March 24, 1998

Mr. Donald A. Reid
Senior Vice President, Operations
Vermont Yankee Nuclear Power Corporation
185 Old Ferry Road
Brattleboro, VT 05301

SUBJECT: ISSUANCE OF AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. DPR-28, VERMONT YANKEE NUCLEAR POWER STATION (TAC NO. M99064)

The Commission has issued the enclosed Amendment No. 155 to Facility Operating License DPR-28 for the Vermont Yankee Nuclear Power Station, in response to your application dated October 10, 1997, as supplemented on October 31, 1997.

The amendment revises and clarifies the offsite power requirements.

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

Sincerely,

ORIGINAL SIGNED BY

Richard P. Croteau, Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosures: 1. Amendment No. 155 to License No. DPR-28
2. Safety Evaluation

cc w/encls: See next page

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DATED: March 24, 1998

AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. DPR-28 - VERMONT YANKEE NUCLEAR POWER STATION

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

VERMONT YANKEE NUCLEAR POWER CORPORATION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 155
License No. DPR-28

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

   A. The application for amendment filed by the Vermont Yankee Nuclear Power Corporation (the licensee) dated October 10, 1997, as supplemented by letter dated October 31, 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;

   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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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) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 155 , 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 its date of issuance to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Cecil O Thomas, 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: March 24, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 155

FACILITY OPERATING LICENSE NO. DPR-28

DOCKET NO. 50-271

Replace the following pages of Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
214	214
217	217
	217a
220	220
221	221
	221a
222	222
223	223

3.10 LIMITING CONDITIONS FOR OPERATION	4.10 SURVEILLANCE REQUIREMENTS
3. Emergency Buses The emergency 4160 volt Buses 3 and 4, and 480 volt Buses 8 and 9 shall be energized and operable.	3. Emergency Buses The emergency 4160 volt buses and 480 volt buses shall be checked daily.
4. Off-Site Power Two qualified off-site power sources consisting of the immediate access source and the delayed access source shall be energized and operable.	4. Off-Site Power a. The status of the off-site power sources shall be checked daily. b. Once per operating cycle, the delayed access source shall be established within one hour.
5. Reactor Protection System Power Protection Two RPS power protection panels for each inservice RPS MG set or alternate power source shall be operable.	5. Reactor Protection System Power Protection Once per operating cycle, the operability of each overvoltage, undervoltage, and underfrequency protective device shall be demonstrated by the performance of an instrument channel calibration test. Settings shall be verified to be in accordance with Table 4.10.1.

3.10 LIMITING CONDITIONS FOR OPERATION	4.10 SURVEILLANCE REQUIREMENTS
f. From and after the date that one of the two 125 volt Switchyard battery systems is found or made to be inoperable for any reason, continued reactor operation is permissible provided that the other 125 volt Switchyard battery system is operable.	
3. Off-Site Power	3. Off-Site Power
a. From and after the date one off-site power source is made or found to be inoperable for any reason, reactor operation may continue for seven days provided the remaining off-site source, both emergency diesel generators, associated emergency buses and all Low Pressure Core and Containment Cooling Systems are operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours unless the conditions of Specifications 3.10.B.3.b are applicable.	a. When one off-site power source is unavailable, the remaining power source, both emergency diesel generators, associated emergency buses and all Low Pressure Core and Containment Cooling Systems shall have been or shall be verified operable within one hour and once per eight hours thereafter.

3.10 LIMITING CONDITIONS FOR OPERATION	4.10 SURVEILLANCE REQUIREMENTS
b. From and after the date that either off-site power source and one diesel generator are made or found to be inoperable for any reason, continued operation is permitted for 24 hours as long as the remaining off-site power source, the remaining diesel generator, associated emergency buses and all Low Pressure Core and Containment Cooling Systems are operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours.	b. When either off-site power source and one diesel or associated buses are unavailable: 1. The other off-site power source and all Low Pressure Core and Containment Cooling Systems shall have been or shall be verified operable within one hour and once per eight hours thereafter. 2. The remaining diesel generator shall have been or shall be demonstrated to be operable within 24 hours.

BASES:

3.10 AUXILIARY ELECTRIC POWER SYSTEMS

A. The objective of this Specification is to assure that adequate power will be available to operate the emergency safeguards equipment. Adequate power can be provided by any one of the following sources: an immediate access source through both startup transformers, backfeed through the main transformer, or either of the two diesel generators. The backfeed through the main transformer is a delayed access off-site power source. The delayed access source is made available by opening the generator no load disconnect switch and establishing a feed from the 345 kV switchyard through the main generator step up transformer and unit auxiliary transformer to the 4.16 kV buses. The delayed access source is available within an hour of loss of main generator capability to assure that fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded.

Electric power can be supplied from the off-site transmission network to the on-site Emergency Safeguards Electric Power Distribution System by two independent sources, one immediate access and one delayed access, designed and located so as to minimize to the extent practicable the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions. An additional off-site source, a 4160 V tie line to Vernon Hydroelectric Station, can supply either 4160 V emergency bus. It is used to meet station blackout and Appendix R licensing requirements.

Off-site power is supplied to the 345 kV switchyard from the transmission network by three transmission lines. A 400 MVA autotransformer is connected between the 345 kV north bus and the 115 kV bus. The autotransformer is the normal source for the 115 kV bus and the station startup transformers. The autotransformer also feeds the 115 kV transmission line to Keene.

The immediate access source is supplied from the 345 kV Transmission System through the 345 kV/115 kV autotransformer. It feeds the on-site Electric Power Distribution System through the two 115 kV to 4.16 kV startup transformers and is available within seconds following a design basis accident to assure that core cooling, containment integrity and other vital functions are maintained. An alternate immediate access source through the Keene line may be made available. Its availability is dependent on its preloading which must be limited by system dispatchers prior to it being declared an immediate access source.

A qualified source consists of all breakers, transformers, switches, interrupting devices, cabling and controls required to transmit adequate power from the off-site transmission network to the on-site Emergency Safeguards Buses 3 and 4.

Two 480 V Uninterruptible Power Systems supply power to the LPCIS valves via designated Motor Control Centers. The 480 V Uninterruptible Power Systems are redundant and independent of any on-site ac power sources.

This Specification assures that at least two off-site and two on-site power sources, and both 480 V Uninterruptible Power Systems will be available before the reactor is taken beyond "just critical" testing. In addition to assuring power source availability, all of the associated switchgear must be operable as specified to assure that the emergency cooling equipment can be operated, if required, from the power sources.

BASES: 3.10 (Cont'd)

Station service power is supplied to the station through either the unit auxiliary transformer or the startup transformers. In order to start up the station, the startup transformers are required to supply the station auxiliary load. After the unit is synchronized to the system, the unit auxiliary transformer carries the station auxiliary load, except for the station cooling tower loads which are always supplied by one of the startup transformers. The station cooling tower loads are not required to perform an engineered safety feature function in the event of an accident; therefore, an alternate source of power is not essential. Normally one startup transformer supplies 4160 volt Buses 1 and 3, and the other supplies Buses 2 and 4.

A battery charger is supplied for each battery. In addition, the two 125 volt station batteries have a spare charger available. Since one spare 125 volt station charger is available, one station battery charger can be allowed out of service for maintenance and repairs.

Power for the Reactor Protection System is supplied by 120 V ac motor generators with an alternate supply from MCC-8B. Two redundant, Class 1E, seismically qualified power protection panels are connected in series with each ac power source. These panels provide overvoltage, undervoltage, and underfrequency protection for the system. Setpoints are chosen to be consistent with the input power requirements of the equipment connected to the bus.

B. Adequate power is available to operate the emergency safeguards equipment from the immediate access source or for minimum engineered safety features from either of the emergency diesel generators. Therefore, reactor operation is permitted for up to seven days with the delayed-access off-site power source unavailable.

Each of the diesel generator units is capable of supplying 100 percent of the minimum emergency loads required under postulated design basis accident conditions. Each unit is physically and electrically independent of the other and of any off-site power source. Adequate power is also available to operate the emergency safeguards equipment from the immediate access source or from the delayed access source of off-site power. Therefore, one diesel generator can be allowed out of service for a period of seven days without jeopardizing the safety of the station.

In the event that the immediate access source is unavailable, adequate power is available to operate the emergency safeguards equipment from the emergency diesel generators or from the delayed-access off-site power source. Therefore, reactor operation is permitted for up to 7 days with the immediate access source unavailable.

In the event that both emergency diesel generators are lost, adequate power is available to operate the emergency safeguards equipment from the immediate access source or from the delayed-access off-site power source within one hour.

The plant is designed to accept one hundred percent load rejection without adverse effects to the plant or the transmission system. Network stability analysis studies indicate that the loss of the Vermont Yankee unit will not cause instability and consequent tripping of the connecting 345 kV and 115 kV lines. Thus, the availability of the off-site power sources is assured in the event of a turbine trip.

BASES: 3.10 (Cont'd)

In the event that one off-site power source and one emergency diesel generator are unavailable, adequate power is available to operate both emergency safeguards buses from the operable off-site power source and to operate 100% of the minimum emergency safeguards loads from the operable diesel generator. In addition, the station blackout alternate ac source of power is capable of supplying power to the bus with the inoperable diesel generator. Therefore, continued operation is permitted for up to 24 hours with one off-site power source and one emergency diesel generator unavailable.

Either of the two station batteries has enough capacity to energize the vital buses and supply d-c power to the other emergency equipment for 8 hours without being recharged. In addition, two 24 volt ECCS Instrumentation batteries supply power to instruments that provide automatic initiation of the ECCS and some reactor pressure and level indication in the Control Room.

Due to the high reliability of battery systems, one of the two batteries may be out of service for up to three days. This minimizes the probability of unwarranted shutdown by providing adequate time for reasonable repairs. A station battery, ECCS Instrumentation battery, or an Uninterruptible Power System battery is considered inoperable if more than one cell is out of service. A cell will be considered out of service if its float voltage is below 2.13 volts and the specific gravity is below 1.190 at 77°F.

The Battery Room is ventilated to prevent accumulation of hydrogen gas. With a complete loss of the ventilation system, the accumulation of hydrogen would not exceed 4 percent concentration in 16 days. Therefore, on loss of Battery Room ventilation, the use of portable ventilation equipment and daily sampling provide assurance that potentially hazardous quantities of hydrogen gas will not accumulate.

C. The minimum diesel fuel supply of 25,000 gallons will supply one diesel generator for a minimum of seven days of operation satisfying the load requirements for the operation of the safeguards equipment. Additional fuel can be obtained and delivered to the site from nearby sources within the seven-day period.

BASES:

4.10 AUXILIARY ELECTRICAL POWER SYSTEMS

A. The monthly tests of the diesel generators are conducted to check for equipment failures and deterioration. The test of the undervoltage automatic starting circuits will prove that each diesel will receive a start signal if a loss of voltage should occur on its emergency bus. The loading of each diesel generator is conducted to demonstrate proper operation at less than the continuous rating and at equilibrium operating conditions. Generator experience at other generator stations indicates that the testing frequency is adequate to assure a high reliability of operation should the system be required.

Both diesel generators have air compressors and air receivers tanks for starting. It is expected that the air compressors will run only infrequently. During the monthly check of the units, each receiver will be drawn down below the point at which the compressor automatically starts to check operation and the ability of the compressors to recharge the receivers.

Following the tests of the units and at least weekly, the fuel volume remaining will be checked. At the end of the monthly load test of the diesel generators, the fuel oil transfer pump will be operated to refill the day tank. The day tank level indicator and alarm switches will be checked at this time. Fuel oil transfer pump operability testing is in accordance with Specification 4.6.E.

The test of the diesels and Uninterruptible Power Systems during each refueling interval will be more comprehensive in that it will functionally test the system; i.e., it will check starting and closure of breakers and sequencing of loads. The units will be started by simulation of a loss of coolant accident. In addition, a loss of normal power condition will be imposed to simulate a loss of off-site power. The timing sequence will be checked to assure proper loading in the time required. Periodic tests between refueling intervals check the capability of the diesels to start in the required time and to deliver the expected emergency load requirements. Periodic testing of the various components plus a functional test at a refueling interval are sufficient to maintain adequate reliability.

The purpose of establishing the delayed access source once per operating cycle is to demonstrate that the delayed access source can be established within the required time of one hour and to demonstrate proper operation of the generator no load disconnect switch. The test demonstrates that power can be transferred to the delayed access source in a timely fashion. The test is not intended to simulate an actual loss of the immediate access source, failure of both diesel generators and consequent loss of power to the station buses.

B. Although the Main Station, ECCS, AS-2, and UPS batteries will deteriorate with time, utility experience indicates there is almost no possibility of precipitous failure. The type of surveillance described in this specification is that which has been demonstrated over the years to provide an indication of a cell becoming irregular or unserviceable long before it becomes a failure.

The performance discharge test provides adequate indication and assurance that the batteries have the specified ampere hour capacity. The rate of discharge during this test shall be in accordance with the manufacturer's discharge characteristic curves

BASES: 4.10 (Cont'd)

for the associated batteries. The results of these tests will be logged and compared with the manufacturer's recommendations of acceptability.

The service discharge test provides a test of the batteries ability to satisfy the design requirements (battery duty cycle) of the associated dc system. This test will be performed using simulated or actual loads at the rates and for the durations specified in the design load profile.

Verification of operability of an off-site power source and Low Pressure Core and Containment Cooling Systems within one hour and once per eight hours thereafter as required by 4.10.B.3.b.1 may be performed as an administrative check by examining logs and other information to determine that required equipment is available and not out of service for maintenance or other reasons. It does not require performing the surveillance needed to demonstrate the operability of the equipment.

C. Logging the diesel fuel supply weekly and after each operation assures that the minimum fuel supply requirements will be maintained. During the monthly test for quality of the diesel fuel oil, a viscosity test and water and sediment test will be performed as described in ASTM D975-68. The quality of the diesel fuel oil will be acceptable if the results of the tests are within the limiting requirements for diesel fuel oils shown on Table 1 of ASTM D975-68.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

1.0 INTRODUCTION

By letter dated October 10, 1997, as supplemented by letter dated October 31, 1997, the Vermont Yankee Atomic Power Corporation (VY or the licensee) submitted a request to amend the Vermont Yankee Nuclear Power Station Technical Specifications (TSs). The proposed amendment would revise the TSs for the offsite power system. Currently, the backfeed through the main (step-up) transformer is being accomplished manually by disconnecting the main generator from the main transformer by removing the generator links and energizing the unit auxiliary transformer from the 345 kV switchyard through the main transformer. This backfeed takes up to six hours to establish. VY is planning to install a new main generator no-load disconnect switch to reduce the time to establish this backfeed. Upon installation of the backfeed switch, the licensee would remove the Vernon tie line as the second delayed access offsite power source from the TS. This requires revising existing limiting conditions for operation (LCOs) for normal plant operation and required action statements for plant operation with inoperable offsite power sources of the TS. The amendment also revises the relevant portions of the Bases Section to reflect modifications.

VY is planning to install the main generator no-load disconnect switch during the Spring 1998 refueling outage. The licensee intends to update the TS to reflect installation of the above mentioned disconnect switch and to upgrade the delayed offsite access/offsite power source for startup in the spring outage.

2.0 EVALUATION

VY's final safety analysis report (FSAR) and TSs currently describe two delayed offsite power sources; one consisting of a backfeed through the main step-up transformer and the other (the Vernon tie line) consisting of a feed from the adjacent Vernon hydroelectric station capable of supplying power to only one of the two emergency buses. Recently, the licensee performed a review of the adequacy of the delayed offsite power circuits at VY and its compliance with the station blackout (SBO) rule. The review indicated that the existing backfeed through the main step-up transformer would have sufficient capacity to supply the required safe shutdown loads under worst-case conditions, but, given its current physical configuration, this circuit cannot be established within sufficient time to meet the licensing basis as a delayed source of offsite power which ensures that specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded. The licensee proposed to install the main generator no-load disconnect switch in the generator leads (isolated phase bus duct) between the generator terminals and the tap to the unit auxiliary transformer. When the disconnect switch

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is opened, the generator and associated protective relays will be isolated from the main transformer and unit auxiliary transformer circuitry. After switch installation, the backfeed to the station buses through the main transformer can be established in less than an hour after a unit trip. VY analyses, performed to support operation of the alternate cooling system, document that the plant can withstand an interruption of all ac power for at least one hour; therefore, the modified backfeed can be established in sufficient time to "assure that specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary would not be exceeded." The above satisfies the time requirement of the delayed access offsite power source. The licensee would no longer consider the Vernon tie as a delayed access offsite power source but will retain it as VY's alternate ac power source to comply with the SBO rule.

The staff has reviewed the proposed changes to LCOs, surveillance requirements (SRs), and the appropriate Bases Sections of the VY TS, and its evaluation is as follows:

Revision of TS LCO 3.10.A.4 and Bases Section 3.10.A Offsite Power - Normal Operation

TS LCO 3.10.A.4.a and 4.b currently describe each of the two offsite power sources for normal plant operation; namely, one immediate power source and two delayed offsite power sources respectively. With installation of the backfeed switch, there would be only one delayed offsite power source at VY. Therefore, the licensee proposed to delete the two provisions in TS LCO 3.10.A.4 and combine them into one, with the following:

> Two qualified off-site power sources consisting of the immediate access source and the delayed access source shall be energized and operable.

The staff reviewed the proposed revision to TS LCO 3.10.A.4 as well as all of the changes proposed for Bases Section 3.10.A relative to the modification made to VY's offsite power sources. The staff finds that the backfeed (with the main generator disconnect switch installed) satisfies the requirement of the delayed offsite power source for VY and that all the changes made to Bases Section 3.10.A are consistent with the proposals in TS LCO 3.10.A.4 regarding the offsite power system. Therefore, the staff concludes that the proposed TS LCO 3.10.A.4 and changes made to Bases Section 3.10.A are acceptable.

Revision of TS LCO 3.10.B.3 and Bases Section 3.10.B Offsite Power - Operation With Inoperable Components

TS LCO 3.10.B.3.a currently states that, "From and after the date that both startup transformers and one diesel generator or associated buses are made or found to be inoperable for any reason, reactor operation may be continued provided the requirements of Specification 3.5.H.1 are satisfied," while TS LCO 3.10.B.3.b states that, "From and after the date that both delayed access offsite power sources become unavailable, reactor operation may continue for seven days provided both emergency diesel generators, associated buses, and all Low Pressure Core and Containment Cooling System are operable." Bases Section 3.10.B also states, "Therefore, reactor operation is permitted with the startup transformers out of service and with one diesel generator out of service provided the NRC is notified immediately of the event and restoration plans."

With installation of the main generator no-load disconnect switch and subsequent deletion from the TS of the Vernon tie line as a delayed access offsite power source, the licensee proposed to revise TS LCO 3.10.B.3 as follows:

TS LCO 3.10.B.3.a would state that:

> From and after the date one offsite power source is made or found to be inoperable for any reason, reactor operation may continue for seven days provided the remaining offsite source, both emergency diesel generators, associated emergency buses and all Low Pressure Core and Containment Cooling Systems are operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours unless the conditions of Specifications 3.10.B.3.b are applicable.

TS LCO 3.10.B.3.b would state that:

> From and after the date that either offsite power source and one diesel generator are made or found to be inoperable for any reason, continued operation is permitted for 24 hours as long as the remaining offsite power source, the remaining diesel generator, associated emergency buses and all Low Pressure Core and Containment Cooling Systems are operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours.

The staff reviewed the proposed TS LCO 3.10.B.3.a, TS LCO 3.10.B.3.b, and Bases Section 3.10.B and noted the following:

1. Exchanging the contents of the current TS LCO 3.10.B.3.a (becomes TS LCO 3.10.B.3.b) with TS LCO 3.10.B.3.b (becomes TS LCO 3.10.B.3.a) is an administrative change and is acceptable.

2. If one offsite power source (i.e., regardless of immediate or delayed) is made or found to be inoperable, the proposed TS LCO 3.10.B.3.a retains its current allowed outage time (AOT) of 7 days and adds action statements for the remaining offsite source, both diesel generators, associated emergency buses and all Low Pressure Core Cooling and Containment Cooling Systems to ensure its operability, and it further restricts reactor operation to 24 hours if these requirements are not met.

3. If one offsite power source and one diesel generator are made or found to be inoperable, the proposed TS LCO 3.10.B.3.b limits the reactor operation to continue for only 24 hours. The current TS LCO allows the reactor operation for 7 days. Since the proposed TS LCO 3.10.B.3.b reduces reactor operation from its current 7 days to 24 hours under the same condition, the AOT for the proposed TS LCO 3.10.B.3.b is more restrictive than the current TS LCO, and action statements have been added that if this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours.

4. If one offsite power source and one diesel generator are made or found to be inoperable, Bases Section 3.10.B requires the licensee to notify the NRC of the event and of its restoration plans. The licensee proposed to delete this statement and replace it with a statement that would restrict the reactor operation for 24 hours, which has been incorporated into TS LCO 3.10.B.3.b.

Since the proposed provisions in TS LCO 3.10.B.3 and its Bases Section 3.10.B restrict the plant operation by adding more action statements, the staff finds the proposed changes to be more conservative, an improvement over the current TS, and consistent with the improved standard TS (NUREG-1433) for General Electric plants. The staff concludes that the proposed TS LCO 3.10.B.3.a, 3.10.B.3.b, and Bases Section 3.10.B are acceptable.

Addition of TS SR 4.10.A.4.b and Its Bases Section 4.10.A - Normal Operation

With installation of the main generator no-load disconnect switch at VY, the licensee proposes to demonstrate the ability to establish the delayed access offsite power source within the allowable time limit once every operating cycle. Thus, the licensee proposed to add a new TS provision (4.b) in SR 4.10.A.4, which states:

> Once per operating cycle, the delayed access source shall be established within one hour.

The licensee also revised the Bases Section 4.10.A to reflect the above SR change.

With proposed TS SR 4.10.B.3.a and Bases Section 4.10.A, the licensee establishes that the delayed access power source can be established within the required 1 hour and its operability will be demonstrated once every refueling outage. The reduction of the new time required for establishing the backfeed from six hours to one hour will ensure that fuel design limit and design conditions of the reactor coolant pressure boundary would not be exceeded. This modification allows the licensee to remove the statement regarding the second delayed offsite line (the Vernon tie line) from the TS and its Bases Section.

The staff finds the proposed addition of SR 4.10.A.4.b and changes to the Bases Section 4.10.A for the delayed access offsite power source to be an improvement over the current TS requirements, and acceptable.

Revision of TS SR 4.10.B.3 and Bases Section 4.10.B - Operation With Inoperable Components

The current TS SR 4.10.B.3.a states that, "When one of the diesel generators or associated buses is made or found to be inoperable, the requirements of the Specification 4.5.H.1 shall be satisfied," while TS SR 4.10.B.3.b states that, "When both delayed access offsite power sources are unavailable, both diesel generators and associated buses shall have been or shall be demonstrated to be operable within 24 hours."

Since the requirements for an inoperable diesel generator are addressed in other sections (SR 4.10.B.1) of VY's TS, the licensee proposed to revise TS SR 4.10.B.3.a for an inoperable offsite power source (either immediate or delayed) as follows:

> When one offsite power source is unavailable, the remaining power source, both emergency diesel generators, associated emergency buses and all Low Pressure Core and Containment Cooling Systems shall have been or shall be verified operable within one hour and once per eight hours thereafter.

The staff has reviewed the proposed TS SR 4.10.B.3.a that addresses required surveillance for an inoperable offsite power source and finds the performance of SRs for the remaining power sources to be more conservative than the similar provision in the improved standard TS. The improved standard TS no longer requires verification of operability of the diesel generators if one offsite power source is found inoperable.

The licensee also proposed to clarify the verification of operability of the above equipment in Bases Section 4.10.B by inserting the following paragraph:

> Verification of operability within one hour and once per eight hours thereafter, may be performed as an administrative check by examining logs and other information to determine that required equipment is available and not out of service for maintenance or other reasons. It does not require performing the surveillance needed to demonstrate the operability of the equipment.

The licensee proposed to change TS SR 4.10.B.3.b as follows:

> When either offsite power source and one diesel or associated buses are unavailable:
>
> 1. The other offsite power source and all Low Pressure Core and Containment Cooling Systems shall have been or shall be verified operable within one hour and once per eight hours thereafter.
>
> 2. The remaining diesel generator shall have been or shall be demonstrated to be operable within 24 hours.

Since the plant is allowed to operate for only 24 hours when one offsite and one diesel generator are found to be inoperable according to TS LCO 3.10.B.3.b and Bases Section 3.10.B, the staff finds that use of the proposed TS SR 4.10.B.3.b is prudent to verify operability of the offsite power source and all Low Pressure Core and Containment Cooling Systems within one hour and once every eight hours and the remaining diesel generator within 24 hours. This change is an improvement over the current TS because it now addresses the required surveillances for an inoperable offsite power source and one diesel generator. The staff also finds that the proposed TS SR 4.10.B.3.b is addressing the pertinent action statement of TS LCO 3.10.B.3.b.

Based on the above, the staff concludes that the proposed revisions of TS SR 4.10.B.3.a, TS SR 4.10.B.3.b, and Bases Section 4.10.B are acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Vermont State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 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 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in 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 previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 68319). 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.

5.0 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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