February 2, 1984

Docket No. 50-220

Mr. G. K. Rhode
Senior Vice President
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

Dear Mr. Rhode:

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your request dated May 20, 1980.

The revision to the Technical Specifications adds the use of the term "operable" as it applies to safety systems in power reactors. The change includes a definition of "operable" as well as a section on operability requirements in the Limiting Conditions for Operation and surveillance section of the Technical Specifications. In particular, the change requires the normal or emergency power source as well as the safety system itself to be operable or the unit be placed in a condition required for the individual system itself.

A copy of the Safety Evaluation is also enclosed.

Sincerely,

Original signed by/

Robert A. Hermann, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:
1. Amendment No. 55 to
   License No. DPR-63
2. Safety Evaluation

cc w/enclosures:
See next page

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Mr. G. K. Rhode
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station, Unit No. 1

cc:

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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. 55
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 May 20, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and 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.

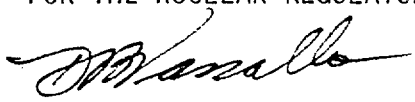
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-63 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 55, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise the Appendix A Technical Specifications by removing pages 2 and 25 and inserting revised pages 2 and 25. The revised areas are indicated by Marginal lines.

1.2 Operable

A system, subsystem, train, component or device shall be operable when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, except as noted in 3.0, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

1.3 Operating

Operating means that a system or component is performing its required functions in its required manner.

1.4 Protective Instrumentation Logic Definitions

a. Instrument Channel

An instrument channel means an arrangement of a sensor and auxiliary equipment required to generate and transmit to a trip system a single trip signal related to the plant parameter monitored by that instrument channel.

b. Trip System

A trip system means an arrangement of instrument channel trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A trip system may require one or more instrument channel trip signals related to one or more plant parameters in order to initiate trip system action. Initiation of protective action may require the tripping of a single trip system or the coincident tripping of two trip systems.

1.5 Sensor Check

A sensor check is a qualitative determination of acceptable operability by observation of sensor behavior during operation. This determinatin shall include, where possible, comparison of the sensor with other independent sensors measuring the same variable.

1.6 Instrument Channel Test

Instrument channel test means injection of a simulated signal into the channel to verify its proper response including, where applicable, alarm and/or trip initiating action.

3.0 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

OPERABILITY REQUIREMENTS

When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered operable for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is operable; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are operable, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in a condition stated in the individual specification.

In the event a Limiting Condition for Operation and/or associated surveillance requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in a condition consistent with the individual specification unless corrective measures are completed that permit operation under the permissible surveillance requirements for the specified time interval as measured from initial discovery or until the reactor is placed in an operational condition in which the specification is not applicable.

3.1.0 FUEL CLADDING

A) GENERAL APPLICABILITY

Applies to the power level regulation, control rod system, liquid poison system, emergency cooling system, and core spray system. LCO's for the minimum allowable circuits corresponding to the LS_3 settings are included in the Reactor Protection System LCO (3.6.2).

B) GENERAL OBJECTIVE

LIMITING CONDITIONS FOR OPERATION - To define the lowest functional capability or performance level of the systems and associated components which will assure the integrity of the fuel cladding as a barrier against the release of radioactivity.

SURVEILLANCE REQUIREMENTS - To define the tests or inspections required to assure the functional capability or performance level of the required systems or components.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-63

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-220

1.0 Introduction

By letter dated May 20, 1980 Niagara Mohawk Power Corporation (the licensee) proposed changes to the Technical Specifications (TS) of Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1. The revisions to the Technical Specifications addressed in this Safety Evaluation regard the use of the term "operable" as it applies to safety systems in power reactors. The change proposed by the licensee includes a definition of "operable" as well as a section on operability requirements in the Limiting Conditions for Operation and Surveillance section of the Technical Specifications. In particular the proposed change requires the normal or emergency power source as well as the safety system itself to be operable or the unit be placed in a condition required for the individual system itself. The change proposed by the licensee was in response to a generic letter issued to all licensees on April 10, 1980 on Multi-plant Item D-17. The letter provided proposed Technical Specifications for each licensee and requested that they be adopted.

2.0 Evaluation

The staff has reviewed and endorses the findings in our contractors's Technical Evaluation Report (TER), EGG-EA-6360 dated September 1983 entitled "Definition of Operable, Nine Mile Point Nuclear Station Unit 1." The report concludes and the staff concurs that the licensee's proposed amendment to the Nine Mile Point Unit 1 TS provides adequate clarification of the term "OPERABLE" as it applies for safety-related systems and includes "Operability Requirements" in the Limiting Condition for Operation section of the Technical Specifications equivalent to those proposed in the model Technical Specifications issued by the staff. The TER is attached.

3.0 Environmental Considerations

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 §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 Conclusion

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Reviewer: Robert A. Hermann

Attachment:
Technical Evaluation Report

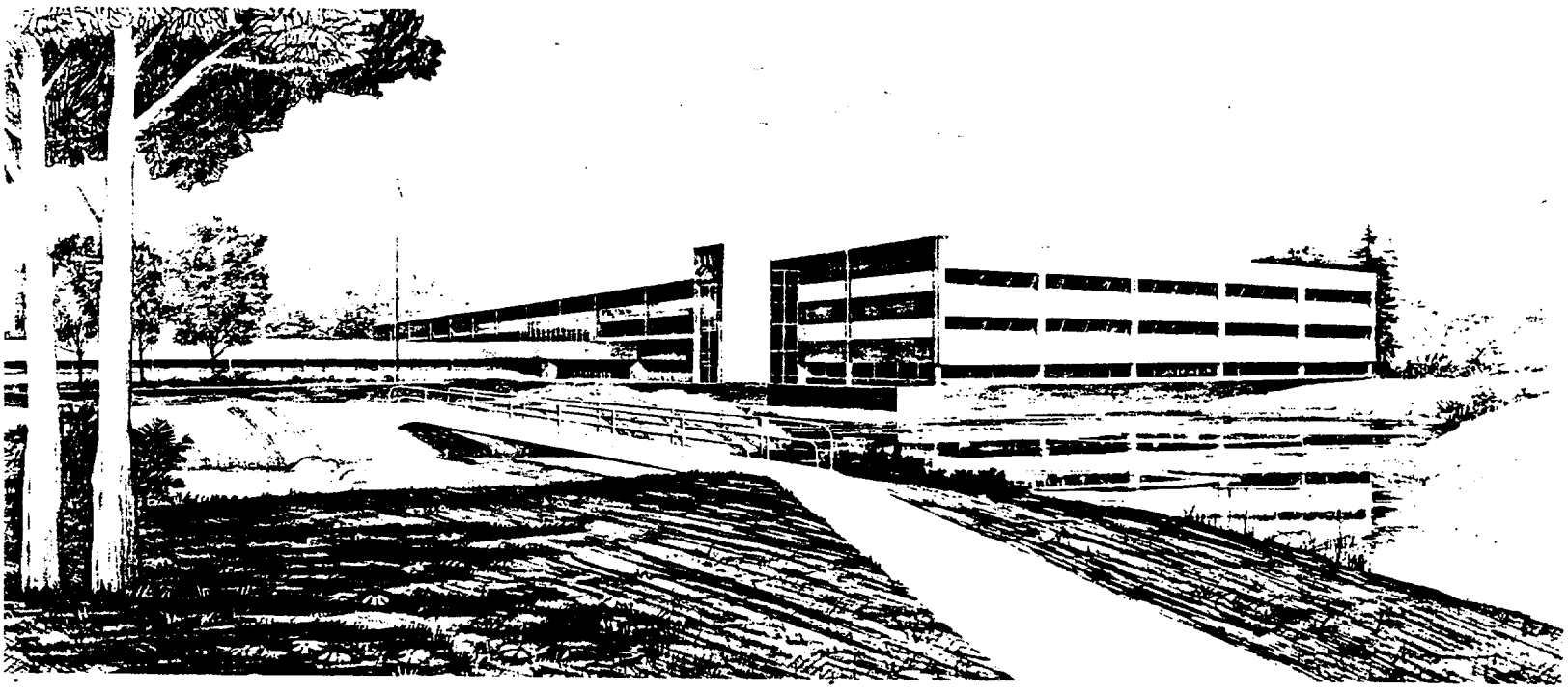
Dated: February 2, 1984

EGG-EA-6360
SEPTEMBER 1983

DEFINITION OF OPERABLE
NINE MILE POINT NUCLEAR STATION UNIT 1

F. G. Farmer
J. W. Stoffel

Idaho National Engineering Laboratory
Operated by the U.S. Department of Energy



This is an informal report intended for use as a preliminary or working document

Prepared for the
U. S. NUCLEAR REGULATORY COMMISSION
Under DOE Contract No. DE-AC07-76ID01570
FIN No. A6429

EG&G Idaho

EGG-EA-6360

DEFINITION OF OPERABLE
NINE MILE POINT NUCLEAR STATION UNIT 1

Published September 1983

F. G. Farmer
J. W. Stoffel

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Responsible NRC Individual and Division:
R. Hermann/Division of Licensing

Docket No.: 50-312
TAC No.: 43042

Prepared for the
U.S. Nuclear Regulatory Commission
Under DOE Contract No. DE-AC07-76ID01570
FIN No. A6429

ABSTRACT

This report reviews the extent of compliance of proposed and existing Nine Mile Point Unit 1 Technical Specifications with clarifications of the definition and application of the term OPERABLE which have been required by the U.S. Nuclear Regulatory Commission.

FORWARD

This report is supplied as part of the "Selected Operating Reactors Issues Program (III)" being conducted for the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Division of Licensing, by EG&G Idaho, Inc., NRC Licensing Support Section.

The U.S. Nuclear Regulatory Commission funded the work under the authorization, B&R 20 19 10 11 1, FIN No. A6429.

NOTICE

CONTENTS

DEFINITION OF OPERABLE, NINE MILE POINT NUCLEAR STATION UNIT 1

1. INTRODUCTION

On April 10, 1980, the Nuclear Regulatory Commission (NRC) issued a generic letter to all Power Reactor Licensees which clarified the term OPERABLE and identified portions of the Model Technical Specifications (MTS) which are recommended to assure that safety systems remain OPERABLE within the limits of the single failure criterion.[1] In that letter the NRC requested that Licensees review their Technical Specifications (TS) and submit such proposed changes as were necessary to incorporate the requirements of the MTS.

On May 20, 1980, Niagara Mohawk Power Corporation responded to the generic letter by proposing an amendment to the Nine Mile Point Unit 1 Technical Specifications.[3] EG&G Idaho, Inc., has reviewed the proposed TS amendment and the existing TS. This report provides an evaluation of those TS and the amendment for conformation to the criteria established by NRC.

2. REVIEW CRITERIA

The review criteria for this task are contained in NRC's April 10, 1980, letter and in reference 2 and are summarized below.

Definition of OPERABLE

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

Limiting Condition for Operation

When a Limiting Condition for Operation is not met because of circumstances in excess of those addressed in the specification, except as provided in the associated ACTION requirements, within one hour action shall be initiated to place the unit in a MODE in which the Specification does not apply by placing it, as applicable, in:

1. At least STARTUP within the next 6 hours,

2. AT least HOT SHUTDOWN within the following 6 hours, and

3. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (a) its corresponding normal or emergency power source is OPERABLE; and (b) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (a) and (b) are satisfied, within two hours action shall be initiated to place the unit in at least STARTUP within 6 hours, in at least HOT SHUTDOWN within the next 6 hours, and in at least COLD SHUTDOWN within the following 24 hours. This specification is not applicable in MODES 5 or 6.

3. DISCUSSION

The amendment proposed by Niagara Mohawk redefines the term OPERABLE. The new definition is almost exactly that contained in the MTS. The proposed amendment also revises the Limiting Conditions for Operation (LCOs) to include "Operability Requirements" which are identical to those in the MTS except that, rather than specifying required reactor modes and time limits in the general "Operability Requirements," required modes and time limits are identified in individual, system specifications. A review of the LCOs for individual safety systems has been conducted and has determined that, as redundancy in safety systems is reduced by failure or maintenance, additional surveillance is required and time limits for return to full operability are established.[4] Failure to meet the time limits or surveillance requirements requires the licensee to shut down within the time limits of the NRC criteria.

4. CONCLUSION

The licensee's proposed amendment to the Nine Mile Point Unit 1 TS provides adequate clarification of the term OPERABLE as it applies for ESF systems to support system outages or multiple outages of redundant components.

5. REFERENCES

1. NRC letter, D. G. Eisenhut, to All Power Reactor Licensees, dated April 10, 1980.

2. NRC internal memorandum, S. Miner to S. Varga, et al., "Definition of Operability--Multi-Plant Item D-17", dated March 26, 1981.

3. LeBouf, Lamb, Leiby & MacRae letter, E. B. Thomas, to NRC, H. R. Denton, dated May 20, 1980.

4. Technical Specifications for Nine Mile Point Unit 1, revised through Amendment 45.