Northeast
Nuclear Energy

Rope Ferry Rd. (Route 156), Waterford, CT 06385

Millstone Nuclear Power Station
Northeast Nuclear Energy Company
P.O. Box 128
Waterford, CT 06385-0128
(860) 447-1791
Fax (860) 444-4277

The Northeast Utilities System

MAR 29 2000

B17993

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Millstone Nuclear Power Station, Unit No. 1, Docket No. 50-245
Request for Modification of License Conditions and Confirmatory Orders

On July 21, 1998, Northeast Nuclear Energy Company (NNECO) informed the U.S. Nuclear Regulatory Commission (NRC) that Millstone Unit No. 1 (MP1) had permanently ceased operations and that the fuel had been permanently removed from the reactor vessel. Pursuant to 10CFR50.82(a)(2), the certification in the letter modified the MP1 license by permanently withdrawing the authority to operate the unit. Also, it prohibits NNECO from placing or retaining fuel in the MP1 reactor vessel. As a result of this fundamental change in the unit's licensing basis, NNECO has determined that many of the conditions of the MP1 operating license, active exemptions from 10 CFR, and Confirmatory Orders are no longer appropriate in the permanently defueled condition. In accordance with 10CFR50.90, NNECO is proposing to modify License Conditions and Confirmatory Orders to reflect the permanently defueled condition of the unit.

The proposed modifications to Operating License No. DPR-21 are consistent with the intent of Information Notice 97-43, "License Condition Compliance." This Information Notice identified that some licensees were not complying with the literal wording of the conditions in their licenses. It states that licensees should reexamine the conditions of their licenses to ensure they are complying with the specific wording of each license condition. Information Notice 97-43 further states that licensees should submit a license amendment request to change the wording of the condition to adequately reflect the actions intended, in the licensee's opinion, by the specific license condition.

A001

The following attachments are provided to support this license amendment:

Attachment 1- Description of and Justification for the Proposed Changes;

Attachment 2 - No Significant Hazards Consideration (SHC) and Environmental Consideration; and

Attachment 3 - Marked-up Version of the Current Operating License and Confirmatory Orders.

There are no regulatory commitments contained within this letter.

NNECO requests that the amendment become effective as of the date of issuance, to be implemented within 30 days of issuance.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

F. C. Rothen
Vice President, Nuclear Work Services

Subscribed and sworn to before me

this 29 day of March, 2000

Donna Lynne Williams
Notary Public

Date Commission Expires: Nov 30, 2001

cc: H. J. Miller, Region I Administrator
L. L. Wheeler, NRC Senior Project Manager, Millstone Unit No. 1
P. C. Cataldo, Resident Inspector, Millstone Unit No. 1

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Attachment 1 to B17993

Description of and Justification for Proposed Changes

Background

On July 21, 1998, Northeast Nuclear Energy Company (NNECO) informed the U.S. Nuclear Regulatory Commission (NRC) that Millstone Unit No. 1 (MP1) had permanently ceased operations and that the fuel had been permanently removed from the reactor vessel. Pursuant to 10CFR50.82(a)(2), the certification in the letter modified the MP1 license by permanently withdrawing the authority to operate the unit. In accordance with 10CFR50.90, NNECO is proposing to modify the License Conditions and Confirmatory Orders to reflect the permanently defueled condition of the unit.

Description of and Justification for Proposed Changes

Currently, the MP1 Operating License (DPR-21) is written to apply to an operating facility. MP1 is permanently shutdown and defueled; thus, Operating License DPR-21 needs to be rewritten to apply to MP1's current status. NNECO proposes to modify certain License Conditions and Confirmatory Orders as follows:

License Condition 1.B

NNECO is proposing to delete License Condition 1.B. This License Condition states:

> "Construction of the Millstone Nuclear Power Station, Unit 1 (the facility), has been completed substantially in conformity with Construction Permit No. CPPR-20, as amended, the application, the provisions of the Act, and the rules and regulations of the Commission; and has been operating under a provisional license since October 7, 1970."

This License Condition contains historical information that is no longer germane to the plant condition. This proposed change is an administrative change which eliminates superfluous information from the Operating License.

License Condition 1.C

NNECO is proposing to modify License Condition 1.C. This License Condition states:

> "The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission."

NNECO proposes to rewrite this License Condition as follows:

> "The facility will be decommissioned in conformity with the provisions of the Act, and the rules and regulations of the Commission."

This proposed change is an administrative change which acknowledges that MP1 has been permanently shutdown and defueled.

License Condition 1.D

NNECO is proposing to delete License Condition 1.D. The License Condition states:

> "There is reasonable assurance that the facility can be operated at power levels up to 2011 megawatts (thermal) without endangering the health and safety of the public; and that such activities will be conducted in compliance with the regulations of the Commission."

MP1 is permanently shutdown and defueled. Thus, this License Condition is no longer applicable.

License Condition 1.I

NNECO is proposing to delete License Condition 1.I. The License Condition states:

> "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."

This License Condition duplicates the provisions of License Conditions 2.B.(2), 2.B.(3), and 2.B.(4). This proposed change is an administrative change, because the provisions of the License Condition are addressed in other License Conditions.

License Condition 2

NNECO is proposing to modify License Condition 2. This License Condition states that the provisional operating license has been superceded by the facility operating license. It has been modified to identify that it is a historical statement, and to provide a connection to the permanently defueled condition. These proposed changes are administrative changes made to reflect that MP1 is permanently shutdown and defueled. They do not change the intent of the License Condition.

License Condition 2.A

NNECO is proposing to modify License Condition 2.A by replacing a reference to the Final Safety Analysis Report (FSAR) with a reference to the Safety Analysis Report. This is a more generic title which is consistent with other regulatory references (e.g., 10CFR50.59). In addition, the FSAR was recently revised to reflect the permanently shutdown and defueled condition. As part of this change, the title was changed to the Defueled Safety Analysis Report (DSAR). This proposed change is an administrative change which does not modify the intent of the License Condition.

License Condition 2.B.(1)

NNECO is proposing to modify License Condition 2.B.(1) by eliminating the authority to use and operate MP1. NNECO has certified the permanent cessation of operations at MP1 in accordance with 10CFR50.82(a)(2). Additionally, NNECO has certified that the fuel has been permanently removed from the reactor vessel. Therefore, the license condition authority to use and operate the unit is no longer required. The proposed change is more restrictive than the current operating license, because it will only permit NNECO to possess MP1.

License Condition 2.B.(2)

NNECO is proposing to modify License Condition 2.B.(2). This License Condition states:

> "Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to receive, possess, and use at any time special nuclear material for 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."

NNECO is proposing to rewrite the License Condition as follows:

> "Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to possess at any time special nuclear material that was used as reactor fuel, in accordance with the limitations for storage as described in the Safety Analysis Report, as supplemented and amended."

NNECO has certified the permanent cessation of operations at MP1 in accordance with 10CFR50.82(a)(2). Additionally, NNECO has certified that the fuel has been permanently removed from the reactor vessel. Thus, NNECO no longer needs a license to receive or use any special nuclear material as reactor fuel. The proposed change is more restrictive than the current operating license, because it will only permit NNECO to possess special nuclear material that was used as reactor fuel.

Also, the reference to the FSAR has been changed to the Safety Analysis Report. This is a more generic title which is consistent with other regulatory references (e.g., 10CFR50.59). In addition, the FSAR was recently revised to reflect the permanently shutdown and defueled condition. As part of this change, the title was changed to the Defueled Safety Analysis Report (DSAR). This proposed change is an administrative change which does not modify the intent of the License Condition.

License Condition 2.B.(3)

NNECO is proposing to modify License Condition 2.B.(3). This License Condition states:

> "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."

NNECO is proposing to rewrite this condition as follows:

> "Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess, and use at any time sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in

> amounts as required and possess any byproduct, source and special nuclear material that was used as sealed neutron sources for reactor startup."

NNECO has certified the permanent cessation of operations at MP1 in accordance with 10CFR50.82(a)(2). Additionally, NNECO has certified that the fuel has been permanently removed from the reactor vessel. Thus, NNECO no longer needs a license to receive or use any byproduct, source or special nuclear material as sealed neutron sources for reactor startup. The proposed change is more restrictive than the current operating license, because it will only permit NNECO to possess byproduct, source and special nuclear material that was used as sealed neutron sources for reactor startup.

License Condition 2.C.(1)

NNECO is proposing to delete License Condition 2.C.(1). This license condition authorizes NNECO to operate the facility at steady-state power levels up to a maximum of 2011 megawatts (thermal). MP1 is permanently shutdown and defueled. Thus, this authorization is no longer required.

License Condition 2.C.(3)

NNECO is proposing to delete License Condition 2.C.(3). This License Condition provides requirements for the fire protection program, including a provision that permits the licensee to make changes to the approved fire protection program without prior Commission approval if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. These requirements are not consistent with 10CFR50.48(f).

10CFR50.48(f) requires licensees that have submitted the certifications required by 10CFR50.82(a)(1) to maintain a fire protection program to address the potential for fires which could cause the release or spread of radioactive materials (i.e., which could result in a radiological hazard). Additionally, 10CFR50.48(f)(3) permits licensees to make changes to the fire protection program provided the changes do not reduce the effectiveness of fire protection for facilities, systems, and equipment which could result in a radiological hazards, taking into account the decommissioning plant conditions and activities.

Deletion of License Condition 2.C.(3) is appropriate because it eliminates the existing conflict between the license and 10CFR50.48(f).

License Condition 2.C.(6)

NNECO is proposing to delete License Condition 2.C.(6).

The first part of the License Condition permits NNECO to conduct refueling operations that include a full-core offload as a normal end-of-cycle event. MP1 is permanently shutdown and defueled. Thus, this authorization is no longer required.

The second part of the License Condition requires the FSAR to be updated to reflect the hardware modifications, heat load analysis, and operational controls consistent with two licensing submittals. The submittals were made in support of the ability to conduct full-core offloads as a normal end-of-cycle event. Given that MP1 no longer conducts refueling operations, the License Condition is no longer applicable and should be removed.

License Condition 2.D.(1)

NNECO is proposing to delete License Condition 2.D.(1). This License Condition identifies that an exemption to Section III.G of Appendix R to 10CFR50 was granted on November 6, 1985. Section III.G of Appendix R to 10CFR50 is entitled "Fire Protection of Safe Shutdown Capability," it provides requirements for: 1) fire protection features for structures, systems, and components important to safe shutdown; 2) ensuring that one of the redundant trains in systems necessary to achieve and maintain hot shutdown is free of fire damage; and 3) alternative or dedicated shutdown for areas where the first two requirements are not met.

MP1 is permanently shutdown and defueled, as a result, it does not have any structures, systems, or components that are important to achieving or maintaining safe shutdown. Based on this, the requirements of Section III.G of Appendix R to 10CFR50 no longer apply to MP1, and the License Condition should be removed.

License Condition 2.D.(2)

NNECO is proposing to delete License Condition 2.D.(2). This License Condition identifies that two exemptions to Appendix J to 10CFR50 remain in effect. It states that these relate to the testing of expansion bellows at containment penetrations and main steam isolation valves. MP1 is no longer authorized to operate the reactor or to place or retain fuel in the reactor vessel. Thus, the only design basis accident that remains is the fuel handling accident

over the spent fuel pool. As a result, the primary containment and primary containment isolation valve systems no longer have a required function to mitigate an accident. Thus, Appendix J to 10CFR50 no longer applies to the permanently shutdown and defueled state, and the exemptions are not required.

License Condition 2.D.(3)

NNECO is proposing to delete License Condition 2.D.(3). This License Condition identifies that an exemption was granted to 10CFR50.71(e)(3) which permitted the FSAR update to be completed and submitted by March 31, 1987. This condition was a one-time schedule exemption which is no longer applicable.

License Condition 3

NNECO is proposing to replace License Condition 3. This License Condition states that the license is effective as of its date of issuance and shall expire at midnight, October 6, 2010. This license expiration date is no longer appropriate. NNECO proposes to replace this License Condition with the following:

> "On July 21, 1998, Northeast Nuclear Energy Company (NNECO) certified that operations at Millstone Unit No.1 would permanently cease and that the fuel had been permanently removed from the reactor vessel in accordance with 10 CFR 50.82(a)(1)(i) and 10 CFR 50.82(a)(1)(ii). As a result, the 10 CFR 50 license no longer authorizes operation of the reactor, or the emplacement or retention of fuel in the reactor vessel.
>
> "This license is effective as of the date of issuance and authorizes ownership and possession of Millstone Unit No. 1 until the Commission notifies the licensee in writing that the license is terminated. The licensee shall:
>
> "A. Take actions necessary to decommission the plant and continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition; and
>
> "B. Conduct activities in accordance with all other restrictions applicable to the facility in accordance with the NRC regulations and the applicable provisions of the 10CFR50 facility license as defined in Section 2 of this license."

This License Condition is appropriate, because it defines the current state of the facility. Also, it is consistent with 10CFR50.82(a)(11) which defines that the

Commission has the responsibility for terminating the license. The proposed License Condition is based on a similar License Condition issued to the Haddam Neck Plant in a revision to its Operating License (DPR-61) dated December 14, 1999.

Order Dated August 24, 1973

NNECO is proposing to remove the order dated August 24, 1973. This Order added Technical Specifications 3.11.A, 3.11.B, 4.11.A, and 4.11.B regarding Average Planar Linear Heat Generation Rate (LHGR) and Local LHGR. These specifications were added to the MP1 Technical Specifications; however, they were deleted as part of Amendment No. 106 to the MP1 Technical Specifications. As a result, the Order should be removed.

Order Dated December 27, 1974

NNECO is proposing to remove the Order dated December 27, 1974. This Order required the licensee to submit a reevaluation of Emergency Core Cooling System performance which conformed to the provisions of 10CFR50.46. The Order states:

> "The Commission subsequently issued Amendment No. 16 to Provisional Operating License DPR-21 which incorporated into Technical Specifications operating limits based upon Loss of Coolant Analysis utilizing models which conform to the requirements of 10 CFR Part 50, Appendix K (refer to Technical Specifications Change No. 29, dated October 17, 1975)."

The Order dealt with an issue that was resolved to the Commission's satisfaction in 1975. Thus, it should be removed.

Order Dated March 11, 1977

NNECO is proposing to remove the Order dated March 11, 1977. This Order required the licensee to submit a reevaluation of Emergency Core Cooling System performance in accordance with the NRC approved General Electric Company's Evaluation Model. The Order states:

> "Amendment No. 49 to Provisional Operating License No. DPR-21 issued June 16, 1978 fulfills the requirements of the Commission's Order for Modifications of License dated March 11, 1977."

The Order dealt with an issue that was resolved to the Commission's satisfaction in 1977. Thus, it should be removed.

Order Dated February 21, 1980

NNECO is proposing to remove the Order dated February 21, 1980. This Order required the licensee to install a recirculation pump trip by December 31, 1980. A recirculation pump trip was installed at MP1 to trip both recirculation pumps in order to protect against an Anticipated Transient Without Scram (ATWS). MP1 is permanently shutdown and defueled, thus, the potential for an ATWS event no longer exists. The Order should be removed, because it is no longer germane to the current plant status.

Order Dated August 29, 1980

NNECO is proposing to remove the Order dated August 29, 1980. The Order states:

> "This order was revised, in its entirety, by the Order issued September 19, 1980."

The Order does not require any additional action by the licensee. Therefore, it should be removed.

Order Dated September 19, 1980

NNECO is proposing to remove the Order dated September 19, 1980. The Order required the licensee to respond to a request specified in the NRC's letters dated March 6, 1980, and March 28, 1980, by November 1, 1980. NNECO supplied the required information in a submittal dated October 31, 1980. The Order does not require any additional action by the licensee. Therefore, it should be removed.

Order Dated October 2, 1980

NNECO is proposing to remove the Order dated October 2, 1980. The Order states:

> "Concerning the BWR Scram Discharge Volume, the approved Technical Specification changes included in Amendment No. 86 to Provisional Operating License DPR-21 (issued November 12, 1982) replaces the interim conditions to the License that were imposed by the Commission's

Order of October 2, 1980, issued by the Office of Inspection and Enforcement."

The Order does not require any additional action by the licensee. Therefore, it should be removed.

Order Dated October 24, 1980

NNECO is proposing to remove the Order dated October 24, 1980. This Order provided requirements that were germane to the environmental qualification of safety-related electrical equipment. MP1 is permanently shutdown and defueled. As a result, the fuel pool and supporting structure, fuel pool liner, and the fuel racks are the only remaining safety-related components. There is no safety-related electric equipment. Thus, the requirements regarding environmental qualification of safety-related electrical equipment are no longer applicable. As a result, the Order should be removed.

Order Dated January 9, 1981

NNECO is proposing to remove the Order dated January 9, 1981. This Order provided requirements regarding an automatic system to initiate control rod insertion on low pressure in the control air header. MP1 is permanently shutdown and defueled. Thus, there is no need for a system that initiates control rod insertion. The Order is no longer applicable, and should be removed.

Order Dated January 13, 1981 and Revised January 19, 1982

NNECO is proposing to remove the Order dated January 13, 1981, which was revised on January 19, 1982. This Order required the licensee to promptly assess the suppression pool hydrodynamic loads, and provided due dates for completing any necessary modifications. The suppression pool is no longer required to perform a function, because MP1 is permanently shutdown and defueled. Thus, the Order should be removed.

Order Dated July 7, 1981 and Revised July 1, 1985

NNECO is proposing to remove the Order dated July 7, 1981, which was revised on July 1, 1985. The Order identifies NNECO's implementation and submittal commitments regarding the post-Three Mile Island (TMI) related issues as set forth in NUREG-0737. Generic Letters 82-05 and 82-10 state that NUREG-0737 incorporated into one document the TMI-related items that were approved by the

Commission for implementation at operating reactors. MP1 is permanently shutdown, therefore NUREG-0737 is no longer applicable to MP1.

Order Dated March 14, 1983

NNECO is proposing to remove the Order dated March 14, 1983. This Order identifies NNECO's commitments regarding post-TMI related issues as set forth in Generic Letters 82-05 and 82-10. Generic Letters 82-05 and 82-10 state that NUREG-0737 incorporated into one document the TMI-related items that were approved by the Commission for implementation at operating reactors. MP1 is permanently shutdown, therefore NUREG-0737 is no longer applicable to MP1.

Order Dated June 12, 1984

NNECO is proposing to remove the Order dated June 12, 1984. This Order identifies NNECO's commitments regarding post-TMI related issues as set forth in Supplement 1 to NUREG-0737. Generic Letters 82-05 and 82-10 state that NUREG-0737 incorporated into one document the TMI-related items that were approved by the Commission for implementation at operating reactors. MP1 is permanently shutdown, therefore NUREG-0737 is no longer applicable to MP1.

Order Dated November 20, 1985

NNECO is proposing to remove the Order dated November 20, 1985. This Order granted an extension to a deadline for environmental qualification of electrical equipment at MP1. MP1 is permanently shutdown and defueled. As a result, the fuel pool and supporting structure, fuel pool liner, and the fuel racks are the only remaining safety-related components. There is no safety-related electric equipment. Thus, this Order is no longer applicable, and should be removed.

Conclusion

NNECO concludes that this request to modify the MP1 Operating License (DPR-21) is appropriate, because it retains those provisions which are applicable and eliminates those provisions which are not applicable to the permanently shutdown and defueled state. The proposed changes will permit the plant staff to focus on those requirements which continue to apply to the existing plant conditions. The proposed changes do not affect the ability to maintain the plant in a safe configuration, including the safe storage of the spent reactor fuel. As a result, the requested modifications will not present any undue risk to the public health and safety.

Attachment 2 to B17993

No Significant Hazards Consideration and Environmental Consideration

On July 21, 1998, Northeast Nuclear Energy Company (NNECO) informed the USNRC that Millstone Unit No. 1 (MP1) had permanently ceased operations and that the fuel had been permanently removed from the reactor vessel. Pursuant to 10CFR50.82(a)(2), the certification in the letter modified the MP1 license by permanently withdrawing the authority to operate the unit. To reflect the permanently shutdown and defueled status of the unit, NNECO is proposing to:

- modify License Conditions 1.C, 2, 2.A, 2.B.(1), 2.B.(2), 2.B.(3), 2.B.(4), and 3 of the MP1 Operating License (DPR-21);

- remove License Conditions 1.B, 1.D, 1.I, 2.C.(1), 2.C.(3), 2.C.(6), 2.D.(1), 2.D.(2), and 2.D.(3) of the MP1 Operating License (DPR-21); and

- remove the Confirmatory Orders.

In accordance with 10CFR50.92, NNECO has reviewed the proposed changes and has concluded that they do not involve a significant hazards consideration (SHC). The basis for this is that the three criteria of 10CFR50.92(c) are not compromised. The proposed changes do not involve an SHC because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   The purpose of the proposed changes is to revise the Millstone Unit No.1 Operating License to only address conditions and requirements that are germane to the permanently shutdown and defueled condition. Since Millstone Unit No.1 has permanently ceased operation and will be maintained in a defueled condition, many provisions of the license related to the operation of the plant are no longer appropriate. Elimination of the unnecessary requirements and statements allows the plant staff to focus on those requirements which continue to be appropriate to the existing plant conditions. The proposed changes do not affect the only design basis accident that continues to be applicable (i.e., the fuel handing accident). Therefore, the changes do not increase the probability or consequences of any previously evaluated accident.

2. Create the possibility of a new or different kind of accident from any previously evaluated.

   The purpose of the proposed changes is to revise the Millstone Unit No.1 Operating License to only address conditions and requirements that are germane to the permanently shutdown and defueled condition. Since Millstone Unit No.1 has permanently ceased operation and will be maintained in a defueled condition, many provisions of the license related to the operation of the plant are no longer appropriate. Elimination of the unnecessary requirements and statements allows the plant staff to focus on those requirements which continue to be appropriate to the existing plant conditions. The proposed changes do not affect storage of spent fuel. Therefore, the proposed changes do not create a different kind of accident from those previously analyzed.

3. Involve a significant reduction in a margin of safety.

   The purpose of the proposed changes is to revise the Millstone Unit No.1 Operating License to only address conditions and requirements that are germane to the permanently shutdown and defueled condition. Since Millstone Unit No.1 has permanently ceased operation and will be maintained in a defueled condition, many provisions of the license related to the operation of the plant are no longer appropriate. Elimination of the unnecessary requirements and statements allows the plant staff to focus on those requirements which continue to be appropriate to the existing plant conditions. The proposed changes do not affect storage of spent fuel. Therefore, the proposed changes do not involve a reduction in a margin of safety.

Environmental Consideration

NNECO has reviewed the proposed license amendment against the criteria of 10CFR51.22 for environmental considerations. The proposed change does not involve a SHC, nor significantly increase the types and amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, NNECO concludes that the proposed change meets the criteria delineated in 10CFR51.22(c)(9) for a categorical exclusion from the requirements for an environmental impact statement.

Attachment 3 to B17993

Millstone Nuclear Power Station Unit No. 1

Request for Modification of License Conditions and Confirmatory Orders

Marked-Up Operating License

February 26, 1992

NORTHEAST NUCLEAR ENERGY COMPANY

(MILLSTONE NUCLEAR POWER STATION, UNIT 1)

DOCKET NO. 50-245

FACILITY OPERATING LICENSE

License No. DPR-21

1. The Nuclear Regulatory Commission (the Commission) has found that:

A. The application for an operating license filed by the Northeast Nuclear Energy Company (the licensee), formerly the Millstone Point Company, acting for itself, and as agent for The Connecticut Light and Power Company (CL&P), and Western Massachusetts Electric Company (WMECO), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the rules and regulations of the Commission, as set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;

B. Deleted. ~~Construction of the Millstone Nuclear Power Station, Unit 1 (the facility), has been completed substantially in conformity with Construction Permit No. CPPR-20, as amended, the application, the provisions of the Act, and the rules and regulations of the Commission; and has been operating under a provisional license since October 7, 1970;~~

C. The facility will operate (be decommissioned) in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

D. Deleted. ~~There is reasonable assurance that the facility can be operated at power levels up to 2011 megawatts (thermal) without endangering the health and safety of the public; and that such activities will be conducted in compliance with the regulations of the Commission;~~

E. The licensee is technically 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 furnished proof of financial protection that satisfies 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; and

H. The issuance of this license is in accordance with 10 CFR Part 51 of the Commissions'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.~~ Deleted.

2. Provisional Operating License No. DPR-21, dated October 7, 1970, as amended, is superseded in its entirety by Facility Operating License No. DPR-21 hereby issued to Northeast Nuclear Energy Company (the licensee or NNECO) to read as follows: It applies to the permanently defueled condition

A. This license applies to the Millstone Nuclear Power Station, Unit 1, a single cycle, boiling light-water reactor, and electric generating equipment (the facility). The facility is located on the licensee's site in Waterford, Connecticut, and is described in the license application, as amended, and the Final Safety Analysis Report, as supplemented and amended (herein the application).

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Northeast Nuclear Energy Company, acting for itself and as agent for CL&P and WMECO:

(1) Pursuant to Section 104b of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, use, and operate the facility at the designated location in Waterford, Connecticut in accordance with the procedures and limitations set forth in this license;

(2) Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to receive, possess, and use at any time special nuclear material for 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.

(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; and

(4) Pursuant to the Act and 10 CFR 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.

C. 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 all applicable provisions of the Act and rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

(1) Maximum Power Level

NNECO is authorized to operate the facility at steady-state power levels up to a maximum of 2011 megawatts (thermal).

(2) Technical Specifications

Deleted

The Technical Specifications contained in Appendix A, as revised through Amendment No. 106, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Fire Protection

Northeast Nuclear Energy Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SERs dated September 26, 1978, November 19, 1980, February 13, 1981, February 7, 1983, October 25, 1985, November 6, 1985, August 1986, July 17, 1987, April 14, 1988, and October 12, 1993 subject to the following provisions:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(4) Physical Protection

The licensee shall fully 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: "Millstone Nuclear Power Station Physical Security Plan," with revisions submitted through March 29, 1988; "Millstone Nuclear Power Station Suitability, Training and Qualification Plan," with revisions submitted through July 21, 1986; and "Millstone Nuclear Power Station Safeguards Contingency Plan," with revisions submitted through October 30, 1985. Changes made in accordance with 10 CPR 73.55 shall be implemented in accordance with the schedule set forth therein.

(5) Deleted

(6) Spent Fuel Pool Operations

NNECO shall conduct refueling operations that include full-core offload as a normal end-of-cycle event in accordance with the controls proposed in Attachment 4 of the application for amendment dated July 28, 1995, as supplemented September 12, 1995.

NNECO shall update the UFSAR to reflect the hardware modifications, head load analysis and operational controls consistent with the application for amendment dated July 28, 1995, as supplemented September 12, 1995, in accordance with 10 CFR 50.71(e).

D. The facility has been granted certain exemptions from the requirements of 10 CFR Part 50 as set forth below:

(1) Section III.G of Appendix R to 10 CFR Part 50, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979." This section relates to fire protection features for ensuring the systems and associated circuits used to achieve and maintain safe shutdown are free of fire damage. The staff safety evaluation, dated November 6, 1985, concluded that the licensee's existing fire-protection configuration with proposed modifications achieves an equivalent level of safety. Exemption granted November 6, 1985.

(2) Appendix J to 10 CFR Part 50, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors." Appendix J relates to containment leakage test requirements, specifically periodic verification by tests of the leak-tight integrity of the primary reactor containment and systems and components which penetrate containment. Three exemptions were granted on May 10, 1985, on the basis of the staff safety evaluation. The two which remain in effect relate to testing of expansion bellows at containment penetrations and main stream isolation valves.

(3) Section 50.71 of 10 CFR Part 50, "Maintenance of Records, Making of Reports." Section 50.71(e)(3) relates to the requirement for submittal of an updated FSAR. An exemption for a schedular delay in the submittal of the updated FSAR was granted on November 22, 1985. This exemption requires that the FSAR update be completed and submitted by March 31, 1987.

3. This license is effective as of its date of issuance and shall expire at midnight, October 6, 2010.

INSERT

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Frank J. Miraglia, Director
Division of PWR Licensing - B

Attachment:
Appendix A - Technical Specifications

Date of Issuance: October 31, 1986

INSERT

3. On July 21, 1998, Northeast Nuclear Energy Company (NNECO) certified that operations at Millstone Unit No.1 would permanently cease and that the fuel had been permanently removed from the reactor vessel in accordance with 10 CFR 50.82(a)(1)(i) and 10 CFR 50.82(a)(1)(ii). As a result, the 10CFR50 license no longer authorizes operation of the reactor, or the emplacement or retention of fuel in the reactor vessel.

   This license is effective as of the date of issuance and authorizes ownership and possession of Millstone Unit No. 1 until the Commission notifies the licensee in writing that the license is terminated. The licensee shall:

   A. Take actions necessary to decommission the plant and continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition; and

   B. Conduct activities in accordance with all other restrictions applicable to the facility in accordance with the NRC regulations and the applicable provisions of the 10CFR50 facility license as defined in Section 2 of this license.

ORDER FOR MODIFICATION OF LICENSE

III.

In view of the foregoing, the Director of Regulation finds that the public health, safety, and interest require that the following Order be made effective immediately. Pursuant to the Atomic Energy Act of 1954, as amended, the Commission's regulations in 10 CFR §§ 2.204 and 50.100 and the License condition noted in Part 1 above,

IT IS ORDERED THAT:

The Technical Specifications of License DPR-21 are hereby changed to include Limiting Conditions for Operation, sections 3.11.A. and 3.11.B. and Surveillance Requirements sections 4.11.A. and 4.11.B. attached hereto as Appendix I and the plant shall be operated immediately in accordance therewith.

Effective Date: August 24, 1978

Attachment: Appendix I - Not included (refer to Change No. 14 to Safety Technical Specifications).

ORDER FOR MODIFICATION OF LICENSE

III.

In view of the foregoing and, in accordance with the provisions of § 50.46(a)(2)(v), the Acting Director of Licensing has found that the evaluation of ECCS cooling performance submitted by the licensees is not consistent with the requirements of 10 CFR § 50.46(a)(1) and, therefore, that the further restrictions on facility operation, set forth in Appendix A to this Order, are required to protect the public health and safety. The Acting Director of Licensing has also found that the public health, safety, and interest require that the following Order be made effective immediatley. Pursuant to the Atomic Energy Act of 1954, as amended, the Commission's regulations in 10 CFR §§ 2.204, 50.46, and 50.54 IT IS ORDERED THAT:

1. As soon as practable, but in no event later than six months from the date of publication of this order in the FEDERAL REGISTER, or prior to any license amendment authorizing any core reloading, whichever occurs first, the licensee shall submit a reevaluation of ECCS cooling performance calculated in accordance with an acceptable evaluation model which conforms with the provisions of 10 CFR Part 50, § 50.46. Such evaluation may be based upon the vendor's evaluation model as modified in accordance with the changes described in the Staff Safety Evaluation Report of the Millstone Nuclear Power Station, dated December 27, 1974. The evaluation shall be accompanied by such proposed changes in Technical Specifications or license amendments as may be necessary to implement the evaluation results.

2. Effective immediately, reactor operation shall continue only within the limits of:

(a) *

(b) *

Effective Date: December 27, 1974

*The operating limits which were in effect December 27, 1974 are available in the original Order for Modification of License dated December 27, 1974.

A submittal was made to the Commission dated July 9, 1975 in response to the requirements of 10 CFR Part 50, Section 50.46 and the Order for Modification of License dated December 27, 1974.

The Commission subsequently issued Amendment No. 16 to Provisional Operating License DPR-21 which incorporated into Technical Specifications operating limits based upon Loss of Coolant Analysis utilizing models which conform to the requirements of 10 CFR Part 50, Appendix K (refer to Technical Specifications Change No. 29, dated October 17, 1975).

ORDER FOR MODIFICATION OF LICENSE*

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's Rules and Regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT Facility Operating License No. DPR-21 is hereby amended by adding the following new provision:

(1) As soon as possible, the licensee shall submit a re-evaluation of ECCS cooling performance calculated in accordance with General Electric Company's Evaluation Model approved by the NRC staff and corrected for the errors described herein and any other corrections in the Model of which the licensee is aware at the time the calculations are performed.

Effective Date: March 11, 1977

*Amendment No. 49 to Provisional Operating License No. DPR-21 issued June 16, 1978 fulfills the requirements of the Commission's Order for Modification of License dated March 11, 1977.

CONFIRMATORY ORDER

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED THAT:

The licensee shall, by December 31, 1980, install a recirculation pump trip, or in the alternative, place and maintain its facility in a cold shutdown or refueling mode of operation.

Effective Date: February 21, 1980

ORDER FOR MODIFICATION OF LICENSE*

Effective Date: August 29, 1980

*This order was revised, in its entirety, by the Order issued September 19, 1980.

REVISED ORDER FOR MODIFICATION OF LICENSE

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT EFFECTIVE IMMEDIATELY Provisional Operating License No. DPR-21 is hereby amended to add the following provisions:

"Information which fully and completely responds to the staff's request as specified in NRC's letters dated March 6, 1980 and March 28, 1980, shall be submitted to the Director, Division of Licensing by the licensee not later than November 1, 1980."

...This order revises, in its entirety, the Order issued August 29, 1980 (45 FR 60070, September 11, 1980).

Effective Date: September 29, 1980

CONFIRMATORY ORDER*

Effective Date: October 2, 1980

*Concerning the BWR Scram Discharge Volume, the approved Technical Specification changes included in Amendment No. 86 to Provisional Operating License DPR-21 (issued November 12, 1982) replaces the interim conditions to the License that were imposed by the Commission's Order of October 2, 1980 issued by the Office of Inspection and Enforcement.

ORDER FOR MODIFICATION OF LICENSE

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's Rules and Regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT EFFECTIVE IMMEDIATELY Provisional Operating License No. DPR-21 is hereby amended to add the following provisions to the Appendix A Technical Specifications

(a) "By no later than June 30, 1982, all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588, "Interim Staff Position on Environmental Qualficiation of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-21 dated October 24, 1980."

(b) "By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified."

Effective Date: October 24, 1980

ORDER FOR MODIFICATION OF LICENSE
CONCERNING BWR SCRAM DISCHARGE SYSTEMS

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, including Sections 103 and 161i, and the Commission's rules and regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT EFFECTIVE IMMEDIATELY, Provisional Operating License No. DPR-21 is hereby amended to add the following provisions:

(1) An automatic system shall be operable to initiate control rod insertion on low pressure in the control air header, which meets the following criteria:

(a) The system shall automatically initiate control rod insertion at 10 psi or greater above scram outlet valve opening pressure;

(b) The system shall not degrade the existing safety systems (e.g., reactor protection system);

(c) The system shall allow for scram reset;

(d) The design shall consider the potential for inadvertent or unnecessary scrams;

(e) Any required power supply should not be subject to any failure mode which could also initiate the degraded-air conditions, unless it can be demonstrated that an automatic scram will occur promptly because of the failure mode of the power supply;

(f) The system is not subject to the requirements of Appendices A and B of 10 CFR 50;

(g) There shall be a documented independent design review of the system;

(h) Before the system is declared operable, a documented pre-operational test of the system will be successfully completed; and

(i) The system shall be functionally tested at each Unit shutdown, but need not be tested more than once each 90 days.

(2) After April 9, 1981, the Automatic Dump System as described above shall be operable in all modes other than shutdown and refueling or the unit shall be placed in a cold shutdown condition within 72 hours unless system operability is restored.

Effective Date: January 9, 1981

ORDER FOR MODIFICATION OF LICENSE

V.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED THAT the license be amended to include the following conditions:

1. The licensee shall promptly assess the suppression pool hydrodynamic loads in accordance with NEDO-21888 and NEDO-24583-1 and the Acceptance Criteria contained in Appendix A to NUREG-0661.

2. Any plant modifications needed to assure that the facility conforms to the Acceptance Criteria contained in Appendix A to NUREG-0661 shall be designed and its installation shall be completed prior to the start of Cycle 9 for all modifications inside the containment and no later than July 1, 1983 for all remaining modifications or, if the plant is shutdown on that date, before the resumption of power thereafter.

Dated: January 13, 1981

Revised: January 19, 1982

ORDER CONFIRMING LICENSEE COMMITMENTS ON
POST-TMI RELATED ISSUES

IV.

Accordingly, pursuant to Sections 103, 161i, 161o, and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT NNECO shall comply with the following conditions:

NNECo shall satisfy the specific requirements described in the Attachment to this Order (as appropriate to the licensee's facility) as early as practicable but no later than 30 days after the effective date of the ORDER.

Effective Date: July 7, 1981
Revised July 1, 1985
Attachments: NUREG 0737 Requirements

ATTACHMENT
NUREG 0737 REQUIREMENTS

Item	Title	Applicability	Specific Requirement	Impl/Doc Subm Due Dates
I.A.1.1	STA	ALL	(a) Provide STA coverage by degreed individuals (or equivalent), trained to licensee's program.	01/01/81
			(b) Submit description of current training program and demonstrate compliance with 10/30/79 letter.	01/01/81
			(c) Submit description of long term training program.	01/01/81
I.A.2.1	Reactor Operator Qualification	ALL	Submit description of and implement Upgraded Training Program.	08/01/80
I.C.1	Accident Procedures	ALL	(a) Submit reanalyses of inadequate core cooling and propose guidelines for emergency procedures, OR propose schedule and justify delays.	01/01/81
			(b) Submit reanalysis of transients and accidents for emergency procedures, OR propose schedule and justify delays.	01/01/81
I.C.5	Feedback of Operating Experience	ALL	Implement procedures for feedback of operating experience (no documentation submittal is required).	01/01/81
I.C.6	Correct Performance of Operating Activities	ALL	Implement procedures to verify correct performance of operating activities (no documentation submittal is required).	01/01/81

Item	Title	Applicability	Specific Requirement	Impl/Doc Subm Due Dates
II.B.2	Shielding	ALL	(a) Have available design details for vital area modifications.	01/01/81
			(b) Submit technical deviations to staff positions.	01/01/81
II.B.3	Post-Accident Sampling	ALL	Submit description of deviations from staff positions	01/01/81
II.B.4	Training to Mitigate Core Damage	ALL	(a) Have available for review a training program for mitigating core damage (no documentation submittal required).	01/01/81
			(b) Implement training program (no documentation submittal required).	04/01/81
II.D.1	Performance Testing of RV/SRV's	ALL	(a) Submit test program (both BWR/PWR's).	07/01/80 (PWR) 10/01/80 (BWR)
			(b) Submit qualification program for PWR's block valve.	01/01/81 (PWR)
II.E.1.2	Aux. Feed Initiation and Flow	PWR's	(a) Submit final design and documentation on safety grade flow indication.	01/01/81
			(b) Submit final design and documentation on safety grade flow initiation.	01/01/81
II.E.4.2	Containment Isolation	ALL	(a) Submit documentation justifying minimum containment pressure setpoint for isolation of non-essential penetrations.	01/01/81
			(b) Submit statement that purge valves not meeting CSB 6-4 (or interim position) are sealed and verification is performed every 31 days.	01/01/81

Item	Title	Applicability	Specific Requirement	Impl/Doc Subm Due Dates
II.F.1	Post-Accident Monitoring	ALL	(a) For noble gas monitor and Iodine/particulate sampling and analysis submit description and justification for deviations from staff requirements.	01/01/81
			(b) Have available the final design information for noble gas monitor and iodine/particulate sampling and analysis.	01/01/81
II.F.2	Inst. for Inadequate Core Cooling	ALL	Submit a report detailing the planned instrumentation system for monitoring inadequate core cooling.	01/01/81
II.K.2.10	Antic. Trip on LOFW and TT	B&W	Submit final design for anticipatory trip as described in NUREG-0737.	01/01/81
II.K.2.13	Thermal Mechanical Report	B&W	Submit report on effects of Hi Pressure Injection on vessel integrity for SB LOCA with no Aux. Feedwater.	01/01/81
II.K.3.2	PORV/SV Failures	PWR	Submit report on SB LOCA and probability of failure of PORV/SV/RV.	01/01/81
II.K.3.3	SRV/SV Failures & Challenges	ALL	Submit report (historical) and annually thereafter) of SRV/SV failures and challenges.	01/01/81
II.K.3.7	PORV Opening Probability	B&W	Submit report on the probability of a PORV opening during an overpressurization transient.	01/01/81
II.K.3.9	PID Controller Modification	Selected W plants	Modify the Proportional Integral Derivative Controller (as recommended by W). Advise NRC when modification is completed.	12/01/80
II.K.3.12	Anticipatory Trip on Turbine Trip	W	Submit confirmation of Anticipatory Trip. If not currently implemented, submit modification design and schedule for implementation.	01/01/81

Item	Title	Applicability	Specific Requirement	Impl/Doc Subm Due Dates
II.K.3.13	Separation of HPCI/RCIC Initiation Levels; Auto Restart of RCIC	BWRs w/HPCI/ RCIC	Submit results of evaluation and proposed modification as appropriate.	01/01/81
II.K.3.16	Reduce Challenges to RV's	BWR	Submit report on actions planned to reduce RV challenges.	04/01/81
II.K.3.17	ECCS System Outages	ALL	Submit report on ECCS outages and propose changes to reduce outages.	01/01/81
II.K.3.18	ADS Logic Modifications	BWR	Submit report of feasibility of ADS system logic changes to eliminate need for manual actuation.	04/01/81
II.K.3.21	CSS/CPCI Restart	BWR	Submit report of evaluation, proposed modifications and analysis to satisfy staff positions.	01/01/81
II.K.3.22	RCIC Suction	BWR w/RCIC	Implement procedures and document verification of this change.	01/01/81
II.K.3.27	Common Reference for H_2O Level Instruments	BWR	Implement change and submit documentation of changes.	01/01/81
II.K.3.29	Isolation Condenser Performance	BWR w/ICs	Submit evaluation of I.C. performance.	04/01/81
II.K.3.30	SB LOCA Methods	ALL	Submit outline of program for model.	11/15/80
II.K.3.44	Fuel Failure	BWR	Submit evaluation to verify no fuel failure.	01/01/81
II.K.3.45	Manual Depressurization	BWR	Submit evaluation on other than ADS method for depressurization.	01/01/81

Item	Title	Applicability	Specific Requirement	Impl/Doc Subm Due Dates
III.D.3.3	Improved Inplant Iodine Monitoring	ALL	Have available means to accurately measure airborne radioiodine inplant during an accident.	01/01/81
III.D.3.4	Control Room Habitability	ALL	(a) Submit control room habitability evaluation information.	01/01/81
			(b) Submit modifications necessary to assure CR habitability with a schedule for completion.	01/01/81

ORDER CONFIRMING LICENSEE COMMITMENTS
ON POST-TMI RELATED ISSUES

Accordingly, pursuant to Section 103, 161i, and 161o of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT the licensee shall:

Implement and maintain the specific items described in the Attachments to this Order in the manner described in the licensee's submittals noted in Section III herein no later than the dates in the Attachments.

Effective Date: March 14, 1983

Attachments: 1. Licensee's Commitments on Applicable NUREG-0737 Requirements from Generic Letter 82-05.
2. Licensee's Commitments on Applicable NUREG-0737 Requirements from Generic Letter 82-10.

ATTACHMENT I
MILLSTONE STATION, UNIT I
LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-05

Item	Title	NUREG-0737 Schedule	Requirement	Licensee's Completion Schedule (or status)*
I.A.3.1	Simulator Exams	10/01/81	Include simulator exams in licensing examinations.	Complete
II.B.2	Plant Shielding	01/01/82	Modify facility to provide access to vital areas under accident conditions.	Complete
II.B.3	Post-Accident Sampling	01/01/82	Install upgrade post-accident sampling capability.	April 1, 1983
II.E.4	Training for Mitigating Core Damage	10/01/81	Complete training program.	Complete
II.E.4.2	Containment Isolation Dependability	07/01/81	Part 5-lower containment pressure setpoint to level compatible w/normal operation.	Complete
		07/01/81	**Part 7-isolate purge & vent valves on radiation signal.	Under evaluation by the staff.
II.F.1	Accident Monitoring	01/01/82	(1) Install noble gas effluent monitors.	*
		01/01/82	(2) Provide capability for effluent monitoring of iodine.	*
		01/01/82	(3) Install incontainment radiation-level monitors.	Complete
		01/01/82	(4) Provide continuous indication of containment pressure.	Complete
		01/01/82	(5) Provide continuous indication of containment water level.	Complete
		01/01/82	(6) Provide continuous indication of hydrogen concentration in containment.	Under evaluation by the staff.

ATTACHMENT 1
MILLSTONE STATION, UNIT I
LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-05

Item	Title	NUREG-0737 Schedule	Requirement	Licensee's Completion Schedule (or status)*
II.K.3.15	Isolation of HPCI & RCIC Modification	07/01/81	Modify pipe break detection logic to prevent inadvertent isolation	N/A
II.K.3.22	RCIC Suction	01/01/82	Modify design of RCIC suction to provide automatic transfer to torus.	N/A
II.K.3.24	Space Cooling for HPCI/RCIC	01/01/82	Confirm adequacy of space cooling for HPCI/RCIC.	N/A
II.K.3.27	Common Reference Level	07/01/81	Provide common Reference Level for Vessel Level Instrumentation.	Complete

* End of outage prior to Cycle 10 currently scheduled for Spring 1984.
** Not part of Confirmatory Order.

ATTACHMENT 2
MILLSTONE STATION, UNIT 1
LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-10

Item	Title	NUREG-0737 Schedule	Requirement	Licensee's Completion Schedule (or status)
I.A.1.3.1	**Limit Overtime	10/01/82	Revise administrative procedures to limit overtime in accordance w/NRC Policy Statement issued by Generic Ltr. No. 82-12, dtd 06/15/82.	Under evaluation by the staff NNECO letter dated 10/01/82.
I.A.1.3.2	**Minimum Shift Crew	To be superseded by Proposed Rule.	To be addressed in the Final Rule on Licensed Operator Staffing at Nuclear Power Units.	To be addressed when Final Rule is issued.
I.C.1	**Revise Emergency Procedures	Superseded by SECY-82-111.	Reference SECY 82-111, Requirements for Emergency Response Capability.	To be determined.
II.D.1.2	RV and SV Test Programs	07/01/82	Submit plant specific reports on relief valve and safety valve program.	Complete
II.K.3.18	ADS Actuation	09/30/82	Submit revised position on need for modifications.	Complete in accordance with NNECO submittal 02/22/83.
II.K.3.30 & 31	**SBLOCA Analysis	1 year after staff approval of model.	Submit plant specific analyses.	To be determined following staff approval of model.
III.A.1.2	**Staffing Levels for Emergency Situations	Superseded by 82-111.	Reference SECY-82-111, Requirements for Emergency Response Capability.	To be determined.
III.A.1.2	**Upgrade Emergency Support Facilities	Superseded by 82-111.	Reference SECY-82-111, Requirements for Emergency Response Capability.	To be determined.

ATTACHMENT 2
MILLSTONE STATION, UNIT 1
LICENSEE'S COMMITMENTS ON APPLICABLE NUREG-0737 ITEMS FROM GENERIC LETTER 82-10

Item	Title	NUREG-0737 Schedule	Requirement	Licensee's Completion Schedule (or status)
III.A.2.2	**Meteorological Data	Superseded by 82-111.	Reference SECY-82-111, Requirements for Emergency Response Capability.	To be determined.
III.D.3.4 ***	Control Room Habitability	To be determined by licensee.	Modify facility as identified by licensee study.	To be determined

**Not Part of Confirmatory Order.
***Item III.D.3.4 is no longer considered part of the Confirmatory Order.

ORDER CONFIRMING LICENSEE COMMITMENTS
ON EMERGENCY RESPONSE CAPABILITY

IV.

Accordingly, pursuant to Sections 103, 161i, 161o and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT the licensees shall:

Implement the specific items described in the Attachment to this ORDER in the manner described in NNECo's submittals noted in Section III herein no later than the dates in the Attachment.

Effective Date: June 12, 1984

Attachment:
NNECO's Commitments on
Requirements Specified in
Supplement 1 to NUREG-0737

MILLSTONE UNIT NO. 1

LICENSEE'S COMMITMENTS ON SUPPLEMENT 1 TO NUREG-0737

June 12, 1984

TITLE	REQUIREMENT	LICENSEE'S COMPLETION SCHEDULE (OR STATUS)
1. Safety Parameter Display System (SPDS)	1a. Submit a safety analysis and an implementation plan to the NRC.	April 9, 1987
	1b. SPDS fully operational and operators trained.	Submit schedule by April 9, 1987.
2. Detailed Control Room Design Review (DCRDR)	2a. Submit a program plan to the NRC.	March 2, 1987
	2b. Submit a summary report to the NRC including a proposed schedule for implementation.	Submit schedule by March 2, 1987
3. Regulatory Guide 1.97 - Application to Emergency Response Facilities	3a. Submit a report to the NRC describing how the requirements of Supplement 1 to NUREG-0737 have been or will be met.	Completed February 29, 1984
	3b. Implement (installation or upgrade) requirements.	Submit schedule July 17, 1984

MILLSTONE UNIT NO. 1

LICENSEE'S COMMITMENTS ON SUPPLEMENT 1 TO NUREG-0737

TITLE	REQUIREMENT	LICENSEE'S COMPLETION SCHEDULE (OR STATUS)
4. Upgrade Emergency Operating Procedures (EOPs)	4a. Submit a Procedures Generation Package to the NRC.	Complete May 13, 1983
	4b. Implement the upgraded EOPs.	Complete June 29, 1983
5. Emergency Response Facilities	5a. Technical Support Center fully functional	Interim TSC operational * +
	5b. Operational Support Center fully functional.	Complete *
	5c. Emergency Operations Facility fully functional.	Complete* (**EOF Backup siting relief requested by NNECo letter dated August 3, 1983)

*Except for any additional changes that may be required as a result of other items in this Order.
**This will be subject to future licensing action.
+Operational TSC temporarily relocated to EOF pending completion of Millstone site TSC (tentatively mid-1985).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Nunzio J. Palladino, Chairman
Thomas M. Roberts
James K. Asselstine
Frederick M. Bernthal
Lando W. Zech, Jr.

NORTHEAST NUCLEAR ENERGY COMPANY (Millstone Nuclear Power Station, Unit 1)	Docket No. 50-245

MEMORANDUM AND ORDER

By letter dated September 30, 1985, the Northeast Nuclear Energy Company ("NNECO") requests that the Commission grant an extension from the November 30, 1985 deadline for environmental qualification of electrical equipment at Millstone Nuclear Power Station, Unit 1. The requests covers approximately five items of equipment. On November 5, 1985, members of the NRC staff and NNECO representatives appeared before the Commission to discuss this request further. The Commission has reviewed in detail the licensee's submittal, the staff's analysis and recommendation as set forth in SECY-85-345, and the arguments presented at the November 5 meeting. Based on this review the Commission finds that the licensee has demonstrated the exceptional nature of its case such that an extension will be granted.

The Commission most recently addressed the environmental qualification issue in Generic Letter 85-15, issued August 6, 1985. In that letter the Commission stated that extensions from the November 30 deadline established in 10 CFR 50.49(g) would be granted "only in rare circumstances." The Commission further stated that extension requests "must clearly identify the exceptional nature of the case, e.g., why, through events entirely beyond its control, the licensee will not be in compliance on November 30; the date when compliance will be achieved; and a justification for continued operation until compliance will be achieved." The Commission also set forth an enforcement policy regarding failure to meet the deadline.

The actions of NNECO with regard to its equipment qualification program generally demonstrate a good faith effort on its part to meet the November 30 deadline. No more than five items (eleven valve motor operators) remain to be qualified.[1] Procurement difficulties precluded the licensee from obtaining qualified replacement equipment for installation prior to the current ongoing outage that began in October 1985. Moreover, even though the equipment is now available, the licensee contends that exceptional circumstances for an extension exist because installing qualified replacement equipment, which is done most

---

[1] In its September 30, 1985 extension request, NNECO also proposed that six other motor valve operators be exempted permanently from the requirements of 10 CFR 50.49. However, on the basis of licensee's action to install "close arm switches" on the valves in question, in effect ensuring their proper operation in all instances, the staff has determined that they no longer require qualification to a harsh environment in accordance with the provisions of 10 CFR 50.49.

safely and efficiently when the plant is not in operation, should be accomplished in line with the schedule for plant modification being developed under the experimental Integrated Safety Assessment Program ("ISAP"), in which Millstone Unit 1 is one of the two participating reactor facilities. As described in the Commission's ISAP policy statement, 49 Fed. Reg. 45112 (Nov. 15, 1984), under the ISAP program the licensee is to assess all outstanding NRC-required facility modifications as well as utility-sponsored plant improvements and, in consultation with the NRC staff, is to set implementation priorities. By letter dated July 31, 1985, the staff informed NNECO of its determination that the valve operators in question were appropriate candidates for ISAP consideration. These items thus having been accepted into the ISAP program, the licensee asserts, an extension of the November 30 date is necessary because assessment of their installation priority under ISAP likely would cause them to be scheduled for replacement not at the current ongoing outage (which would add eight days to that outage) but rather at a subsequent outage. The NRC staff agrees with the licensee's assessment in this regard. The Commission concludes that, on balance, these circumstances are exceptional such that good cause exists for an extension.

The Commission therefore grants the request of NNECO for an extension on Millstone Unit 1. The staff has reviewed the justifications for continued operation and finds they support continued safe operation. In addition, staff has indicated that it presently is considering whether, in accordance with 10 CFR 50.12, the equipment in question properly would be exempt from the requirements of 10 CFR 50.49.

The ISAP program, however, was not intended to act as a substitute for this exemption process by allowing compliance with regulatory requirements to be postponed indefinitely. Accordingly, the licensee's deadline for equipment qualification for all remaining items is hereby extended until the next outage that occurs after the staff has made a determination on whether an exemption to section 50.49 can be granted and that is of sufficient duration to replace the equipment in question, but in any event no later than the next refueling outage for Millstone Unit 1 scheduled for mid-1987 or August 30, 1987, whichever occurs first.

Chairman Palladino and Commissioner Asselstine disapproved this order. The separate views of Chairman Palladino and Commissioner Asselstine are attached.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Washington, D.C.
this 20th day of November, 1985.