Dist Jution: ulk AEC PDR Docket File DR Reading DRL Reading RPB-2 Reading Orig: HSteele (2) R. S. Boyd ALIG 2 2 1969 T. B. Conner, OGC L. Kornblith, CO (2) N. Dube w/3 enc. D. Skovholt V. Stello F. Collins Niagara Mohawk Power Corporation bcc: H. J. McAlduff, ORO 300 Erie Boulevard West A. A. Wells, ASLBP Syracuse, New York 13202 E. E. Hall, GMR/H S. Robinson, SECY Attention: Mr. Minot H. Pratt J. A. Harris, PI Vice President and R. Leith, OC Executive Engineer J. R. Buchanan, ORNL T. W. Laughlin, DTIE J. Verme, SMM D. Nussbaumer, DML

Gentlemen:

Docket No. 50-220

Provisional Operating License No. DPR-17 with appended Technical Specifications and Special Nuclear Material Transfer Schedule is enclosed. The license authorizes Niagara Mohawk Power Corporation to operate the Nine Mile Point Nuclear Station at power levels not to exceed 1538 megawatts thermal in accordance with the provisions of the license and the Technical Specifications appended thereto.

A copy of a related notice which has been forwarded to the Office of the Federal Register for filing and publication is also enclosed.

We agree with the program you have outlined in your letter dated August 1, 1969, with regard to the nondestructive testing of certain reactor components within the facility, demonstration of low leakage through the main steam line isolation valves, and vibration tests of selected reactor internal components should this become necessary.

Two signed copies of Amendment No. 4 to Indemnity Agreement No. B-36, which covers the activities authorized under this license, are enclosed for your review and acceptance. Please sign and return one copy of the amendment to this Office.

Sincerely yours,

	Original signed by F. Schroeder	
	Peter A. Morris Director Division of Reactor Licensing	
Enclosures:	Supersede AS PER Lic DPR-	63
1. Lic. No. DPR-17, incl. T.S. 2. Fed. Rev. Notice		
2. Fed. Reg. Notice 3. Amend. No. 4 to I.A. No. B-	-36 dra 12-26-14 x	
cc: Arvin E. Upton, Esquire	DRL: RP OGC (DRL: RP) DR	7
OFFICE >LeBoeuf, Lamb, Leiby & Mer	HSteele tal Ab	for
	HSteele/di Ypc RSBoyd PAMorr	
DATE	8/18/69 8/18/69 8/2/169 8/22/	69

Form AEC-318 (Rev. 9-53) AECM 0240

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

NIAGARA MOHAWK POWER CORPORATION

### DOCKET NO. 50-220

#### PROVISIONAL OPERATING LICENSE

License No. DPR-17

The Atomic Energy Commission (the Commission) having found that:

- a. The application for provisional operating license (application Amendments Nos. 2 through 13, dated May 29, 1967, July 14, 1967, September 6, 1967, May 16, 1968, September 27, 1968, October 14, 1968, November 4, 1968, January 17, 1969, January 17, 1969, March 10, 1969, March 28, 1969 and April 10, 1969, respectively) complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in Title 10, Chapter 1, CFR;
- b. The facility has been constructed in accordance with the application, as amended, and the provisions of Provisional Construction Permit No. CPPR-16;
- c. There are involved features, characteristics and components as to which it is desirable to obtain actual operating experience before the issuance of an operating license for the full term requested in the application;
- d. There is reasonable assurance (i) that the facility can be operated at power levels not in excess of 1538 megawatts (thermal) in accordance with this license 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 applicant is technically and financially qualified to engage in the activities authorized by this license, in accordance with the rules and regulations of the Commission;
- f. The applicant has furnished proof of financial protection to satisfy the requirements of 10 CFR Part 140;
- g. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

Provisional Operating License No. DPR-17 is hereby issued to Niagara Mohawk Power Corporation (Niagara Mohawk), as follows:

1. This license applies to the Nine Mile Point Nuclear Station, a single cycle, forced circulation, boiling light water reactor, and electric

generating equipment (the facility). The facility is located on the Nine Mile Point site on the southeast shore of Lake Ontario in Oswego County, New York, approximately seven miles northeast of the City of Oswego and thirty-six miles northwest of Syracuse, and is described in license application Amendment No. 2, "Final Safety Analysis Report," as supplemented and amended (Amendments Nos. 3 through 13).

- 2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Niagara Mohawk:
  - A. Pursuant to Section 104b of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, CFR, Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility as a utilization facility at the designated location on the Nine Mile Point site;
  - B. Pursuant to the Act and Title 10, CFR, Part 70, "Special Nuclear Material," to receive, possess and use at any one time up to 3800 kilograms of contained uranium 235 in connection with operation of the facility;
  - C. Pursuant to the Act and Title 10, CFR, Part 30, "Rules of General Applicability to Licensing of Byproduct Material," to receive, possess, and use in connection with operation of the facility 24 curies of Cobalt 60 as a sealed source; 430 millicuries of Cobalt 60 as two sealed sources of not more than 400 millicuries and 30 millicuries each; 500 microcuries of Cobalt 60 as five sealed sources not to exceed 100 microcuries each; 101 millicuries Cobalt 60, 3 millicuries Strontium 90, 101 millicuries Iodine 131, 102 millicuries Cesium 137, and 13 millicuries of any byproduct material with Atomic Nos. between 3 and 83, inclusive, in any chemical and/or physical form; 12,500 curies Antimony 122-124 as five sealed sources not to exceed 2,500 curies each; and six curies Americium 241 as a sealed source; and
  - D. Pursuant to the Act and Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility.
- 3. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70, and is subject to the additional conditions specified below:
  - A. Maximum Power Level

Niagara Mohawk is authorized to operate the facility at steady state power levels up to a maximum of 1538 megawatts thermal.

## B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A attached hereto are hereby incorporated in this license. Niagara Mohawk shall operate the facility at power levels not in excess of 1538 megawatts thermal in accordance with the Technical Specifications, and may make changes therein only when authorized by the Commission in accordance with the provisions of Section 50.59 of 10 CFR Part 50.

C. <u>Reports</u>

In addition to the reports otherwise required under this license and applicable regulations:

- (1) Niagara Mohawk shall inform the Commission of any incident or condition relating to the operation of the facility which prevented or could have prevented a nuclear system from performing its safety functions as described in the Technical Specifications. For each such occurrence, Niagara Mohawk shall promptly notify by telephone or telegram the appropriate Atomic Energy Commission Regional Compliance Office listed in Appendix D of 10 CFR 20, and shall submit within ten (10) days a report in writing to the Director, Division of Reactor Licensing (Director, DRL), with a copy to the Division of Compliance.
- (2) Niagara Mohawk shall report to the Director, DRL, in writing, within thirty (30) days of its observed occurrence any substantial variance disclosed by operation of the facility from performance specifications contained in the Final Safety Analysis Report (safety analysis report) or the Technical Specifications.
- (3) Niagara Mohawk shall report to the Director, DRL, in writing within thirty (30) days of its occurrence any significant changes in transient or accident analysis as described in the safety analysis report.
- (4) As soon as possible after the completion of six months of operation of the facility (calculated from the date of initial criticality), Niagara Mohawk shall begin submitting reports in writing in accordance with the requirements of the Technical Specifications.

#### D. Records

Niagara Mohawk shall keep facility operating records in accordance with the requirements of the Technical Specifications.

- 4. Pursuant to Section 50.60, Title 10, CFR, Part 50, the Commission has allocated to Niagara Mohawk for use in the operation of the facility 14,321 kilograms of uranium 235 contained in uranium in the isotopic ratios specified in the application. Estimated schedules of special nuclear material transfers to Niagara Mohawk and returns to the Commission are contained in Appendix B which is attached hereto. Transfers by the Commission to Niagara Mohawk in accordance with column 2 in Appendix B will be conditioned upon Niagara Mohawk's return to the Commission of material substantially in accordance with column 3 (including the subcolumns headed "Scrap" and "Depleted Fuel").
- 5. This license is effective as of the date of issuance and shall expire eighteen (18) months from said date, unless extended for good cause shown, or upon the earlier issuance of a superseding operating license.

FOR THE ATOMIC ENERGY COMMISSION

Peter A. Morris, Director

Division of Reactor Licensing

Enclosures: Appendix A - Technical Specifications w/Attachment A Appendix B - SNM Transfer Schedule

Date of Issuance: AUG 2 2 1969

AUG 2 2 1969

### APPENDIX B

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### ESTIMATED SCHEDULE OF TRANSFERS OF SPECIAL NUCLEAR MATERIAL FROM THE COMMISSION TO NIAGARA MOHAWK AND TO THE COMMISSION FROM NIAGARA MOHAWK

Date of Transfer (fiscal year)	Transfers From AEC to NMPC	Returns From NMPC to AEC Depleted		Net Yearly Transfer	Cumulative Requirements Including Cumulative Losses
	(a) (kg U235)	Scrap (kg U235)	Fuel (b) (kg U235)	(kg U235)	(kg U235)
1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1987 1988 1989 1999 1991 1992 1993 1994 1995 1997 1998 1997	2182 - 1000 500 500 500 500 500 500 50	152 - 70 35 35 35 35 35 35 35 35 35 35 35 35 35	- 428 159 120 81 204 195 177 166 166 166 166 166 166 166 166 166	2182 (152) - 1000 430 37 306 345 384 261 270 288 299	$\begin{array}{c} 2182\\ 2030\\ 2030\\ 3030\\ 3460\\ 3497\\ 3803\\ 4148\\ 4532\\ 4793\\ 5063\\ 5351\\ 5650\\ 5949\\ 6248\\ 6547\\ 6846\\ 7145\\ 7444\\ 7743\\ 8542\\ 8806\\ 8939\\ 9238\\ 9537\\ 9836\\ 10135\\ 10434\\ 10733\\ 11032\\ 1131\\ 11630\\ 11929\\ 12228\\ \end{array}$

## UNITED STATES ATOMIC ENERGY COMMISSION

#### DOCKET NO. 50-220

## NIAGARA MOHAWK POWER CORPORATION

# NOTICE OF ISSUANCE OF PROVISIONAL OPERATING LICENSE

Notice is hereby given that no request for a hearing by the applicant or petition for leave to intervene by any interested person having been filed following publication of the notice of proposed action in the FEDERAL REGISTER, the Atomic Energy Commission (the Commission) has issued Provisional Operating License No. DPR-17 to Niagara Mohawk Power Corporation (Niagara Mohawk) authorizing the licensee to possess, use, and operate the Nine Mile Point Nuclear Station, a single cycle, forced circulation, boiling water nuclear reactor, located on the Nine Mile Point site on the southeast shore of Lake Ontario in the Town of Scriba, Oswego County, New York. The license authorizes Niagara Mohawk to operate the reactor at thermal power levels not to exceed 1538 megawatts, in accordance with the provisions of the license and the Technical Specifications (Appendix A) appended thereto.

The Commission has inspected the facility and has determined that it has been constructed in accordance with the application, as amended, and the provisions of Construction Permit No. CPPR-16.

The provisional operating license was issued as set forth in the Notice of Proposed Issuance of Provisional Operating License published in the FEDERAL REGISTER on June 5, 1969, 34 F.R. 8977, except for modification of the Technical Specifications as set forth in Attachment A to the Technical Specifications as issued with Provisional Operating License No. DPR-17. These modifications (1) delete the requirements for the nondestructive testing of safety valves since all of these tests have been completed, and (2) modify the pressure for performing a leak rate test on a main steam line isolation valve to permit testing at the same pressure specified for the containment test.

A copy of License No. DPR-17, complete with Technical Specifications and Attachment A thereto, is available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C.

Dated at Bethesda, Maryland this  $22^{nd}$  day of August, 1969.

FOR THE ATOMIC ENERGY COMMISSION

Peter A. Morris, Director Division of Reactor Licensing

Date of Transfer (fiscal year)	Transfer Returns from AEC from NMPC to NMPC to AEC		NMPC	Net Yearly Transfer	Cumulative Requirements Including Cumulative Losses
<u> </u>	(a) (kg U235)	Scrap (kg U235)	Depleted Fuel (b) (kg U235)	(kg U235) (k	(kg U235)
2000 2001 2002 2003 2004 2005 2006 2007 2008	500 500 500 500 500 500 500	35 35 35 35 35 35 35 35 35	166 166 166 166 166 166 166 166 1350	299 299 299 299 299 299 299 (201) (1350)	12527 12826 13125 13424 13723 14022 14321 14120 12770

NOTE: Based on operation at 80% capacity factor with 525 MW(e) gross as full power rating.

- (a) First core-enrichment 2.1% U-235 by weight, replacement loadings-enrichment 2.4% U-235 by weight.
- (b) First core-discharge enrichment 0.87% U-235 by weight, replacement loadings-discharge enrichment 0.88% U-235 by weight.

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