



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

Docket File

April 6, 1981

Docket Nos. 50-245
and 50-336

LS05-81-04-006

Mr. W. G. Council, Senior Vice President
Nuclear Engineering and Operations
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06101



Dear Mr. Council:

The Commission has issued the enclosed Amendment No. 75 to Provisional Operating License No. DPR-21 and Amendment No. 65 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit Nos. 1 and 2. The amendments are in response to your application dated February 3, 1978, as supplemented February 2, 1979, and application dated July 2, 1979, as supplemented July 3, 1980.

The amendments approve changes to the Appendix B (Environmental) Technical Specifications (ETS) which delete surveillance requirements specified in 3.1.2.1.1 Exposure Panels, 4.6 Thermal Plume Study, and 4.7 Chlorination. The amendments also approve several changes involving the following aquatic monitoring programs: Benthic Survey, Trawling, Entrainment Studies, and Impingement Monitoring.

A discussion of our review and evaluation of the proposed changes follows.

Benthic Studies, Section 3.1.2.1.7

You requested a number of changes dealing with (1) the abandonment of any further sampling of rocky substrates, and therefore the deletion of a number of stations; (2) changing the total surface area samples at a station from either 393 cm² or 785 cm² to not less than 1,000 cm²; and (3) the use of a .5 mm screen in sieving samples instead of the current use of a 1mm screen.

- (1) Due to the paucity of rocky substrate in Long Island Sound, the destructive nature of sampling (periodic scraping) and the successional changes that occur after scraping which overshadow any potential changes due to elevated water temperatures associated with the thermal discharge, we conclude that this study can be discontinued. Therefore, the sampling stations associated with the rocky substrate program (1, 4, 5, 7, 10, 11, and 12) are deleted. The remaining stations are renumbered and an additional station is added at the intake (#6).

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- (2) A change in the method of sampling will result in a 28% increase in the area sampled at each station. Since this will more accurately sample the benthic community, we find the proposal acceptable.
- (3) The use of a finer mesh screen (.5 mm versus 1 mm) during the sieving of benthic samples will result in an increase of 20% to 80% of the number of individual organisms retained in the sample. Since this will result in a more accurate sample of the benthic community, we find the proposed change acceptable.

Trawling, Section 3.1.2.1.7

You requested three changes dealing with (1) the removal of extraneous sampling stations indicated in Figure 3.1.2; (2) deletion of the requirement to calculate the condition factor of captured organisms; and (3) deletion of the requirement to record information on reproductive activity of captured organisms.

- (1) Figure 3.1.2 is no longer applicable to the Plankton Program since the study requirements have been satisfied and the study previously deleted from the ETS. The figure is still applicable to the trawl program and has been updated to include only those stations. Therefore, we find the proposed change acceptable.
- (2) Due to the inability to take accurate weight and length measurements on board the boat due to wave action, condition factor determination would necessitate the sacrificing of collected organisms to permit measurements to be taken back at the laboratory. It is determined, due to the number of fish collected, and the recreational and commercial nature of many of these species that efforts should be made to release individuals alive as quickly as possible. We have found this proposal acceptable because we conclude that condition factor determination is not necessary during trawling sampling.
- (3) Quantitative observations on reproductive activity during trawl sampling have been in the past focused on winter flounder. Emphasis has been placed on winter flounder since it is the most important local recreational and commercial fish species and is the only fish species caught in large numbers during its reproductive phases. Detailed information on the reproductive activity of this species is also collected annually in the Niantic River tag and recapture study. The data thus far collected in trawls is in agreement with that obtained in the Niantic River winter flounder tag recapture study. Since quantitative data is obtained in the river study and the trawl data has historically been very similar, the qualitative observations of reproductive activity during trawling is redundant and of little additional value. We, therefore, find the deletion of this requirement acceptable.

Entrainment Studies, Section 3.1.2.1.9

You proposed that the entrainment sampling effort during the fall (October-December) be reduced from 18 samples per week to six (3 days and 3 nights) samples per week. The samples collected in the months of October, November, and December typically contain low numbers of fish eggs and larvae and have not provided as much quantitative information on major entrained ichthyoplankton as samples collected during other months. Based on the previous years collections at the current sampling frequency of 18 samples per week, the licensee performed an analysis that indicated that a reduction in sampling based on the previously collected data would, under worst case conditions, cause only a 3% greater change in abundance of eggs or larvae entrained on an annual basis. This greatest change was for the family Gobiidae, a group of organisms of no commercial or recreational importance. We agree that the proposed reduction in sampling effort based on past data would not result in a significant change in the annual estimates of entrained organisms and, therefore, find the proposed change acceptable.

Impingement Monitoring, Section 3.1.2.1.10

The proposed change for the impingement monitoring study (1) deletes the requirement to place fish and shellfish lengths into categories and (2) also places the cumulation of 24-hour counts on a monthly basis instead of a daily running total.

- (1) In the past, three arbitrary length categories (0-3", 3-6", and >6") were used to record fish and shellfish lengths. You proposed to use actual length measurements which can at a later date be apportioned into any number of increments for each taxon. This would facilitate assignment of individuals to various age classes. We concur in the proposed change since more meaningful data will result from its adoption.
- (2) The second change, whereby cumulative totals are to be made on a monthly basis, would allow you more latitude with respect to data handling. The basis for the daily cumulative totals historically was to maintain a total that could be compared to report limits. The absence of such limits removes the necessity of daily cumulatives. The 24-hour total for each species will still be performed and retained. Based on the above, we find the proposal acceptable.

Exposure Panels, Section 3.1.2.1.1

You also proposed to eliminate the exposure panel study that was designed to assess the impacts of construction and operation of the power stations on marine boring and fouling communities in the areas of Niantic Bay and Long Island Sound under the influence of the discharge plume. Results to date,

representing over ten years of data collection, indicate that construction and operation of the Millstone Station have had no significant effect on marine boring and fouling communities inhabiting the exposure panels deployed in the area under the influence of the plume. There has been a generalized trend in the fouling community towards an increase in the number of species, particularly algae, over the years. This trend has been noted at stations located adjacent to Millstone Nuclear Power Station as well as at others more remote. You and your consultants have suggested that improved water quality and improved taxonomic expertise is likely to be responsible for the increase in diversity of the fouling community. We agree that the fouling portion of the study should be discontinued.

The exposure panel study also monitored marine borers in the vicinity of the Millstone Station. The results of the study indicate that for areas outside the immediate influence of the discharge plume (outside the discharge embayment) no detectable effects on the population of wood-boring organisms was observed. The dominant aspect of the data during the course of the study has been the variability in population density both among stations within the same year and between years at the same station. During the course of the study a population of Teredo bartschi appeared and became established in the discharge quarry area. This tropical-sub-tropical species was first documented at the site in 1975. It appears that the elevated water temperature is necessary for its continued survival. There has been no evidence since its discovery to suggest that the species has successfully spread from the quarry area despite continued monitoring of the region. Our research at the Oyster Creek Generating Station reports similar findings, i.e., dependence on elevated temperature to its continuance in an area and its very slow or nonexistent colonization of areas outside the immediate area of the thermal plume.

We conclude that the potential for this species to spread from the discharge quarry out into Niantic Bay and Long Island Sound and become a nuisance due to the operation of Millstone Units 1 and 2 is extremely low or nonexistent. This conclusion is based on the past monitoring of the population at the site and the results of research conducted at a similar facility with a similar situation. Therefore, we find deletion of the requirement for panel study from the ETS acceptable. However, for some period, perhaps two years, prior to the anticipated operation of Millstone Unit 3, the monitoring program for marine boring organisms should be reinstated to determine if the additional flow and higher ΔT of the discharge will cause the species to move out of the quarry area and into the Niantic Bay.

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Thermal Plume Study, Section 4.6

You proposed that the study be deleted from the ETS since the study was concluded and the results presented in the Thermal Plume Study Report submitted April 18, 1979. We concur in the deletion of this study.

Chlorination Study, Section 4.7

You also proposed that this study be deleted from the ETS since the study was concluded and the results presented in the Chlorination Study Report submitted as part of the 1977 Annual Report. We, therefore, find the deletion of this study acceptable.

It is our understanding, based on communications with representatives of the State of Connecticut and your representatives, that negotiations are underway for development of a revised water quality study program. We intend to delete the remaining water quality programs contained in the ETS if requested by Northeast Nuclear Energy Company (NNECo) when the State and NNECo adopt a mutually satisfactory program.

The amendments apply to ETS surveillance requirements and do not authorize a change in effluent types or amounts or an increase in power level, and will not result in any environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendments.

The amendments do not involve significant new safety information of a type not considered by a previous Commission safety review of the facilities. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin and, therefore, do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action and that the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

A copy of the related Notice of Issuance is also enclosed.

*SEE ATTACHED FOR PREVIOUS CONCURRENCE

Sincerely,

Original signed by
Dennis M. Crutchfield
Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

DL:AD/SA
GCLainas
4/16/80
should have removed as ministerial

DL:ORB #3/C DL:AD/SA
RAClark
4/12/80
DL:ORB #5/C
DCrutchfield
4/13/80
TNovak
4/13/80

OFFICE	Enclosures:	DL:ORB #5	DL:ORB #5/PM	DL:ORB #3/LA	DL:ORB #3/PM	OELD
SURNAME	See next page	HSmith	JShea	PKreutzer	MConner	JRGray
DATE		3/26/81*	3/26/81*	4/12/81	4/12/81	3/26/81*

April 6, 1981

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A copy of the related Notice of Issuance is also enclosed.

Sincerely,


Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosures:
See next page

Mr. W. G. Council

- 6 -

April 6, 1981

Enclosures:

1. Amendment No. 75 to
License No. DPR-21
2. Amendment No. 65 to
License No. DPR-65
3. Notice of Issuance

cc w/enclosure:
See next page

April 6, 1981

cc w/enclosures:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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

DOCKET NO. 50-245

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 1

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 75
License No. DPR-21

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by the Connecticut Light and Power Company, The Hartford Electric Light Company, Western Massachusetts Electric Company, and Northeast Nuclear Energy Company (the licensees) dated February 3, 1978, as supplemented February 2, 1979, and July 2, 1979, as supplemented July 3, 1980, comply 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 applications, 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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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Provisional Operating License No. DPR-21 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 75, are hereby incorporated in the license. Northeast Nuclear Energy Company shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 6, 1981



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

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

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 65
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by the Connecticut Light and Power Company, The Hartford Electric Light Company, Western Massachusetts Electric Company, and Northeast Nuclear Energy Company (the licensees) dated February 3, 1978, as supplemented February 2, 1979, and July 2, 1979, as supplemented July 3, 1980, comply 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 applications, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 65, are hereby incorporated in the license. Northeast Nuclear Energy Company shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 6, 1981

ATTACHMENT TO LICENSE AMENDMENT NOS. 75 AND 65

LICENSE NOS. DPR-21 AND DPR-65, RESPECTIVELY

DOCKET NOS. 50-245 AND 50-336

Replace the following pages of the Appendix B Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

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3.1-21
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Normal Power Operation. Operation of any unit at the station with the reactor critical and above 5 percent of rated power in conformance with the requirements of the Safety Technical Specifications.

Non-routine Operation is that which occurs when for any unit at the site all the condenser cooling water pumps are not used because of pump failure, pump inspection and/or maintenance and condenser heat treatment.

Phytoplankton refers to those planktonic plants (autotrophs) which are capable of photosynthesis and may be classified as primary producers.

Quarry Cut refers to the point of discharge from the Millstone site into the receiving waters of the Long Island Sound. It is the channel that connects the Millstone Quarry to the Long Island Sound.

Recirculation refers to that small portion of the discharge water that under certain tidal conditions finds its way back into the area of the intake.

Routine Operation occurs when all four condenser cooling water pumps are utilized at all units at the site.

Standard Methods refers to those methods as specified in the Federal Register Title 40, Part 136, Vol. 38, No. 199, pages 28758-28760, October 16, 1973.

Total Residual Chlorine is the total amount of chlorine present in water in the form of free available chlorine and combined available chlorine.

Unreviewed Environmental Impact

A change in plant design, in plant operation, or in procedures related to these Environmental Technical Specifications shall constitute an Unreviewed Environmental Impact if both:

1. The change could result in an increase in the environmental effects of station operation, and
2. The increased effect is significant enough such that it exceeds the effect previously reviewed and evaluated by the NRC for the particular system or type of operation involved.

Zooplankton refers to those planktonic elements which are primary producers, most of which may be classified as herbivorous.

Millstone 1: Amendment No. 75
Millstone 2: Amendment No. 65

3.1.2 Biota

3.1.2.1 Aquatic

3.1.2.1.1 Exposure Panels

DELETED

Millstone 1: Amendment ~~60~~, 75

Millstone 2: Amendment ~~57~~, 65

3.1.2.1.5 Benthic Survey

Objective

The objective is to examine in detail the populations of benthic organisms in order to describe any plant effects.

Specification

Benthic sand samples shall be collected quarterly at two intertidal sand stations, Jordan Cove and Giants Neck, and at four subtidal sand stations, Jordan Cove, Giants Neck, Effluent and Intake (Figure 3.1.1). The size of the sampling device and the replication shall be sufficient to cover a combined total surface area of at least 0.1 m^2 at each sampling. Samples shall be taken to a depth of at least 5cm.

In the laboratory, samples shall be sieved through a .5mm mesh screen. Organisms retained on the screen shall be identified to the lowest practical taxon and enumerated.

Deviations from the above program are permitted when changes in habitat occur at a station and the data are no longer comparable. In such instances a new station location will be found.

Reporting Requirement

A non-routine report shall be submitted to NRC in accordance with Section 5.6.2a(2) when gross changes in population species composition or abundance are evident. Such a change is one that is beyond normal seasonal fluctuation. Otherwise reports shall be issued on a routine basis as described in Section 5.6.1.

Bases

The basis for this program element is to provide direct observation of the benthic conditions which exist in areas over which the plume passes as well as areas removed from the influence of the plume. This will assist in identification of any benthic impacts which might be associated with station operation.

Millstone 1: Amendment ~~80~~, 75

Millstone 2: Amendment ~~81~~, 65

DELETED

Millstone 1: Amendment ~~80~~, 75

Millstone 2: Amendment ~~81~~, 65

3.1.2.1.7 Trawling

Objective

The objectives of this study are to provide information on the occurrence and distribution of the larger ground fish in the area.

Specification

A 30-foot otter trawl with 1/4 inch cod-end liner shall be used to trawl six locations around Millstone Point every other week. (Stations 2, 5, 6, 8, 11, 14 (Fig. 3.1-2). Fish and selected invertebrates collected shall be identified and representative numbers will be measured. Efforts will be made to release uninjured individuals alive.

When subsampling is undertaken the following conditions shall apply:

1. Subsampled data shall be of a comparable quality with previously collected data;
2. Subsample data shall be comparable with similar data collected from the traveling screens during impingement samples; and
3. Subsampled data shall be of a quality which will permit valid statistical analyses to be performed at a performance level comparable with previous analyses.

Deviations from the required sampling schedule may occur when, for example, it is not possible to trawl in an area either because of ice or dense vegetation.

Reporting Requirement

Reports shall be issued on a routine basis as described in Section 5.6.1. Marked or gross changes, beyond seasonal variations, in species abundance will be cause for the submission of a non-routine report in accordance with Section 5.6.2.a.(2). Disappearance of a previously common or abundant species (e.g. flounder) shall also be the cause for submitting a non-routine report.

Bases

The basis for this program element is that data on changes in overall species composition and abundances in the area are necessary for continuous monitoring of the plant's operation and surveillance of its effects, if any, on the regional biota.

Millstone 1: Amendment 00, 75

Millstone 2: Amendment 57, 65

3.1.2.1.9 Entrainment Studies

Objective

The objective of the entrainment studies is to quantify the zooplankton (including fish eggs and larvae) that pass through the plants in order to assess the proportion of the zooplankton population subject to the entrainment stresses.

Specification

Samples for zooplankton including fish eggs and larvae shall be collected at the plant discharges. Sampling shall be done weekly and alternately at Units 1 and 2 so that each unit is sampled every other week. From January through September, three samples shall be taken both day and night, three days per week. From October through December three samples shall be taken both day and night on one day each week.

Deviations from this sampling schedule are permitted when all circulating water pumps are not operating at both units. The required number of weekly samples shall be obtained as long as the unit has at least one circulating pump operating.

Fish eggs and larvae shall be sorted and fish larvae shall be identified to the lowest practical taxonomic level in all samples. On day and one night sample per week shall be processed for the identification of all zooplankton.

Samples shall be collected using one meter diameter plankton nets with a 0.333 mm mesh size. Alternate types of gear were evaluated for sampling the condenser cooling system in an attempt to determine the sampling method and location in the cooling system that would provide the most representative quantitative estimates of organisms entrained. The method and location judged most suitable was then selected for the routing samplings.

Reporting Requirement

The number of fish eggs and larvae and other zooplankton entrained is directly related to the abundance in waters adjacent to the intake. A prompt report shall be submitted in accordance with Section 5.6.2.a(2) when a species or zooplankton group is entrained in numbers disproportionately large in relation to the local abundance. Reporting requirements shall be more easily defined when verification of the mathematical models is finalized. Otherwise data shall be reported on a routine basis as described in Section 5.6.1.

Bases

Entrainment studies utilizing stationary plankton nets and other techniques at Millstone Unit 1 intake, discharge and

Millstone 1: Amendment 60, 75

Millstone 2: Amendment 57, 65

quarry cut have been conducted since initial operation of that plant in 1970. To date the studies have provided detailed information on the entrainment stresses to both phytoplankton and zooplankton. The effects of condenser passage on phytoplankton productivity was determined using c^{14} assimilation. Various mortality stresses were considered, i.e., temperature, chlorine, mechanical and combinations of each. Mortality estimates were made for copepods and fish larvae. Stratified sampling (3 depths) at the intake was used to determine vertical stratification of fish eggs and larvae entering Unit 1. Comparisons were also made of the numbers caught at each of the three sampling locations (intake, discharge and quarry cut).

The monitoring program as specified above was selected based upon an analysis of these existing data. Sampling variability at the intake and discharge were compared. Since discharge samples showed less variation, these data were employed to determine the number of replicates and the frequency of sampling required to achieve estimates of population means within certain confidence limits at various precision levels. Triplicate samples taken both day and night three days each week provide estimates with confidence limits of 33% at a 0.10 alpha level.

A lower level of effort is specified for the fall months: October, November and December. During this period the abundant or otherwise important ichthyoplankton species in terms of power plant impact assessment are found only in low abundance. As a result, the parameters used to estimate the quantity of ichthyoplankton entrained (annual percent species composition and annual abundance) are little affected by a lower level of effort in the fall.

Millstone 1: Amendment No. 75
Millstone 2: Amendment No. 65

Impingement MonitoringObjective

Fish impingement shall be monitored to assure that impingement losses remain at levels compatible with the local populations of fish and shellfish.

Specification

A minimum of three days each week, with no more than four days between counts, fish and shellfish washed from the traveling screens into the collection baskets over a 24-hour period shall be identified, counted, and the length recorded for a representative number of each species. Impingement records for Units Nos. 1 and 2 shall be combined monthly. The number of each species impinged per month shall be estimated by calculating the daily average of the cumulative total in any month and multiplying the daily average by the number of days in each month.

Reporting Requirements

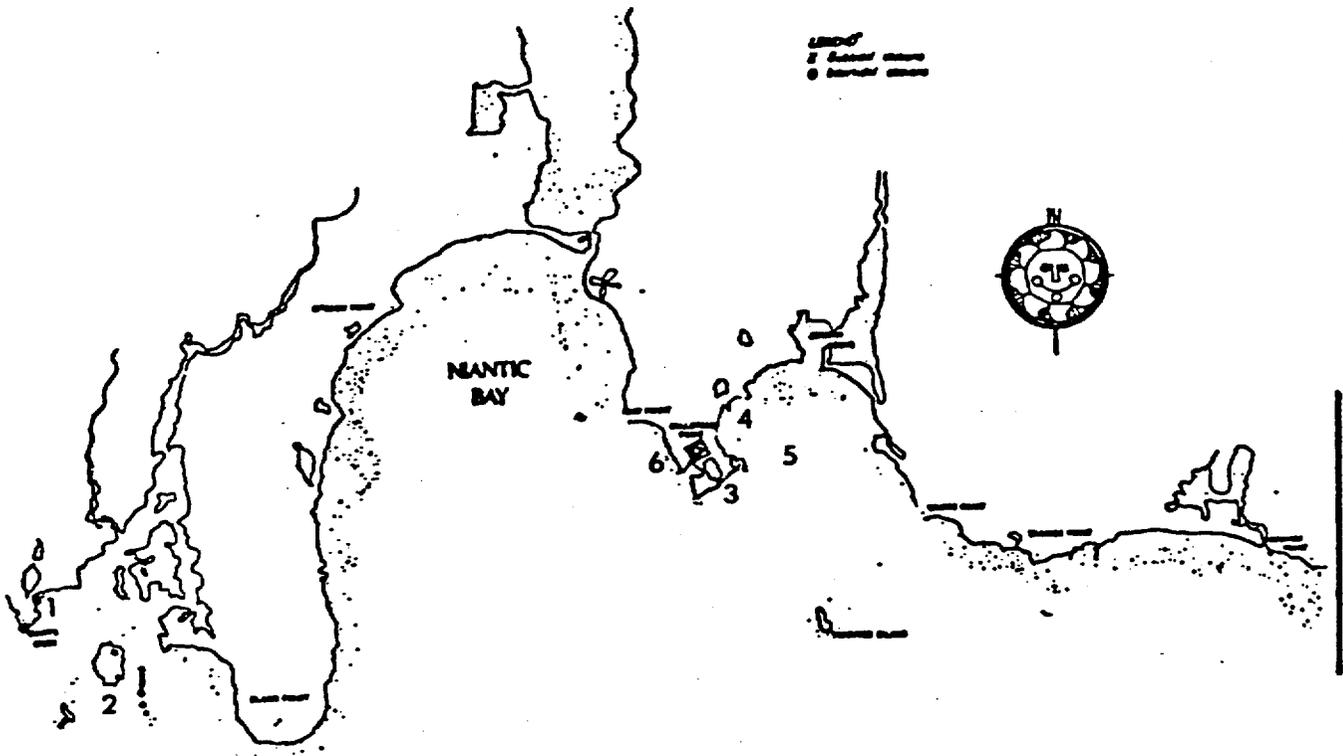
The number of each species impinged shall be reported on a routine basis as described in Section 5.6. Data shall be reported by unit, species and length categories.

The annual operating report shall include an analysis of the relationship between the estimated size of the species population (based on the relative abundance data collected according to specifications 3.1.2.1.3, 3.1.2.1.6 and 3.1.2.1.7) and the number impinged on the intake screens.

Bases

Historical fish impingement levels at Millstone Unit No. 1 have not been found to constitute a significant adverse impact based upon extensive studies of resident and migratory fish species.

Using the numbers observed at Unit No. 1 predictions were made for Unit No. 2. The predictions were judged acceptable in terms of environmental impact. Initially, monthly report levels were established for each species size category impinged. The basis for including these report levels was that the observed data could be used to establish a maximum level and that this maximum level would be the highest monthly total that would normally be impinged at the plant. However, the two years of data on which these report levels were based were not adequate to define the year-to-year variability of the many species collected on the screens, and the species size category report levels did not account for one dominant size category growing into the next. Yearly comparisons will be made to determine the relationships between species relative population size and the number impinged for the purpose of determining the plant impact on the species population in the site vicinity instead of the report levels.



- (1) Giant's Neck intertidal: sand substrate
- (2) Giant's Neck subtidal: sand substrate
- (3) Effluent subtidal: sand substrate (20 feet MLW)
- (4) Jordan Cove intertidal: sand substrate
- (5) Jordan Cove subtidal: sand substrate (15 feet MLW)
- (6) Intake subtidal: sand substrate

FIGURE 3.1-1 SAMPLING STATIONS FOR THE BENTHIC STUDIES

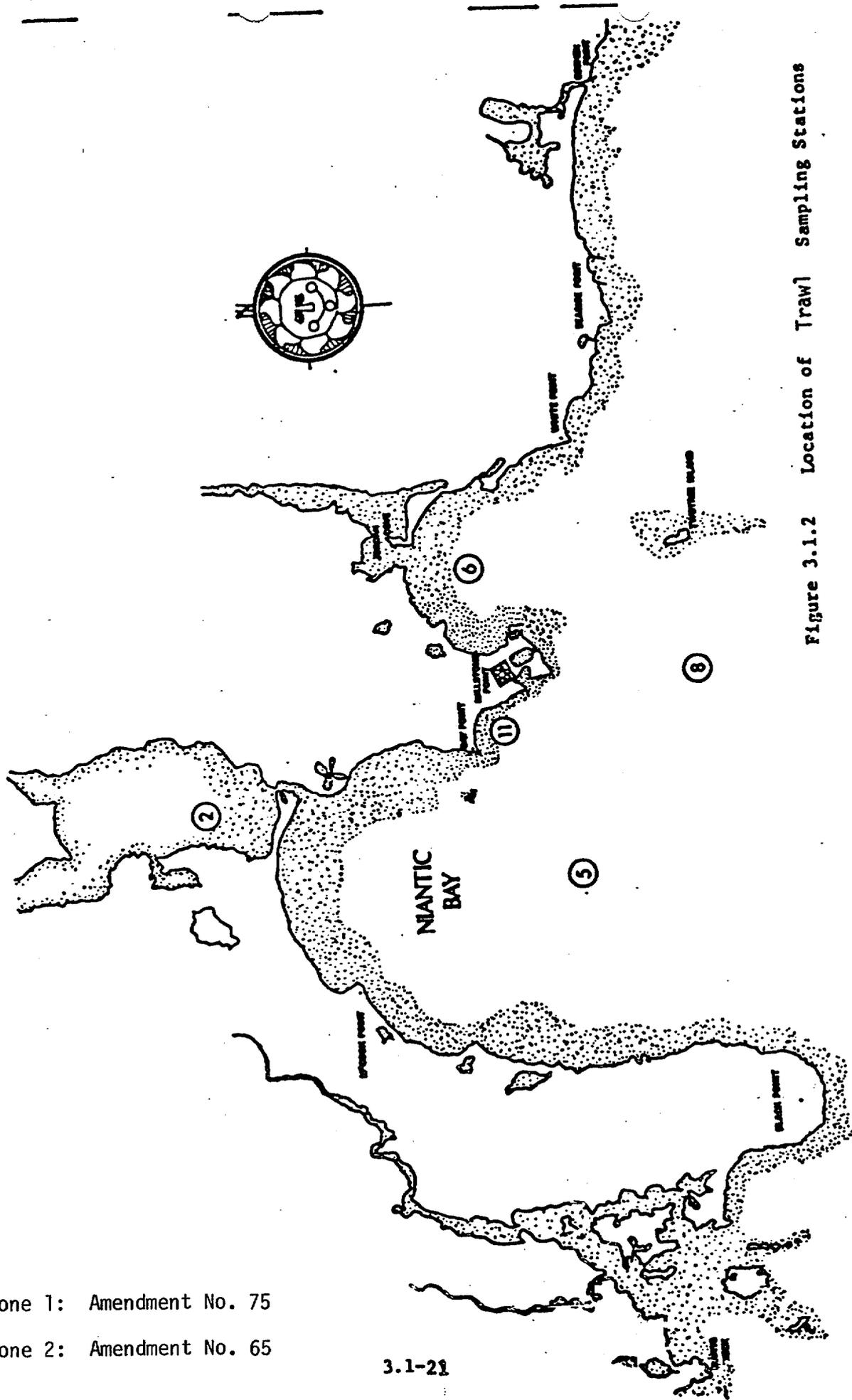


Figure 3.1.2 Location of Trawl Sampling Stations

Millstone 1: Amendment No. 75

Millstone 2: Amendment No. 65

4.6 Thermal Plume Study

DELETED

Millstone 1: Amendment No. 75

Millstone 2: Amendment No. 65

4.6 Thermal Plume Study (Cont'd)

DELETED

Millstone 1: Amendment No. 75

Millstone 2: Amendment No. 65

4.7

Chlorination Study

DELETED

Millstone 1: Amendment No. 75

Millstone 2: Amendment No. 65

5.0 ADMINISTRATIVE CONTROLS

Objective

Administrative and management controls are established to provide continuing protection to the environment and to implement the Environmental Technical Specification.

Specifications

5.1 Responsibility

5.1.1 The ultimate responsibility for implementation of the Environmental Technical Specifications shall reside with the corporate officers of The Northeast Nuclear Energy Company. The corporate and station level organization chart is shown in Figure 5.1-1.

5.1.2 Each Unit Superintendent shall have direct responsibility for assuring that the operation of his Unit is conducted in such a manner as to provide continuing protection to the environment. During periods when the Unit Superintendent is unavailable, he may delegate his responsibility to qualified plant supervisory personnel as designated in the plant administrative procedures.

Operation of each unit to insure adherence to the limiting conditions for operation is the responsibility of the Unit Superintendent with the assistance of the plant staff organization.

5.1.3 The environmental surveillance programs and the special ecological studies will be performed through contractual arrangement either by personnel of the Northeast Utilities Service Company (NUSCO) or by various outside environmental contractors appointed by the company. The coordination of and technical direction for all the programs will come from the Environmental Programs Branch reporting through the administrative chain of command in Figure 5.1.1.

5.1.4 The immediate responsibility for the frequent review and updating of each program lies with the group performing the activity. They can receive assistance in the review from the various scientific and technical personnel employed by NUSCO or from outside environmental consultants.

5.1.5 The Environmental Review Boards' (ERB) scope of responsibilities shall include the review and audit of environmental matters as described in Section 5.3.

The Environmental Review Board shall be constituted as follows:

Millstone 1: Amendment No. 75

5.1-1

Millstone 2: Amendment No. 65

5.1.5.6 Procedures

Written administrative procedures for Board operation shall be prepared and maintained.

5.1.6 The Plant Operations Review Committee (PORC) shall be constituted as specified in Appendix A to the Provisional Operating License DPR-21 Millstone Unit 1 and Appendix A to the Operating License of Millstone Unit 2 and shall assume the same scope of responsibility in on-site environmental matters which it holds in other operational matters. The PORC shall make recommendations to the Unit Superintendent.

5.1.6.1 Unit Procedures, except common site and Service Groups procedures governing environmental matters shall be reviewed by the PORC and approved by the Unit Superintendent prior to implementation and periodically as set forth in each document.

Temporary changes to procedures of 5.1.6.1 above may be made provided:

5.1.6.1.1 The intent of the original procedure is not altered.

5.1.6.1.2 The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's license on the unit affected.

5.1.6.1.3 The change is documented, reviewed by the PORC, and approved by the Unit Superintendent within 14 days of implementation.

The duties of PORC shall include the following:

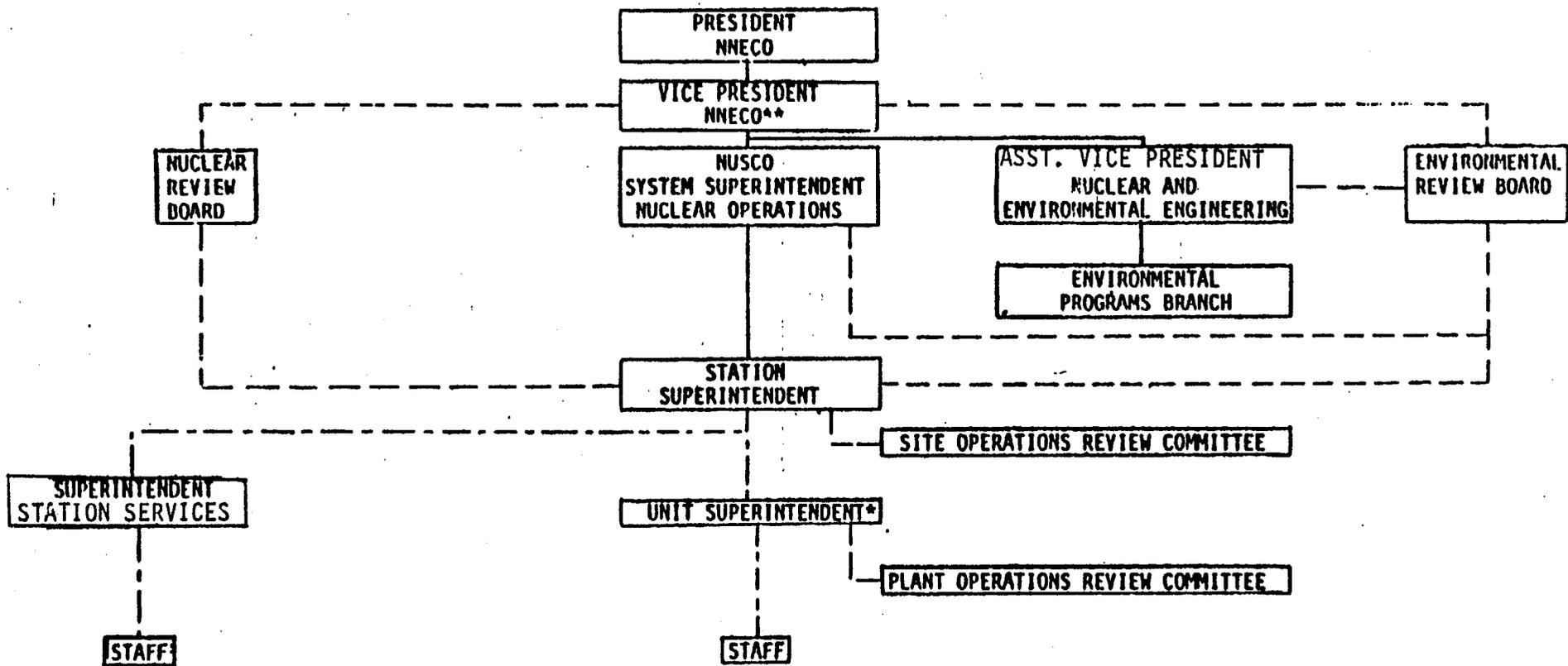
5.1.6.2 Review of all Unit, except Service Groups, proposed tests and experiments that affect environmental matters.

5.1.6.3 Review all Unit, except Service Groups, proposed changes or modifications to plant systems or equipment which directly impact the environment.

5.1.6.4 Investigate violations of the Environmental Specifications, not common to both Units, and prepare and forward a report covering evaluation and recommendations to prevent recurrence to the Plant Superintendent, Superintendent of Nuclear Production, and to the Chairman of the Environmental Review Board.

5.1.6.5 Review Unit facility operations to detect potential environmental hazards.

- 5.1.6.7 Performance of special reviews and investigations and reports thereon as requested by the Chairman of the Environmental Review Board.
- 5.1.7 The Site Operations Review Committee (SORC) shall be constituted as specified in Appendix A to the provisional Operating License DPR-21 Millstone Unit 1 and Appendix A to the Operating Licensing of Millstone Unit 2 and shall assume the same scope of responsibility in on-site environmental matters which it holds in other operational matters. SORC review of environmental matters common to both units, or applicable to the Service Groups, will preclude the necessity of individual PORC reviews. Specifically, their duties shall consist of the following:
 - 5.1.7.1 Perform all functions listed in Sections 5.1.6.1 through 5.1.6.5 which are common to both units or applicable to the Services Groups.
 - 5.1.7.2 Performance of special reviews and investigations and reports as requested by the Chairman of the Environmental Review Board.
 - 5.1.7.3 Review all proposed changes to the Environmental Technical Specifications.



- * One designated for each unit
 - ** Also NUSCO Senior Vice President Nuclear Engineering and Operations
- _____ Administration NUSCO
 - - - - - Administration and Line responsibility NNECO
 - - - - - Communications, advisory reporting

FIGURE 5.1-1 Chart of Organizational Responsibilities for Northeast Utilities and the Northeast Nuclear Energy Company.

Millstone 1: Amendment No. 57, 72, 75

Millstone 2: Amendment No. 47, 64, 65

5.3 Review and Audit

5.3.1 The Environmental Review Board shall review the following:

5.3.1.1 Proposed changes to the Environmental Technical Specifications and the evaluation of the impact of the change.

5.3.1.2 Proposed changes or modifications to plant systems or equipment which are determined to have an "Unreviewed Environmental Impact."

5.3.2 The Environmental Review Board shall make or cause to be made at least semiannual reviews or audits of the following:

5.3.2.1 Investigations of all reported instances of violations of Environmental Technical Specifications. Where investigation indicates, evaluation and formulation of recommendations will be made to prevent recurrence.

5.3.2.2 Surveillance records, written procedures and reports, required for compliance with these Environmental Technical Specifications.

5.3.3 The Environmental Review Board shall make or cause to be made at least annually a review or audit of the following:

5.3.3.1 Results of the environmental monitoring program.

5.3.4 An annual review of the programs described in the Environmental Technical Specifications shall be performed by the Environmental Programs Branch with the objective of proposing changes or modifications of the scope or content of the programs. The proposed changes will be reviewed by the Environmental Review Board before submittal to the NRC.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas shall be made and retained for the life of the plant:

- a. Records and drawings detailing plant design changes and modifications made to system and equipment as described in Section 5.6.3.
- b. Records of all processed data from environmental monitoring, surveillance, and special surveillance and study activities required by these environmental technical specifications.

5.7.2 All other records and logs relating to the environmental technical specification shall be retained for five years following logging or recording.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-245 AND 50-336NORTHEAST NUCLEAR ENERGY COMPANY, ET ALNOTICE OF ISSUANCE OF AMENDMENTS
TO OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 75 and 65 to Provisional License Nos. DPR-21 and Facility Operating License No. DPR-65, respectively, to Northeast Nuclear Energy Company, The Connecticut Light and Power Company, The Hartford Electric Light Company, and Western Massachusetts Electric Company, which revised the Technical Specifications for operation of the Millstone Nuclear Power Station, Units 1 and 2, located in the Town of Waterford, Connecticut. The amendments are effective as of their date of issuance.

The amendments approve changes to the Appendix B (Environmental) Technical Specifications (ETS) which delete surveillance requirements specified in 3.1.2.1.1 Exposure Panels, 4.6 Thermal Plume Study, and 4.7 Chlorination. The amendments also approve several changes involving the following aquatic monitoring programs: Benthic Survey, Trawling, Entrainment Studies, and Impingement Monitoring.

The applications for the amendments comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

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The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

For further details with respect to this action, see (1) the applications for amendments dated February 3, 1978, as supplemented dated February 2, 1979, and July 2, 1979, including its supplement dated July 3, 1980, and (2) Amendment Nos. 75 and 65 to License Nos. DPR-21 and DPR-65, respectively, including the Commission's letter of transmittal. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Waterford Public Library, Rope Ferry Road, Route 156, Waterford, Connecticut. A copy of item (2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this sixth day of April, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION


Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing