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of New Hampshire**

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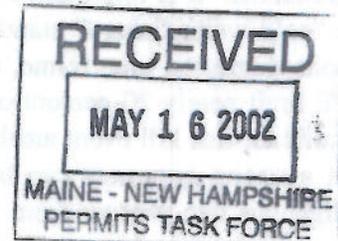
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The Northeast Utilities System

May 8, 2002

D18597

Mr. John King
US EPA - Region 1
Office of Ecosystem Protection (CPE)
NPDES Permit Unit
1 Congress Street, Suite 1100
Boston, MA 02114-2023



Subject: Merrimack Station NPDES Permit No. 0001465
Proposed Temperature Limitations

Dear Mr. King:

On behalf of PSNH, Normandeau Associates (NAI) compiled the attached letter to summarize our position regarding the proposed thermal limits for Merrimack Station, as presented and discussed at the interagency meeting on April 17. This letter is to support the technical findings submitted by NAI and to directly provide additional comment. PSNH is pleased to have the opportunity to participate in these preliminary negotiations and compliments you on the professional manner in which they have been conducted.

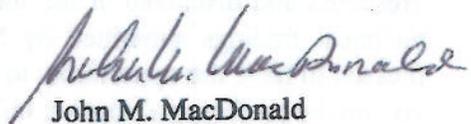
The agencies have stated that the time has come to assign numeric temperature criteria in the Merrimack Station NPDES permit. While we believe the current regulatory scheme provides adequate protection, we recognize its uniqueness and understand EPA's preference for more traditional temperature limits. Given your directive that the limit setting process will be science-based, and having the vast library of research that exists for the target fish in general, and for the Hooksett pool specifically, PSNH feels that fair, reasonable limits are certainly achievable. Unfortunately, the limits that have been proposed are based upon only a scant amount of the available technical information. The suggested maximum limits for the migratory seasons were selected from a source that provided preferential, not lethal, temperatures. There appears to have been little to no science applied to the derivation of the temperature limit assigned for the remainder of the year. Of greatest concern, is the imposition of these overly protective limits at the worst case location, Station S0. This approach ignores further scientific evidence that shows the plume stratifies in the top meter of the river and that an ample supply of cooler water exists below the surface lens. And while the surface discharge temperatures can considerably exceed river temperatures, near ambient temperatures are always available to the fish beneath the plume. In fact, even at Station S0, approximately one third of the river cross section is maintained at near ambient temperatures. If the intent is to apply temperatures that fish prefer, then the limits should be assigned in the water body where the fish live. If the intent is to apply limits at Station S0, then additional modeling is necessary to refine the correlation between downstream subsurface temperatures and canal discharge temperatures.

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The limits as proposed impose significant consequences to PSNH and the electric consumers of New Hampshire, from both economic and power supply perspectives. At present, the available research documentation does not justify a multimillion dollar expenditure to provide cooler water for the anadromous fish program as it currently exists or for the resident populations. It is important to recognize that this stretch of the river typically begins to exceed the "cold water fishery" standard not long after the spring runoff is complete. For the salmon smolts migration time frame, the naturally occurring river temperature can exceed the proposed 68°F limit nearly 20-percent of the time. And in nearly 35 years of operations, there is not one significant fish kill event attributed to the normal thermal discharge from Merrimack Station. In fact a strong argument can be made, and corroborated by numerous fishermen logs, that the indigenous fish prosper from the thermal discharge. If an agreement can not be reached based upon the existing documentation, PSNH requests the opportunity to perform further site specific investigations to gather the lacking information. To gain more knowledge and to further substantiate the zone of passage, we are already installing additional RTDs at Station S4 to record temperatures at two greater depths this summer.

Again, thank you for this opportunity to present our position on this extremely important issue. Please contact Allan Palmer at 603-634-2439 to continue the discussions.

Very truly yours,



John M. MacDonald
Vice President

cc: Roger Janson, USEPA
Eric Nelson, USEPA
Carl Deloi, USEPA
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