

LAW OFFICES
ARTHUR B. CUNNINGHAM
79 Checkerberry Lane, Hopkinton, NH 03229

July 7, 2010

Debra A. Howland
Executive Director and Secretary
Public Utilities Commission
21 South Fruit Street
Concord, NH 03301-2429



Re: Docket No. DE 08-103. Response to PSNH confidentiality claims

Dear Secretary Howland:

The three studies: "Merrimack Station Unit 2 Boiler Replacement Feasibility Study, dated November, 2004, prepared by Burns & McDonnell; "Preliminary Permit Plan Analysis-Critical Path Issues, Multi-Pollutant Control Strategy Options', dated July 26, 2005, prepared by GZA GeoEnvironmental, Inc.; and, "Merrimack Boiler Study", dated February 1, 2007, prepared by Sargent & Lundy, LLC, are comprehensive evaluations of generation upgrade and life extension projects for Merrimack Station, together with the environmental permitting implications of those projects, of the 60 year old coal fired power plant owned by Public Service Company of New Hampshire [PSNH].

The studies, which were commissioned by PSNH at ratepayer expense, are material to this docket.

The Burns & McDonnell study examined three Clean Air Act sulfur dioxide [SO₂] compliance options, including the replacement of the MK2 boiler with wet flue gas desulphurization [FGD] installation; installation of the FGD system without the boiler replacement; and, continuation of the current practice of purchasing SO₂ credits, without the FGD system.

The GZA report examined Clean Air Act permitting consequences of the upgrade of the high pressure and intermediate pressure [HP/IP] turbine alone or in conjunction with control technology retrofit projects; up-rate of MK2 by up to 20 MW contemporaneous with the FGD system and the HP/IP turbine upgrade; retrofit of FGD system to MK1 and MK2, including retrofit of a balanced draft system to each unit; and other projects. Importantly, the GZA report states that: "...A cursory review of the MK2 annual current emission rates shows that a very small increase in actual emissions [\leq than 1%] is all that would be needed to exceed the NSR significant emission levels." In other words, a less than 1%

PO Box 511, Contoocook, NH 03229
(603) 746-2196 (office and fax) (603) 491-8629 (cell)
gilfavor@comcast.net

emissions increase will invoke more stringent Clean Air Act permitting responsibilities, including the installation of upgraded pollution control equipment.

The Sargent & Lundy report, 4th version, although heavily redacted, is an exhaustive, highly technical examination of generation upgrade, debottlenecking and life extension projects, including, but not limited to, balanced draft conversion of MK1 and MK2; up-rate of the MK2 boiler by 20 MW of steaming capacity; replacement of the MK2 tubular air heater; improvements to the control of the flue gas inlet temperature to the MK2 selective catalytic reactor [SCR]; and, addition of a mechanical draft cooling tower to replace existing spray modules. Sargent & Lundy states that the initial objective of its study was to determine whether the MK2 boiler firing rate could be increased sufficiently to produce up to an additional 20 MW of generation, both without an increased firing rate and with an increased firing rate.¹ Sargent & Lundy concluded that improvements to the plant could substantially increase output by as much as 12 MW to 17 MW during winter and spring and 9 MW to 13 MW in the summer compared to historical plant gross output.²

Sargent & Lundy also examined the Clean Air Act permitting implications under New Source Performance Standards [NSPS], noting that existing steam generating projects that are modified or reconstructed would be subject to NSPS if the plant modification results in an increase of pollutants measured in pounds of pollutant per hour [PM, NO_x and SO₂], or, if the reconstruction means the replacement of components has a fixed capital cost that exceeds 50% of the cost of an entirely new steam generating unit of comparable design and it can meet the applicable standards of the Clean air Act. [40 CFR 60.15]³ Sargent & Lundy also examined NSR permitting, noting that non-routine modifications of an existing electric generating unit [EGU] may trigger New Source Review [NSR] permitting requirements.

New Hampshire Sierra Club obtained the Burns & McDonnell and GZA reports from Region 1, United States Environmental Protection Agency [EPA], pursuant to a Freedom of Information [FOIA] request. EPA, Region 1, on April 3, 2009, initiated a reporting requirement on PSNH pursuant to Clean Air Act, 42 USC 7414. Section 114(a) of the Act authorizes EPA to demand information from a source to determine whether the source is in violation of the Clean Air Act. PSNH, pursuant to 40 CFR 2.301(a) (2)

¹ PSNH, as early as June 7, 2006, conceded to NHDES-ARD that a generation upgrade was necessary to handle the parasitic load on capacity of the FGD system.

² The increased output is in addition to the increased output of the replaced MK2 turbine as PSNH consistently argued in Air Resources Council proceedings that the turbine replacement was an entirely separate project from the FGD project.

³ In view of the huge PSNH debt authorization request in DE 10-122, NSPS permitting is of concern.

is entitled to claim that information is confidential business information [CBI]. PSNH made broad CBI claims, the validity of which, EPA, Region 1, has not yet determined. The Burns & McDonnell and GZA reports were not included in the PSNH CBI claims; therefore, the assertion of Attorney Eaton, in his July 1, 2010, letter is incorrect. Region 1 would not have produced the reports if PSNH had included them in the CBI claim.

Furthermore, PSNH did not object to admission of either the Burns & McDonnell or GZA report to the public record in Air Resources Council Docket No. 09-10, ARC. Mr. Eaton's statement that PSNH objected to the GZA report is wrong.

The Sargent & Lundy report was ordered produced by the Air Resources Council; therefore, PSNH has no basis whatever to complain about its production.

The New Hampshire Rules of Evidence, Rule 510 provides that a claim of privilege is waived if the holder of the privilege voluntarily discloses or consents to disclosure of any significant part of the privileged matter. Federal law is similar. See E.I. duPont deNemours & Co., v. Christopher, 431 F.2d 1012 [1970], where the Court stated that it is not improper to obtain knowledge of a process where the holder of the alleged trade secret voluntarily discloses it or fails to take reasonable precautions to ensure its secrecy. Furr's, Inc., United Specialty Advertising Co., 385 S.W. 2d 456, 459 [1964], cert denied, 382 U.S. 824 [1965], owner of a trade secret must do something to protect himself or the secret will be lost by its disclosure.

PSNH has asserted that the Burns & McDonnell and GZA are copyrighted by Burns & McDonnell and GZA. PSNH does not explain the basis of how it can assert a claimed copyright of a third party.

Puc 201.04 states that all documents submitted to the Commission or staff in an adjudicative or non-adjudicative shall become matters of public record, therefore, the Burns & McDonnell, GZA and Sargent & Lundy reports should be promptly posted to this docket.

Finally, Attorney Eaton states that the Burns & McDonnell report was a study of a sulfur scrubber; that the scrubber currently under construction is a mercury scrubber, a "substantially different machine". Mr. Eaton goes on to state that PSNH "never in fact pursued a sulfur dioxide scrubber so that analysis consequently has no bearing on any issues before the Commission today".

The Eaton statement is nonsense. The scrubber under construction is a wet flue gas desulfurization scrubber the primary purpose of which is

to remove SO₂ from the flue gas stream at Merrimack Station in order to comply with the Clean Air Act and RSA 125-O:11-18.⁴ A cursory review of Temporary Permit, TP-0008, the scrubber construction permit, establishes that the FGD system is primarily to remove SO₂. FGD systems may also remove some mercury in its ionic form. The mercury in coal is combusted in coal fired boilers in speciated form, including elemental and ionic mercury. FGD systems are known to convert ionic mercury to elemental mercury, which is emitted from the stack. The ionic mercury removed from flue gas in wet FGD systems is land filled with the gypsum sludge or in secondary dewatering processes, if any.

What is particularly disturbing about Mr. Eaton's assertion that PSNH is installing a "mercury" scrubber is that it may not work.⁵ The "mercury" scrubber will likely not remove 80% of the mercury in the coal combusted at Merrimack Station in accordance with RSA 125-O:11-18 and, most certainly, will not achieve the maximum achievable control [MACT] technology required by the Clean Air Act to reduce emissions of the hazardous air pollutant mercury.

As a result of these concerns, New Hampshire Sierra Club, on March 25, 2010, filed its Notice of Appeal, Air Resources Council Docket No.10-06, to the issuance of the PSNH Merrimack Station, Proposed Title V Operating Permit FY 96-TV048, asserting *inter alia* that the Title V is legally flawed with respect to the hazardous air pollutant mercury [Hg] because it does not comply with Clean Air Act 42 USC 4212 and RSA 125-O:11-18. The appeal is pending.

The reports should be admitted to Docket DE 08-103.

Very truly yours,

Arthur B. Cunningham

cc: Service list

⁴ Mr. Eaton refers to NHSC expert witness Michael Hekking. Mr. Hekking spent a large part of his career running cyclone boiler coal fired power plants very like Merrimack Station. Mr. Hekking testified to the ARC that he was very familiar with scrubbers, but, had never heard of a "mercury" scrubber, while acknowledging that scrubbers may have the incidental benefit of removing some mercury.

⁵ NHDES-ARD and PSNH have yet to establish an agreed baseline for mercury, four years after the passage of RSA 125-O:11-18 and the expenditure of hundreds of millions of dollars.

