September 30, 1977

Docket No.: 50-271

Yankee Atomic Electric Company

Licensing Engineer

ATTN: Mr. Robert H. Groce

Westboro. Massachusetts

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Gentlemen:

20 Turnpike Road

The Commission has issued the enclosed Amendment No. 38 to Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station (VYNPS). The amendment consists of changes to the Technical Specifications (Appendix B) in response to your application dated August 8, 1977.

01581

This amendment modifies the limiting conditions of operation and surveillance requirements related to the discharge of condenser cooling during the period October 1, 1977, through May 31, 1978, to permit the acquisition of special environmental information related to the effects of open cycle cooling.

These modifications to the limiting conditions for operation and surveillance requirements of the Appendix B. Technical Specifications do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. 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.

Copies of the Environmental Impact Appraisal and the Notice of Issuance/ Negative Declaration are also enclosed.

Robert W. Reid, Chief
Operating Reactors Branch #4

Division of Operating Reactors

Enclosures and cc: See next page

ORB#4:DOR ORB#4:DOR C-ORB#4:DOR

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Yankee Atomic Electric Company

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Yankee Atomic Electric Company

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

cc w/enclosures and cy of VY's filing dtd.: 8/8/77
Public Service Board
State of Vermont
120 State Street
Montpelier, Vermont 05602



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

VERMONT YANKEE NUCLEAR POWER CORPORATION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 38 License No. DPR-28

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Vermont Yankee Nuclear Power Corporation (the licensee) dated August 8, 1977, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-28 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 38, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

morton B. Fairtile for

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

Attachment: Changes to the Technical Specifications

Date of Issuance: September 30, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 38 FACILITY OPERATING LICENSE NO. DPR-28 DOCKET NO. 50-271

Revise Appendix B Technical Specifications as follows:

Remove Pages	<u>Insert Pages</u>		
2 & 2a	2 & 2a		
24 & 25	24 & 25		

Changes on the revised pages are shown by marginal lines.

1.0 LIMITING CONDITIONS FOR OPERATION

- 2. No discharge of heated wastes, except for cooling tower blowdown, shall be made from the plant when the temperature of the river upstream of the condenser water inlet is 70°F or higher.
- 3. The discharges of heated water shall be controlled so that the rate of change due to operation or normal startup or shutdown conditions shall not exceed 0.5°F per hour from May 1 through October 31 nor 1.0°F per hour from Movember 1 through April 30, as measured at the upstream and downstream monitors.
- 4. Thermal discharges into the Vernon Pond will be controlled so that the resultant temperature at the periphery of a 50 acre zone shall not exceed 45°F when the ambient river water temperature is less than 40°F or increase more than 5°F when the ambient river water temperature is above 40°F.
- 5. From October 1, 1977, through May 31, 1978, conditions 1 through 4 under Section 1.1.A will be superseded by conditions a, b, and c below for the purposes of conducting monitoring described in Section 2.0 below. If Vermont Yankee terminates the open cycle tests, the NRC shall be notified within 24 hours and specifications described herein will no longer apply and will be superseded by the

2.0 SURVEILLANCE REQUIREMENTS

- 2. Mixing zone configuration and extent shall be monitored as described in Table 2.2-1, "Temperature Monitoring Survey" (as modified for the temperary operating license). The results of the temperature monitoring program shall be used to establish the 50 acre zones under varying river flows for open-cycle operation.
- 3. From October 1, 1977, through May 31, 1978, the biological and thermal monitoring studies shall be conducted as specified in Table 2.2-3 provided that the open cycle test program is being conducted. In the event that the open cycle test program is not being conducted, Vermont Yankee may revert to the monitoring program specified in Tables 2.2-1 and 2.2-2.

previous conditions 1 through 4 of Section 1.1.A. A reduction or elimination of the thermal effluent as a result of plant outage does not constitute termination of the open cycle tests. Vermont Yankee shall immediately advise the NRC if the States of New Hampshire or Vermont modify or revoke their approval of the test program.

- a. The plant induced hourly averaged increase of mixed river temperature at reference Monitor #3 over that at reference Monitor #7 shall not exceed 10^{0} F as a result of plant operation.
- b. The plant induced rate of change of temperature at reference Monitor #3 shall not exceed 5°F in any one hour period as a result of plant operation.
- c. The hourly averaged temperature at reference Monitor #3 shall not exceed 85^{0}F during the study.

I. HYDROGRAPHIC

A. Hydrothermal Surveys

Hydrographic studies will involve field surveys to measure the distribution of heat in the region of the Connecticut River adjacent to the plant site and below Vernon Dam. Hydrographic studies are proposed that will determine the temperature distribution below the dam considering the influx of heat from natural heat sources to the Connecticut River, heat exchange with the atmosphere and longitudinal dispersion.

B. Current Measurements

Current measurements will be taken in the Connecticut River to determine the current patterns induced by plant discharge.

C. In Situ Temperature Monitoring Program

The <u>in situ</u> temperature monitoring program will be continued. This system includes measurements at Vernon Dam, in Vernon Pool, and at Monitors 3 and 7.

II. BIOLOGICAL STUDIES

1. Plankton

Phytoplankton and zooplankton will be sampled once monthly (river flow and ice conditions permitting) at stations: 7 Monitor, 7 midstream, 5 midstream, 4 Vermont quarter, 4 New Hampshire quarter, 0.1 mile north of Vernon Dam, 3 Monitor and 3 midstream.

2. Entrainment

Duplicate entrainment samples will be taken twice monthly at approximately two week intervals when the plant is operating in hybrid or open cycle. Intake samples will be taken from the river in front of the trash racks at the intake structure. Condenser discharge samples will be taken in the "hot bay" (this is the first accessible point where samples can be collected after the cooling water has passed through the condenser). Samples will be taken at appropriate intervals (depending on the number of circulating pumps running) to insure that the same water mass sampled at the intake is sampled at the discharge. Samples will be examined promptly after collection to ascertain the numbers of living and dead phytoplanktons and zooplanktons. Detailed taxonomic determinations will be made later in the laboratory. Chlorophyll determinations will be made on all samples.

3. Benthos

Benthic fauna will be sampled (one sample equals five Ekman dredge hauls at river quarter points) at each of the following stations in May: 7, 5, 4, 3, 2, and 1. In addition, if river flow and ice conditions permit, benthic samples will be taken at stations 7, 3, 2, and 1 in October, November, December, January, February, March, and April. It is anticipated that the probability of collecting the December-April samples may be small due to weather conditions.

4. Impingement

Cooling water intake screens will be backwashed once daily. Fish found on the screens will be counted, identified, weighed, and measured; the data will be recorded in a log. Service water screens will not be backwashed (these screens are backwashed automatically and any fish impinged will be accounted for in the cooling water backwash count).

5. Finfish

Finfish will be sampled (river flow and ice conditions permitting) twice each month at approximately two week intervals. Gill nets and/or trap nets will be set at locations in and (when possible) out of plume. All specimens captured will be counted, identified, weighed, and measured; in the spring all specimens will be checked for condition (maturity, degree of reproductive ripeness, etc.) to ascertain if there are any indications of premature spawning. All data will be recorded in a log.

6. Live Cage Studies

Brown Trout (or salmon if available) will be placed in live cages at stations 7, 4 in plume, 4 out of plume, and 3 for ten day periods once each month when river flow and ice conditions permit. Cages may be placed at additional downstream stations if it is felt this will produce useful information.

Amendment No. 28, 38



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

ENVIRONMENTAL IMPACT APPRAISAL
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. DPR-28
VERMONT YANKEE NUCLEAR POWER CORPORATION
VERMONT YANKEE NUCLEAR POWER STATION
DOCKET NO. 50-271

Description of Proposed Action

By letter dated August 8, 1977, the Vermont Yankee Nuclear Power Corporation (VYNPC) requested a change to the Vermont Yankee Environmental Technical Specifications (Appendix B of Facility License No. DPR-28). By letter dated September 1, 1977, VYNPC submitted letters received from the appropriate regulatory agencies of Vermont and New Hampshire granting authorization in support of VYNPC's request to conduct the Phase V Hydrothermal and Biological Studies Program.

In the present Technical Specifications, limitations are put on far-field temperature increase over ambient, the rate of change of downstream temperature and the size of the thermal plume. In the proposed Technical Specifications, no limitation is put on the size of the thermal plume and the far-field temperature increase limitation and rate of change limitation are increased.

VYNPC has demonstrated during four previous studies (Phase 1, February - April 1974; Phase II, December 1974 - May 1975; Phase III, October 1975 - May 1976; and Phase IV, September 1976 - May 1977) that the controlled discharge of selected amounts of heated water directly to the Connecticut

River at Vernon has resulted in no measurable adverse impact on the water quality and biotic communities of that ecosystem. These four studies have resulted in a good understanding of the effects of heated water on the aquatic ecosystem at Vernon; however, in view of the unusual cold winter of 1976-1977 (during Phase IV) and the expected restoration of the Atlantic salmon and American shad which should result from the scheduled 1981 installation of fish ladders at Vernon Dam, VYNPC has proposed to conduct a Phase V study to verify the Phase IV conclusions.

The purpose of the multi-phase testing program is to gather biological and hydrothermal data during the colder months of the year to show that no significant impact to the environment is caused by open cycle operation. The data from the first four phases provided the basis for submitting an application for a 316(a) demonstration which, if approved, will permit open-cycle operation during certain times of the year and under specified river conditions.

This appraisal describes the biological impacts that were predicted in support of Amendment No. 28 to License No. DPR-28 $^{\rm l}$ and the actual results of Phase IV $^{\rm 2}$. It also addresses the probable environmental impacts associated with the proposed Phase V.

EVALUATION

In our earlier evaluation of Phase I, II and III study results (Reference 1), we concluded that, under the first three studies, there had not been a significant environmental impact associated with the operation of Vermont Yankee; additionally, we concluded that no significant environmental impact was expected during Phase IV in spite of the allowable river temperature rise of 13°F.

This evaluation addresses the actual results of Phase IV and provides an appraisal of the potential environmental effects associated with Phase V.

In general, the impacts associated with Phase V will be less than those associated with Phase IV because Phase V will begin one month later than did Phase IV. Additionally, the proposal is for a 10°F temperature rise during Phase V rather than the allowed 13°F rise during the Phase IV study.

Phytoplankton

VYNPC has conducted extensive phytoplankton monitoring in the vicinity of the plant. They have submitted annual reports for the past five years, and in addition, have submitted reports from four intensive "phase" studies 2,3,4,5. Data were collected over a wide range of river flow conditions and heat rejection rates. These data have never illustrated a statistically significant difference in the phytoplankton population within the plume as compared to that outside of the plume or downstream of the plant as compared to that upstream of the plant.

During the Phase IV study, the species composition and total count of phytoplankton reflected information obtained prior to plant operation. Based on pre-operational and closed cycle data, Aquatec, Inc. developed a regression equation which predicts phytoplankton densities downstream from counts taken upstream. On all 10 of the dates on which an upstream and downstream density comparison was made, observed values of the downstream station fell within two standard errors of estimate (Reference 2, Figure 5.2). We judge this variation not to be significant as phytoplankton populations typically vary this amount due to natural causes.

Since there were no significant or detectable impacts associated with Phase IV no significant impacts are expected for Phase V.

Zooplankton

VYNPC's monitoring program for zooplankton is concurrent with their phytoplankton monitoring program. The data they have collected show as much variability among replicate samples as between different stations and no statistically significant difference in population occurs between those observed within the plume as compared to those observed outside of the plume or downstream of the plant as compared to upstream of the plant. Data collected during the Phase IV study show that the plant has little or no destructive effect on zooplankton passing through the condenser during open cycle operation. Several samples were taken at the intake and discharge structures and the fraction of living zooplankton determined. The average percent living at the intake structure was 93.5% and at the discharge structure was 87.6% for 18 samples at each location. The close similarity of these two numbers indicates that there is little entrainment mortality associated with entrainment of zooplankton.

Based on pre-operational and closed cycle data, a regression equation was developed which predicts zooplankton density downstream based on upstream counts. Figure 5.3 of Reference 2 plots the observed zooplankton counts for samples taken on the 10 sampling dates. Observed values at the downstream station fell within two standard errors of the predicted value. We judge this variation not to be significant as zooplankton populations typically vary this amount due to natural causes.

Since there were no significant or detectable impacts associated with Phase IV, no significant impacts are expected during Phase V.

Benthos

During Phase IV, benthic organisms were sampled by means of Henson traps and Eckman dredges at three stations downstream of Vernon Dam and three stations north of the dam. Nine sample sets were collected (Reference 2, page 48 and Tables 5.3-1, 2 and 3). Except for an increase in the relative abundance of Caddis flies (a favored fish food) in the Henson traps, the taxonomic composition of the samples was similar to that observed in previous years (Reference 2, page 49).

During the Phase IV study, many samples were collected during the winter months. The diversity (Shannon-Weiner indices and equitability indices) and numbers of organisms found in samples were as great or greater at stations adjacent to or downstream of Vermont Yankee as compared to upstream samples (Reference 2, Tables 5.3-1, 2, and 3). The populations varied much more from colder months to warmer months than from areas outside the thermal plume to areas within the thermal plume. Overall, the data do not suggest that there is an adverse effect of the thermal plume on the benthos populations near the plant. During Phase IV, the benthos populations downstream of Vernon Dam at Station No. 3 experienced temperatures as great at 9.2°F above ambient. Because no adverse impact was detected on the benthic organisms during Phase IV, we judge that none will likely occur during Phase V.

Fishes

During the Phase IV studies, the intake traveling screens were backwashed once per day. Fish observed on the screens were identified, weighed and measured. For the entire study period, an average of twelve fish per day weighing a total of 225 grams were impinged. This value is extremely small and comparable to values obtained during earlier phases.

The fish populations in Vernon Pond have been studied for several years by VYNPC under the "Phase" programs. Sampling of the fish populations has been by two techniques; fish trap nets and gill nets. The trap nets have proven much more effective in sampling the populations than have the gill nets. These studies have shown that the fishes tend to stay on the New Hampshire side of the river, apparently because of the differences in the two types of habitat on the two sides of the river. As in previous "Phase" studies, the rate at which fish were caught outside of the plume was greater than within the plume. During Phase IV, fish were captured outside of the plume at a rate 1.6 times greater than within the plume (Reference 2, Table 5.5), possibly indicating that the fish population tends to avoid the areas of the heated plume or at least are not attracted to it.

As in-previous phases, brown trout (Salmo trutta) were kept in underwater cages within and out of the area of the 5°F thermal plume isotherm. Six fish were placed in a cage and left for ten days. There were cages located in eight locations: one upstream from the plant and one downstream from Vernon Dam, one in the immediate vicinity of the discharge, and three further away from the discharge but in the near vicinity of where the 5°F thermal plume isotherm is usually found, and two at the Vernon Dam ice boom near the location of the

intake to the proposed fishway. Fish were placed in the cages at several different times during the year. At the end of each 10-day period, the cages were retrieved and the numbers of survivors in each cage were logged.

The data from the Phase I study show a much lower survival rate than for the later two studies and are not considered valid because the cages were a poor design which subjected the fish to stresses through continuous exposure to currents. The data from the Phase'II and III studies indicate that survival probability is slightly lower in the cage located closest to the discharge structure (72%). The five cages located in the thermal plume area and upstream and downstream of the plant had a higher survival rate of 84% or a difference of 12%.

As in previous studies, the survival rate of the caged trout during Phase IV was quite high. Most of the fish survived for ten days except when water temperature averaged more than $60^{\circ}F$; under these conditions, starvation may have been an important factor (fish require more food at higher temperatures). Many fish survived temperature changes of $10^{\circ}F$ in ten minutes and during March, twelve fish near the discharge survived temperature changes of $30^{\circ}F$ in ten minutes.

These numbers were determined by observing the survival of more than 400 fish. The species Salmo trutta was used because, compared to other species which are found in the vicinity of the station, it has a low thermal tolerance. 6,7,8 .

As previously discussed, data from the fish trapping studies indicate that the population tends to reside on the New Hampshire side of the pond and not near the discharge. During the Phase IV studies, the thermal plume size within the $5^{\circ}F$ isotherm during >99.5% heat rejection rate varied from a low of undetectable to a high of 342 acres. The large area plumes were only observed during periods when the river was artificially regulated at low flow (prolonged impoundment) for the purpose of Phase IV testing. In the Final Environmental Statement $(FES)^9$, we recommended that a 50-acre area be made available during the first year for study purposes. The present Technical Specifications require that the thermal plume area be no greater than 50 acres, but because of other thermal criteria, the actual plume size has been measured to be generally on the order of 10-15 acres. The data do not indicate that any of the aquatic biota have been affected because of this plume, except for some of the fish that were held in cages near the discharge structure. Three hundred and forty-two acres is a large fraction of the pond. When the thermal plume is this large, it extends across the pond to the New Hampshire side where the fish populations are more dense. As the previous discussion suggests, some of the fish may try to avoid the heated water by swimming upstream. This will cause a temporary redistribution of the fish population in Vernon Pond. Based on the live box studies, however, the fish that remain in the pond are not likely to experience higher mortality. It is likely that during the fall and winter months of the year when the water temperature is low and the area flow rates are high (October - March) the effect of the proposed study on the populations will be small and that only during May and possibly April could there be negative effects on the fish population. Furthermore, the study will not be conducted during the times of the year that the impact would be most severe,

i.e., during June through September when the ambient river temperature is the highest and the river flow rates are the lowest. None of the fishes found in the area are species which are exceptionally fragile or are likely to become extinct in the area because of the study; rather, they represent species that are known to be resilient to impact and adaptable to environmental change. Even if large fish mortalities occur in Vernon Pond during April and May, which we believe to be unlikely, it is acceptable on the basis that it will affect less than 1% of, the river and the pond will be quickly repopulated with fish from upstream of the plant. Fishes downstream of Vernon Dam will not be detrimentally affected by the heating since during the warmest month of the study the temperature of the water below the dam will be below the maximum natural variability. Such mortality did not occur during the Phase IV study.

The proposed Technical Specifications allow the plant_induced rate of change of water temperature to be as much as 5°F in any one hour period downstream of Vernon Dam. Data obtained from the cage studies suggest that this variation will not have a significant effect on the fish populations downstream of the dam. The temperature within the cages fluctuated most during the coldest months of the year, e.g., in November 1976 and March 1977, the temperature in a cage in the plume varied over a range of 30°F in 10 minutes. No mortality was observed at the two stations which experienced these changes. The cage studies suggest that the sustained temperature increase is the important factor in increasing mortality and not the variation in temperature. As the species used in the cage studies are known to be relatively temperature sensitive, changing temperature caused by the plant in conjunction with the operation of

the hydroelectric plant at Vernon Dam is likely to have an insignificant effect on the fish populations downstream of the dam.

Impact on Turners Pool

By letter dated June 22, 1977, the State of Massachusetts requested VYNPC to address the thermal impacts of open cycle operation of VYNPS on Turners Pool which is located at Turners Falls Dam approximately 15 miles south of VYNPS on the Connecticut River. We have studied the thermal impact of station open cycle operation in the vicinity of VYNPS and have determined that the impact would be insignificant at river monitoring point 3 which is about one mile south of the plant. Therefore, it is expected that the thermal impact attributable to station open cycle operation would also be insignificant at Turners Pool.

Safety Considerations

We have examined the safety significance of this modification of the operation of the VYNPS and have determined that the modification does not alter the accident and transient analyses previously considered by the Commission. We have concluded that: (1) because the change does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the

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

Conclusions for Negative Declaration

On the basis of the foregoing analysis, it is concluded that there will be no significant environmental impact attributable to the proposed action other than has already been predicted and described in the FES. Having made this conclusion we further conclude that no environmental impact statement for the proposed action need be prepared and a negative declaration to this effect is appropriate.

Dated: September 30, 1977

References:

- Environmental Impact Appraisal By the Office of Nuclear Reactor Regulation Supporting Amendment No. 28 to License No. DPR-28, Vermont Yankee Nuclear Power Corporation, Vermont Yankee Nuclear Power Station, Docket No. 50-271, September 6, 1976, U. S. Nuclear Regulatory Commission.
- 2. Hydrothermal and Biological Studies, Phase IV, September 1976 May 1977.

 Aquatec, Inc., South Burlington, Vermont.
- 3. Hydrothermal and Biological Studies, Phase I, February-April 1974. Aquatec, Inc., South Burlington, Vermont.
- 4. Hydrothermal and Biological Studies, Phase II, December 1974 May 1975. Aquatec, Inc., South Burlington, Vermont.
- 5. Hydrothermal and Biological Studies (draft), Phase III, October 1975 June 1976. Aquatec, Inc., South Burlington, Vermont.
- Sylvester, J.R., Possible Effects of Thermal Effluents on Fish: A Review. <u>Environ</u>. <u>Polut</u>. (3) 1972.
- 7. Industrial Waste Guide on Thermal Pollution. U. S. Department of the Interior. Pacific Northwest Water Laboratory. September 1968.
- 8. Gross Physical and Biological Effects of Overboard Spoil Disposal in Upper Chesapeake Bay. NRI Special Report No. 3. Chesapeake Biological Laboratory, Solomons, Maryland.
- 9. Final Environmental Statement Related to the Operation of Vermont Yankee Nuclear Power Station, July 1972. U. S. Atomic Energy Commission.

UNITED STATES NUCLEAR REGULATORY COMMISSION DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

AND NEGATIVE DECLARATION

The Nuclear Regulatory Commission (the Commission) has issued

Amendment No. 38 to Facility Operating License No. DPR-28 issued to

Vermont Yankee Nuclear Power Corporation (the licensee) which revised

Technical Specifications for operation of the Vermont Yankee Nuclear

Power Station (the facility), located near Verron, Vermont. The amendment is effective as of its date of issuance.

The amendment authorizes use of once-through cooling, subject to certain limitations and monitoring requirements, for the period October 1, 1977, through May 31, 1978, to permit the acquisition of additional environmental information on the effects of using this mode of cooling. It also conforms the license with earlier actions taken by New Hampshire and Vermont.

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

The Commission has prepared an environmental impact appraisal for the revised Technical Specifications and has concluded that an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the action other than that which has already been predicted and described in the Commission's Final Environmental Statement for the facility.

For further details with respect to this action, see (1) the application dated August 8, 1977, (2) Amendment No. 38 to License No. DPR-28, and (3) the Commission's Environmental Impact Appraisal. 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 Brooks Memorial Library, 224 Main Street, Brattleboro, Vermont. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 30th day of September 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

morton B. Fairtile

Morton B. Fairtile, Acting Chief Operating Reactors Branch #4 Division of Operating Reactors