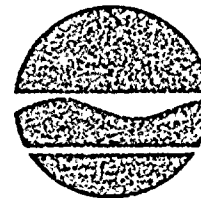


New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233
Division of Water

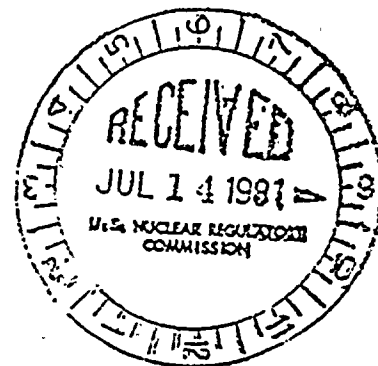


Robert F. Flacke
Commissioner

July 9, 1981

Mr. Philip Polk
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Re: Niagara Mohawk
Nine Mile Point Unit #1
#NY-000 1075



Dear Mr. Polk:

We have modified the SPDES permit for the referenced facility to enable Niagara Mohawk to operate under full load conditions. Niagara Mohawk had miscalculated the operating characteristics of their facility. Therefore, we agreed to raise the discharge temperature and discharge temperature difference limitations by 3 Degrees Farenheit to 115 Degrees Farenheit and 35 Degrees Farenheit. Department biologists have reviewed and approved these limitations.

These limitations will be incorporated in the long term 5-year permit to be written for this facility in the near future.

If you have any further questions on this matter, please contact Allan Geisendorfer at (518) 457-6717.

Very truly yours,

Walter E. Loveridge, P.E.
Chief
Physical Systems Section
Bureau of Industrial Programs

WEL/ANG/fd

cc: G. Metti, Niagara Mohawk
EWQ - Region #7

DUP OF

8107150022 810709
PDR ADDCK 05000220
P PDR

COOP
51/0



ATTACHMENT TO LICENSE AMENDMENT NO. 46

FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

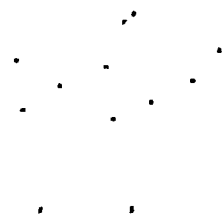
Replace the following pages of the Appendix "B" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Pages

4

5

7



2.0 LIMITING CONDITIONS FOR OPERATION

2.1 Thermal

2.1.1 Maximum ΔT

OBJECTIVE

The purpose of this Specification is to limit the thermal stress to the aquatic ecosystem by limiting the maximum ΔT across the main condenser inlet and the screenwell discharge bay.

SPECIFICATION

Maximum ΔT across the main condenser inlet and the screenwell discharge bay during normal Station operation shall be limited to 35°F. If during normal Station operation the ΔT exceeds 35°F for eight consecutive hours, the cause of this deviation shall be investigated and positive action shall be taken to prevent any such deviation in the future. In addition, a report shall be submitted in accordance with Section 5.6.2.

MONITORING REQUIREMENT

The ΔT across the main condenser inlet and the screenwell discharge bay shall be monitored and recorded once per hour. Two resistance temperature detectors (RTD) shall measure the temperature in each location. The RTD's shall be accurate to $\pm 1.0^\circ\text{F}$.

BASES

Lake studies and operating experience indicate that mortality of plankton, eggs, and larvae entrained in the condenser will not have a significant effect on the lake population of the species involved.^{2,3} With the main condenser operating at design heat load and circulating water at 95% design flow, the condenser temperature rise should not exceed 36°F. Since the service water discharges downstream of the condenser outlet, the corresponding station cooling water temperature rise across the plant should not exceed 35°F.

1.2 Maximum Discharge Temperature

115F

1.3 Maximum BTU Per Hour

NOT APPLICABLE



2.1.5 Heat Treatment of Circulating Water System

OBJECTIVE

To limit the thermal stress to the aquatic ecosystem by limiting the circulating water temperature increase over lake ambient temperature resulting from tempering and reverse flow procedures.

SPECIFICATION

When the lake inlet temperature is between 32°F and 50°F, the discharge temperature shall not exceed the lake inlet temperature by more than 50°F, except during reverse flow operations. At no time during tempering, except during reverse flow operations, shall the discharge temperature exceed 85°F.

Following a flow reversal, the discharge temperature shall not exceed the lake inlet temperature by more than the following values:

- 70°F for the first hour following flow reversal
- 60°F for the second hour following flow reversal
- 50°F two hours following flow reversal and thereafter

MONITORING REQUIREMENT

The discharge temperature shall be monitored and recorded hourly as provided in the Monitoring Requirement of Section 2.1.1.

BASES

When lake temperature is less than 50°F, part of the discharge flow in the screenwell may be recirculated to the intake to maintain condenser inlet temperature between 40°F and 50°F. This procedure is known as "tempering". The maximum circulating water temperature rise due to tempering is 18°F and occurs when the lake temperature is 32°F. When this is added to the 35°F ΔT , the maximum rise is 53°F over lake inlet temperature. Maintaining the condenser inlet temperature at no more than 50°F during tempering ensures that the discharge temperature will not exceed 85°F during tempering.

The amount of tempering is controlled by moving a gate in the screenwell, and is normally adjusted to maintain the optimal condenser inlet temperature of approximately 45°F. The gate can be adjusted to achieve this temperature within an error of approximately 5°F. This error includes minor tempering gate leakages which may be present at any time including when lake temperature is in excess of 50°F. This leakage is not considered tempering for the purpose of this specification.

