

April 20, 1978

Docket No.: 50-336

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 ACRS (16) J Burdoin
 OPA, Clare Miles

Northeast Nuclear Energy Company
 ATTN: Mr. D. C. Switzer
 President
 P. O. Box 270
 Hartford, Connecticut 06101

Gentlemen:

J. Burdoin

The Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2. The amendment consists of changes in accordance with your request dated April 20, 1978.

The amendment revises the Technical Specifications to allow reactor startup with the need switch position indicator channel inoperable in Control Element Assembly (CEA) A-42. Your proposed Technical Specifications have been modified to meet our requirements. Your staff has agreed to these modifications.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Robert W. Reid, Chief
 Operating Reactors Branch #4
 Division of Operating Reactors

Enclosures:

1. Amendment No. 39 to DPR-65
2. Safety Evaluation
3. Notice

cc w/enclosures: See next page

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SURNAME →	RIngram	MConner	WButler	LCHANDLER	RReid
DATE →	4/20/78	4/20/78	4/ /78	4/20/78	4/20/78

cc: William H. Cuddy, Esquire
Day, Berry & Howard
Counselors At Law
One Constitution Plaza
Hartford, Connecticut 06103

Anthony Z. Roisman
Natural Resources Defense Council
917 15th Street, N.W.
Washington, D. C. 20005

Mr. Albert L. Partridge, First Selectman
Town of Waterford
Hall of Records - 200 Boston Post Road
Waterford, Connecticut 06385

Northeast Nuclear Energy Company
ATTN: Superintendent
Millstone Plant
P. O. Box 128
Waterford, Connecticut 06385

Chief, Energy Systems Analysis Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, N. W.
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region I Office
ATTN: EIS COORDINATOR
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Waterford Public Library
Rope Ferry Road, Route 156
Waterford, Connecticut 06385

cc w/enclosures & incoming dtd:
4/20/78

Connecticut Energy Agency
ATTN: Assistant Director, Research
and Policy Development
Department of Planning and Energy
Policy
20 Grand Street
Hartford, Connecticut 06106



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

THE CONNECTICUT LIGHT AND POWER COMPANY,
THE HARTFORD ELECTRIC LIGHT COMPANY,
WESTERN MASSACHUSETTS ELECTRIC COMPANY, AND
NORTHEAST NUCLEAR ENERGY COMPANY

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 39
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by The Connecticut Light and Power Company, The Hartford Electric Light Company, Western Massachusetts Electric Company, and Northeast Nuclear Energy Company (the licensees), dated April 20, 1978, 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.

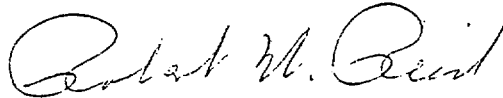
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 39, 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



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 20, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 39

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following pages of the Appendix "A" Technical specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Pages

3/4 1-24

3/4 1-24a (added)

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REACTIVITY CONTROL SYSTEMS

POSITION INDICATOR CHANNELS

LIMITING CONDITION FOR OPERATION

3.1.3.3 All shutdown and regulating CEA reed switch position indicator channels and CEA pulse counting position indicator channels shall be OPERABLE and capable of determining the absolute CEA positions within \pm 3 steps. *

APPLICABILITY: MODES 1 and 2.

ACTION:

- a. Deleted.
- b. With a maximum of one reed switch position indicator channel per group or one (except as permitted by ACTION item d. below) pulse counting position indicator channel per group inoperable and the CEA(s) with the inoperable position indicator channel partially inserted, within 4 hours either:
 1. Restore the inoperable position indicator channel to OPERABLE status, or
 2. Be in HOT STANDBY, or
 3. Reduce THERMAL POWER to $<$ 70% of the maximum allowable THERMAL POWER level for the existing Reactor Coolant Pump combination; if negative reactivity insertion is required to reduce THERMAL POWER, boration shall be used. Operation at or below this reduced THERMAL POWER level may continue provided that within the next 4 hours either:
 - a) The CEA group(s) with the inoperable position indicator is fully withdrawn while maintaining the withdrawal sequence required by Specification 3.1.3.6 and when this CEA group reaches its fully withdrawn position, the "Full Out" limit of the CEA with the inoperable position indicator is actuated and verifies this CEA to be fully withdrawn. Subsequent to fully withdrawing this CEA group(s), the THERMAL POWER level may be returned to a level consistent with all other applicable specifications; or

*See page 3/4 1-24a

REACTIVITY CONTROL SYSTEMS

POSITION INDICATOR CHANNELS (Continued)

LIMITING CONDITION FOR OPERATION

*The provisions of Specification 3.0.4 applicable to reed switch position indicator channel OPERABILITY requirements for CEA #A-42 may be suspended until midnight October 20, 1978, subject to the following provisions:

1. The CEA pulse counting position indicator channel for CEA #A-42 shall be OPERABLE.
2. CEA #A-42 shall be withdrawn to and maintained at its "Full Out" limit during operation in MODES 1 and 2, except during surveillance testing pursuant to Specification 4.1.3.1.2.
3. The position of CEA #A-42 shall be verified by its "Full Out" limit at least once per 12 hours.
4. The reed switch position indicator channel for CEA #A-42 shall be returned to OPERABLE status, and the provisions of this footnote in its entirety shall then be void, if the facility is placed in COLD SHUTDOWN prior to midnight October 20, 1978.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

Introduction

By letter dated April 20, 1978, Northeast Nuclear Energy Company (NNECO or the licensee) described certain problems with the Control Element Assembly (CEA) position indication. Current Technical Specifications (TS) require that all shutdown and regulating CEA reed switch and CEA pulse counting position indicator channels are operable in Modes 1 and 2.

During "hot" operability checks performed on April 19, 1978, CEA number A-42 indicated "fully inserted," independent of its actual position, on the reed switch position indicator channel. The licensee has traced the problem to a permanently closed condition of the lowest switch in the reed switch stack on the reactor vessel head.

Failure of the switch in this position (closed) masks the readings of remaining reed switches in the stack, causing this channel of CEA position to be inoperative.

NNECO has proposed modifying the TS to allow use of limit switches (mimic reed switches, reading "full in" or "full out") as a second channel of CEA position indication. In the case of a shutdown CEA, such as number A-42, which is normally fully withdrawn or fully inserted, the mimic reed switches can serve as a backup CEA position indication channel. During that short period of time when this CEA is being withdrawn for reactor startup, NNECO says they will use a resistance measurement method for determining CEA position as a backup to the pulse counting position indication.

We conclude that no safety-related problem will result from allowing reactor operation with the CEA reed switch position indicator failed for shutdown CEA number A-42 because this control rod is not used for control of any transient conditions, will still drop into the reactor core upon a reactor trip and the "full in" reed switch should give confirmation that the CEA has dropped. We have modified the TS to be more specific than the licensee proposed. Specification 3.1.3.3 will require CEA number A-42 to: 1) have the pulse counting position indicator operable; 2) be fully withdrawn except for surveillance testing; 3) verify its position once each 12 hours; and 4) return to operable status when the reactor is placed in the cold shutdown mode prior to October 20, 1978. The amendment has been limited to a specific time period (six months) to allow time for our review of a related request for TS change, dated January 23, 1978, and for additional review of the maintainability of the reed switches.

Environmental Consideration

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.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Dated: April 20, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-336

NORTHEAST NUCLEAR ENERGY COMPANY,
THE CONNECTICUT LIGHT AND POWER COMPANY,
THE HARTFORD ELECTRIC LIGHT COMPANY, AND
WESTERN MASSACHUSETTS ELECTRIC COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING
LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 39 to Facility Operating License No. DPR-65 to Northeast Nuclear Energy Company, The Connecticut Light and Power Company, The Hartford Electric Light Company, and Western Massachusetts Electric Company, which revised Technical Specifications for operation of the Millstone Nuclear Power Station, Unit No. 2, located in the Town of Waterford, Connecticut. The amendment is effective as of its date of issuance.

This amendment revises the Technical Specifications to allow reactor startup with the reed switch position indicator channel inoperable on Control Element Assembly A-42.

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

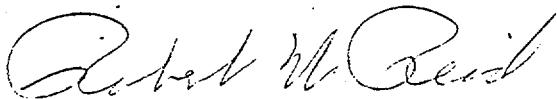
since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(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 April 20, 1978, (2) Amendment No. 39 to License No. DPR-65, and (3) the Commission's related Safety Evaluation. 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 Waterford Public Library, Rope Ferry Road, Route 156, Waterford, Connecticut. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 20th day of April 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors