

Docket No. 50-220

JUL 24 1981

Mr. Donald P. Dise  
Vice President - Engineering  
c/o Miss Catherine R. Seibert  
Niagara Mohawk Power Corporation  
300 Erie Boulevard West  
Syracuse, New York 13202



Dear Mr. Dise:

The Commission has issued the enclosed Amendment No. 46 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit 1. The amendment consists of changes to the Technical Specifications in partial response to your application dated July 16, 1981.

By letter dated July 9, 1981, the N. Y. State Department of Environmental Conservation agreed to a revision to the Nine Mile Point Environmental Technical Specifications. Specifically, limits regarding main condenser temperature increase and maximum discharge temperature to Lake Ontario were raised 3°F to 35°F and 115°F, respectively. This amendment reflects these changes.

Based on the foregoing, we have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level, and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §1.5(d)(4) that an environmental impact statement, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

We have further concluded that the amendment does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin and therefore does not involve a significant

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Mr. Donald P. Dise

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hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the related Notice of Issuance is also enclosed.

Sincerely,

Original Signed by  
T. A. Ippolito

Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

- 1. Amendment No. 46 to DPR-63
- 2. Ltr. dated 7/9/81 fm N. Y. Dept. of Environ. Conservation
- 3. Notice

cc w/enclosures:

See next page

Distribution:

Docket File

NRC PDR

Local PDR

ORB#2 Reading

D. Eisenhut

S. Norris

P. Polk

OELD

OI&E (4)

G. Deegan (4)

B. Scharf (10)

J. Wetmore

ACRS (10)

OPA (Clare Miles)

R. Diggs

NSIC

TERA

A. Rosenthal, ASLAB (1)

T. CAIN, EEB (1)

*concerned only,  
AS READ TO FORM  
OF AMOS and  
FOR NOTICE  
only*

OFFICE	DL:ORB#2	DL:ORB#2	DL:ORB#2	DL/AD:OR	OELD		
SURNAME	S. Norris	P. Polk	T. Ippolito	T. Novak	B. Scharf		
DATE	7/20/81	7/21/81	7/21/81	7/22/81	7/24/81		

Mr. Donald P. Dise  
Niagara Mohawk Power Corporation

cc:

Eugene B. Thomas, Jr., Esquire  
LeBoeuf, Lamb, Leiby & MacRae  
1333 New Hampshire Avenue, N. W.  
Suite 1100  
Washington, D. C. 20036

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Technological Development Programs  
State of New York  
Energy Office  
Swan Street Building  
CORE 1 - Second Floor  
Empire State Plaza  
Albany, New York 12223

Mr. Robert P. Jones, Supervisor  
Town of Scriba  
R. D. #4  
Oswego, New York 13126

Niagara Mohawk Power Corporation  
ATTN: Mr. Thomas Perkins  
Plant Superintendent  
Nine Mile Point Plant  
300 Erie Boulevard West  
Syracuse, New York 13202

U.S. Environmental Protection Agency  
Region II Office  
ATTN: EIS COORDINATOR  
26 Federal Plaza  
New York, New York 10007

State University at Oswego  
Penfield Library - Documents  
Oswego, New York 13126

Resident Inspector  
c/o U.S. NRC  
P. O. Box 126  
Lycoming, New York 13093



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 46  
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated July 16, 1980 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility License No. DPR-63 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 46 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of its issuance.

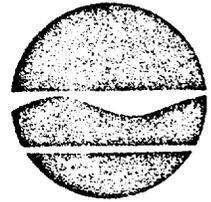
FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: July 24, 1981

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

WEL/ANG/fd

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

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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 $\Delta T$

##### OBJECTIVE

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

##### SPECIFICATION

Maximum  $\Delta T$  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  $\Delta T$  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  $\Delta T$  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.<sup>2,3</sup> 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  $\Delta T$ , 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.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-220

NIAGARA MOHAWK POWER CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 46 to Facility Operating License No. DPR-63 issued to Niagara Mohawk Power Corporation (the licensee) which revised the Technical Specifications for operation of the Nine Mile Point Nuclear Station, Unit No. 1 (the facility) located in Oswego County, New York. The amendment is effective as of its date of issuance.

The amendment revises Appendix B Environmental Technical Specifications to reflect changes agreed to by the New York State Department of Environmental Conservation. Specifically, limits regarding main condenser temperature increase and maximum discharge temperature to Lake Ontario were raised 3°F to 35°F and 115°F respectively.

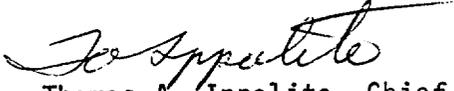
The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §1.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated July 16, 1980, (2) Amendment No. 46 to License No. DPR-63, (3) the letter dated July 9, 1981, from the New York State Department of Environmental Conservation to the Commission, and (4) the Commission's letter to the licensee dated July 24, 1981. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. and at the Penfield Library, State University College at Oswego, Oswego, New York 13126. A copy of items (2) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland this 24th day of July 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing