have considered before it made a determination as to whether the Scrubber Project and Merrimack Station would have an unreasonable effect on human health or the natural environment.

II. NEW HAMPSHIRE LAW REQUIRES THE SEC TO FULLY REVIEW SIZEABLE ADDITIONS AT ENERGY FACILITIES FOR ENVIRONMENTAL IMPACTS.

A. The SEC Must Review And Certify Any Sizeable Addition At Merrimack Station, As Well As The Larger Facility.

The SEC is obligated to review any sizeable addition to an existing energy facility under the Siting Law. RSA 162-H:5.⁴ In passing the Siting Law, the New Hampshire Legislature recognized that energy facilities and the associated routing of lines will have a significant impact upon the environment of the state and the use of natural resources. RSA 162-H:1. The Legislature declared that the Siting Law was enacted to ensure that the construction and operation of energy facilities is treated as a significant aspect of land-use planning in which all issues are resolved in an integrated fashion to assure that the state's energy supply is adequate and conforms to sound environmental principles. *Id.* To achieve this, any facility undergoing sizeable changes or additions must apply for and receive certification from the SEC and the SEC must assess environmental impacts arising from the site and facility and require mitigating measures to be taken for certification. RSA 162-H:5; H:16.

The Siting Law explicitly requires review and certification of the site and the facility. RSA 162-H:16, IV(c).⁵ The term "energy facility" is defined to include "electric generating station equipment and associated facilities designed for, or capable of, operation at any capacity of 30 megawatts or more." RSA 162-H:2, VII(b). Thus, the Siting Law contemplates the SEC will review a sizeable addition to an energy facility not in a vacuum, but in the context of the

⁴ The statutory citations in this brief refer to the current Siting Law, but the meaning remains the same in for the purposes of this case, despite the amendments that took effect on August 8, 2009.

⁵ To issue certificate, the SEC must find that the site and facility meet the requirements. *See also* RSA 162-H:2, II-a ("Certificate" or "certificate of site and facility" refers to the document that allows the applicant to proceed with the site and facility); RSA 162-H:16-VI (Certificate of site and facility may contain reasonable conditions).

facility as a whole. The Siting Law also indicates that SEC review is not limited to issues of construction, but also includes operation of energy facilities within the state. RSA 162-H:1.

The Siting Law contemplates a method of project and facility review that is comprehensive, meaningful, and effective. RSA 162-H:1. Before issuing a certificate, the SEC must make a number of findings. RSA 162-H:16. Prior to making those findings, the SEC must fully review the environmental impacts of the site and facility, consider all available alternatives, and review any other factor relevant to the purpose of the Siting Law. *Id.* The SEC must find that the site and facility will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety. RSA 162-H:16, IV(c). If any of the required findings cannot be made, the SEC must impose conditions to allow the project, site, and facility to be acceptable under the Siting Law.

B. The New Hampshire Legislature Did Not Relieve The SEC Of Its Duties By Passing The Scrubber Law.

The New Hampshire Legislature enacted the Scrubber Law in 2006, requiring Merrimack Station to be fitted with a wet flue gas desulphurization system by July, 2013. RSA 125-O:13, I. Immediately following this requirement, the Legislature mandated:

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 findings that the installation and operation of scrubber technology at Merrimack Station is in the public interest. The owner shall make appropriate initial filings with the department and the public utilities commission, if applicable, within one year of the effective date of this section, and with any other applicable regulatory agency or body in a timely manner.

Id. (emphasis added). While the New Hampshire Legislature recognized the need for the Scrubber Project, it in no way relieved PSNH from the requirement to obtain all necessary permits and approvals, nor did it relieve the SEC of its duty to review the Scrubber Project as

required by the Siting Law. In fact, all the Legislature did in the Scrubber Law was *encourage* regulatory agencies to give *due consideration* to the Legislature's finding that the Scrubber Project was in the public interest. *Id.* (emphasis added). Any argument that the Legislature's requirement for the Scrubber Project obviated the need for the SEC or any other regulatory body to perform separate and distinct statutorily mandated duties directly contradicts the plain language of the Scrubber Law and is without merit. The New Hampshire Legislature required the Scrubber Project, but only after and contingent upon PSNH seeking and receiving all necessary permits and approvals from federal, state, and local regulatory agencies and bodies.

C. The Environmental Issues Surrounding The Scrubber Project And The Facility Demonstrate That Environmental Review Is Necessary To Fulfill The Purpose Of The Siting Law.

The Scrubber Project and the operation of Merrimack Station implicate a host of environmental issues. While some pollutants will be decreased as a result of the Scrubber Project, others will continue and some may merely change the method of discharge. To ensure the Scrubber Project truly achieves the purpose of the Scrubber Law and advances in a manner protective of New Hampshire's public health and environment as is required by the Siting Law, the SEC must review the environmental effects of the Scrubber Project, the site, and the facility, and require conditions to mitigate negative impacts. RSA 162-H:16. The SEC addressed and considered environmental issues in its decision-making on whether the Scrubber Project constituted a sizeable addition, but performed no investigation or evaluation and did not take or receive full information concerning environmental factors. R.000019-21. The review undertaken by the SEC was minimal and limited, with almost no review of environmental consequences other than recognition of the beneficial reductions in mercury and sulfur dioxide *air* emissions that would occur as a result of the Scrubber Project. R.000020 (emphasis added).

It is improper for the SEC to make a decision or draw conclusions concerning the environmental effects of the Scrubber Project and Merrimack Station from such limited review. The SEC cannot conclude or suggest that the Scrubber Project and Merrimack Station will have no unreasonable environmental effects on air and water quality, the natural environment, or public health and safety, until it has performed the comprehensive review necessary to reach such a conclusion. To date the SEC has not performed this review.

III. THE SCRUBBER PROJECT AND MERRIMACK STATION UNREASONABLY IMPACT THE WATER QUALITY OF THE MERRIMACK RIVER, AND THE SEC MUST REVIEW AND MITIGATE THESE IMPACTS.

A. The Merrimack River Is Impaired By Mercury.

All New Hampshire waters are impaired for mercury.⁶ The Merrimack River, in particular, has been identified as a “biological mercury hotspot.”⁷ New Hampshire has a fish consumption advisory in place that limits consumption of various species of freshwater fish from New Hampshire’s waters due to mercury and other contaminants.⁸

Mercury in the Merrimack River comes from various sources, including the deposition of mercury from the air.⁹ Mercury is metal that never degrades.¹⁰ It persists in the environment after it is released, becoming a part of a cycle of evaporation and deposition, and ultimately may be ingested through food consumption.¹¹ Humans are exposed to mercury by eating fish.¹²

Because mercury stays in tissue, it is concentrated through predation, and reaches high levels in

⁶ N.H. DEP’T ENVTL. SERV. ET AL., NORTHEAST REGIONAL MERCURY TOTAL MAXIMUM DAILY LOAD (2007), pg. 11, App. at A-97, available at <http://www.neiwpecc.org/mercury/mercury-docs/FINAL%20Northeast%20Regional%20Mercury%20TMDL.pdf> (hereinafter “NORTHEAST REGIONAL MERCURY TMDL”).

⁷ David C. Evers et al., *Biological Mercury Hotspots in the Northeastern United States and Southeastern Canada*, 57 *BIOSCIENCE* 29, 33 (Jan. 2007), App. at A-140.

⁸ N.H. Dep’t Env’tl. Serv., Fact Sheet ARD-EHP-25:New Hampshire Fish Consumption Advisory, 1 (2009) App. at A-151, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-ehp-25.pdf>

⁹ NORTHEAST REGIONAL MERCURY TMDL, at pg. vi, App. at A-76.

¹⁰ U.S. Env’tl. Prot. Agency, Taking Toxics Out of the Air, pg. 2, 10, App. at A-154-A-162, available at <http://www.epa.gov/oar/toxicair/takingtoxics/p1.html> (August 2000).

¹¹ *Id.* at 5, App. at A-157.

¹² *Id.*

fish, enough to be harmful to humans when ingested.¹³ Prenatal exposure to mercury causes impaired neurological development.¹⁴ Babies born to mothers with higher levels of mercury in their bodies are more likely to have impaired memory, attention problems, poor language development and impaired motor and visual spatial skills.¹⁵ In extreme cases, prenatal exposure to high levels of mercury can cause vision impairment, muscle weakness, and impairment to speech, hearing, and walking.¹⁶ Wildlife is also harmed by mercury exposure.¹⁷

B. New Hampshire Has Adopted A Strategy For Significantly Reducing Mercury Discharges To New Hampshire Waters, Including The Merrimack River.

To reduce the high mercury levels in state waters, New Hampshire has joined with other New England states and adopted a coordinated strategy for reducing mercury deposition and mercury loading that occurs as a result of direct point-source discharges into waters. This plan seeks to measure each river's total maximum daily load ("TMDL") for mercury.¹⁸ The plan then sets regional goals to reduce each TMDL.¹⁹ Under this plan, total mercury concentrations in the Merrimack River need to decrease by between 87 to 90 %.²⁰ This dramatic reduction of mercury requires significant decreases in both direct mercury discharges and mercury deposition.

New England's TMDL plan calls for significant reductions in mercury pollution by direct point-source discharges into waterways and indirect deposition of mercury from the air.²¹

Specifically, the New England TMDL requires point source discharges to remain at or below 2.1

¹³ *Id.*

¹⁴ U.S. Env'tl. Prot. Agency, Mercury Health Effects, pg. 1-2, App. at A-163-A-164, *available at* <http://www.epa.gov/mercury/effects.htm>.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ U.S. Env'tl. Prot. Agency, Mercury: Environmental Effects, pg. 1, App. at A-166, *available at* <http://www.epa.gov/hg/eco.htm>.

¹⁸ NORTHEAST REGIONAL MERCURY TMDL, at pg. 1, App. at A-87.

¹⁹ *Id.* at vii, App. at A-77.

²⁰ Email from Gregg Comstock, Supervisor, NHDES Watershed Management Bureau, to Jeff Andrews, Dan Dudley, Susan Willoughby, and Stergios Spanos, pg. 2 (May 20, 2009, 15:15 EST), App. at A-170.

²¹ NORTHEAST REGIONAL MERCURY TMDL, at pg. vii, App. at A-77.

percent of the total mercury loading for a given water body.²² To meet the TMDL goals for the Merrimack River, the New Hampshire Department of Environmental Services (“NHDES”) plans to reduce point source mercury discharges by 74% and anthropogenic atmospheric deposition by 98.2%.²³ The current plan for reducing mercury deposition uses the Scrubber Project at Merrimack Station, as required by the Scrubber Law.²⁴ While the Scrubber Project addresses one aspect of mercury reduction contemplated in the TDML, it also has the potential to create a waste stream of mercury from a point source discharge directly into the Merrimack River. Any additional mercury loading to the Merrimack River goes against the reductions called for in the TMDL because the coordinated strategy makes clear that point-source discharges of mercury must be reduced.²⁵

C. Mercury Will Be Discharged To The Merrimack River After The Scrubber Project Is Complete.

PSNH is currently discharging wastewater from Merrimack Station to the Merrimack River pursuant to a National Pollutant Discharge Elimination System (“NPDES”) permit issued by the U.S. Environmental Protection Agency (“EPA”) in 1992.²⁶ The NPDES permit does not include any limitation for mercury discharges from the facility.²⁷ The only regulated metals with limits under the 1992 NPDES permit are copper and iron.²⁸ In 1997, PSNH submitted its reapplication for its NPDES permit to EPA.²⁹ In May 2010, four years after the Scrubber Law was passed and four months after the SEC made its final determination in this case, PSNH

²² *Id.* at 30, App. at A-116.

²³ E-mail from Gregg Comstock, Supervisor, NHDES Watershed Management Bureau, to Paul Currier, Stergios Spanos, and Paul Heitzler, pg. 1 (Sept. 11, 2009, 8:01 AM), App. at A-172.

²⁴ NORTHEAST REGIONAL MERCURY TDML, at pg. 37 (Table 9-1), App. at A-123.

²⁵ NORTHEAST REGIONAL MERCURY TDML, at pg. 35-36, App. at A-121-A-122.

²⁶ U.S. Env'tl. Prot. Agency, Authorization to Discharge Under the National Pollutant Discharge Elimination System (June 25, 1992), pg. 1, App. at A-174. This is Permit # NH0001465.

²⁷ *Id.* at 10, App. at A-182.

²⁸ *Id.*

²⁹ Letter to Shelley Puleo, U.S. Env'tl. Prot. Agency, from R.G. Chevalier, PSNH, regarding Merrimack Station-NPDES Permit NH0001465, Application for Permit Renewal (March 10, 1997), App. at A-195-A-196.

supplemented its 1997 reapplication to add the FGD Scrubber wastewater treatment system information.³⁰

PSNH's May 2010 NPDES permit supplemental application (the "Supplement") indicates that, as currently proposed, mercury will be discharged to the Merrimack River even after treatment by the new wastewater system. While the cover letter to the Supplement purports that there will be no significant effect on water quality resulting from the addition of 50,000 gallons per day of effluent from the Scrubber Project to the wastewater stream, Attachment 1 to the Supplement indicates that the projected daily loading of mercury to the Merrimack River will be 0.000016 mg/l or 0.0017 lbs of mercury.³¹ This projected daily load is more than zero; therefore, mercury will be discharged to the Merrimack River even after treatment. Attachment 2 to the Supplement suggests that PSNH is seeking to further reduce mercury with additional treatment technology, but does not indicate what reductions the additional treatment could accomplish and does not guarantee the elimination of mercury discharges to the Merrimack River.³² Our review of documents made available by NHDES and EPA have not produced information indicating what additional treatment PSNH proposes. Further, EPA has yet to issue a draft NPDES permit for Merrimack Station, so it is unclear whether PSNH will be required to meet any other daily mercury loading than that proposed in Attachment 1 to the Supplement. Therefore, documents made publicly available subsequent to the SEC's final determination below demonstrate that Merrimack Station will discharge mercury into the Merrimack River even after treatment. This mercury discharge will exacerbate the existing mercury impairment in

³⁰ PSNH, Merrimack Station, NPDES Permit No. NH0001465, NPDES Supplemental Application To Add A Flue Gas Desulfurization Wastewater Treatment System (May 2010), App. at A-1-A-70.

³¹ *Id.* at Attachment 1, Projected Maximum Metals Daily Loading. App. at A-22.

³² *Id.* at Attachment 2, 11: FGD Wastewater Treatment System, URS Executive Summary of "Anti-Degradation Study." (May 5, 2010) App. at A-36.

the Merrimack River and contradicts the call for reduced mercury point-source discharges in the New England TMDL.

D. The SEC Has A Duty To Fully Review The Environmental Impact Associated With The Scrubber Project And Merrimack Station And Mitigate Unreasonable Adverse Affects By Imposing Certificate Conditions, Such As Eliminating Mercury Discharges To The Merrimack River.

When the New Hampshire Legislature required the Scrubber Project, it could not have intended to permit the creation of an entirely new waste stream and allow for additional negative impacts to public health and the environment. To convert the Legislature's intent to reduce mercury deposition into a license to discharge captured mercury into the Merrimack River as "in the public interest" turns reason on its head. The SEC has a clear obligation to review the environmental impacts associated with the Scrubber Project and Merrimack Station and to place conditions on its certification of the Scrubber Project to require that all mercury be prevented from directly discharging to the Merrimack River from Merrimack Station.

The SEC can require an elimination of direct mercury discharges to the Merrimack River from Merrimack Station by mandating a zero liquid discharge ("ZLD") system be used to manage the wastewater from the Scrubber Project. The ZLD system uses a method of concentration, evaporation, and crystallization to collect all pollutants from the waste slurry for proper disposal, and the resulting treated water is clean enough for re-use in the plant.³³ ZLD systems have been in use for over forty years, and operate in hundreds of sites around the world.³⁴ A ZLD system would work to accomplish the goals of the New England TMDL, but most importantly, it would protect the Merrimack River. Additionally, the SEC would fulfill its

³³ General Electric, Reducing Wastewater to Dryness: Zero Liquid Discharge Case Studies at New Power Plants, pg. 1, App. at A-197, available at

http://www.gewater.com/pdf/Technical%20Papers_Cust/Americas/English/TP1046EN.pdf

³⁴ HPD, POWER GENERATION INDUSTRY: TECHNOLOGY DATA SHEET 1 (2010), App. at A-203, available at <http://www.hpdsystems.com/lib/hpd/coldprocesszld/15840,HPD-PG-COLDPROC-TDS-5-24a.pdf>.

duty to “fully review...the environmental impact of the site and facility” before issuing a certificate that can be considered “conclusive on all questions of . . . water quality.” RSA 162-H:16.

IV. NEW HAMPSHIRE CITIZENS ARE UNREASONABLY IMPACTED BY MERRIMACK STATION’S AIR EMISSIONS, AND THE SEC MUST REVIEW AND MITIGATE THESE IMPACTS.

A. New Hampshire Citizens Are Exposed To Unsafe Levels Of Ground Level Ozone.

Pursuant to the Clear Air Act (“CAA”), EPA has established National Ambient Air Quality Standards (“NAAQS”) for six air pollutants which have the most potential to adversely affect public health and welfare.³⁵ Ozone is one of the six criteria pollutants.³⁶ The primary NAAQS are set at a level deemed appropriate by EPA to protect public health.³⁷ EPA must strengthen the NAAQS periodically based on the latest scientific knowledge and “must establish uniform national standards at a level that is requisite to protect public health from the adverse effects of the pollutants in the ambient air.” 42 U.S.C. § 7409(b) (2010); *Whitman v. American Trucking Associations*, 531 U.S. 457, 473 (2001). States are required to implement compliance with the NAAQS.³⁸ States must submit a state implementation plan (“SIP”) to EPA, which details how and what mix of control technologies the state is going to implement in order to successfully attain and maintain the NAAQS.³⁹ Even though SIPs are in place, there are still nonattainment areas where the levels of pollution in the ambient air exceed the NAAQS.⁴⁰

³⁵Envtl. Prot. Agency, Six Common Air Pollutants, pg. 1, App. at A-205, available at <http://www.epa.gov/air/urbanair>.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.* at pg. 2, App. at A-206.

³⁹ *Id.*

⁴⁰ *Id.* at pg. 1, App. at A-205.

EPA is implementing a more stringent eight-hour NAAQS for ozone and the southeastern portion of New Hampshire is not attaining this NAAQS.⁴¹ The nonattainment areas are predominately located in Strafford, Rockingham, Hillsborough and Merrimack counties, and are generally southeast of Merrimack Station.⁴² The nonattainment area in Merrimack County is the town of Hooksett, located directly to the southeast of Merrimack Station.⁴³ Based on wind direction measurements at Concord Airport, Merrimack Station and Suncook Village, the prevailing wind direction blows most frequently from the northwest, where Merrimack Station is located, to the nonattainment area in southeastern New Hampshire.⁴⁴ Therefore, emissions from Merrimack Station are very likely to blow from the plant into the nonattainment area. Southeastern New Hampshire is a heavily populated area of the state with 60% of the state's population residing in a part of the state that is not attaining the current NAAQS for ozone.⁴⁵ A total of 746,016 New Hampshire citizens live in and breathe air that contains levels of ozone EPA has determined to be adverse to their health.⁴⁶

In January 2010, EPA proposed to further strengthen the NAAQS for ozone and when EPA finalizes and implements the stronger standards, eight New Hampshire counties will not attain one or more of the range of standards EPA is considering.⁴⁷ In particular, Merrimack

⁴¹ Letter from Governor John H. Lynch to Mr. Ira W. Leighton, Acting Regional Administrator for the U.S. Env'tl. Prot. Agency, Region I regarding Designations of Nonattainment Areas Under 8-Hour Ozone Standard (2008) (March 12, 2009), App. at A-207-A-209, *available at* http://www.epa.gov/ozonedesignations/2008standards/rec/letters/01_NH_rec.pdf.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Agency for Toxic Substances and Disease Registry, Health Consultation, pg. 9 (December 11, 2003), App. at A-218, *available at* <http://www.atsdr.cdc.gov/HAC/pha/PHA.asp?docid=1185&pg=0> (review of 2002-2003 Air Monitoring Data for Merrimack Power Station).

⁴⁵ U.S. Census Bureau, N.H. Place and County Subdivision (2000), App. at A-220-A-226, *available at* http://factfinder.census.gov/servlet/GCTTable?geo_id=04000US33&ds_name=DEC_2000_SF1_U&_box_head_nbr=GCT-PH1&format=ST-7&_lang=en&_sse=on.

⁴⁶ *Id.*

⁴⁷ Env'tl. Prot. Agency, Fact Sheet: Proposal to Revise the National Ambient Air Quality Standards for Ozone (2010), pg.1, App. at A-227, *available at* <http://www.epa.gov/glo/pdfs/fs20100106std.pdf>. *See also*, Env'tl. Prot.

County and the two counties directly to the southeast, Rockingham and Hillsborough, are all projected to violate the highest air quality standard in the range proposed by EPA, 0.070 parts per million (as compared to the current eight-hour standard of 0.075 parts per million).⁴⁸ EPA stated that it believes a more stringent ozone standard is necessary to increase the protection for children and other “at risk” populations, like adults with lung disease, against the array of ozone-related adverse health effects.⁴⁹ EPA summarized the adverse health effects from ozone exposure to include: decreased lung function, irritation and damage to airways, increased asthma attacks, increased susceptibility to respiratory infection, and aggravation of chronic lung diseases.⁵⁰ Although EPA’s findings indicate human health requires that the ambient air contain even less ground level ozone, New Hampshire citizens will continue to be exposed to this harmful pollutant for the foreseeable future due, in large part, to the continued emissions from Merrimack Station, which is now projected to operate for at least another 15 years. R.000678-679.

B. Merrimack Station Is New Hampshire’s Largest Stationary Source Emitter Of NO_x, A Precursor Pollutant To Ozone, And Could Further Reduce NO_x Emissions With Existing Pollution Control Equipment.

Merrimack Station’s NO_x emissions contribute to and exacerbate health problems associated with exposure to ground level ozone.⁵¹ Merrimack Station is New Hampshire’s single largest stationary source emitter of NO_x.⁵² In 2009, there were 3,762.9 tons of NO_x

Agency, Counties Violating the Primary Ground-level Ozone Standard, 2006-2008, pg. 8, App. at A-240, available at <http://www.epa.gov/air/ozonepollution/pdfs/CountyPrimaryOzoneLevels0608.pdf>.

⁴⁸ *Id.*

⁴⁹ Env’tl. Prot. Agency, Fact Sheet: Proposal to Revise the National Ambient Air Quality Standards for Ozone (2010), pg. 2, App. at A-228, available at <http://www.epa.gov/glo/pdfs/fs20100106std.pdf>.

⁵⁰ *Id.* at 5, App. at A-231.

⁵¹ Ground-level ozone is formed by a chemical reaction between oxides of nitrogen (NO_x) and volatile organic compounds in the presence of sunlight.

⁵² See U.S. Env’tl. Prot. Agency, Air Data-Facility Emissions Report-Criteria Air Pollutants, pg. 1, App. at A-247, available at <http://www.epa.gov/air/data/netemis.html?st~NH~New%20Hampshire>.

emitted by stationary sources in New Hampshire and Merrimack Station accounted for 2,306.5 tons or 61% of the state's total stationary source NO_x emissions.⁵³

Merrimack Station's utility boilers (MK1 and MK2) have selective catalytic reduction ("SCR") systems to control their NO_x emissions; however, the SCR technology is only operated at an 85% control level⁵⁴ when it could be operated to achieve further NO_x emissions reductions. New Hampshire is currently working within the Mid-Atlantic/Northeast Visibility Union ("MANE-VU") Regional Planning Organization to address the requirements of EPA's Regional Haze Rule.⁵⁵ In its May 22, 2009 Regional Haze SIP Revision, NHDES indicated that the Best Available Retrofit Technology ("BART") for NO_x at Unit MK2 (the applicable unit under EPA's Regional Haze Rule) was the existing SCR technology operated at an 85% control level and it was not establishing any new emission limit for NO_x at MK2.⁵⁶ In commenting upon NHDES's SIP submittal, two federal agencies questioned NHDES's decision to not require more stringent NO_x limits for MK2 at Merrimack Station. EPA commented:

For NO_x, New Hampshire has determined the year round use of selective catalytic reduction (SCR) is considered BART for Unit MK2. This determination seems reasonable. New Hampshire, however, states that its current federally enforceable limit for this unit is 0.86 lb/MMBtu, while the MANE-VU recommended level of BART control ... is 0.1-0.25 lb/MMBtu, depending on the boiler and fuel type. A review of the data in the CAMD database indicates that MK2 is achieving an emission rate well

⁵³See U.S. Evtl. Prot. Agency, Clean Air Markets- Data and Maps, App. at A-252-A-259, available at http://camddataandmaps.epa.gov/gdm/index.cfm?fuseaction=whereyoulive.state&displaymode=view&programYearSelection=none&prg_code=ALL&year=2009&state=NH.

⁵⁴See Proposed Title V Operating Permit, Public Service of New Hampshire, Merrimack Station (March 15, 2010), pg. 9, 20-21, App. at A-268, A-279-A-280; see also, BART Analysis for PSNH Merrimack Station Unit MK2 from 1-29-10 Final SIP Submittal, Attachment X, pg. 15 (Table indicating BART analysis for Merrimack Station Unit MK2 with the existing SCR with a control level of 85%), App. at A-301; see also Public Service of New Hampshire Merrimack Station, Clean Air Project, Temporary Permit Application for FGD System Installation (June 6, 2007), Form ARD-2, Merrimack Unit #1 pg. 3, Form ARD-2, Merrimack Unit #2 pg. 3 (operating data indicating the expected efficiency rates at Merrimack Units MK1 and MK2), App. at A-311, A-315, available at http://des.nh.gov/organization/divisions/air/pehb/apps/documents/psnh_tv_permit.pdf.

⁵⁵N.H. Dep't of Evtl. Serv., Air Resources Division, Draft Final New Hampshire Regional Haze SIP Revision, May 22, 2009, Mid-Atlantic/Northeast Visibility Union (MANE-VU), pg. 83, App. at A-327, available at http://des.nh.gov/organization/divisions/air/do/asab/rhp/documents/regional_haze_sip.pdf.

⁵⁶*Id.* at pg. 87, table 9.2, App. at A-331.

below 0.86 lb/MMBtu. For example, the highest monthly average emission rate in 2008 was 0.30 lb/MMBtu. Therefore New Hampshire should impose a more stringent emission limit for this unit.⁵⁷

Further, the National Park Service⁵⁸ asked NHDES to explain why the SCR (with or without additional combustion controls) cannot achieve better than the estimated 85% control.⁵⁹ The National Park Service commented, “NHDES should include requirements that PSNH optimize operation of the SCR.”⁶⁰ In a December 4, 2009 letter to NHDES, PSNH responded to these questions, indicating that boiler operations, load conditions and malfunctions of the SCR system and/or associated equipment do not allow the SCR to “perform continually at its maximum capability” and that PSNH “needs flexibility to operate the SCR based on current operating conditions.”⁶¹ However, PSNH neglects to address whether it could optimize operation of the SCR at a level less than maximum control, but more than the current control level of 85%. PSNH suggested the “load point may increase with the new, more efficient HP/IP turbine,” but does not mention whether this would allow greater control operation of the SCR or whether it would allow for a more stringent emission limit for NO_x.⁶² Finally, PSNH does not include any information as to how the SCR control level could be optimized with additional combustion controls.⁶³

⁵⁷ Letter from Anne Arnold, U.S. Env'tl. Prot. Agency, Region 1 to Jeff Underhill, N.H. Dep't of Env'tl. Serv., regarding EPA Comments on New Hampshire's May 2009 Proposed Regional Haze SIP (June 26, 2009), pg. 3, App. at A-337.

⁵⁸ EPA's Regional Haze Rule was promulgated to improve visibility in the 156 national parks and wilderness areas across the United States, including New Hampshire's Class I Areas: the Great Gulf Wilderness and the Presidential Range-Dry River Wilderness located in the White Mountain National Forest.

⁵⁹ Letter from John Bunyak, National Park Service, Department of the Interior, to Robert R. Scott, N.H. Dep't of Env'tl. Serv., regarding BART Review Comments (June 26, 2009), pg. 2, App. at A-345.

⁶⁰ *Id.*

⁶¹ Letter from John M. MacDonald, PSNH, to Robert Scott, N.H. Dep't of Env'tl. Serv., regarding Request for Additional Information for Determination of Best Available Retrofit Technology (BART) for the NH Regional Haze SIP (December 7, 2009), pg. 2-3, App. at A-355-A-356.

⁶² *Id.* at pg. 2, App. at A-355.

⁶³ *Id.*

While NHDES reports that the SCR associated with Unit MK2 achieves a level of control greater than 85%, it has failed to impose a more stringent, enforceable permit requirement that would guarantee a reduction in NO_x emissions from Merrimack Station. In what appears to be the BART Analysis for PSNH's Merrimack Station Unit MK2 that was included in NHDES's final Regional Haze SIP submittal to EPA in January 2010, NHDES indicates that the SCR associated with Unit MK2 achieves a level that exceeds 85% most of the time and frequently surpasses 90%.⁶⁴ However, NHDES concludes that the 85% control level is appropriate for a BART control level for NO_x at Unit MK2 and does not impose a more stringent emission limit to guarantee the SCR is operated at control levels it has been shown to be capable of achieving.⁶⁵

C. The SEC Has A Duty To Fully Review The Environmental Impact Associated With The Scrubber Project And Merrimack Station And Mitigate Unreasonable Adverse Effects By Imposing Certificate Conditions, Such As Maximizing Operation Of The SCR System To Reduce NO_x Emissions.

The SEC, after completing a full review, must find the Scrubber Project and Merrimack Station will not have an unreasonable adverse effect on ... air and water quality, the natural environment, and public health and safety before it can issue its certificate. RSA 162-H:16, IV(c). In order to make this finding, the SEC must conduct reasonable studies and investigations as appropriate to carry out the purpose of the Siting Law and may employ consultants to do so. RSA 162-H:10, V. The SEC cannot make the findings it made below until it "considers available alternatives" and fully reviews the environmental impact of the Scrubber Project and Merrimack Station. RSA 162-H:16, IV. Due to the long-term investment and massive, multi-year construction operation associated with the Scrubber Project at Merrimack Station, a coal-

⁶⁴ BART Analysis for PSNH Merrimack Station Unit MK2 from 1-29-10 Final SIP Submittal, Attachment X, pg. 8, App. at A-294. The document included in the Appendix indicates it is an attachment to NHDES's final Regional Haze SIP Submittal and was part of a document production we received from EPA, Region 1 pursuant to a request made under the Freedom of Information Act. We were unable to locate a full copy of the final SIP submittal on NHDES's website, although the agency does provide a copy of the 2009 SIP revision previously discussed.

⁶⁵ *Id.* at pg. 12-14, App. at A-298-A-300.

fired power plant nearing the end of its useful life, New Hampshire citizens deserve the review the Siting Law requires.

New Hampshire citizens currently suffer and will continue to suffer from exposure to ground level ozone, largely created by the NO_x emissions associated with Merrimack Station. Although the Scrubber Project will reduce mercury and sulfur dioxide emissions, it will do nothing to address Merrimack Station's continued NO_x emissions.⁶⁶ In fact, due to the installation of the Scrubber Project, Merrimack Station will continue to operate for many years beyond the present, presumably emitting its currently permitted level of NO_x emissions.⁶⁷ R. 000678-679. Additional guaranteed reductions in NO_x emissions are possible utilizing the current SCR technology at Merrimack Station, but PSNH and NHDES have failed to capture and ensure these reductions for New Hampshire citizens. SEC review of the Scrubber Project and Merrimack Station could result in the imposition of a requirement that PSNH optimize operation of the SCR system to the greatest extent possible and that NHDES guarantee the associated emissions reductions with an enforceable permit limitation. This type of review and reasonable result demonstrates the purpose and promise of the Siting Law.

⁶⁶ Public Service of New Hampshire Merrimack Station, Clean Air Project, Temporary Permit Application for FGD System Installation (June 6, 2007), App. at A-304-A-316.

⁶⁷ See BART Analysis for PSNH Merrimack Station Unit MK2 from 1-29-10 Final SIP Submittal, Attachment X, pg. 9 (indicating that although the 42-year old MK2 Unit is now beyond its estimated useful life, PSNH's commitment to install new emissions controls on the unit demonstrates the company's belief that the unit is capable of supplying electricity to the region for many years beyond the present), App. at A-295.

V. **MERRIMACK STATION UNREASONABLY IMPACTS THE NATURAL ENVIRONMENT BY EMITTING GREENHOUSE GASES THAT INCREASE THE EFFECTS OF CLIMATE CHANGE, AND THE SEC MUST REVIEW AND MITIGATE THESE IMPACTS.**

A. **New Hampshire Citizens Will Suffer From The Effects Of Climate Change, And The State Has Prioritized This Important Issue.**

The effects of climate change are wide-ranging. Climate change is especially visible in the northeast, and is predicted to change much of the region's character in coming years. The United States Supreme Court noted, "[t]he harms associated with climate change are serious and well recognized . . . including the 'global retreat of mountain glaciers, reduction in snow-cover extent, the earlier spring melting ice on rivers and lakes, and the accelerated rate of rise of sea levels during the 20th century relative to the past few thousand years.'" *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497, 521 (2007). NHDES estimates that climate change could increase global average temperatures 1.8–6.3 degrees Fahrenheit and parts of New Hampshire could experience even warmer trends.⁶⁸

Climate change and its expected impacts will adversely affect the health of New Hampshire citizens. Respiratory illnesses are expected to increase, as are vector-borne diseases such as Lyme disease, West Nile virus, and equine encephalitis.⁶⁹ Heat stresses are expected to generally degrade health and air quality, resulting in possible heat waves, increased allergens, and increased asthma symptoms.⁷⁰ The Concord/Manchester area may experience four times as many poor air quality days.⁷¹ Climate change is expected to result in more frequent and more extreme weather events, and this may result in greater harm from storms and floods, which can

⁶⁸ N.H. Dep't of Env'tl. Serv., Fact Sheet ARD-23: Global Climate Change and Its Impact on New Hampshire, pg.1, (2008), App. at A-358.

⁶⁹ N.H. Dep't of Env'tl. Serv., Climate Action Plan, pg. 29-30 (2009), App. at A-378-A-379, available at http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf

⁷⁰ *Id.*

⁷¹ *Id.* at 30, App. at A-379.

damage development within floodplains, contribute to water contamination, and cause sewage overflows.⁷²

The impacts from climate change will adversely effect New Hampshire's natural environment, and have economic consequences as well. New Hampshire is likely to see a reduction in the brilliant fall colors, negatively impacting "leaf-peeping" season, which currently brings approximately 292 million dollars to the state.⁷³ There may also be a large-scale collapse of the sugar maple forests and maple syrup production.⁷⁴ Spruce and other tree species are likely to be impacted, and vegetation density will decrease by 25–75 percent.⁷⁵ Extensive wildfires, large increases in pest and pathogen outbreaks, and a serious lag in the establishment of a new arboreal ecosystem may also occur.⁷⁶ Cold-water fishing in New Hampshire will be affected, due to temperature rise, habitat loss, and drought.⁷⁷ The skiing industry will also be affected with a shorter and lower-quality ski season.⁷⁸ A loss of 10-20 days from the ski season will cause a loss of about 42-84 million dollars in direct and indirect spending in New Hampshire.⁷⁹

A projected sea level rise of about 10-23 inches or as much as 31-79 inches will require

⁷² *Id.*

⁷³ N.H. Dep't of Env'tl. Serv., Fact Sheet ARD-23: Global Climate Change and Its Impact on New Hampshire, pg.2 (2008), App. at A-359, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-23.pdf>.

⁷⁴ *Id.*; N.H. Dep't of Env'tl. Serv., Fact sheet ARD-25: Global Climate Change and Its Impact on New Hampshire's Fall Foliage and Maple Sugar Industry (2008), App. at A-382, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-25.pdf>.

⁷⁵ N.H. Dep't of Env'tl. Serv., Fact Sheet ARD-23: Global Climate Change and Its Impact on New Hampshire, pg.2 (2008), App. at A-359, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-23.pdf>.

⁷⁶ *Id.*

⁷⁷ N.H. Dep't of Env'tl. Serv., Fact Sheet ARD-26: Global Climate Change and Its Impact on New Hampshire Cold Water Fishing (2008), App. at A-383-A-384, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-26.pdf>

⁷⁸ N.H. Dep't of Env'tl. Serv., Fact Sheet ARD-24: Global Climate Change and Its Impact on New Hampshire Skiing (2008), App. at A-385, available at <http://des.nh.gov/organization/commissioner/pip/factsheets/ard/documents/ard-24.pdf>

⁷⁹ *Id.*

significant investment in infrastructure such as dikes, levies, and dredge channels to shore up state and coastal areas.⁸⁰

New Hampshire has recognized the hazards of climate change and the adverse effects of greenhouse gas emissions on public health and safety and the environment. To address climate change impacts, Governor Lynch established the Climate Change Policy Task Force on December 6, 2007. The task force developed the New Hampshire Climate Action Plan (the “Plan”), advocating for carbon dioxide (“CO₂”) emissions reductions of 20 percent below 1990 levels by 2025, and 80 percent by 2050.⁸¹ The Plan also recognizes that delayed emissions reductions reduces the economic benefit associated with the reductions, and prioritizes avoiding the high costs associated with dealing with climate change as it occurs.⁸² To realize the reduction goals, the Plan advocates immediate measures to reduce emissions by using cost-effective, available technology.⁸³

The New Hampshire Legislature has also recognized the need for CO₂ reductions in the Scrubber Law. The law includes a finding that “aggressive further reductions in emissions of sulfur dioxide (SO₂), oxides of nitrogen (NO_x), mercury, and carbon dioxide (CO₂) must be pursued.” RSA 125-O:1, III. The Scrubber Law then states that those pollutants are responsible for the various health and environmental impacts documented in the New Hampshire Clean Power Strategy, issued by the NHDES in 2001. *Id.* This is followed by a finding that New Hampshire’s high quality of life is essential to the State’s economic well-being, and both are greatly served by reductions in emissions of CO₂ and the other listed pollutants. RSA 125-O:1, IV-V. Specifically, the legislature found that “substantial additional reductions in emissions of

⁸⁰ N.H. Dep’t of Env’tl. Serv., Climate Action Plan, pg. 31 (2009), App. at A-380, available at http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf

⁸¹ *Id.* at pg. 5, App. at A-371.

⁸² *Id.* at pg. 2, App. at A-368.

⁸³ *Id.*

CO₂ must be required of New Hampshire's existing fossil fuel burning steam electric power plants." *Id.*

B. Merrimack Station Contributes To And Increases The Effects Of Climate Change With Substantial CO₂ Emissions.

Merrimack Station presents a significant climate change challenge. Coal-burning power plants are the least efficient type of generating facility currently used, and give off the most CO₂ per unit of heat and per kilowatt-hour produced.⁸⁴ Many plants (like Merrimack Station) were built in the 1960's with technology that was inferior to what is now available. In 2009, Merrimack Station alone emitted over 2.5 million tons of CO₂.⁸⁵ The year 2009 is only one of two years since 1995 that Merrimack Station's total CO₂ emission was less than 3 million tons.⁸⁶ Merrimack Station's CO₂ emissions appear likely to exceed 3 million tons in 2010.⁸⁷ In order to combat the significant CO₂ emissions, the Scrubber Law calls for substantial additional reductions in CO₂ emissions from existing fossil fuel burning electric generating stations.

C. The SEC Must Review And Consider The Climate Change Impacts From Merrimack Station's CO₂ Emissions And Require Mitigation Of Adverse Environmental Effects.

The SEC has an obligation to consider the climate change impacts associated with Merrimack Station's continued high rates of CO₂ emissions and require conditions that mitigate the adverse environmental effects. For reasons discussed above, Merrimack Station's continued CO₂ emissions will negatively impact New Hampshire's environment, as well as public health,

⁸⁴ U.S. Dep't of Energy, Energy Information Administration, Frequently Asked Questions About Environment and Emissions, (August 19, 2010), pg. 2, App. at A-387, *available at* http://www.eia.doe.gov/ask/environment_faqs.asp

⁸⁵ U.S. Env'tl. Prot. Agency, Clean Air Markets, Data and Maps: Facility Summary for Merrimack, App. at A-395, *available at*

[https://gwmail.vermontlaw.edu/gw/webacc/gyaqw5Q10pu2ln5Mie/GWAP/AREF/1?action=Attachment.View&error=fileview&Item.Attachment.filename=Clean+Air+Markets+%2d+Data+and+Maps%2epdf&Item.Attachment.id=1&User.context=gyaqw5Q10pu2ln5Mie&Item.drn=12440z2z0&Item.Child.id=&Item.Attachment.allowViewNative=](https://gwmail.vermontlaw.edu/gw/webacc/gyaqw5Q10pu2ln5Mie/GWAP/AREF/1?action=Attachment.View&error=fileview&Item.Attachment.filename=Clean+Air+Markets+%2d+Data+and+Maps%2epdf&Item.Attachment.id=1&User.context=gyaqw5Q10pu2ln5Mie&Item.drn=12440z2z0&Item.Child.id=&Item.Attachment.allowViewNative=1)

1.

⁸⁶ *Id.*

⁸⁷ *Id.*

safety, and welfare. The SEC, in reviewing the Scrubber Project and Merrimack Station, has various options for mitigating conditions to reduce CO₂ emissions.

Carbon dioxide emissions reductions can be easily achieved by improvements in efficiency and the simple reduction of waste.⁸⁸ For every 1% of improvement in efficiency of a coal-burning power plant, CO₂ emissions are reduced by an average of 2-3%.⁸⁹ Independent consultants to the EPA have identified specific plant systems and equipment that can add cost-effective efficiency improvements to coal-fired power plants like Merrimack Station.⁹⁰ Implementation of some or all of these projects could offer significant improvements in thermal efficiency and reductions in the amount of CO₂ released in the generation of each kilowatt-hour.⁹¹ However, the amount of such potential and its cost at Merrimack Station will not be known until further study and review is conducted. Imposing conditions that significantly reduce the adverse effects associated with Merrimack Station's CO₂ emissions using cost-effective, available technology would simultaneously satisfy the intent of the Plan, the Siting Law, and the Scrubber Law. Under certification review, the SEC should undertake the necessary investigation and review to implement such beneficial conditions.

⁸⁸ World Coal Institute, *Improving Efficiencies*, pg. 1, App. at A-397, available at <http://www.worldcoal.org/coal-the-environment/coal-use-the-environment/improving-efficiencies/>.

⁸⁹ *Id.*

⁹⁰ Sargent & Lundy, LLC., *Coal-Fired Power Plant Heat Rate Reductions*, 1-1 to 7-2 (Jan. 22, 2009), App. at A-406-A-438, available at <http://www.epa.gov/airmarkt/resource/docs/coal-fired.pdf>

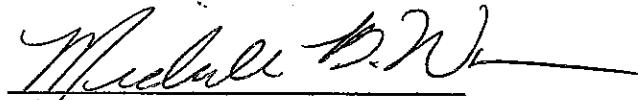
⁹¹ *Id.* at 1-1 to 1-3, App. at A-406-A-408.

CONCLUSION

For the foregoing reasons, the Court should reverse the SEC's determination that the Scrubber Project is not a sizeable addition at Merrimack Station and remand the matter to the SEC, requiring review and certification of the Scrubber Project and Merrimack Station.

Respectfully Submitted,

Date: November 29, 2010



Michelle B. Walker, Esq.
Pending Pro Hac Vice
Environmental and Natural Resources Law Clinic
Vermont Law School
P.O. Box 96, 164 Chelsea Street
South Royalton, Vermont 05068
(802) 831-1624
mwalker@vermontlaw.edu

Associated with:



Steven Whitley, Esq.
NH Bar No. 17833
Baldwin & Callen, PLLC
3 Maple Street
Concord, NH 03301
(603) 225-2585
SWhitley@nhlandlaw.com

CERTIFICATE OF SERVICE

Pursuant to New Hampshire Supreme Court Rule 16(10), I hereby certify that two copies of this Brief of Amicus Curiae and Appendix were sent by first class mail, postage prepaid, this **29th day of November, 2010** to the following Counsel of Record in this matter:

**For Campaign for Ratepayers Rights and
Union of Concerned Scientists**

Patrick Arnold, Bar No. 19610
Bostock Law, PLLC
92 Portsmouth Avenue, Suite 14
Exeter, NH 03833

**For Freedom Logistics, LLC and
Halifax-American Energy, LLC**

James T. Rodier, Bar No. 8583
1500A Lafayette Road, #12
Portsmouth, NH 03802-5918
(603) 559-9987

For Trans-Canada Hydro Northeast, Inc.

Douglas L. Patch, Bar No. 1977
Jeremy D. Eggleton, Bar No. 18170
Orr & Reno, P.A.
One Eagle Square
P.O. Box 3550
Concord, NH 03302-3550
(603) 224-2381

For Public Service of New Hampshire.

Christopher J. Allwarden
Senior Counsel, Legal Dept.
Public Service Co. of New Hampshire
PSNH Energy Park
780 N. Commercial Street
P.O. Box 330
Manchester, NH 03105-0330
(603) 634-2961

For Conservation Law Foundation

Melissa Hoffer, Bar No. 17849
27 North Main Street
Concord, NH 03301-4930
(603) 225-3060

For Granite Ridge Energy, LLC

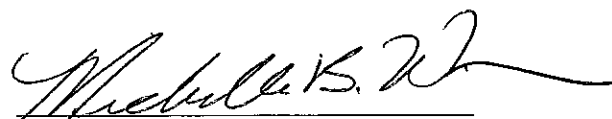
Howard M. Moffett, Bar No. 1780
Orr & Reno, P.A.
One Eagle Square
P.O. Box 3550
Concord, NH 03302-3550
(603) 224-2381

Jackson Perry (pro se)

Jackson Perry
38 Mason Avenue
Pembroke, NH 03275

For Public Service of New Hampshire

Barry Needleman, Esq.
McLane Law Firm
11 South Main St., Ste 500
Concord, NH 03301
(603) 230-4407



Michelle B. Walker, Esq.