



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

Docket No. 50-219

November 30, 1985

Mr. P. B. Fiedler
Vice President and Director
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

Dear Mr. Fiedler:

SUBJECT: REACTOR WATER LEVEL INSTRUMENTATION CHANNEL CHECK

Re: Oyster Creek Nuclear Generating Station

The Commission has issued the enclosed Amendment No. 95 to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station (Oyster Creek). This amendment is in response to your application dated September 30, 1985, as revised by letters dated November 7 and 16, 1985, and as supplemented by letters dated November 4, 8 and 14, 1985. The amendment was authorized by telephone on November 8, 1985, for only the shutdown reactor mode and on November 16, 1985, for the remaining reactor modes of operation.

This amendment authorizes changes to Items 3. and 4. of Table 4.1.1, "Minimum Check, Calibration, and Test Frequency For Protective Instrumentation," for Section 4.1, Protective Instrumentation of the Appendix A Technical Specifications (TS) for Oyster Creek. Specifically, these changes (1) revise the channel check for the low reactor water level instrumentation channels from daily for all the channels to daily for only the channels which have indication in the control room and (2) deletes the channel check for the low-reactor water level instrumentation channels. As you applied for, this is a one-time-only change which is effective only from November 8, 1985, to the restart from the Cycle 11 Refueling (Cycle 11R) outage. If this amendment is not changed by a future timely application, this amendment will revert to the previous requirement of a daily channel check for this reactor water level instrumentation at the time the reactor is made critical during the station restart from the Cycle 11R outage.

The staff reviewed the circumstances associated with your request and concluded that this change was needed to avoid a delay in the restart of Oyster Creek from the Cycle 10M outage. The staff also concluded that you provided a sufficient basis for finding that the situation could not have been avoided by prior application. Therefore, in accordance with 10 CFR 50.91(a)(5), a valid emergency existed.

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Mr. P. B. Fiedler

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A Notice of Issuance of Amendment to License and Final No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action will be published in the Commission's biweekly publication notice in the Federal Register. A copy of our related Safety Evaluation is also enclosed.

Sincerely,

ORIGINAL SIGNED BY

John A. Zwolinski, Director
BWR Project Directorate #1
Division of BWR Licensing

Enclosures:

1. Amendment No. 95 to License No. DPR-16
2. Safety Evaluation

cc w/enclosures:
See next page

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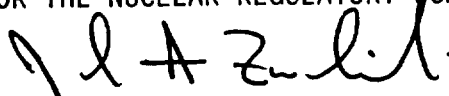
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Provisional Operating License No. DPR-16 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95, are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment became effective November 8, 1985 for the shutdown reactor mode and November 16, 1985 for the remaining reactor modes of operation.

FOR THE NUCLEAR REGULATORY COMMISSION



John A. Zwolinski, Director
BWR Project Directorate #1
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 30, 1985.

Mr. P. B. Fiedler
Oyster Creek Nuclear Generating Station

Oyster Creek Nuclear
Generating Station

cc:

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

GPU NUCLEAR CORPORATION

AND

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 95
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by GPU Nuclear Corporation and Jersey Central Power and Light Company (the licensees) dated September 30, 1985, as revised by letters dated November 7 and 16, 1985, and as supplemented by letters dated November 4, 8 and 14, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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ATTACHMENT TO LICENSE AMENDMENT NO. 95
PROVISIONAL OPERATING LICENSE NO. DPR-16
DOCKET NO. 50-219

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain vertical lines indicating the area of change.

REMOVE

4.1-5

INSERT

4.1-5

**TABLE 4.1.1
MINIMUM CHECK, CALIBRATION AND TEST FREQUENCY FOR PROTECTIVE INSTRUMENTATION**

<u>Instrument Channel</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks (Applies to Test and Calibration)</u>
1. High Reactor Pressure	N A	1/3 mo.	Note 1	By application of test pressure
2. High Drywell Pressure (Scram)	N A	1/3 mo.	Note 1	By application of test pressure
3. Low Reactor Water Level	Note 3	1/3 mo.	Note 1	By application of test pressure
4. Low-Low Water Level	Note 3	1/3 mo.	Note 1	By application of test pressure
5. High Water Level in Scram Discharge Volume	N A	1/3 mo.	Note 1	By varying level in switch columns
6. Low-Low-Low Water Level	N A	1/3 mo.	Note 1	By application of test pressure
7. High Flow in Main Steamline	1/d	1/3 mo.	Note 1	By application of test pressure
8. Low Pressure in Main Steamline	N A	1/3 mo.	Note 1	By application of test pressure
9. High Drywell Pressure (Core Cooling)	1/d		Note 1	By application of test pressure
10. Main Steam Isolation Valve (Scram)	N A	N A	1/3 mo.	By exercising valve
11. APRM Level	N A	1/3 d	N A	Output adjustment using operational type heat balance during power operation
APRM Scram Trips	Note 2	1/mk.	1/mk.	Using built-in calibration equipment during power operation
12. APRM Rod Blocks	Note 2	1/3 mo.	1/mo.	Upscale and downscale
13.a. High Radiation in Main Steamline	1/s	1/3 mo.	1/mk.	Using built-in calibration equipment during power operation
b. Sensors for 13(a)	N A	Each refueling outage	N A	Using external radiation source

NOTE 1: Initially once/mo, thereafter according to Fig. 4.1.1, with an interval not less than one month nor more than three months.

NOTE 2: At least daily during reactor power operation, the reactor neutron flux peaking factor shall be estimated and the flow-referenced APRM scram and rod block settings shall be adjusted, if necessary, as specified in Section 2.3, Specifications (1) (a) and (2) (a).

NOTE 3: A daily channel check will be performed using RE 21A and B to verify reactor water level instrumentation header operability. This is valid from November 8, 1985 to the restart from the IIR outage. Otherwise, a daily channel check is required.

(B165X)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 95 TO PROVISIONAL OPERATING LICENSE NO. DPR-16

GPU NUCLEAR CORPORATION AND
JERSEY CENTRAL POWER & LIGHT COMPANY
OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated September 30, as revised by its letters dated November 7 and 16, 1985, and supplemented by its letters dated November 4, 8 and 14, 1985, GPU Nuclear Corporation (the licensee) requested an emergency amendment to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station (Oyster Creek). The licensee requested the amendment to be issued under emergency conditions in its letter dated November 4, 1985, to avoid a delay in the restart of Oyster Creek from the Cycle 10M outage. This amendment would authorize changes to Items 3. and 4. of Table 4.1.1, "Minimum Check, Calibration, and Test Frequency For Protective Instrumentation," for Section 4.1, Protective Instrumentation of the Appendix A Technical Specifications (TS) for Oyster Creek. Specifically, these changes (1) revise the channel check for the low reactor water level instrumentation channels from daily for all the channels to daily for only the channels which have indication in the control room and (2) deletes the channel check for the low-low reactor water level instrumentation channels.

As the licensee applied for, this amendment is a one-time-only change to the TS which is effective only from November 8, 1985, to the restart from the Cycle 11 Refueling Cycle (Cycle 11R) outage. The staff authorized this amendment by telephone on November 8, 1985, for only the shutdown reactor mode and on November 16, 1985, for the remaining reactor modes of operation. If this amendment is not changed by a future timely application by the licensee, this amendment will revert to the previous requirement of a daily channel check for this reactor water level instrumentation at the time the reactor is made critical during the station restart from the Cycle 11R outage. The Cycle 11R outage is expected to begin in April 1986 and last for 6 months.

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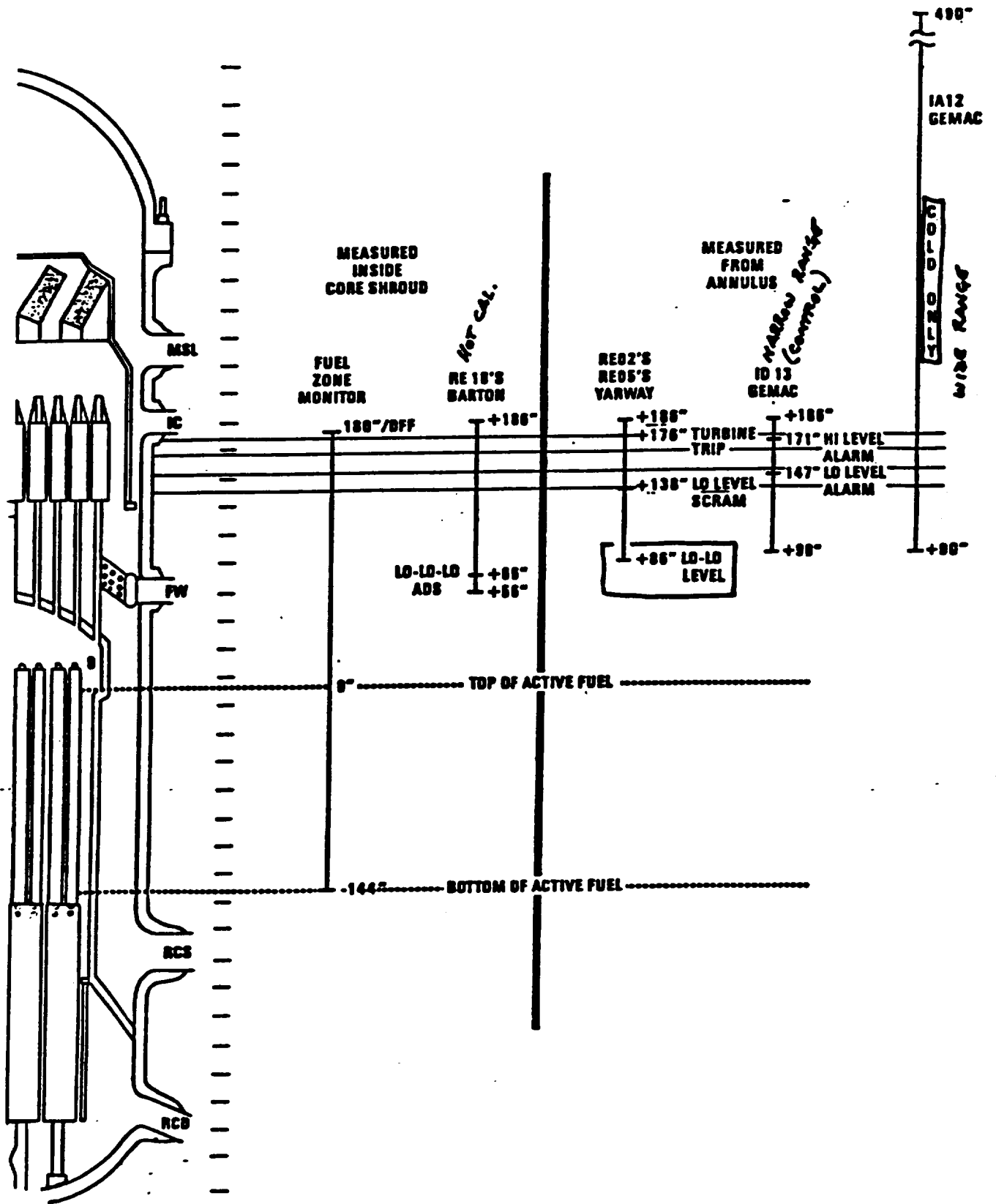
A Notice of Consideration of Issuance of Amendment to License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the September 30, 1985 application was published in the Federal Register on October 23, 1985 (50 FR 43027). No public comments or requests for hearing were received as of November 18, 1985.

2.0 DISCUSSION

Oyster Creek was in cold shutdown in a special maintenance outage from October 18 to November 16, 1985. This outage was to complete, among other items, equipment changes required to comply with the Environmental Qualification rule (10 CFR 50.49) which requires compliance by November 30, 1985. Among these changes is the replacement of several reactor water level instrument transmitters.

The water level instrumentation system at Oyster Creek consists of five types of level channels, each of which includes redundant channels as shown in the following figure.

The first type is the "fuel zone" set of monitors which cover the range of +180 inches to -144 inches (where "zero" for all channels is the top of the active fuel). This type channel provides indication in the control room but does not provide any automatic actions. The second type is the RE-18 set of Barton instruments which cover the range of +185 inches to +55 inches (above the top of the active fuel). This type has no indication in the control room but provides automatic safety actions at the low-low-low setpoint (+55 inches). The third type includes the RE-02 set of Yarway instruments which cover the range of +185 inches to +86 inches (above the top of the active fuel). This type has local indication and provides automatic safety actions at the low-low setpoint (+86 inches). This type also includes the RE-05/19 set of Yarway instruments which covers the same range, has control room and local indication, and provides automatic safety actions at the high level setpoint (+176 inches) and at the low level setpoint (+138 inches). The instrumentation channels with local indication have the switches which provide the automatic safety actions at the low and low-low setpoints. The channels with control room indication do not have switches. The fourth type is the ID-13 narrow range GE/MAC instruments which are "hot calibrated" to cover the range of +185 inches to +90 inches (above the top of the active fuel). This type has control room indication, has automatic control function, and is used primarily during normal power operation. This type also includes an alarm at a high level value of +171 inches and at a low level value of +147 inches, where the nominal operating level is +165 inches. The fifth type is the ID-12 wide range GE/MAC instruments which are "cold calibrated" to cover the range of +490 inches to +90 inches (above the top of the active fuel).



GPU NUCLEAR CORPORATION OYSTER CREEK NUCLEAR GENERATING STATION UPDATED FINAL SAFETY ANALYSIS REPORT	REACTOR WATER LEVEL INSTRUMENTATION	
	REV. 0, 12/84	FIGURE 7.6-3

The licensee's planned equipment changes were conducted with the plant in cold shutdown and included replacing the transmitters and rerouting of the hydraulic sensing lines within the instrument racks for all the channels in the first and third types presented above. In replacing the transmitters in the third type presented above, the eight switches installed for low and low-low reactor water level do not have indicating gauges as the previous switches had. The action by the instrumentation channels at low reactor water level is to scram the reactor and trip the turbine. The action at low-low reactor water level is to initiate engineered safety feature systems as core spray, containment spray, reactor building isolation, etc.

The staff review of the modification of this equipment was the subject of a previous amendment to the TS which was authorized on October 18, 1985. This is Amendment No. 91 dated November 19, 1985. By letter dated November 4, 1985, the licensee stated that it expected to complete this modification by November 10, 1985, and needed the application to revise the channel check for this equipment to be approved by this date so this equipment could be returned to service in time for plant restart to begin November 16, 1985.

3.0 EVALUATION

The TS Table 4.1.1 requires that a daily channel check be performed on the low and low-low reactor water level instrumentation channels. A channel check is defined in the TS (Definition 1.19A) as a qualitative determination of acceptable operability by observation of channel behavior during operation. Switches with indicated gauges in these channels were replaced in the Cycle 10M outage by switches without indicating gauges.

The channel check is one of three required tests on the instrumentation channels listed in TS Table 4.1.1. The other two tests are channel calibration and channel functional test: channel calibration is the adjustment of the channel output such that the channel responds with the necessary range and accuracy. Channel functional test is the injection of a simulated signal to verify the operability of the channel including alarms and/or trip initiating functions. The frequency of channel calibration and channel functional test for the low and low-low reactor water level instrumentation channels are not being changed in this action. The channel calibration and functional test are conducted only on the switches with the switches valved out of the hydraulic sensing lines.

The automatic actions which are taken by the low and low-low reactor water level instrumentation channels at the low and low-low setpoints are not being changed by this action.

The channel check for the reactor water level instrumentation switches with indicating gauges would indicate that these channels are still connected to the reactor vessel, are operable and should be indicating water level properly. This could show if the piping for the instrument channel had become plugged, if the hydraulic sensing lines had failed or if the electrical cables had been damaged. Therefore, the channel check is important.

The eight instrumentation channels which are the subject of this action are part of the Yarway Reactor Water Level Instrumentation System. This is the third type of water level instrumentation discussed in Section 2.0 above. This System is two completely separate level instrumentation systems so that one system could fail without causing the failure of the other. Of the instrumentation channels involved in this action, half are in each system and are connected to a manifold in each system. This system has eight channels with switches and two without switches. These eight switches provide the automatic safety action at low and low-low reactor water level. These eight channels now have no indication but the two channels without switches - now labelled RE-21A and RE-22B - still have control room indication. One of the two channels that will still have an indicating gauge in the control room will be connected to each manifold. Therefore, the channel check on these two indicating gauges will perform the purposes of a channel check on the instrumentation channels from the reactor vessel to the two manifolds. The channel check can not be done on the channels from the manifold to the switches. At the request of the staff, the licensee amended, by letter dated November 7, 1985, its application of September 30, 1985, to propose a daily channel check for channels RE-21A and RE-218.

The licensee has replaced all eight of the low and low-low reactor water instrumentation channel indicating switches with non-indicating switches. These new switches do not have indicating gauges available so that a channel check may be made on the instrumentation channel. The staff reviewed the proposed changes against the guidance provided in the Standard Review Plan and the General Design Criteria (notably GDC 21). An instrumentation channel for which a channel check cannot be performed is within the staff's acceptance criteria with respect to the reactor protection system and engineered safety features systems as specified in the Standard Review Plan, Section 7.2, Reactor Trip System, and Section 7.3, Engineered Safety Features Systems, and in the Integrated Plant Safety Assessment Report (IPSAR, NUREG-0822 dated January 1983) for Oyster Creek for the staff's Systematic Evaluation Program. The Institute of Electrical and Electronic Engineers (IEEE) Standard 270-1971 allows for instrumentation channels to not have a channel check. In addition, other protective instrument channels in TS Table 4.1.1 lack the capability of a channel check.

Although an instrumentation channel for which a channel check cannot be performed is within acceptable criteria and a daily channel check would be made from the sensors to the manifolds, the staff did not consider this sufficient to authorize the licensee's proposed amendment in its letter dated November 7, 1985, without any additional restrictions. This is because (1) the design basis or licensing basis for Oyster Creek was being changed by the proposed amendment and (2) General Design Criterion (GDC) 21, Protective System Reliability, of Appendix A to 10 CFR Part 50 states that the protection system shall be designated for inservice testability commensurate with the

safety functions to be performed. The low and low-low reactor water level instrumentation are important, safety grade instrumentation for Boiling Water Reactors (BWR) and do not have any safety grade instrumentation which would be considered an equivalent, backup instrumentation to perform the same safety functions that they perform. Therefore, the channel check for operability of this instrumentation is important and the fact that this instrumentation meets the staff's applicable Standard Review Plans is not sufficient in itself for the staff to accept the licensee's proposed amendment.

Based on its interpretation of GDC 21, the staff authorized the licensee's proposed amendment as submitted in its letter dated November 7, 1985, only for the shutdown reactor mode. This would allow the licensee to restore the reactor water level instrumentation to service and begin the process to restart the station on November 16, 1985, and yet keep the reactor in a safe condition until the staff resolved its concerns on this instrumentation not having a channel check.

The staff discussed its concerns about (1) the assurance that the switches are returned to service properly after surveillance, tests and checks of the switches, (2) the assurance that the switches have regained communication with the reactor vessel after being returned to service and (3) the possibility of losing this communication between surveillance, tests or checks of the switches and not knowing of this loss without the channel check on the switch being done. This was discussed with the licensee by telephone on November 12, 1985, and the licensee submitted its supplementary letter dated November 14, 1985. During the surveillance, tests or checks on the switches, the switches are valved out of the instrumentation hydraulic sensing lines to do the surveillance, test or check and thus they do not then communicate with the reactor vessel. Returning the switches to service is the realignment of the valve lineup so that the switches communicate with the reactor vessel. In its November 14, 1985 letter, the licensee provided an explanation of its actions that assure this instrumentation is returned to service properly without a channel check after function tests, surveillances or calibration. This includes the requirement in the procedures controlling the instrumentation valve lineups for surveillances, tests and calibration that a "hands-on" independent verification is made to assure that the switches are valved in properly and returned to service properly. After review of this information, the staff concluded that this level of administrative control addressed the staff's concern (1) discussed above but did not address concerns (2) and (3), and was not an additional restriction on this instrumentation because the licensee is presently required to independently verify the return of safety instrumentation to service and was not sufficient for the staff to approve the proposed amendment.

On November 15, 1985, the staff requested that the licensee commit to the following:

1. This is a one-time-only amendment effective from November 8, 1985, to the restart of the Cycle 11R outage with the channel check for only channels RE-21A and RE-21B reverting to daily channel check for all channels after restart from Cycle 11R.

2. An additional level of administrative control be added to the existing procedures on returning the instrumentation switches to service which will show that the switches communicate with the reactor vessel. This addresses the staff's concern (2) discussed above.
3. Report promptly to the staff any loss of operability of this reactor water level instrumentation.
4. Before the commencement of the Cycle 11R outage, provide a justification of the existing instrumentation channels addressing the staff concerns about the checks for operability of the channels commensurate to its safety function or, install in Cycle 11R means for a channel check such as the General Electric analog system which the licensee committed to in Section 4.28 of the Integrated Plant Safety Assessment Report (NUREG-0822 dated January 1983) for Oyster Creek. This will address the staff's concern (3) discussed above.

By letter dated November 16, 1985, the licensee committed to the items listed above and submitted a new page revising its amendment request. The staff concludes that the above commitments are sufficient in the short term, November 8, 1985, to the restart of the Cycle 11R outage, for the staff to conclude that the subject instrumentation channels meet GDC 21. The reactor will be in cold shutdown from the commencement of the Cycle 11R outage in April 1986 to the restart from the outage.

The indicating gauges will be removed from local instrumentation panels and not from the control room. Therefore, the control room operators will not be affected by the modification to the instrumentation and the proposed amendment.

Based on the above, the staff concludes that the proposed amendment of November 16, 1985, to revise the TS requirements on the channel check for the low and low-low reactor water level instrumentation channels is acceptable. The frequency of the channel check for the channels (i.e. RE-21A and B) with indicating gauges is not being changed by this action.

3.1 Findings of Emergency Warranting An Amendment Without Notice

The licensee shut down Oyster Creek on October 18, 1985, to begin the Cycle 10M outage. This outage was scheduled to last a month to complete the remaining environmental qualification modifications of electrical equipment important to safety. These modifications are required to be completed by November 30, 1985, per 10 CFR 50.49(g) and the staff's letter of March 30, 1985.

One modification to be completed in this outage was to replace the low and low-low reactor water level instrumentation. This modification must be completed and the instrumentation declared operable and returned to service before the station can restart because the TS require this equipment to be operable in the restart and run reactor modes. This instrumentation can not be declared operable and returned to service with the existing TS because

the existing TS require all these instrumentation channels to have a daily channel check and, after the modifications are completed, this instrumentation will not have a channel check. This is for the shutdown reactor mode which the station was in when the licensee submitted its letter of November 4, 1985. Therefore, without the proposed TS change, the licensee can not return this instrumentation to service without being in violation of the TS and, thus, can not restart the station.

In its letters dated November 4 and 7, 1985, the licensee stated that it needed the proposed TS change by November 10, 1985, to restart the station by November 16, 1985. The licensee stated that 6 days are needed after the instrumentation is operable and returned to service to complete other necessary work so that the restart can begin on November 16, 1985. This instrumentation is logic inputs to several engineered safety features systems and the 6 days are needed to restore these systems to that required in the TS prior to restart. The licensee stated that the need for the proposed TS change became apparent on September 16, 1985, during the process of planning for the physical work to replace the instruments. The initial application of September 30, 1985, was submitted to the staff. The need to have the proposed TS approved by November 10, 1985, was determined in early November after the outage began because the outage was being completed earlier than scheduled and the station was then expected to restart earlier than originally scheduled.

The staff has reviewed the circumstances associated with the licensee's request and has discussed this with the NRC Resident Inspector at Oyster Creek. The staff and the Inspector agreed with the licensee that the station could not restart without the proposed change to Table 4.1.1 for this instrumentation. The requested amendment which is the subject of this safety evaluation was, therefore, needed to avoid a delay in the scheduled restart of Oyster Creek and thus was an emergency amendment. The staff has also concluded that the licensee has provided a sufficient basis for finding that the emergency situation could not have been avoided by prior application. Therefore, in accordance with 10 CFR 50.91(a)(5), a valid emergency existed.

3.2 Final No Significant Hazards Consideration Determination

TS Table 4.1.1 requires that a daily channel check be performed on the low reactor water level and low-low reactor water level instrument channels. Channel check is defined in the TS (Definition 1.19A) as a qualitative determination of acceptable operability by observation of channel behavior during operation. Switches in these two channels were equipped with indicating gauges; however, during the Cycle 10M outage, these non-environmentally qualified switches were replaced with qualified switches. All of these qualified switches are not equipped with indicating gauges. Therefore, a channel check could not be made on all of these channels after the new switches were installed.

The non-environmentally qualified switches were replaced by qualified switches to meet the schedule and technical requirements of 10 CFR 50.49(g) and the staff's letter of March 30, 1985, to have all electrical equipment at Oyster Creek important to safety environmentally qualified by November 30, 1985.

The new switches perform the same safety function as the switches they replaced. These new switches without indicating gauges are similar to switches in other protective instrument channels listed in Table 4.1.1 which do not allow a channel check of the instrument channel. These other channels have an "NA" (not applicable) listed under the column for channel check in Table 4.1.1.

The daily channel check does not verify the channels' proper response or that it responds within acceptable range and accuracy to fulfill its safety functions. The channel check is the qualitative determination of acceptable operability of the channel by comparing, in this case, the existing channel switches indicating gauges to each other. Tests of proper functioning of an instrument channel are performed by the channel calibration and channel test which are also listed in Table 4.1.1. The frequency for channel calibration and channel test would not be changed by the licensee's proposed action. The instrumentation channels are returned to service after surveillance, testing or calibration by a "hands-on" independent verification of valve lineup.

An instrumentation channel for which a channel check cannot be performed is within acceptable criteria with respect to the reactor protection system as specified in both the Standard Review Plan, Section 7.2, Reactor Trip System, and Section 7.3, Engineered Safety Feature Systems, and in the Integrated Plant Safety Assessment Report (NUREG-0822 dated January 1983) for Oyster Creek for the staff's Systematic Evaluation Program. In addition, similar protective instrument channels to the low reactor water level and low-low reactor water level in the reactor protective system and listed in TS Table 4.1.1 lack the capability of a channel check.

Of the instrumentation system involved in this action, two channels will still have an indicating gauge. One of each of these two switches is connected to each of the two manifolds in the subsystems of the overall reactor water level instrumentation system. Therefore, a channel check will still be made on the instrumentation system from the reactor vessel to the two manifolds.

The indicating gauges being removed will be removed from local instrumentation panels and not from the control room. Therefore, the control room operators will not be affected by this modification to the instrumentation and the proposed action.

This action also does not affect the instrumentation channels of high drywell pressure, low-low-low reactor water level, low pressure in main steamline and high flow in main steamline which would respond to events causing loss of water from the reactor. Also the operators have three other reactor water level indicating systems (GE/MACs and fuel zone) which would show the reactor water level. The narrow range GEMAC has an alarm at low reactor water level but none of the three system will initiate any action on low and low-low reactor water level. The alarm would cause the operators to manually scram the reactor if the instrumentation channels did not scram the reactor at low water level. The operators would then be aware of this situation and act in the appropriate manner if the water level reached the low-low level and the instrumentation channels did not act properly.

Based on the above, the staff concluded that, for the shutdown reactor mode only, the proposed channel check on RE-21A and RE-21B of the licensee's letter of November 7, 1985 on the modified low and low-low reactor water level instrumentation was less than but sufficiently equivalent to the previous condition of a daily channel check on this instrumentation. Therefore, for the authorization of November 8, 1985, the staff concluded the proposed TS amendment of November 7, 1985, meets the following criteria of 10 CFR 50.92(c): (1) it does not involve a significant increase in the probability or consequences of a previously evaluated accident, (2) it does not create the possibility of a new or different kind of accident from any accident previously evaluated and (3) it does not involve a significant reduction in a margin of safety. Based on this, the staff concluded that the requested action of November 7, 1985, did not involve a significant hazards consideration.

With the letter of November 16, 1985, the licensee further committed to an additional level of administrative control on returning the switches to service from any checks or tests which would show that the switches actually communicated with the reactor vessel, committed to report promptly any loss of operability of the low and low-low reactor water level instrumentation and agreed to the proposed amendment being a one-time-only amendment which would be effective only from November 8, 1985, to the restart of Cycle 11R outage. The Cycle 11R outage is expected to begin April 12, 1986 and end 6 months later in October 1986. With these additional items, the staff concludes that the proposed action of November 16, 1985, is less than but sufficiently equivalent to the daily channel check for all these switches for all the reactor modes. Therefore, for the authorization of November 16, 1985, the staff concludes the proposed action of November 16, 1985, meets the same three criteria of 10 CFR 50.92(c) listed above and, therefore, does not involve a significant hazards consideration.

3.3 State Consultation

In accordance with the Commission's regulations, consultations were held with the State of New Jersey, Bureau of Radiation Protection, by telephone on November 14 and 18, 1985. These consultations were after the staff's authorizations of November 8 and 16, 1985. Prior to these dates, the NRC Project Manager had discussions on this proposed amendment with the staff of the Bureau of Radiation Protection on several occasions after October 24, 1985 to keep the State up-to-date with the staff's evaluation. The State of New Jersey stated on both dates that it was in agreement with the licensee's proposed amendment.

The staff published a notice of the application of September 30, 1985, in the Federal Register on October 23, 1985 (50 FR 43027). No public comments or requests for hearing were received as of November 18, 1985.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the use of facility components located within the restricted area as defined in 10 CFR Part 20 and a change to the surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final finding that this amendment involves no significant hazards consideration. Accordingly, this 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 this amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) the amendment does not (a) significantly increase the probability or consequences of an accident previously evaluated, (b) increase the possibility of a new or different kind of accident from any previously evaluated or (c) significantly reduce a safety margin and, therefore, the amendment does not involve 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.

5.0 ACKNOWLEDGEMENT

This evaluation was prepared by R. Scholl and J. Donohew.

Dated: November 30, 1985.