



GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

July 7, 2000
1940-00-20048

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555

Subject: Oyster Creek Nuclear Generating Station
Facility License No. DPR-16
Docket No. 50-219
Technical Specification Change Request No. 275

In accordance with 10 CFR 50.4(b)(1), enclosed is Technical Specification Change Request (TSCR) No. 275 for the above facility.

GPU Nuclear requests that the Technical Specifications (TS) contained in Appendix A to the Facility License be amended to replace the requirement in TS 3.4.A.7.c and 3.4.A.8.c to demonstrate operability of core spray pumps and system components by testing, with verification of operability. Corresponding changes to the Bases of Specification 3.4 are included for information but are not part of the change. A mark-up of the affected TS page showing the requested changes is contained in Attachment 2. The revised TS and basis page are provided in Attachment 3.

In accordance with 10 CFR 50.91 (b)(1), the designated official of the State of New Jersey Bureau of Nuclear Engineering has been sent a copy of this TSCR.

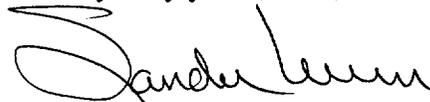
GPU Nuclear requests issuance of an immediately effective license amendment prior to the next (Cycle 18R) refueling outage. The 18R outage is currently scheduled to begin on October 14, 2000. Since the requested changes are intended to support outage activities, issuance of the amendment should occur no later than September 15, 2000.

This license amendment application has undergone a safety review in accordance with Section 6.5 of the Oyster Creek Technical Specifications.

A001

Should further information be required, please contact Mr. Paul F. Czaya of our Nuclear Safety and Licensing Department at 609-971-4139.

Very truly yours,

A handwritten signature in black ink, appearing to read "Sander Levin". The signature is fluid and cursive, with a large initial "S" and a long, sweeping underline.

Sander Levin
Acting Director
Oyster Creek

Attachments

- c: Administrator, USNRC Region I
- USNRC Senior Resident Inspector - Oyster Creek
- USNRC Senior Project Manager - Oyster Creek



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Post Office Box 388
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July 7, 2000
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The Honorable William J. Boehm
Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

Dear Mayor Boehm:

Enclosed herewith is one copy of Technical Specification Change Request
No. 275 for the Oyster Creek Nuclear Generating Station Operating License.

This document was filed with the United States Nuclear Regulatory Commission on July 7,
2000.

Very truly yours,

A handwritten signature in black ink, appearing to read "Sander Levin". The signature is fluid and cursive, with a large initial "S" and a long, sweeping underline.

Sander Levin
Acting Director
Oyster Creek

Attachments



GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

July 7, 2000
1940-00-20048

Mr. Kent Tosch, Director
Bureau of Nuclear Engineering
Department of Environmental Protection
CN 411
Trenton, NJ 08625

Dear Mr. Tosch:

Subject: Oyster Creek Nuclear Generating Station
Facility Operating License No. DPR-16
Technical Specification Change Request No. 275

Pursuant to 10 CFR 50.91(b)(1), please find enclosed a copy of the subject document, which was filed with the United States Nuclear Regulatory Commission on July 7, 2000.

Very truly yours,

A handwritten signature in black ink, appearing to read "Sander Levin".

Sander Levin
Acting Director
Oyster Creek

Attachments

GPU Nuclear, Inc.
Oyster Creek Nuclear Generating Station

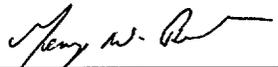
Facility License No. DPR-16

Technical Specification Change Request No. 275
Docket No. 50-219

Applicant hereby submits a proposed change to Appendix A Technical Specification page 3.4-2.

By: 
Sander Levin
Acting Director
Oyster Creek

Sworn and subscribed to before me this 5th day of July, 2000.


A Notary Public of NJ

GEORGE W. BUS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Aug. 8, 2003



United States of America
Nuclear Regulatory Commission

In the Matter of)
)
GPU Nuclear, Inc.)

Docket No. 50-219

Certificate of Service

This is to certify that a copy of Technical Specification Change Request No. 275 for the Oyster Creek Nuclear Generating Station Operating License, filed with the U.S. Nuclear Regulatory Commission on , 2000 has this day of 2000, been served on the Mayor of Lacey Township, Ocean County, New Jersey by deposit in the United States mail, addressed as follows:

The Honorable William J. Boehm
Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

By: 
Sander Levin
Acting Director
Oyster Creek

Attachment 1

Oyster Creek Nuclear Generating Station Technical Specification Change Request No. 275

I. Change Requested

The proposed changes are to Technical Specifications (TS) 3.4.A.7.c and 3.4.A.8.c. The changes are as follows:

The requirement in TS 3.4.A.7.c and 3.4.A.8.c to repetitively demonstrate operability of core spray pumps and system components by testing is revised to confirm operability through verification. Verification will be by administrative check of appropriate plant records (e.g., surveillance records, inservice testing).

The proposed changes are contained on page 3.4-2. Revisions of TS Section 3.4 Bases are contained on page 3.4-7. In addition, words in the specifications contained on affected TS pages that are defined by Section 1.0 of the Technical Specifications are capitalized consistent with the format of the Standard Technical Specifications. A mark-up of the affected TS page is in Attachment 2. The revised TS and basis pages are in Attachment 3.

II. Discussion of Proposed Changes

The changes to TS 3.4.A.7.c and 3.4.A.8.c propose verification of core spray pump/component operability in lieu of repetitive system testing when reduced core spray availability requirements are in effect. This change has little effect on equipment availability. Overall system reliability is demonstrated by its high success rate during regular surveillance testing. The proposed replacement of the frequent testing requirements during shutdown reduced availability conditions with a verification of operability is an acceptable method of ensuring system availability as adopted in the Improved Standard Technical Specifications when a redundant system train is inoperable.

Several changes to the Bases of Section 3.4 are included. Two of the changes are editorial in nature. The major change concerns the change from demonstration of operability to verification of operability. Finally, the capitalization of terms defined in Section 1.0 of the Technical Specifications, where they appear on TS pages affected by this license amendment request is purely administrative in nature and has no impact on existing requirements.

III. Safety Assessment

The proposed changes will not adversely impact safety. They do not involve hardware changes, operating parameters or affect system design bases.

Changing the operability demonstration via repetitive testing in TS 3.4.A.7.c and 3.4.A.8.c to verification via review of equipment status records provides adequate assurance of system availability. Core spray pump/component performance degradation is minimal due to the nature of its standby mode during plant operation and monthly testing requirements. Their reliability has been demonstrated historically by their high success rate of operability surveillance testing. Weekly testing (TS 3.4.A.7.c) or testing every 72 hours (TS 3.4.A.8.c) contributes to unnecessary component wear. Under the proposed change, the components to be relied upon during a period of reduced availability would be verified periodically.

The resultant reduction in testing eliminates unnecessary wear, which decreases the probability of equipment failure. The ability of core spray system components to perform their safety function in response to the postulated loss of coolant during shutdown conditions remains unchanged. The reduced testing requirements are consistent with the Improved Standard Technical Specifications for General Electric Boiling Water Reactors (NUREG 1433) and with similar changes already incorporated into the Oyster Creek Technical Specifications. In the SER accompanying Amendment 167, issued on December 21, 1993, the NRC agreed to eliminate demonstration of operability by testing in numerous instances "since the added assurance provided by such testing is not sufficient to justify the loss of safety function during the test".

IV. Information Supporting a Finding of No Significant Hazards Consideration

GPU Nuclear has concluded that the proposed changes to the TS do not involve significant hazards. In support of this determination, an evaluation of each of the three standards set forth in 10 CFR 50.92 is provided below.

1. The proposed TS changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS changes will not increase the probability of occurrence of an accident previously evaluated because they are not associated with accident initiators. The proposed changes are, however, associated with the requirements for accident mitigation features. The accident that the affected TS address is a loss of coolant from the reactor vessel when the plant is shutdown. The postulated accident could occur at any point subsequent to 24 hours after shutdown. It assumes that manual initiation of a core spray pump and related components or the fire protection system could be accomplished within 15 minutes. The analysis indicated that given those conditions the temperature of the fuel would remain well below 2200° F. In the Safety Evaluation Report supporting License Amendment 12, dated January 21, 1976, the NRC concurred with the analysis. The proposed changes do not affect the assumptions or conclusions of that analysis. Therefore, the proposed TS changes do not involve a significant increase in the probability of an accident previously evaluated.

The consequences of the shutdown loss of coolant accident previously evaluated are not increased because the TS changes do not degrade the ability of the accident mitigation system to perform its intended function. The proposed change to core spray pump/component operability verification versus demonstration in TS 3.4.A.7.c and 3.4.A.8.c provides an alternate means of determining equipment availability without reliance on frequent testing.

The capitalization of definitions is an administrative change and does not impact accident probability or consequences.

2. The proposed TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed TS changes are not associated with accident initiators. They are administrative changes that provide an alternate means of determining equipment availability with a reduced amount of testing.

The proposed TS changes do not involve the addition of any new plant structure, system or component (SSC). Similarly, the proposed TS changes do not involve physical changes to an existing SSC nor do they modify any current operating parameters. Providing an alternate means of determining equipment availability does not alter the functional capability of any accident mitigation system. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The proposed TS changes are not associated with accident initiators and do not introduce new SSCs. They are administrative changes that provide an alternate means of determining equipment availability with a reduced amount of testing without modifying any operating parameters. While the proposed changes are associated with the requirements for accident mitigation features, they do not degrade the ability of the accident mitigation system to perform its intended function. Administrative changes such as these do not impact safety margins. Therefore, the proposed TS change does not involve a reduction in a margin of safety.

V. Information Supporting an Environmental Assessment

An environmental assessment is not required for the proposed change since the proposed change conforms to the criteria for "actions eligible for categorical exclusion" as specified in 10 CFR 51.22(c)(9). The proposed change will have no impact on the environment. The proposed change does not involve significant hazards as discussed in the preceding section. The proposed change does not involve a significant change in the types or significant increase in the amounts of any effluents that may be released off-site.

In addition, the proposed change does not involve a significant increase in individual or cumulative occupational radiation exposure. In fact, reducing testing requirements will decrease the amount of occupational radiation exposure.

VI. Conclusion

The proposed changes to the TS, which relate to core spray system capability to mitigate a loss of coolant during shutdown conditions, have been reviewed in accordance with Section 6.5 of the Oyster Creek TS and it has been concluded there are no unreviewed safety questions. As discussed above, using the standards in 10 CFR 50.92, GPU Nuclear believes that there are no significant hazards involved with the proposed changes.

Attachment 2

Oyster Creek Technical Specification Change Request No. 275

Mark-up Revision to Technical Specifications

If two of the redundant active loop components become inoperable, the limits of Specification 3.4.A.3 shall apply.

5. During the period when one diesel is inoperable, the core spray equipment connected to the operable diesel shall be operable.
6. If Specifications 3.4.A.3, 3.4.A.4, and 3.4.A.5 are not met, the reactor shall be placed in the cold shutdown condition. If the core spray system becomes inoperable, the reactor shall be placed in the cold shutdown condition and no work shall be performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel.
7. If necessary to accomplish maintenance or modifications to the core spray systems, their power supplies or water supplies, reduced system availability is permitted when the reactor is:
 - (a) maintained in the cold shutdown condition or (b) in the refuel mode with the reactor coolant system maintained at less than 212°F and vented, and (c) no work is performed on the reactor vessel and connected systems that could result in lowering the reactor water level to less than 4'8" above the top of the active fuel. Reduced Core Spray System Availability is minimally defined as follows:
 - a. At least one core spray pump, and system components necessary to deliver rated core spray to the reactor vessel, must remain operable to the extent that the pump and any necessary valves can be started or operated from the control room or from local control stations.
 - b. The fire protection system is operable, and
 - c. These systems are ~~demonstrated~~ ^{verified} to be operable on a weekly basis.
8. If necessary to accomplish maintenance or modifications to the core spray systems, their power supplies or water supplies, reduced system availability is permitted when the reactor is in the refuel mode with the reactor coolant system maintained at less than 212°F or in the startup mode for the purposes of low power physics testing. Reduced core spray system availability is defined as follows:
 - a. At least one core spray pump in each loop, and system components necessary to deliver rated core spray to the reactor vessel, must remain operable to the extent that the pump and any necessary valves in each loop can be started or operated from the control room or from local control stations.
 - b. The fire protection system is operable and,
 - c. Each core spray pump and all components in 3.4.A.8a are ~~demonstrated~~ ^{verified} to be operable every 72 hours.

Attachment 3

Oyster Creek Technical Specification Change Request No. 275

Revised Technical Specification and Basis Pages

If two of the redundant active loop components become inoperable, the limits of Specification 3.4.A.3 shall apply.

5. During the period when one diesel is inoperable, the core spray equipment connected to the OPERABLE diesel shall be OPERABLE.
6. If Specifications 3.4.A.3, 3.4.A.4, and 3.4.A.5 are not met, the reactor shall be PLACED IN the COLD SHUTDOWN CONDITION. If the core spray system becomes inoperable, the reactor shall be PLACED IN the COLD SHUTDOWN CONDITION and no work shall be performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the TOP OF ACTIVE FUEL.
7. If necessary to accomplish maintenance or modifications to the core spray systems, their power supplies or water supplies, reduced system availability is permitted when the reactor is: (a) maintained in the COLD SHUTDOWN CONDITION (b) in the REFUEL MODE with the reactor coolant system maintained at less than 212°F and vented, and (c) no work is performed on the reactor vessel and connected systems that could result in lowering the reactor water level to less than 4'8" above the TOP OF ACTIVE FUEL. Reduced Core Spray System Availability is minimally defined as follows:
 - a. At least one core spray pump, and system components necessary to deliver rated core spray to the reactor vessel, must remain OPERABLE to the extent that the pump and any necessary valves can be started or operated from the control room or from local control stations.
 - b. The fire protection system is OPERABLE, and
 - c. These systems are verified to be OPERABLE on a weekly basis.
8. If necessary to accomplish maintenance or modifications to the core spray systems, their power supplies or water supplies, reduced system availability is permitted when the reactor is in the REFUEL MODE with the reactor coolant system maintained at less than 212°F or in the STARTUP MODE for the purposes of low power physics testing. Reduced core spray system availability is defined as follows:
 - a. At least one core spray pump in each loop, and system components necessary to deliver rated core spray to the reactor vessel, must remain OPERABLE to the extent that the pump and any necessary valves in each loop can be started or operated from the control room or from local control stations.
 - b. The fire protection system is OPERABLE and,
 - c. Each core spray pump and all components in 3.4.A.8a are verified to be OPERABLE every 72 hours.

Specification 3.4.A.4 allows continued operation with one component inoperable for a limited period of time. Each core spray loop contains redundant active components based upon Reference 1 or 5, as appropriate. Therefore, with the loss of one of these components, the system as a whole (both loops) can tolerate an additional single failure of one of its active components and still perform the intended function and meet 10 CFR 50.46 criteria. If a redundant active component fails, a fifteen day period is allowed for repairs, based on 1 out of 4 components being required. 3.4.A.4.b insures that the 1 out of 4 requirement is maintained.

Specification 3.4.A.5 ensures that if one diesel is out of service for repair, the core spray components fed by the other diesel must be OPERABLE. Since each diesel will provide power to components for both core spray loops, the required flow specified in the bases for Specification 3.1.A.1 will be met.

When the reactor is in the SHUTDOWN or REFUELING MODE and the reactor coolant system is less than 212°F and vented and no work is being performed that could result in lowering the water level to less than 4'8" above the core, the likelihood of a leak or rupture leading to uncovering of the core is very low. The only source of energy that must be removed is decay heat and one day after shutdown this heat generation rate is conservatively calculated to be not more than 0.6% of rated power. Sufficient core spray flow to cool the core can be supplied by one core spray pump or one of the two fire protection system pumps under these conditions. When it is necessary to perform repairs on the core spray system components, power supplies or water sources, Specification 3.4.A.7 permits reduced cooling system capability to that which could provide sufficient core spray flow from two independent sources. Manual initiation of these systems is adequate since it can be easily accomplished within 15 minutes during which time the temperature rise in the reactor will not reach 2200°F.

In order to allow for certain primary system maintenance, which will include control rod drive repair, LPRM removal/installation, reactor leak test, etc., (all performed according to approved procedure), Specification 3.4.A.8 requires the availability of an additional core spray pump in an independent loop. While this maintenance is being performed the likelihood of the core being uncovered is still considered to be very low. However, the requirement of a second core spray pump capable of full rated flow is specified. OPERABILITY of both core spray pumps will be verified every 72 hours by administrative check of appropriate plant records (e.g., surveillance records, inservice testing).

Specification 3.4.A.10 allows the core spray system to be inoperable in the COLD SHUTDOWN or REFUEL MODES if the reactor cavity is flooded; the reactor vessel head, spent fuel pool and equipment pool gates are removed; and a source of water supply to the reactor vessel is available. Water would then be available to keep the core flooded.

The relief valves of the automatic depressurization system enable the core spray system to provide protection against the small break in the event the feedwater system is not active.