

June 24, 1997

Mr. Ted C. Feigenbaum  
Executive Vice President and  
Chief Nuclear Officer  
North Atlantic Energy Service Corporation  
c/o Mr. Terry L. Harpster  
P.O. Box 300  
Seabrook, NH 03874

SUBJECT: AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NPF-86: TECHNICAL SPECIFICATION 5.3.1 - FUEL ASSEMBLIES ZIRLO OR ZIRCALOY-4 FUEL CLADDING MATERIAL - LICENSE AMENDMENT REQUEST 0202 (TAC NO. M98842)

The Commission has issued the enclosed Amendment No. 53 to Facility Operating License No. NPF-86 for the Seabrook Station, Unit 1, in response to your application dated May 29, 1997.

The amendment modifies an Appendix A Technical Specification identifying the fuel assemblies design features. Specifically, the amendment modifies Technical Specification 5.3.1 by replacing the current term *zircaloy* with terminology that explicitly identifies the NRC-approved Westinghouse fuel assembly design in use at the Seabrook Station consisting of assemblies with either ZIRLO or Zircaloy-4 fuel cladding material.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,  
Original signed by  
Albert W. De Agazio, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - /II  
Office of Nuclear Reactor Regulation

Docket No. 50-443  
Serial No. SEA-97-015

Enclosures: 1. Amendment No. 53 to NPF-86  
2. Safety Evaluation

cc w/encls: See next page

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Seabrook Station, Unit No. 1

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

NORTH ATLANTIC ENERGY SERVICE CORPORATION, ET AL.\*

DOCKET NO. 50-443

SEABROOK STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 53  
License No. NPF-86

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by North Atlantic Energy Service Corporation, et al. (the licensee), dated May 29, 1997, 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.

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\*North Atlantic Energy Service Company (NAESCO) is authorized to act as agent for the: North Atlantic Energy Corporation, Canal Electric Company, The Connecticut Light and Power Company, Great Bay Power Corporation, Hudson Light and Power Department, Massachusetts Municipal Wholesale Electric Company, Montaup Electric Company, New England Power Company, New Hampshire Electric Cooperative, Inc., Taunton Municipal Light Plant, and The United Illuminating Company, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

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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. NPF-86 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 53, and the Environmental Protection Plan contained in Appendix B are incorporated into Facility License No. NPF-86. NAESCO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance, to be implemented before transition into Operational Mode 2 during startup from Refueling Outage 5.

FOR THE NUCLEAR REGULATORY COMMISSION



Patrick D. Milano, Acting Director  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 24, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 53

FACILITY OPERATING LICENSE NO. NPF-86

DOCKET NO. 50-443

Replace the following pages of Appendix A, Technical Specifications, with the attached pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. Overleaf pages have been provided.

Remove

5-9

5-10\*

Insert

5-9

5-10\*

## DESIGN FEATURES

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### DESIGN PRESSURE AND TEMPERATURE

5.2.2 The containment building is designed and shall be maintained for a maximum internal pressure of 52.0 psig and a temperature of 296°F.

### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

5.3.1 The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of cylindrical ZIRLO or Zircaloy-4 clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide ( $UO_2$ ) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 5.0 weight percent U-235.

#### CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 57 full-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 142 inches of absorber material. The nominal values of absorber material shall be 80% silver, 15% indium, and 5% cadmium. All control rods shall be clad with stainless steel tubing.

### 5.4 REACTOR COOLANT SYSTEM

#### DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

#### VOLUME

5.4.2 The total water and steam volume of the Reactor Coolant System is 12,255 cubic feet at a nominal  $T_{avg}$  of 588.5°F.

### 5.5 (THIS SPECIFICATION NUMBER IS NOT USED)

## DESIGN FEATURES

### 5.6 FUEL STORAGE

#### CRITICALITY

5.6.1.1 The spent fuel storage racks are designed and shall be maintained with:

- a. A  $k_{eff}$  equivalent to less than or equal to 0.95 when flooded with unborated water, which includes margin for uncertainty in calculation methods and mechanical tolerances with a 95% probability at a 95% confidence level.
- b. A nominal 10.35 inch center-to-center distance between fuel assemblies placed in the storage racks.

5.6.1.2 The new fuel storage racks are designed and shall be maintained with:

- a. A  $k_{eff}$  equivalent to less than or equal to 0.95 when flooded with unborated water, which includes margin for uncertainty in calculational methods and mechanical tolerances with a 95% probability at a 95% confidence level.
- b. A  $k_{eff}$  equivalent to less than or equal to 0.98 when aqueous foam moderation is assumed, which includes margin for uncertainty in calculational methods and mechanical tolerances with a 95% probability at a 95% confidence level.
- c. A nominal 21 inch center-to-center distance between fuel assemblies placed in the storage racks.

#### DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 14 feet 6 inches.

#### CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 1236 fuel assemblies.

### 5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

## DESIGN FEATURES

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. NPF-86  
NORTH ATLANTIC ENERGY SERVICE CORPORATION

SEABROOK STATION, UNIT 1

DOCKET NO. 50-443

**1.0 INTRODUCTION**

By letter dated May 29, 1997, North Atlantic Energy Service Corporation (North Atlantic) submitted an application for license amendment for a change to the Seabrook Station, Unit No. 1 (Seabrook) Appendix A Technical Specifications. The amendment would revise Technical Specification 5.3.1, which specifies some fuel assembly design features, by replacing the reference to "zircaloy," the currently identified fuel rod cladding material, with "ZIRLO or Zircaloy-4" to identify explicitly the NRC-approved Westinghouse fuel assembly designs in use at Seabrook.

**2.0 BACKGROUND**

The Technical Specifications approved when Seabrook was licensed initially incorporated, in part, the following description of the fuel assemblies comprising the reactor core:

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4....

This partial description of the fuel assemblies remained unchanged until Amendment 33 was issued on November 23, 1994. That amendment modified the Seabrook Technical Specifications to permit operation of the reactor core with an expanded axial flux difference band (wide-band operation) and to allow for fuel design enhancements. With regard to the description of the Seabrook fuel assemblies, North Atlantic stated that the purpose of the change to Technical Specification 5.3.1 was "...to allow the possibility of future implementation of ZIRLO cladding." Amendment 33 modified the partial fuel assembly description stated above by changing "Zircaloy-4" to "zirconium alloy" as follows<sup>1</sup>:

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with a zirconium alloy....

<sup>1</sup> It is no longer acceptable to the staff to describe the fuel rod clad material as merely "a zirconium alloy". The staff will only accept wording that identifies the specific fuel rod clad alloy.

The next change to Technical Specification 5.3.1 was made by Amendment 50, issued on March 12, 1997, that inadvertently incorporated a typographical error contained in the proposed replacement pages submitted with North Atlantic's application. The error caused the partial fuel assembly description in Technical Specification 5.3.1 to revert to the original wording:

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4....

Amendment 51 issued May 13, 1997, again changed Technical Specification 5.3.1. The changes approved by Amendment 51 allow the use of solid stainless steel or zirconium alloy filler rods in fuel assemblies to replace failed or damaged fuel rods. North Atlantic's submittal was in accordance with the guidance provided in Generic Letter 90-02, Supplement 1. The Generic Letter 90-02, Supplement 1, model technical specification stated:

5.3.1 The reactor shall contain [ ] fuel assemblies. Each assembly shall consist of a matrix of zircaloy clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide as fuel material[, and water rods]. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods, and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in non-limiting core regions.

Information to be added to the generic letter model technical specification by licensees as appropriate is indicated by [ ].

### 3.0 EVALUATION

The Seabrook fuel design used for Operational Cycles 1 through 4 incorporated Zircaloy-4 cladding. For Operational Cycle 5, the core design incorporated Vantage 5H fuel utilizing ZIRLO cladding material in addition to the 17X17 STD fuel assemblies with Zircaloy-4 cladding. North Atlantic plans to use Vantage 5H and 17X17 STD fuel assemblies with ZIRLO and Zircaloy-4 cladding material for future operational cycles. The proposed change will explicitly recognize in Technical Specification 5.3.1 the NRC-approved Westinghouse fuel assembly design in use at Seabrook consisting of "ZIRLO or Zircaloy-4" fuel cladding material.

The Safety Evaluating supporting Amendment No. 33 to the Seabrook Operating License noted the implementation of fuel design enhancements, namely, low pressure drop Zircaloy grids and ZIRLO cladding. That Safety Evaluation addressed the staff's review of North Atlantic's submittals supporting the proposed changes including reanalyses of those transients and accidents that are discussed in the Seabrook Station's Updated Final Safety Analysis Report (UFSAR). Section 2.2 of the Amendment 33 Safety Evaluation stated:

The revised LOCA analysis assumes the swelling/burst characteristics of the zirlo fuel cladding which bounds the Zircaloy cladding as well. This permits flexibility for future implementation of zirlo cladding. TS 5.3.1 is revised accordingly.

The staff approved the Westinghouse ZIRLO fuel design described in Topical Report WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Reference Core Report," in a safety evaluation dated July 1, 1991<sup>2</sup>. The staff also approved loss-of-coolant accident (LOCA) methodologies described in Westinghouse topical report WCAP-12610-P-A. The staff has reviewed the Seabrook VANTAGE 5H ZIRLO fuel design, thermal-mechanical analyses, and LOCA methodologies described in WCAP-12610-P-A, and has concluded that the VANTAGE 5H ZIRLO fuel design is acceptable, and the LOCA analyses demonstrate conformance with the criteria given in 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50 for Seabrook. In addition, the use of either ZIRLO or Zircaloy is consistent with 10 CFR 50.44 and 50.46. ZIRLO is similar in chemical composition, physical, and mechanical properties to Zircaloy-4, but ZIRLO has improved corrosion performance and dimensional stability. These characteristics ensure that fuel rod cladding integrity and fuel assembly structural integrity are maintained. ZIRLO clad fuel rods will satisfy the same design bases as Zircaloy-4 fuel rods. All design and performance criteria will continue to be met by fuel assemblies manufactured with ZIRLO clad fuel rods. Seabrook Technical Specification 6.8.1.6.b. identifies the approved analytical methods to be used for determining core operating limits and includes those previously reviewed and approved analytical methods to support the operation of Seabrook with fuel rods clad with either Zircaloy or ZIRLO.

Based upon the above, the staff concludes that it is acceptable to change Technical Specification 5.3.1 to identify explicitly the NRC-approved Westinghouse fuel assembly designs for use at Seabrook. Accordingly, Technical Specification 5.3.1 is changed to state the following:

5.3.1 The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of ZIRLO or Zircaloy-4 clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide ( $UO_2$ ) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 5.0 weight percent U-235.

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<sup>2</sup> The VANTAGE+ and VANTAGE 5H ZIRLO designations refer to the identical fuel design.

#### 4.0 STATEMENT OF EXIGENT CIRCUMSTANCES

The Commission's regulation as stated in 10 CFR 50.91, provides special exceptions for the issuance of amendments when the usual 30-day public notice cannot be met. One type of special exception is an exigency. An exigency exists when the staff and the licensee need to act quickly and time does not permit the staff to publish a Federal Register notice allowing 30 days for prior public comment, and the staff also determines that the amendment involves no significant hazards consideration.

In accordance with 10 CFR 50.91(a)(6)(i)(B), the staff used local media to provide reasonable notice to the public in the area surrounding the Seabrook Station of the proposed amendment and proposed finding of no significant hazards consideration, and reasonable opportunity to comment thereon. The notice was published in Foster's Daily Democrat and in the Portsmouth Herald on June 4, 1997. Comments were received and are detailed in Section 5.

Seabrook is currently in Refueling Outage 5 and the station is scheduled to restart on approximately June 24, 1997<sup>3</sup>. Thus, the amendment is needed before expiration of the normal 30 day comment period provided for in 10 CFR 50.91. North Atlantic requested NRC review on an exigent basis pursuant to the provisions of 10 CFR 50.91(a)(6). The exigent circumstances that have occurred are described below.

During a site visit on May 23, 1997, the NRC Project Manager identified that the Technical Specifications must be revised to identify the specific fuel cladding materials in use at the Seabrook Station. North Atlantic concurred with the NRC's assessment and on May 29, 1997, submitted an application for a license amendment to correct Technical Specification 5.3.1 to identify the specific fuel assembly cladding material approved for use at Seabrook.

The NRC staff determined that North Atlantic has exercised its best efforts to make a timely application for amendment in that the application was submitted promptly after the identification of the need for the change to Technical Specification 5.3.1. Accordingly, the Commission has determined, pursuant to 50.91(a)(6), that the amendment may be processed on an expedited basis in that exigent circumstances exist warranting prompt action, the situation could not have been avoided, and the amendment, as discussed in Section 6.0, does not involve a significant hazards consideration.

#### 5.0 COMMENTS

During the comment period, the Commission received telephone calls from two individuals. The following is a summary of the comments received.

Two comments dealt with the effectiveness of the NRC's procedure for receiving comments from the public outlined in the Public Notice. The comments noted that the telephone number provided in the Public Notice was equipped with

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<sup>3</sup> At the time the application was received, restart was scheduled for June 16, 1997.

automated voice-mail capability; thus, if the automated voice-mail system responds in the absence of the called individual, collect telephone calls cannot be accepted. Further, one individual stated, that the use of voice-mail raises a concern that other commentors may have attempted to provide comments unsuccessfully, and, therefore, the individual believed public comment period should be extended. As a result of these comments, the staff is examining various options to assure that in the future individuals placing collect calls can reach an attended telephone. The staff notes that while collect callers may have had difficulty in recording comments during certain circumstances, the voice-mail system was available otherwise for recording public comments. Furthermore, the voice-mail system provided callers (including telephone system operators) the option of call-forwarding to reach an attended telephone. When the problem was brought to our attention, the voice-mail message was removed, and automatic call-forwarding to an attended telephone after four rings was provided for the last 2 days of the comment period on this proposed amendment. There is no indication that any individual wishing to comment on the notice was unable to do so, and there is no basis for extending the comment period.

Two individuals commented that the proposed amendment involves a significant hazards consideration because there is a problem with the ZIRLO-clad Westinghouse fuel in use at Seabrook; one of these individuals asserted that the existence of a steam generator tube leak is relevant to the issue because the fuel problems coupled with a steam generator tube leak represents degradation of two of the principal safety barriers, and further degradation of these barriers could lead to serious public safety consequences. The individual held that the probability and consequences of previously evaluated accidents would be increased, and that margins of public safety would be reduced.

The recent fuel experience at Seabrook appears to be due to a combination of several factors such as fuel assembly power history, operational strategy, and core design. There is no indication that the fuel rod cladding material adversely influenced fuel performance at Seabrook. This amendment makes a change to the materials acceptable for use as fuel rod cladding only. No other design features of the fuel assemblies used at Seabrook or of the remainder of the facility are involved. Zircaloy and ZIRLO are similar zirconium-based materials; however, ZIRLO has certain improved physical and mechanical characteristics over those of Zircaloy. The most important of these characteristics is superior corrosion resistance. ZIRLO clad fuel rods are expected to perform better than fuel rods clad with Zircaloy.

During each refueling outage, any leaking steam generator tubes are identified and plugged. Furthermore, each steam generator is examined every two refueling outages (two steam generators per outage) for indications of tube degradation, and any tubes with degradation exceeding predetermined limits are plugged to minimize the potential for failure during operation.

Occasional limited failures of fuel rods and occurrences of leaking steam generator tubes during operation are expected and are provided for in the design and licensing of the facility. The recent fuel experience at Seabrook notwithstanding, the proposed change to Technical Specification 5.3.1 will

not result in the station operating with radioactivity releases greater than that those for which the facility is currently licensed. The effect of this change upon the probability and consequences of previously evaluated accidents and margins of public safety are discussed in Section 6.0.

#### 6.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has made a final determination that the amendment involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92(c), this means that the operation of the facility in accordance with the proposed amendment would not (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Involve a significant reduction in a margin of safety.

The Commission has evaluated the proposed changes against the above standards as required by 10 CFR 50.91(a) and has concluded that:

- A. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated (10 CFR 50.92(c)(1)) because ZIRLO is similar in chemical composition, physical, and mechanical properties to Zircaloy-4, but ZIRLO has improved corrosion performance and dimensional stability. These characteristics ensure that fuel rod cladding integrity and fuel assembly structural integrity are maintained.

Fuel assemblies manufactured with ZIRLO clad fuel rods meet the same design bases requirements as fuel assemblies manufactured with Zircaloy-4 cladding, and the regulatory requirements of 10 CFR 50.46 are applicable to either material. No concerns have been identified pertaining to reactor operation with a core comprised of fuel assemblies manufactured with Zircaloy-4 clad rods and fuel assemblies manufactured with ZIRLO clad rods. ZIRLO clad fuel rods do not require a change to the Seabrook reload design and safety analysis limits. The proposed amendment will not result in a change to any of the process variables that might initiate an accident or affect the radiological release for an accident. The operating limits will not be changed and the analysis methods to demonstrate operation within the limits will remain in accordance with NRC-approved methodology. The amendment does not involve any changes to facility structures, systems, or components other than the changes to the fuel assemblies. Radiological consequences of previously evaluated accidents are not increased because the safety analysis dose predictions are not sensitive to the type of cladding material used.

Therefore, the use of ZIRLO fuel rod material does not adversely affect fuel performance or impact nuclear design methodology, and the probability or consequences of accidents previously evaluated in the Seabrook Updated Final Safety Analysis Report are not increased by this change.

- B. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated (10 CFR 50.92(c)(2)) because fuel assemblies manufactured with ZIRLO clad fuel rods will satisfy the same design bases as those currently used for Zircaloy-4 clad fuel assemblies. All design and performance criteria will continue to be met by fuel assemblies manufactured with ZIRLO clad fuel rods. The use of fuel assemblies manufactured with ZIRLO cladding does not involve any other alteration to facility structures, systems, or components that would introduce any new operational modes or accident initiators. Therefore, the possibility of a new or different kind of accident from any accident previously evaluated is not created by this change.
- C. The change does not involve a significant reduction in a margin of safety (10 CFR 50.92(c)(3)) because the use of fuel assemblies manufactured with ZIRLO clad fuel rods does not change the reactor core reload design and safety accident limits. The use of these fuel assemblies will take into consideration the normal core operating conditions allowed in the Technical Specifications. Each cycle reload core design will be evaluated using NRC-approved reload design methods.

Based on the above considerations, the staff concludes that the amendment meets the standards set forth in 10 CFR 50.92 for no significant hazards consideration. Therefore, the staff has made a final determination that the proposed amendments involve no significant hazards consideration.

## 7.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Hampshire and Massachusetts State officials were notified of the proposed issuance of the amendment. The New Hampshire official was notified on June 5, 1997, and the Massachusetts official was notified on June 11, 1997. The State officials had no comments.

## 8.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final finding that the amendment involves no significant hazards consideration. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

**9.0 CONCLUSION**

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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