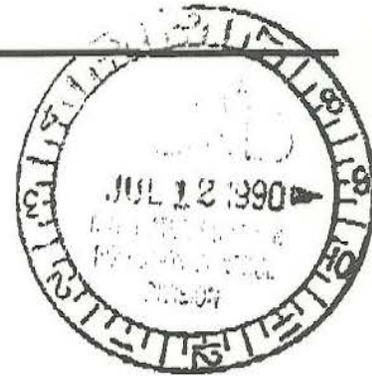




State of New Hampshire  
Fish and Game Department

2 Hazen Drive, Concord, NH 03301  
(603) 271-3421

Donald A. Normandeau, Ph.D.  
Executive Director



July 2, 1990

Jeffrey Andrews, P.E.  
New Hampshire Department of Environmental  
Services  
P.O. Box 95  
6 Hazen Drive  
Concord NH 03301-0095

REF. NPDES Permit  
Schiller Station  
Portsmouth NH  
Piscataqua River  
#NH0001473

Dear Mr. Andrews:

Thank you for the opportunity to respond to comments by PSNH on their Draft NPDES Permit application for the Schiller Station. PSNH is requesting variances to conditions proposed in the draft permit for discharges and monitoring of treated wastewater and cooling water.

Specifically, PSNH is requesting that they be relieved from testing treated wastewater on weekends for total residual chlorine. They state that testing occurs during the week, and their equipment is maintained to assure that weekend chlorination is undertaken in proper amounts. The Department suggests that since chlorine is applied as a biocide during the week there is no need to treat during the weekends since fouling of lines is unlikely to occur during that two day period.

PSNH also requests that the required sampling from outfall #11, which is the culmination of three pipes, be identified as one of the three pipes which discharges into a trench which drains to the river. They contend that the sampling at the outfall to the river is dangerous due to a steep bank. The Department recommends that the sampling occur in the trench before it reaches the steep bank.

PSNH also asks for suspension of conditioned temperature limits for Outfalls #2, 3, and 4 during critical generation periods. The temperature limits of their present NPDES permit are to protect the marine resources of the river. If PSNH desires a change they should formally apply for higher temperature limits at which time an assessment can be properly made of the environmental impacts. PSNH applied for a similar change in the temperature conditions for their nearby Newington facility.

Jeffrey Andrews  
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July 2, 1990

If you have any questions please contact Ecologist, William Ingham, Jr. at (603) 271-2501; or Chief of the Marine Division, John Nelson at (603) 868-1095.

Sincerely



Donald A. Normandeau, Ph.D.  
Executive Director

DAN/WCI  
cc: William Ingham, Jr.  
John Nelson  
Gordon Beckett



Public Service of New Hampshire

AUGUST 3, 1990

U. S. Environmental Protection Agency  
Compliance Branch  
JFK Federal Building  
Boston, Massachusetts 02203



RE: NPDES Draft Permit No. NH0001473

Gentlemen:

Public Service Company of New Hampshire has reviewed the draft permit for Schiller Station and we are in general agreement with the limitations and conditions. We are pleased that several of our preliminary comments submitted on June 1, 1990, were incorporated into the draft document. We do, however, wish to restate a few of the remaining comments for further consideration.

Oil and grease samples are collected only on a monthly basis for outfalls 001, 011, and 018. The permit contains two limits which causes confusion when only one value is recorded each period. PSNH requests the average monthly limit be eliminated so that it is not interpreted improperly in the future.

PSNH asks that the DMR submittal deadline for reports be the 28th of each month as required by our existing permit. Additional time is needed to compile the large amount of data associated with an 18-outfall facility.

Most significantly, PSNH requests that an emergency temperature provision be granted for outfalls 002, 003, and 004 to allow less restricted operation during New England power deficiencies. The request is made to lessen the risk of voltage reductions or brownouts during periods of high electrical power demand, usually triggered by extreme weather conditions. Potential environmental impacts from regional power outages could be much more severe than occasional elevated temperatures in Schiller Station's cooling water. EPA's Fact Sheet acknowledges that "little, if any, impact from the thermal plume upon the biological community has been detected, and ... the station has operated without any obvious environment degradation". If approved, the provision would be rarely implemented, particularly in light of the recent success of Seabrook Station operation. Temperatures above the 95°F/25°F limit would probably occur less than 200 hours during the life of the permit, or less than 0.5% of the time. Our original request is attached to provide a more thorough discussion.

PSNH commends EPA on their management of this permit reissuance and we appreciate the opportunity to comment. Please contact me at (603)669-4000, extension 2439, if you have any questions.

Very truly yours,

Allan G. Palmer  
Senior Engineer

AGP/1m/8:5

cc: Nicholas Prodan - USEPA  
Russell Nulander - NHWSPCD

## ATTACHMENT FROM 6/1/90 SUBMITTAL

Temperature Limitations

In our application, PSNH asked if temperature limit variances could possibly be granted for Outfalls 002, 003 and 004 during critical power generation periods. We suggested that it might be possible to link the variances to a New England Power Exchange (NEPEX) utility emergency response action termed Operating Procedure #4 (OP-4). EPA requested more information.

OP-4 is a formalized series of electric utility response actions that NEPEX implements when the New England region experiences an energy capacity deficiency. The actions are specifically defined and are generally applicable to all New England utilities simultaneously. The responses are usually triggered by extreme weather conditions but are also influenced by other factors such as large generating unit outages, including those outside of New England.

The first response action under OP-4 is to bring all of the steam generating units up to Maximum Claimed Capability (MCC). Temperature limitations are regularly approached by Schiller Station Units 4, 5, and 6 when they are operated at MCC. To avoid the conflict between responding to the regional power demand and the NPDES permit, PSNH requests the temperature limits be suspended during these brief emergency periods.

OP-4 implementation is typically infrequent and short-lived. In 1989, NEPEX called upon OP-4 less than 1% of the year. An unofficial summary of the last 7 years is provided here:

OP-4 Events

<u>YEAR</u>	<u>NO. OF DAYS</u>	<u>NO. OF HRS.</u>	<u>% OF YR.</u>
1983	0	0	0.0
1984	13	50	0.6
1985	7	30	0.3
1986	32	112	1.3
1987	24	119	1.4
1988	34	181	2.1
1989	21	71	0.8

Due to new generation, New England is predicted to have a larger surplus of power from 1990 through 1994 than it had in 1989. By 1995, the region is expected to face a similar supply and demand situation as in 1989. Consequently, OP-4 should be in effect less than 1% of the entire life of the permit. Additionally, it is possible that Schiller Station units could be out of service during OP-4 events or that temperature compliance could still be achieved when operating at MCC. This reduces even further the frequency that the variance will be needed. It will, however, allow the generation of valuable power during critical supply periods.

PSNH understands that this may be a procedure that is unfamiliar to EPA. More details are available if desired; perhaps we can discuss the concept further and the possible means to implement the variance and to document it. Special reporting or possibly a trial program could be arranged.