



UNITED STATES
 ATOMIC ENERGY COMMISSION
 WASHINGTON, D.C. 20545

DO NOT REMOVE

U. S. ATOMIC ENERGY COMMISSIONNIAGARA MOHAWK POWER CORPORATIONDOCKET NO. 50-220FACILITY OPERATING LICENSE

License No. DPR-63

1. The Atomic Energy Commission (the Commission) has found that:
 - A. The application for license, as amended, filed by the Niagara Mohawk Power Corporation (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Nine Mile Point Nuclear Station Unit No. 1 has been substantially completed in conformity with Construction Permit No. CPPR-16 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. The licensee is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - F. The licensee has satisfied the applicable provisions of 10 CFR Part 140 "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations;
 - G. The issuance of this full-term operating license will not be inimical to the common defense and security or to the health and safety of the public;

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- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of the full-term Facility Operating License No. DPR-63 (subject to the conditions for protection of the environment set forth herein) is in accordance with Appendix D, 10 CFR Part 50 of the Commission's regulations and all applicable requirements have been satisfied; and
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70 including Sections 30.33, 40.32, 70.23 and 70.31.
2. Facility Operating License No. DPR-63 is hereby issued to the Niagara Mohawk Power Corporation to read as follows:
- A. This license applies to the Nine Mile Point Nuclear Station Unit No. 1, a single cycle, forced circulation, boiling light water reactor, and associated equipment (the facility), owned by the Niagara Mohawk Power Corporation. The facility is located on the Nine Mile Point site on the southeast shore of Lake Ontario in Oswego County, New York and is described in the "Final Safety Analysis Report" (with its Amendments Nos. 3 through 13 and its Supplements Nos. 1 through 10) and the "Environmental Report" (with its Supplements Nos. 1 through 3).
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Niagara Mohawk Power Corporation:
- (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility at the designated location in Oswego County, New York, in accordance with the procedures and limitations set forth in this license;
 - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended as of February 4, 1976;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

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- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components.
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility."

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30; Section 40.41 of Part 40; Section 50.54 and 50.59 of Part 50; and Section 70.32 of Part 70. The license is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect and is also subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 1850 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 155, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

- ~~(3) Operation beyond the end-of-cycle (all rods out condition) thermal power is limited to seventy (70) percent minimum. Increasing core power level via reduced feedwater heating, once operation in the coastdown mode has begun, is not allowed.~~

ADDED BY
AMDT #31
4-12-79

Amended - See Page 3A
for new para.

- (3) Beyond the point in the Cycle 6 fuel cycle at which the reactivity reduction rate during a scram is less than that of the curve marked EOC 6 minus 1500 Mwd/T in Figure 2C of "Supplemental Reload Licensing Submittal for Nine Mile Point Nuclear Power Station Unit 1 Reload No. 1, Ring Reanalysis Supplement," NEDO 24155-1 Supplement 1 dated December 1978, operation of the reactor shall not exceed a core thermal power of 1813 megawatts (98% of rated) at rated flow conditions.

*Amer. 36
3-28-80*

Beyond the point in the Cycle 6 fuel cycle at which the reactivity reduction rate during a scram is less than that of the curve marked EOC 6 minus 1000 Mwd/T in Figure 2B of "Supplemental Reload Licensing Submittal for Nine Mile Point Nuclear Power Station (Unit 1) Reload No. 7," NEDO 24155, 78NED291, dated November 1978, operation of the reactor shall not exceed a core thermal power of 1757 megawatts (95% of rated) at rated flow conditions.

Operation beyond the end-of-cycle (all rods out condition) thermal power is limited to seventy (70) percent minimum.

Increasing core power level via reduced feedwater heating, once operation in the coastdown mode has begun, is not allowed.

D. This license is subject to the following additional conditions for the protection of the environment:

- (1) The licensee will complete construction of a new radwaste facility in conformance with the design defined and evaluated in the FES, to be operational no later than June 1976.
- (2) Pursuant to Section 401(d) of the Federal Water Pollution Control Act Amendments of 1972; this permit is subject to the requirements set forth in a certification dated April 9, 1974, issued to the licensee by the State of New York. Inclusion of the State requirements herein shall not relieve licensee of its obligation to obtain Commission approval, pursuant to the Act and regulations promulgated pursuant thereto, of any intake or discharge design which may ultimately be required by the State of New York.
- (3) Pursuant to Section 402 of the Federal Water Pollution Control Act Amendments of 1972, this permit is subject to the requirements that will be set forth in a certification to be issued to the licensee by the Environmental Protection Agency (EPA). Inclusion of the EPA requirements herein shall not relieve licensee of its obligation to obtain Commission approval, pursuant to the Act and regulations promulgated pursuant thereto, of any intake or discharge design or alternate heat dissipation system which may ultimately be required by the Environmental Protection Agency.

(4) Security Plan, Guard Training and Safeguards Contingency Plans

The licensee shall implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Nine Mile Point Nuclear Station Physical Security Plan," with revisions submitted through December 29, 1987; "Nine Mile Point Nuclear Station Guard Training and Qualification Plan," with revisions submitted through June 27, 1985; and "Nine Mile Point Nuclear Station Safeguards Contingency Plan," (Chapter 8 of the Physical Security Plan) with revisions submitted through July 30, 1987. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

Amdt.
100
7-5-88

Paragraph 2.D(5) of the license has been combined with paragraph 2.D(4) as amended above into a single paragraph.

~~2.D.5 Guard Training and Qualification Plan~~ See Amdt. #100, 7-5-88

~~The licensee shall fully implement and maintain in effect all provisions of the Commission-approved Guard Training and Qualification Plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved plan consists of documents withheld from public disclosure pursuant to 10 CFR 73.21 identified as "Nine Mile Point Nuclear Station Security Training and Qualification Plan" dated August 17, 1979 as revised June 26 and December 28, 1981. This plan shall be implemented, in accordance with 10 CFR 73.55(b)(4), within 60 days after approval by the Commission. The licensee may make changes to this plan without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee shall maintain records of and submit reports concerning such changes in the same manner as required for changes made to the Safeguards Contingency Plan pursuant to 10 CFR 50.54(p).~~

Added per Amdt. #50
10-15-82

2.D(6) Recirculation System Safe-end Replacement

The recirculation system and safe-end replacement program including the cutting and welding of the replacement components and the dose mitigation program (ALARA) is approved, subject to the following conditions:

- a. The licensee shall complete the recirculation piping stress reanalysis prior to restart of Nine Mile Point Nuclear Power Station, Unit No. 1. The results of this analysis for selected representative portions of the recirculation system shall be submitted to the NRC prior to restart of the facility.
- b. All fuel and control rods shall be removed from the reactor pressure vessel and stored in the spent fuel pool during the period that work on the safe-end and recirculation system replacement program is in progress.
- c. The licensee shall update the collective occupational dose estimate weekly. If the updated estimate exceeds the 1908 person-rem estimate by more than 10%, the licensee shall provide a revised estimate, including the reasons for such changes, to the NRC within 15 days of determination.
- d. Progress reports shall be provided at 90-day intervals from June 30, 1982 and due 30 days after close of the interval, with a final report within 60 days after completion of the repair. These reports will conclude:
 - (1) a summary of the occupational dose received to date by major task, and
 - (2) a comparison of estimated doses with the doses actually received.

Amdt. # 50 10-15-82

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2.D.(7) Fire Protection

Renumbered
per Amdt.
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1-28-86

The licensee may proceed with and is required to complete the modifications identified in Table 3.1 of the NRC's Nine Mile Point Unit 1 Safety Evaluation Report (SER), Fire Protection Review, dated July 26, 1979. These modifications shall be completed in accordance with the schedule in Table 3.1 of the SER or supplements thereto.

Further, Niagara Mohawk Power Corporation shall, prior to implementation, provide for Commission review and obtain Commission approval of the final design of modifications as indicated in section 3.1 of the Safety Evaluation Report.

Except for the modifications described in the approved fire protection plan and approved as a result of Commission review of the Nine Mile Point Unit 1 Nuclear Plant Fire Protection Program, Niagara Mohawk Power Corporation is authorized to make changes to the Program without prior Commission approval provided that such changes do not result in a decrease in the effectiveness of the Program.

The licensee is required to implement the administrative controls identified in Section 6 of the SE. The administrative controls shall be in effect by September 1, 1979.

Added
Per
Amdt. #33
7-26-79

2.D.(8) Hot Process Pipe Penetrations

Hot Process Pipe Penetrations in the Emergency Condenser Steam Supply (2 each), Main Steam (2 each), Feedwater (2 each), Cleanup Suction (1 each), and Cleanup Return (1 each) piping systems have been identified as not fully in conformance with FSAR design criteria. This anomaly in design condition from the original design is approved for the duration of Cycle 8 or until March 31, 1986, whichever occurs first, subject to the following conditions:

- (a) An unidentified leakage limit of a change of 1 gallon per minute in 24 hours to permit operation will be imposed by administrative control (Standing Order) at the facility for the interim period.
- (b) The licensee shall restore the facility to a condition consistent with the FSAR or provide a change to the FSAR criteria for staff review and approval prior to restart from the forthcoming Cycle 8 outage.

Added
PER
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1-28-86

E. This license is effective as of the date of issuance and shall expire on April 11, 2005.

FOR THE ATOMIC ENERGY COMMISSION

A. Giambusso
A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Appendices A & B -
Technical Specifications
Date of Issuance: December 26, 1974

