



**Public Service  
of New Hampshire**

PSNH Energy Park  
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The Northeast Utilities System

75

November 24, 2004

D21803

Ms. Joy J. Hilton  
U.S. Environmental Protection Agency  
Region I  
1 Congress Street, Suite 1100 (SEW)  
Boston, MA 02114-2023

Reference: NPDES Permit No. NH0001473, Schiller Station, Public Service Company of New Hampshire, issued September 11, 1990; modified May 31, 1991; modified January 24, 1995.

Dear Ms. Hilton:

Schiller Station  
5-Day Noncompliance Notification

In compliance with Part II, Section D.1.e., of the referenced NPDES Permit, Public Service Company of New Hampshire (PSNH) submits this noncompliance notification for Schiller Station located in Portsmouth, NH. On Tuesday, November 23, 2004, Allan Palmer of PSNH initially informed Stephanie Larson of the NH Department of Environmental Services of the noncompliance in a telephone conversation and left a voicemail containing a general description for you. This letter is to provide greater detail of the event.

During a computer download at midnight on Monday, November 22, 2004, station operators noticed that the data sheets were reporting generation output for a unit that had been taken off-line earlier in the day. Further investigation determined that the computer output for a set of data points had frozen on the same numbers at 16:00 on Thursday, November 18. One of the frozen data points was the temperature differential (delta-T) of condenser cooling water. When the computer was reset, the alarm engaged for delta-T on Unit 5 (Outfall 003) as the reading was above the permit limit of 25<sup>0</sup>F. A follow-up investigation determined that the Unit 5 condenser was obstructed with river debris and that the temperature differential had exceeded the permit limit over this period. The condenser was immediately secured for cleaning and operations were returned to normal.

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Although the delta-T printouts had frozen, station personnel were able to recover cooling water temperatures from the computer during the period in question. While the averages that are calculated every 30 seconds are not recorded and were lost, the data base did still contain hourly inlet and outlet condenser temperature readings. These readings were used to manually calculate the hourly temperature differentials, which is in compliance with the permit requirement. This data showed that Unit 5 was in noncompliance on a considerable number of occasions, but that the differential only climbed above 27<sup>0</sup>F for four hours and never exceeded 29<sup>0</sup>F (see the attachment).

Technicians are presently reviewing the computer system to determine the cause of the problem. Electronic and/or manual safeguards will be instituted to prevent a similar event from occurring. In the interim, Control Room Operators have been instructed to manually verify that the computer is operating properly throughout each day.

A follow-up report with our findings will be provided to NHDES and USEPA within 30 days. PSNH will also review the computer systems at our Merrimack and Newington stations to ensure that the data is protected at those locations. If you have any questions regarding this notification, please contact Allan Palmer, PSNH Generation, at (603)634-2439.

Very truly yours,



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William H. Smagula, P.E.  
Director - Generation

cc: Ms. Stephanie Larson  
N.H. Department of Environmental Services  
Water Division  
Wastewater Engineering Bureau  
Permits and Compliance Section  
29 Hazen Drive, PO Box 95  
Concord, NH 03302-0095

Attachment

Schiller Station Unit 5 (Outfall 003)  
Cooling Water Temperature Differential Noncompliances

	<u>Hour</u>	<u>Delta-T</u>
Thursday, November 18, 2004	22:00	26 <sup>0</sup> F
Friday, November 19, 2004	23:00	26 <sup>0</sup> F
	24:00	26 <sup>0</sup> F
Saturday, November 20, 2004	01:00	26 <sup>0</sup> F
	11:00	26 <sup>0</sup> F
	14:00	26 <sup>0</sup> F
	15:00	26 <sup>0</sup> F
	16:00	26 <sup>0</sup> F
	22:00	26 <sup>0</sup> F
	23:00	26 <sup>0</sup> F
	24:00	27 <sup>0</sup> F
Sunday, November 21, 2004	01:00	27 <sup>0</sup> F
	02:00	27 <sup>0</sup> F
	03:00	27 <sup>0</sup> F
	04:00	27 <sup>0</sup> F
	05:00	26 <sup>0</sup> F
	06:00	26 <sup>0</sup> F
	07:00	26 <sup>0</sup> F
	08:00	26 <sup>0</sup> F
	09:00	26 <sup>0</sup> F
	10:00	26 <sup>0</sup> F
	11:00	26 <sup>0</sup> F
	12:00	27 <sup>0</sup> F
	13:00	27 <sup>0</sup> F
	14:00	27 <sup>0</sup> F
	15:00	27 <sup>0</sup> F
	16:00	26 <sup>0</sup> F
	17:00	26 <sup>0</sup> F
	19:00	26 <sup>0</sup> F
	21:00	26 <sup>0</sup> F
	22:00	26 <sup>0</sup> F
	23:00	26 <sup>0</sup> F
	24:00	27 <sup>0</sup> F