GPU NUCLEAR CORPORATION
OYSTER CREEK NUCLEAR GENERATING STATION

Provisional Operating
License No. DPR-16

Technical Specification
Change Request No. 185
Docket No. 50-219

Applicant submits, by this Technical Specification Change Request No. 185 to the Oyster Creek Nuclear Generating Station Technical Specifications, a change to pages 1.0-5, 1.0-6, and 1.07.

By _____
E. E. Fitzpatrick
Vice President and Director
Oyster Creek

Sworn and Subscribe to before me this 2nd day of March, 1990.

Diana M. DeBlasio
A Notary Public of NJ

DIANA M. DeBLASIO
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires 6.5.91

TSCR185

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
) Docket No. 50-219
GPU Nuclear Corporation)

CERTIFICATE OF SERVICE

This is to certify that a copy of Technical Specification Change Request No. 185 for Oyster Creek Nuclear Generating Station Technical Specifications, filed with the U.S. Nuclear Regulatory Commission on March 2, 1990 has this day of March 2, 1990 , been served on the Mayor of Lacey Township, Ocean County, New Jersey by deposit in the United States mail, addressed as follows:

The Honorable Debra Madensky
Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

By _____
E. E. Fitzpatrick
Vice President and Director
Oyster Creek

OYSTER CREEK NUCLEAR GENERATING STATION
PROVISIONAL OPERATING LICENSE NO. DPR-16
DOCKET NO. 50-219
TECHNICAL SPECIFICATION CHANGE REQUEST NO. 185

Applicant hereby requests the Commission to change Appendix A to the above captioned license as below, and pursuant to 10CFR50.91, an analysis concerning the determination of no significant hazards consideration is also presented:

1.0 **SECTIONS TO BE CHANGED**

License Condition 2.C.7, Technical Specification Sections 1.12, Table 4.1.1 Items 18, 20, 25, 27.a, 28.a, 28.b, Table 4.1.2 Item 13, 4.2.A, 4.2.C.1, 4.4.B.1, 4.5.J.5.B(4), 4.5.K.2, 4.7.A.3, 4.7.B.3, 4.8.A.2, 6.15.2(3).

2.0 **EXTENT OF CHANGE**

License Condition 2.C.7 is revised to specify that the core spray sparger and repair assemblies inspections shall be performed at intervals not to exceed 20 months in lieu of each refueling outage. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Technical Specification Definition 1.12, REFUELING OUTAGE, is revised to specify that refueling outage tests or surveillances shall be performed at least once per 24 months. The existing provision, which allows refueling outage surveillances to be postponed to the next regularly scheduled outage when refueling outages occur within 8 months of the end of the previous refueling outage, is removed. The asterisked footnote is no longer applicable and is removed.

Table 4.1.1 Items 18, 20, 25 and 27.a are revised to specify that calibration and/or test of Condenser Low Vacuum, High Temperature Main Steamline Tunnel, Recirculation Loop Flow, and Scram Discharge Volume (Rod Block) - Water Level High Instrument channels, respectively, shall be performed once per 20 months in lieu of each refueling outage. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Table 4.1.1 Items 28.a and 28.b are revised to extend the Loss of Power Instrument Channel calibrations from once per 18 months to once per 24 months consistent with the 24 month plant operating cycle.

Table 4.1.2 Item 13 are revised to specify that the Containment Spray Trip System Test and the Containment Vent and Purge Isolation Trip System Test be performed once per 20 months in lieu of each refueling outage. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Sections 4.2.A and 4.2.C.1 are clarified to specify that the shutdown margin demonstration and control rod scram time tests be performed at an interval not to exceed 20 months. This change requires that these surveillances be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Section 4.5.J.5.B(4) is clarified to specify that the drywell to suppression chamber leak rate test be performed at intervals not to exceed 20 months. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months as justification for extension to 24 months is not provided. This is considered an editorial change.

Section 4.4.B.1 is clarified to specify that the Automatic Depressurization System valve operability test be performed at intervals not to exceed 20 months. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Section 4.5.K.2 is clarified to specify that the Standby Gas Treatment System differential pressure test for Reactor Building integrity be performed at intervals not to exceed 20 months. This change requires that this surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Section 4.7.A.3 is revised to extend the diesel generator inspection frequency from at least once per 18 months to at least once per 24 months consistent with the 24 month plant operating cycle.

Section 4.7.B.3 is revised to extend the station battery capacity tests from at least once per 18 months to at least once per 24 months consistent with the 24 month plant operating cycle.

Section 4.8.A.2 is clarified to specify that the Isolation Condenser System automatic actuation and functional test shall be performed at intervals not to exceed 20 months. This change requires that this surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

Section 6.15.2(3) is revised to specify that the Reactor Water Cleanup System leak test to demonstrate integrity outside containment shall be performed at an interval not to exceed 20 months in lieu of refueling cycle intervals. This change requires that the surveillance be performed at the currently defined refueling outage interval of 20 months since justification for extension to 24 months is not provided. This is considered an editorial change.

3.0 CHANGES REQUESTED

The requested changes are shown on the attached Technical Specification pages; Provisional Operating License Page 4, Technical Specification Pages 1.0-2, 4.1-7, 4.1-8, 4.1-9, 4.2-1, 4.4-1, 4.5-6, 4.7-1, 4.7-2, 4.8-1, 6-16.

4.0 DISCUSSION

The purpose of this Technical Specification change is to revise the Technical Specifications to accommodate implementation of the 24-month plant refueling cycle by changing the surveillance interval for Technical Specification surveillance requirements that are generally performed during a refueling outage. The following discussion supports the Technical Specification changes identified in Section 3.0 above. The discussion also provides the supporting justification for the component or system surveillance requirements which are specified on a refueling outage basis and are therefore being extended to at least once per 24 months by the proposed change to the Technical Specification refueling outage definition in Section 1.12. Included in this discussion are the following Technical Specification surveillance history evaluations completed to date:

Table 4.1.1	Item 13.b	High Radiation in Main Steamline - instrument channel sensor calibration
Table 4.1.1*	Item 15	High Radiation on Air Ejector Off-Gas - instrument channel calibration/test.
Table 4.1.1	Item 20	High Temperature Main Steamline Tunnel - instrument channel test
Table 4.1.1	Item 27.b	Scram Trip Bypass instrument channel test
Table 4.1.1 *	Item 28.a	4.16 KV Emergency Bus Undervoltage (Loss of Voltage) instrument channel calibration
Table 4.1.1 *	Item 28.b	4.16 KV Emergency Bus Undervoltage (Degraded Voltage) instrument channel calibration
Table 4.1.1	Item 29	Drywell High Radiation instrument channel calibration/test
Table 4.1.2	Item 3	Containment Spray Trip System Test
Table 4.1.2	Item 4	Automatic Depressurization Trip System Test
Table 4.1.2	Item 5	MSIV Closure Trip System Test
Table 4.1.2	Item 6	Core Spray Trip System Test
Table 4.1.2	Item 7	Primary Containment Isolation Trip System Test
Table 4.1.2	Item 9	Isolation Condenser Actuation Trip System Test

Table 4.1.2	Item 12	Air Ejector Offgas Line Isolation Trip System Test
4.2.E.3*		Standby Liquid Control System Functional Test
4.2.H		Scram Discharge Volume Drain and Vent Valve Operability Test
4.3.D		Reactor Coolant System Visual Examination
4.3.G		Primary Coolant System Pressure Isolation Valve Leak Test
4.4.A.1		Core Spray System Pump Operability Test
4.4.B.2		Automatic Depressurization System Automatic Actuation Test
4.4.C.1		Containment Cooling System Pump Operability Test
4.4.D.1		Emergency Service Water System Pump Operability Test
4.4.E.1		Control Rod Drive Hydraulic System pump operability
4.4.F.1		Fire Protection System pump and isolation valve operability
4.5.E*		Type "B" and "C" Local Leak Rate Test (LLRT)
4.5.J.1		Containment Isolation Valve Automatic Closure Test
4.5.J.4.b		Reactor Building to Suppression Chamber Vacuum Breakers test and instrument calibration
4.5.J.5.b		Suppression Chamber - Drywell Vacuum Breakers Test, position indication and alarm test and calibration, and inspection
4.5.O		Instrument Line Flow Check Valve Test
4.5.P.2		Suppression Chamber interior visual inspection

4.7.A.2 & A.3*		Diesel Generator start and load test, automatic start and sequence timer test, inspection, fuel supply check and starting batteries test/monitoring
4.7.A.5 & B.3*		Station Battery capacity tests and low voltage communicator operability verification
4.8.A.4.a		Isolation Condenser isolation valve visual inspection and external leakage check
4.12.I		Alternate Shutdown Monitoring Instrumentation
Table 4.13-1	Item 5	Containment High Range Radiation Monitor
4.17		Control Room Heating, Ventilating, and Air-Conditioning System
6.15*		Core Spray, Containment Spray, Isolation Condenser and Shutdown Cooling System Leak Tests

*Note: The existing surveillance interval for these items will expire prior to the current scheduled 13R refueling outage date. Priority review for these items is requested to avoid the need for an emergency Technical Specification Change Request.

The evaluations of the past surveillance histories was completed in 1988. Each evaluation considered the historical surveillance data available at that time. As a result the various system or equipment evaluations are based on historical data and operating experience derived over different time periods. In all cases, the historical surveillance data that was available is sufficient to demonstrate reliable operation as described in the detailed discussions below.

Change No. 1 Technical Specification Definition

Technical Specification Definition 1.12, REFUELING OUTAGE, is revised to specify that refueling outage testing and surveillances shall be performed at least once per 24 months. This change is needed to provide consistency between the Technical Specification definition of refueling outage interval and the 24 month plant operating cycles. This change results in extending all refueling outage based Technical Specification Surveillances, which have been appropriately evaluated, from the current maximum allowed duration of 20 months to at least once per 24 months. As stated above, all affected surveillance extensions are supported herein or are being revised to indicate the existing 20 month interval until evaluations of these components/systems is completed. This revision to Definition 1.12 would allow the existing 25% surveillance extension to be periodically applied to accommodate the length of a fuel cycle for surveillances that are performed at each refueling outage and are specified with a fuel cycle length surveillance interval. The 25% allowable surveillance extension is not intended to be used repeatedly and is provided to facilitate surveillance scheduling, and is therefore not considered coincident with the surveillance interval duration extensions from 20 to 24 months. The existing provision which allows refueling outage surveillances to be postponed to the next

regularly scheduled outage when refueling outages occur within 8 months of the end of the previous refueling outage is removed. This provision will not be utilized and the removal is administrative in nature. The asterisk footnote is also deleted since it is applicable prior to Cycle 10 refueling outage only. OCNGS is currently operating in Cycle 12. This is an editorial change.

Change No. 2 Protective Instrumentation

1. Technical Specification Table 4.1.1 Item 13.b, High Radiation in Main Steamline instrument channel sensor calibration is currently specified to be performed each refueling outage. The purpose of this test is to verify that detector sensitivity to a known radioactive source has not been degraded. This instrumentation, which is part of the Main Steam Line Monitoring Subsystem, provides continuous monitoring of each main steam line to permit the prompt indication of gross release of fission products from the fuel to the reactor coolant, and subsequently to the turbine. This instrumentation also provides a closure signal to the Main Steam Isolation Valves (MSIV) via RPS to limit gross release of fission products to the environment. The proposed change will extend the interval between successive calibration from 20 months to 24 months. Evaluation of the surveillance test results over the period 1977 to 1987 indicated one deviation which was resolved by recalibrating the monitor. The Main Steam Line Monitoring Subsystem is tested once every month and channel checks are performed once per shift in accordance with Technical Specification requirements. In addition, the analog Log Radiation Monitors (LRM) have been replaced with new G.E. NUMAC LRM's which include self-diagnostic functions, which alarm when failures are detected. The proposed refueling outage interval change from 20 to 24 months will have no effect on system availability since the detectors have demonstrated reliable operation over the ten year period cited above, and Technical Specification required individual channel checks of the radiation monitoring channels on each steam line allow the operators to verify instrument channel performance and initiate repairs or replacement of a defective channel component, and new self-diagnostic radiation monitors have been installed. Therefore, the proposed change has no effect on the safety function of the High Radiation in Main Steamline instrument channel sensors.

2. Technical Specification Table 4.1.1 Item 15, High Radiation on Air Ejector Off-Gas instrument channel calibration and test are currently specified to be performed each refueling outage. The purpose of this test is to verify that detector sensitivity to a known radioactive source has not been degraded. The Air Ejector Offgas Radiation Monitoring System monitors and records the radioactivity level of the effluent gases removed from the main condenser by the steam jet air ejectors. The purpose of this subsystem is to obtain a continuous record of radioactivity released to the offgas holdup system through the air ejectors and to isolate the offgas volume from the stack before the maximum permissible stack release rate is reached. The safety function of the Air Ejector Offgas Radiation Monitoring System is to initiate closure of the Offgas System Isolation valves when the offgas activity exceeds ten times the average stack release rate limit. The proposed change will extend the interval between successive calibrations and tests from 20 months to 24 months.

Evaluation of the surveillance test and calibration results for this instrumentation over the period 1977 to 1986 do not indicate any deviations, and the acceptance criteria for these surveillances were fully met. Technical Specification required channel checks are performed once every shift. In addition, the analog Log Radiation Monitors (LRM) have been replaced with new G.E. NUMAC LRM's which include self-diagnostic functions, which alarm when failures are detected. The proposed refueling outage interval change from 20 to 24 months will have no effect on system availability since the detectors have demonstrated reliable operation over the nine year period cited above, and Technical Specification required channel checks once every shift will allow the operators to verify instrument channel performance and to initiate repair or replacement of a defective channel component, and new self-diagnostic radiation monitors have been installed. Therefore, the proposed change has no affect on the safety function of the High Radiation on Air Ejector Off-gas instrument channels.

3. Technical Specification Table 4.1.1 Item 20, High Temperature Main Steam Line Tunnel instrument channel tests are currently specified to be performed each refueling outage. This surveillance tests the sixteen Main Steam Line Tunnel Temperature Sensors. The Main Steam Line Tunnel High Temperature sensors automatically initiate main steam line isolation valve closure to provide reactor vessel isolation in the event of a main steam line break accident in the tunnel. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of functional test results for these temperature sensors over the period 1978 to 1986 do not indicate any deviations and the acceptance criteria for the functional tests were fully met. The proposed refueling outage interval change from 20 to 24 months will have no effect on the instrument channel availability since temperature sensors have demonstrated reliable operation over the eight year period cited above. Therefore, the proposed change has no effect on the safety function of the High Temperature Main Steam Line Tunnel instrument channels.

4. Technical Specification Table 4.1.1 Item 27.b, Scram Discharge Volume (Rod Block) - scram trip bypass instrument channel test is currently specified to be performed each refueling outage. This surveillance tests the operability of the alarms, indications and the bypass logic circuitry of the Scram Discharge Volume (Rod Block) Scram Trip Bypass associated with Reactor Protection System and the Reactor Manual Control System. Bypasses of inputs to a trip system other than IRM and APRM bypasses are provided for meeting operational requirements identified in Technical Specification Table 3.1.1. The safety function of the surveillance test is to assure acceptable system availability by detecting a failed component. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of available test results over the period 1984-1988 indicates no deviations or abnormalities. Sensors which are a part of this instrument channel are separately calibrated and tested once every three months. The proposed

refueling outage interval change from 20 to 24 months will have no effect on the instrument channel availability since this circuitry has demonstrated reliable operation over the four year period cited above. Therefore, the proposed change has no effect on the safety function of the Scram Discharge Volume (Rod Block) - scram trip bypass instrument channel.

5. Technical Specification Table 4.1.1, Items 28.a and 28.b, Loss of Power instrument channel calibrations are currently specified to be performed once every 18 months. Loss of power relays monitor the 4.16 KV Emergency Buses 1C and 1D voltages. On loss of voltage or degraded grid voltage, the safety buses are unloaded and the emergency diesel generator is started. The calibration test is performed to verify that the loss of voltage relays and the degraded voltage relays operate at the proper setpoints. The proposed change will extend the interval between successive calibrations from 18 months to 24 months. Evaluation of the calibration test results from 1985, 1986 and 1988 indicate no deviations for the loss of voltage relays (Type GE IAV 53K). The Type 27H degraded voltage relays had experienced drift beyond the Technical Specification limit. As a result, these relays have been replaced with new Type 27N relays. The Type 27N relays have a maximum expected drift of $\pm$ 0.6% which is well within the Technical Specifications limit. Degraded voltage logic is designed for 2 out of 3 relay operations. Therefore, malfunction of one relay would not affect the operation of the instrument channel. In addition, both the loss of voltage and the degraded voltage relays are required by Technical Specifications to be checked daily and tested monthly which provides added assurance of channel operability. The proposed refueling outage interval change from 20 to 24 months will have no effect on the 4160 volt system since the Type 27N replacement relays installed for the degraded voltage relays are not expected to drift beyond Technical Specification limits based on design specification and the degraded voltage logic in a 2 out of 3 relay operation; the loss of voltage relays have demonstrated reliable operation, and both the degraded voltage and loss of voltage instrument channels are checked daily and tested monthly in accordance with Technical Specification requirements. Therefore, the proposed change has no effect on the safety function of the Loss of Power protective instrument channels.

6. Technical Specification Table 4.1.1, Item 29, Drywell High Radiation protective instrument channel calibration and test is currently specified to be performed each refueling outage. These surveillances check the Containment High Range Radiation Monitoring System trip setpoint with an external source and test the RPS logic channel. The Containment High Range Radiation Monitoring System, installed in 11R, provides a high radiation trip signal to the Drywell and Torus Purge and Vent Isolation Valves via the RPS. The safety function of the periodic surveillance calibration and testing is to verify that detector sensitivity to a known radioactive source has not been degraded and to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive calibration and tests from 20 months to 24 months. The system supplier (Victoreen) recommends that the

detector must be calibrated once every five years to verify that it did not deviate ±10% from the original factory calibration. The proposed 24 month calibration and testing frequency is well within the five year vendor recommendation. In addition, separate surveillance checks and tests are performed once every month on the Containment High Range Radiation Monitoring System. The proposed refueling outage interval change from 20 to 24 months will have no effect on the instrument channel availability since a 24 month calibration interval is well within the vendor recommendation of once every five years. On this basis, extension of instrument channel trip logic testing to 24 months is also justified. Therefore, the proposed change has no effect on the safety function of the Drywell High Radiation protective instrument channels.

Change No. 3 Trip Systems

1. Technical Specification Table 4.1.2, Item 3, Containment Spray actuation system testing is currently specified to be performed each refueling outage. This surveillance tests the operability of the Containment Spray actuation system logic and actuation components. The safety function of the Containment Spray System is to reduce containment pressure and temperature following a design basis LOCA. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The Containment Spray actuation system is also tested once every 3 months in accordance with Technical Specification Table 4.1.2. The proposed change will extend the interval between successive refueling outage tests from 20 months to 24 months. The purpose of this test is to detect any defects caused by maintenance or construction activities during the outage. A change in the interval between outages will have no effect on system availability. Therefore, the proposed change has no effect on the safety function of the Containment Spray actuation system.

2. Technical Specification Table 4.1.2, Item 4, Automatic Depressurization trip system testing is currently specified to be performed each refueling outage. This surveillance tests the operability of the Automatic Depressurization System (ADS) initiation logic and actuation components. The ADS is part of the Emergency Core Cooling System (ECCS). Its safety function is to depressurize the Reactor Coolant System during a small break LOCA to permit the low pressure Core Spray System to inject water onto the reactor core. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results over the period 1978 to 1988 do not indicate any deviations or abnormalities and acceptance criteria were fully met. The proposed refueling outage interval change from 20 to 24 months will have no effect on the ADS trip system availability since the trip system logic and components have demonstrated reliable operation over the ten year period cited above. Therefore, the proposed change has no effect on the safety function of the ADS trip system.

3. Technical Specification Table 4.1.2, Item 5, MSIV Closure trip system testing is currently specified to be performed each refueling outage. This surveillance tests the operability of the Main Steam Isolation Valve (MSIV) closure trip logic and actuation components. The MSIVs are containment isolation valves designed to minimize both the coolant loss from the reactor vessel and the offsite doses in the event of a main steam line break accident. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results over the period 1978 to 1987 for instrument channels, trip system logic and trip system actuation components associated with MSIV closure do not indicate any deviations or discrepancies and acceptance criteria were fully met, except for one main steam line low pressure switch. Three of the four main steam line low pressure switches have performed satisfactorily in all sixteen test intervals conducted over the period from 1982 to 1987. One low pressure switch failed the acceptance criteria in two of the sixteen test intervals (representing 2 out of 64 individual tests). This discrepancy is localized to only one of the four switches and does not represent a significant failure rate considering the number of individual tests performed over the period. These switches are subject to additional Technical Specification required quarterly testing which will provide added assurance of reliable operation. The proposed refueling outage interval change from 20 to 24 months will have no effect on the MSIV closure trip system availability since the trip system logic and components have demonstrated reliable operation over the nine year period cited above, and other more frequent Technical Specification required testing will further ensure the reliable operation of the main steam line low pressure switch which has experienced two failures (representing 2 out of 64 individual tests). Therefore, the proposed change has no effect on the safety function of the MISV Closure trip system.

4. Technical Specification Table 4.1.2, Item 6, Core Spray actuation system testing is currently specified to be performed each refueling outage. This surveillance tests the automatic initiation logic for each Core Spray System. The Core Spray System is part of the Emergency Core Cooling System (ECCS). Its safety function is to provide for the removal of decay heat from the core following a postulated LOCA. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The Core Spray actuation system is also tested once every 3 months in accordance with Technical Specification Table 4.1.2. The proposed change will extend the interval between successive refueling outage tests from 20 months to 24 months. The purpose of this test is to detect any defects caused by maintenance or construction activities during the outage. A change in the interval between outages will have no effect on system availability. Therefore, the proposed change has no effect on the safety function of the Core Spray actuation system.

5. Technical Specification Table 4.1.2, Item 7, Primary Containment Isolation trip system testing is currently specified to be performed each refueling outage. This surveillance tests the operability of the Primary Containment Isolation logic and actuation components including the isolation valves. The safety function of the Primary Containment Isolation System is to isolate the drywell by signals from the Reactor Protection System to contain any activity which might escape the reactor and to limit the release of radioactive materials in the event of a line break. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results over the period 1978 to 1987 do not indicate any deviations or discrepancies, except for one test deviation where valves V-23-15 and V-23-16 failed to open. This test deviation was due to lack of continuity of the control wires to their respective solenoids. The wires were connected and the test was satisfactory. In addition, each instrument channel associated with the Primary Containment Isolation trip system is calibrated and tested once every three months per Technical Specification Table 4.1.1. The proposed refueling outage interval change from 20 to 24 months will have no effect on the Primary Containment Isolation Trip System since no significant deviations or abnormalities have occurred in previous test results and the trip system logic and components have demonstrated reliable operation over the nine year period cited above. The calibration and testing requirements of Technical Specification Table 4.1.1 provide added assurance of system availability. Therefore, the proposed change has no effect on the safety function of the Primary Containment Isolation Trip System.

6. Technical Specification Table 4.1.2, Item 9, Isolation Condenser Actuation and isolation system testing is currently specified to be performed each refueling outage. This surveillance tests the automatic initiation logic for the Isolation Condenser System. The safety function of the Isolation Condenser Systems is to provide for the removal of fission product heat from the reactor vessel following a reactor trip and for isolation of the reactor from the Main Condenser. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive tests from 20 to 24 months. Evaluation of test results over the period 1978 to 1988 do not indicate any deviations or discrepancies, and acceptance criteria were fully met. The proposed refueling outage interval change from 20 to 24 months will have no effect on the Isolation Condenser Actuation Isolation trip system availability since the system actuation logic and components have demonstrated reliable operation over the ten year period cited above. Additionally, instrument loops for Reactor Water Low Low Level and High Reactor Pressure sensors have been replaced with an analog system which will further increase reliability. Therefore, the proposed change has no effect on the safety function of the Isolation Condenser Actuation and Isolation trip system.

7. Technical Specification Table 4.1.2, Item 12, Air Ejector Offgas Line Isolation trip system testing is currently specified to be performed each refueling outage. This surveillance tests the automatic trip signal logic to isolation valve V-7-31. The safety function of the Air Ejector Offgas Line Isolation trip system is automatic closure of isolation valve V-7-31 upon detecting either Main Steam Line High Radiation or Offgas High Radiation, thereby limiting the radioactive effluents release to the environment and to assure that the radioactive concentrations of any materials released are kept within the limits of 10CFR20. The safety function of the periodic surveillance testing is to assure acceptable system availability by detecting failed components or failed circuitry. The proposed change will extend the interval between successive tests for 20 to 24 months. Evaluation of test results in 1986 and 1987 do not indicate any deviations and acceptance criteria were fully met. In addition, the existing analog Log Radiation Monitors (LRM) have been replaced with new G.E. NUMAC LRM's which include self-diagnostic functions, which alarm when failures are detected. The proposed refueling outage interval change from 20 to 24 months will have no effect on the Air Ejector Offgas Line Isolation trip system availability since the system has demonstrated reliable operation, and new self-diagnostic radiation monitors have been installed. Therefore, the proposed change has no effect on the safety function of the Air Ejector Offgas Line Isolation trip system.

Change No. 4 Reactivity Control

1. Technical Specification Section 4.2, Subsection E.3, currently specifies that a functional test of the standby liquid control system be performed each refueling outage. This surveillance demonstrates operability of the standby Liquid Control System by manually initiating pump start and verifying a pump running indication, verifying the corresponding squib valve (explosive valve) has a fired indication, verifying a flow indication annunciator alarm, and verifying automatic Reactor Water Clean-up System isolation upon a signal from the flow indicating switch. The standby Liquid Control System is designed to bring the reactor to a shutdown condition at any time in core life independent of control rod capabilities. The safety function of the periodic surveillance testing is to assure that the standby Liquid Control System will perform as designed if it is needed during a plant emergency. The proposed change will extend the interval between successive system functional tests from 20 to 24 months. Evaluation of system functional test results from 1978 to 1988 did not indicate any failures to meet acceptance criteria. In addition, a pump operability test is performed each month in accordance with current Technical Specification requirements and quarterly in accordance with IST requirements. The explosive valves (squibs) are purchased in lots with samples tested prior to installation. The lots are purchased such that the valve's primer and trigger mechanism 5-year service shelf life could accommodate a 24-month testing interval. The proposed refueling outage interval change from 20 months to 24 months will have no effect on the standby Liquid Control System availability since the system components have demonstrated reliable operation over the ten year period cited above. Additional IST pump testing, explosive valve sample testing

and a 5-year service shelf life for the explosive valve primer and trigger mechanisms provides further assurance of system operability. Therefore, the proposed change has no effect on the safety function of the standby Liquid Control System.

2. Technical Specification Section 4.2, Subsection H, currently specifies that all withdrawn control rods are verified operable at least once per refueling cycle by demonstrating the scram discharge volume drain and vent valves are operable. This surveillance demonstrates operability of the scram discharge volume (SDV) drain and vent valves. The safety function of the SDV system is to limit the loss of and contain the reactor primary vessel water from all the control rod drives during a scram. The SDV drain and vent valves isolate the SDV upon a scram signal. The safety function of the periodic surveillance test is to demonstrate functional operability of the valves and acceptable closure times. The proposed change will extend the interval between successive tests from 20 to 24 months. Evaluation of test results from 1982 to 1988 (seven tests) indicates only one deviation. One test in 1984 resulted in unacceptable valve closure time for two valves. These valves were inspected, repacked, and have retested successfully. This is considered an isolated test failure since all valves have tested successfully since then. Additional monthly verification of drain and vent valve operability is performed. The proposed refueling outage interval change from 20 to 24 months will have no effect on the operability of the SDV drain and vent valves since the seven functional tests conducted over the six year period cited above have demonstrated reliable operation. The one test deviation for valve closure time is considered an isolated occurrence. Additional monthly verification of drain and vent valve operability provides added assurance of component availability. Therefore, the proposed change has no effect on the safety function of the SDV drain and vent valves.

Change No. 5 Reactor Coolant

1. Technical Specification Section 4.3, Subsection D, currently specifies that a visual examination for leaks shall be made with the reactor coolant system at pressure during each scheduled refueling outage or after major repairs have been made to the reactor coolant system. This surveillance provides assurance that the Nuclear Steam Supply System (NSSS) has not developed leaks during operation or as a result of maintenance during an outage, by performance of a visual inspection of the NSSS at pressurized conditions during startup. The proposed change will extend the interval between successive visual inspections from 20 to 24 months. The unidentified leak rate is monitored during this inspection and corrective actions taken if an unacceptable leak rate is found by visual inspection or by monitored leak rate. During normal operation, unidentified leak rate is monitored every 4 hours. Any leakage from the NSSS will be indicated as unidentified leakage. Technical Specifications provide a limit of 5 gpm or an increase of 2 gpm in 24 hours for unidentified leak rate. Therefore, monitoring of unidentified leak rate provides an acceptable means to detect NSSS leakage during operation. Technical Specification Section 3.3 Bases also references fracture mechanics analysis which shows that postulated pipe crack initiation and

subsequent growth would occur very slowly and will be detected before it grows to critical size which could cause pipe rupture. Fracture mechanics analysis also shows that the leak rate at the critical size exceeds the upper limit on unidentified leak rate. The proposed refueling outage interval change from 20 to 24 months will have no effect on assurance that the NSSS has not developed leaks during operation since the NSSS leakage can be monitored as unidentified leakage. Therefore, the proposed change has no effect on the safety function of the NSS System.

2. Technical Specification Section 4.3, Subsection G, currently specifies that the Primary Coolant System Pressure Isolation Valves be periodically leak tested every time the plant is placed in the cold shutdown condition for refueling. This surveillance leak tests the check valves to ensure they are fully seated prior to plant startup. The Core Spray testable check valves are defined as primary coolant pressure isolation valves by Technical Specification Section 3.3. The testable check valves are not repositioned during power operation. The valves are maintained in the closed position by reactor system pressure and are isolated from the Core Spray System by the normally closed outside containment isolation valves. The safety function of the periodic surveillance test is to verify that the valves are fully seated and any leak rate is within acceptance criteria. The proposed change will extend the interval between successive tests from 20 to 24 months. Evaluation of test results over the period 1981 to 1988 do not indicate any deviations and acceptance criteria was fully met. It is further noted that fourteen of the nineteen test packages evaluated showed no measurable leakage past these valves. The proposed refueling outage interval change from 20 to 24 months will have no effect on the operability of these valves since the test results have demonstrated acceptable leak tightness over the seven year period cited above. Therefore, the proposed change has no effect on the safety function of the Primary Coolant System Pressure Isolation Valves.

Change No. 6 Emergency Cooling

1. Technical Specification Section 4.4, Subsection A.1, currently specifies that Core Spray System pump operability is verified once per month, after major maintenance, and prior to startup following a refueling outage. The Core Spray System provides for the removal of decay heat from the core following a LOCA by delivering water from the suppression pool to the reactor vessel through spray nozzles located directly above the fuel assemblies. The safety function of this periodic surveillance is to provide assurance of Core Spray System availability prior to startup following a refueling outage, during which major repair and maintenance may be performed on the system. The proposed change will extend the interval between successive refueling outage tests from 20 months to 24 months. Technical Specification Section 4.4.A.1 also requires that Core Spray System pump operability be verified once every month. The proposed refueling outage interval change from 20 to 24 months will have no effect on the availability of the Core Spray System since pump operability is required by Technical Specifications to be verified on a monthly basis in addition to prior to startup following a refueling outage. The basis for verifying pump

operability prior to startup following a refueling outage is to ensure that major repair and maintenance performed during an outage has not encroached upon the availability of the Core Spray System. A change in the interval between outages will have no effect on system availability. Therefore, the proposed change has no effect on the safety function of the Core Spray System.

2. Technical Specification Section 4.4, Subsection B.2, currently specifies that the Automatic Depressurization System automatic actuation test be performed every refueling outage. The Automatic Depressurization System (ADS) is part of the Emergency Core Cooling System. Its safety function is to depressurize the Reactor Coolant System during a small break LOCA to permit the low pressure Core Spray System to inject water onto the reactor core. The ADS consists of five automatically activated relief values. Only four of the five valves are required to achieve depressurization in the allowable time period. The safety function of this periodic surveillance is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive refueling outage test from 20 months to 24 months. Evaluation of test results over the period 1978 to 1988 do not indicate any test deviations and acceptance criteria were fully met. The proposed refueling outage interval change from 20 to 24 months will have no effect on the availability of the Automatic Depressurization System since the test results have demonstrated reliable operation over the ten year period cited above. Therefore, the proposed change has no effect on the safety function of the Automatic Depressurization System.

3. Technical Specification Section 4.4, Subsections C.1 and D.1, currently specify that Containmen' Cooling System pump operability and Emergency Service Water System pump operability is verified once per month, after major maintenance,and prior to startup following a refueling outage. The Containment Spray and Emergency Service Water Systems comprise the Containment Cooling System and function to reduce containment pressure and temperature following a design basis LOCA, and in conjunction with the Core Spray System assure continuity of core cooling. The safety function of this periodic surveillance is to provide assurance of Containment Spray System and Emergency Service Water System availability prior to startup following a refueling outage, during which major repair and maintenance may be performed on these systems. The proposed change will extend the interval between successive refueling outage tests from 20 months to 24 months. Technical Specification Sections 4.4.C.1 and 4.4.D.1 also require that Containment Spray pump operability and Emergency Service Water System pump operability, respectively be verified once every month. The proposed refueling outage interval change from 20 months to 24 months will have no effect on the availability of the Containmen: Spray System or the Emergency Service Water System since pump operability is required by Technical Specifications to be verified on a monthly basis in addition to prior to startup following a refueling outage. The basis for verifying pump operability prior to startup following a refueling outage is to ensure that major repair and maintenance performed during an outage has not encroached upon the availability

the Containment Cooling System or the Emergency Service Water System. A change in the interval between outages will have no effect on system availability. Therefore, the proposed change has no effect on the safety function of the Containment Cooling System or the Emergency Service Water System.

4. Technical Specification Sections 4.4., Subsections E.1 and F.1, currently specify that Control Rod Drive Hydraulic System pump operability and Fire Protection System pump and isolation valve operability is verified once per month, after major maintenance and prior to startup following a refueling outage. As stated above, the proposed change will extend the interval between successive refueling outage tests from 20 months to 24 months. The proposed refueling outage interval change will have no effect on the availability of the Control Rod Drive Hydraulic System pumps or the Fire Protection System pumps and isolation valves since Technical Specification Sections E.1 and F.1 require this verification once every month, in addition to prior to startup following a refueling outage. The basis for verifying pump and isolation valve operability prior to startup following a refueling outage is to ensure that major repair and maintenance performed during an outage has not encroached upon the availability of these Systems. A change in the interval between outages will have no effect on system availability. Therefore, the proposed change has no effect on the safety function of the Control Rod Drive Hydraulic System or the Fire Protection System.

Change No.7 Containment System

1. Technical Specification Section 4.5, Subsection E, currently specifies that Type "B" and "C" Local Leak Rate Tests (LLRT) shall be performed each refueling outage. Technical Specification Section 4.5, Subsection G, further specifies that the Local Leak Rate Tests shall be performed as stated in Section 4.5.E, but in no case may exceed intervals of 24 months. This specified maximum interval of 24 months is consistent with the requirements, of 10CFR50, Appendix J, Primary Reactor Containment Leakage Testing, Subsections III.D.2 and D.3, which specifies that Type "B" and "C" tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years. Thus, the extension of the refueling outage from 20 months to 24 months is within the existing Technical Specification frequency requirements for the LLRT and within the regulations pertaining to the LLRT as specified in 10CFR50, Appendix J. Therefore, the proposed change has no effect on the specified frequency for performing the LLRT.

2. Technical Specification Section 4.5, Subsection J.1, specifies that all containment isolation valves be tested for automatic closure by an isolation signal during each refueling outage. This surveillance tests the operability of the containment isolation valves and verifies acceptable closure times. The safety function of the Primary Containment Isolation System is to isolate the drywell on signals from the Reactor Protection System and to limit the release of radioactive materials. The safety function of the periodic surveillance testing is to assure acceptable system availability.

The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of tests results over the period 1978 to 1987 do not indicate any failures due to valve hardware problems or valve degradation. The proposed refueling outage interval change from 20 to 24 months will have no effect on containment isolation valve operability since the valves have demonstrated reliable operation over the nine year period cited above. Therefore, the proposed change has no effect on the safety function of the containment isolation valves.

3. Technical Specifications Section 4.5, Subsection J.4.b, specifies that the Reactor Building to Suppression Chamber Vacuum Breakers shall be tested each refueling outage and the air-operated vacuum breaker instrumentation shall be calibrated each refueling outage. This surveillance verifies the force required to open the vacuum breaker from closed to fully open, and calibrates the vacuum breaker actuation instrumentation. The safety function of the Reactor Building to Suppression Chamber Vacuum Breakers is to prevent exceeding the torus design external pressure of 1.0 psig. The safety function of the periodic surveillance is to assure acceptable vacuum breaker valve operability. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results has indicated no degradation of valve parts. Technical Specification Section 4.5, Subsection J.4.a requires that the Reactor Building to Suppression Chamber Vacuum Breakers and associated instrumentation, including setpoint be checked for proper operation every three months. The proposed refueling outage interval change from 20 to 24 months will have no effect on the Reactor Building to Suppression Chamber Vacuum Breakers and actuation instrumentation since the vacuum breakers and instrumentation have demonstrated reliable operation, and quarterly operability testing in accordance with Technical Specification requirements provides additional assurance of availability between refueling inspections. Therefore, the proposed change has no effect on the safety function of the Reactor Building to Suppression Chamber Vacuum Breakers and actuation instrumentation.

4. Technical Specification Section 4.5, Subsections J.5.b(1), (2) and (3), currently specify that all suppression chamber - drywell vacuum breakers shall be tested each refueling outage, the suppression chamber - drywell vacuum breaker position indication and alarms shall be calibrated and tested each refueling outage, and at least four of the suppression chamber - drywell vacuum breakers shall be inspected each refueling outage. This surveillance verifies the force required to open each valve from fully closed to fully open, functionally tests and calibrates alarms and position indication instrumentation, and inspects for valve deficiencies.

The suppression chamber - drywell vacuum breakers prevent exceeding the design limit of 2.0 psid between the drywell and the external environment, and to prevent suppression pool water backup to the drywell. The safety function of the periodic surveillance is to assure acceptable vacuum breaker valve operability. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results have indicated no degradation of valve parts. Technical

Specification Section 4.5, Subsection J.5.a, requires each operable suppression chamber - drywell vacuum breaker be exercised once each month and following any release of energy which would tend to increase pressure to the suppression chamber. Operation of position switches, indicators and alarms are also verified monthly by operation of each vacuum breaker in accordance with Technical Specification requirements. The proposed refueling outage interval change from 20 to 24 months will have no effect on the supersession chamber - drywell vacuum breakers and associated instrumentation since the vacuum breakers and instrumentation have demonstrated reliable operation, and monthly operability testing in accordance with Technical Specification requirements provides additional assurance of availability between refueling inspections. Therefore, the proposed change has no effect on the safety function of the suppression chamber - drywell vacuum breakers.

5. Technical Specification Section 4.5, Subsection O, currently specifies that Instrument Line Flow Check Valves shall be tested at least once in every period between refueling outages. This surveillance verifies the capability of each valve to isolate. The excess flow check valves are part of the Primary Containment System and their safety function is to close at a flowrate of 3 gpm or less following an instrument line break downstream of the check valve's location, thereby limiting the release of fission products. The safety function of the periodic surveillance functional testing is to assure operability of each excess flow check valve and detect and replace any failed devices. The proposed change will extend the interval between successive tests from 20 months to 24 months. Evaluation of test results over the period 1980 to 1987 identified no significant deviations which would have prevented the check valves from performing their safety function. The proposed refueling outage interval change from 20 to 24 months will have no effect on the operability of the excess flow check valves since these valves have demonstrated reliable operation over the seven year period cited above. Therefore, the proposed change has no effect on the safety function of the Instrument Line Flow Check Valves.

6. Technical Specification Section 4.5, Subsection P.2, currently specifies that a visual inspection of the suppression chamber interior shall be made at each major refueling outage. This surveillance verifies the integrity of the coating material on the interior surfaces of the suppression chamber. The safety function of the coating material is to provide adequate corrosion protection for the suppression chamber. The safety function of the periodic surveillance is to determine the functional integrity of the coating material. The proposed change will extend the interval between successive inspections from 20 months to 24 months. The present coating material was installed in the 10R outage (1984). The subsequent refueling outage inspection performed in 11R outage indicated an absence of damage that would compromise the functional integrity of the coating material. The visual inspection conducted during the 12R refueling outage indicated a few random blisters and areas of minor mechanical damage. No evidence of corrosion damage associated with this condition was observed, nor was there any evidence of spalling of the coating from the steel shell. This inspection indicated that the coating is adequately adhering to the steel shell and is providing corrosion protection. The proposed refueling outage interval change from 20 to 24 months will have no effect on the coating material integrity since the previous inspections indicated an absence of damage that would compromise the functional integrity of the coating material. Any potential failure of the coating material is circumvented by detection of degradation during periodic inspections and subsequent repair. The proposed refueling outage interval change from 20 to 24 months will have no effect on the functional integrity of the coating material since initial integrity has been demonstrated, and potential degradation modes would be detected and repaired. Therefore, the proposed change has no effect on the safety function of the suppression chamber coating.

Change No. 8 Auxiliary Electrical Power

1. Technical Specification Section 4.7, Subsections A.2 and A.3, currently specify that the emergency diesel generators shall be automatically actuated and functionally tested during each refueling outage, and a thorough inspection performed at least once per 18 months during shutdown. This surveillance testing verifies that the emergency diesel generators can start and assume load in the proper time and sequence. Thorough inspections serve to detect any signs of wear long before any failure. The emergency diesel generators provide sufficient electrical power for all loads required for safe shutdown of the plant. The safety function of the periodic surveillance testing and inspection is to verify acceptable availability of the emergency diesel generator system. The proposed change will extend the interval between successive functional tests from 20 months to 24 months, and the interval between successive inspections from 18 months to 24 months. Evaluation of emergency diesel generator test results has indicated that reliability is well within NRC guidelines as described in OCNGS response to NRC Generic Letter 84-15. In response to the station blackout issue OCNGS is

committed to maintaining a 0.975 target reliability value for the emergency diesel generator. The diesel generator manufacturer has stated that the increased maintenance and inspection cycle is acceptable. Since the emergency diesel generator units are standby units, the actual operating time of approximately 120 hours per year is far less than the rated maintenance/inspection interval of 2000 hours as specified by the manufacturer. The proposed refueling outage interval change from 20 to 24 months and extension of the inspections from 18 months to 24 months will have no effect on the availability or reliability of the emergency diesel generator system since acceptable performance, availability, and reliability has been demonstrated, target reliability values are established and monitored, extension of maintenance and inspection intervals is supported by the manufacturer, and the cumulative operating time of each diesel generator between extended maintenance and inspection intervals would remain much less than the manufacturers recommended interval of 2000 hours. Therefore, the proposed change has no effect on the safety function of the emergency diesel generator system.

2. Technical Specification Section 4.7, Subsections A.5 and B.3, currently specify that diesel generator starting batteries and station batteries shall be tested at least once per 18 months during shutdown, respectively. This surveillance test verifies the battery capacity during a battery capacity discharge test, and verifies operability of the battery low voltage annunciators. The safety function of the DC power system is to provide a continuous source of 125 V DC power to Class 1E Buses B and C, and to provide 125 V DC power for starting the emergency diesel generators and for certain relays. The safety function of the periodic surveillance test is to assure acceptable availability of the 125 V DC power system. Evaluation of test results for the 125V DC power system has indicated no significant failure of the low voltage annuciators. All batteries are subject to weekly surveillances to verify electrolyte level, pilot cell voltage, overall battery voltage, and pilot cell specific gravity in accordance with Technical Specification Section 4.7.B.1. All batteries are subjected to quarterly surveillances to verify electrolyte level, the voltage of each connected cell, and the specific gravity of each cell. These surveillances monitor battery conditions and capabilities, and will indicate cell deterioration tendencies long before such tendencies cause improper cell performance. The battery manufacturer has supported the load test cycle from 18 to 24 months. Extending the load test cycle from 18 to 24 months will reduce the number of discharges the batteries are subjected to thereby prolonging the life of the batteries. The proposed extension of the surveillance test from 18 months to 24 months will have no effect on the 125 V DC power system availability for the reasons stated above. Therefore, the proposed change has no effect on the safety function of the 125 V DC power system.

It should be noted that TSCR No. 177, submitted on February 20, 1990, provides additional justification supporting extension of the battery capacity test to a 5-year interval (T.S.4.7.B.3).

Change No. 9 Isolation Condenser

1. Technical Specification Section 4.8, Subsection A.4.a, currently specifies that a visual inspection of the isolation condenser steam side isolation valves be conducted each refueling outage. This surveillance visually inspects the external valve bodies for signs of deterioration. The valves provide isolation capability in case of a line break in the steam piping of the isolation condenser system and maintain primary containment integrity. The safety function of the surveillance is to provide assurance that these valves will maintain their integrity when they are required for isolation of the primary containment. The proposed change will extend the interval between successive visual inspections from 20 months to 24 months. These valves are located outside the drywell. If a crack or leak develops on these valves, the insulation would become saturated and eventually the leak will appear through the insulation. All of the valves and associated piping are visually inspected for visible leaks once per shift during operation. In addition, the Technical Specifications require that the temperature in the area of these valves be checked once each shift for temperature increases that would indicate valve leakage. The proposed refueling outage interval change from 20 to 24 months will have no effect on the operability of the isolation condenser system since the existing Technical Specification required area temperature monitoring once per shift and additional visual inspections are sufficient to detect any potential leakage which could occur during operations. Therefore, the proposed change has no effect on the safety function of the isolation condenser steam side isolation valves.

Change No. 10 Fire Protection

1. Technical Specification Section 4.12, Subsection I, currently specifies that the following Alternate Shutdown Monitoring Instrumentation channels be calibrated each refueling outage:

   Condensate Transfer Pump Discharge Pressure
   Condensate Storage Tank Level
   Service Water Pump Discharge Pressure
   Control Rod Drive Pump Flowmeter
   Shutdown Cooling System Flowmeter
   Isolation Condenser "B" Shell Water Level
   Rx. Bldg. Closed Cooling Water Pump Discharge Pressure

   The Alternate Shutdown Monitoring instrumentation is part of the alternate shutdown facility which provides the capability to safely shutdown the plant in the event of a fire. This facility was installed in 11R in accordance with 10 CFR 50 Appendix R requirements. The safety function of the alternate shutdown monitoring instrumentation is to provide accurate indications of plant process conditions so that the operator can safely shutdown the plant from outside the control room in the event of a fire in certain

locations. The safety function of the periodic calibration is to assure acceptable system availability by detecting failed components. The proposed change will extend the interval between successive calibrations from 20 months to 24 months.

The Condensate Transfer Pump Discharge Pressure Indicator, the RB CCW Pump Discharge Pressure Indicator,and the Service Water Pump Discharge Pressure Indicator are all existing mechanical gages. The indicators have maintained an excellent performance record over the period from 1974 to 1988. In addition, Technical Specifications require monthly channel checks for these instrument channels.

The Isolation Condenser "B" Shell Water Level loop is a newly added loop using an existing transmitter. Technical Specifications require a monthly channel check be performed on the instrument channel. In addition, plant procedures specify a channel check and calibrations be performed once every three months.

The Condensate Storage Tank (CST) Level Indicator and CRD Pump Flowmeter are newly added instruments. The Shutdown Cooling Flowmeter is an existing instrument. These instruments are differential pressure type mechanical gages which are not susceptible to drift and have maintained an excellent performance record in various applications over a long period. These instruments do not perform any automatic or nuclear safety related functions. Technical Specifications require additional monthly channel checks of the CST Level and CRD Pump Flowmeter instrument channels. In addition, plant procedures specify that the CST Level Indicator and the CRD Flowmeter be calibrated once per year. The proposed refueling outage interval change from 20 months to 24 months will have no effect on the Alternate Shutdown Monitoring instrumentation availability since long term reliable performance has been demonstrated for these channels using existing instrumentation, and the more frequent channel checks and calibrations required by Technical Specifications and plant procedures provides adequate assurance of instrument channel operability. Therefore, the proposed change has no effect on the safety function of the Alternate Shutdown Monitoring instrumentation.

Change No. 11 Accident Monitoring Instrumentation

1. Technical Specification Section 4.13, Table 4.13-1, Item 5, currently specifies that the Containment High Range Radiation Monitor be calibrated each refueling outage. This surveillance checks the sensor, readout device and power supply calibration, monitor alarm and trip setpoint with an external source. The Containment High Range Radiation Monitors were installed in 11R in accordance with NUREG-0737 requirements and provide information to assess the in-containment radiological conditions and fuel cladding integrity in the event of a LOCA. The safety function of the periodic surveillance is to assure acceptable system availability by detecting failed components. Technical Specifications require monthly checks of this instrumentation. Evaluation of these monthly test results from 1986 to 1987 do not indicate any deviations. The monitoring system has self-diognostic functions and tests which alarm when failures are detected. The system supplier (Victoren) has

recommended that the detector be calibrated once every five years. The proposed refueling outage interval change from 20 to 24 months will have no effect on the availability of the Containment High Range Radiation Monitoring instrumentation since Technical Specification required monthly instrument checks have demonstrated reliable operation over the period cited above, the monitoring system has self-diagnostic functions which will alarm when failures are detected during plant operation,and the proposed 24 month calibration frequency is well within the vendor recommended five year calibration frequency. Therefore, the proposed change has no effect on the safety function of the Containment High Range Radiation Monitor instrumentation.

Change No. 12 Control Room HVAC

1. Technical Specification Section 4.17, Subsection B, currently specifies that the control room HVAC system shall be tested to demonstrate that control room and lower cable spreading room are maintained at a positive pressure of $\geq$ 1/8 in. w.g. relative to the outside atmosphere in the partial recirculation mode of operation, at least once every refueling outage. This surveillance also verifies the capability of the Control Room HVAC System to maintain the required positive pressure with a total flow rate of makeup air plus infiltration air less than or equal to 2000 cfm. The safety function of the Control Room HVAC System is to provide a habitable environment within the Control Room Envelope which will assure that plant operators are adequately protected against the effects of accident releases of radioactive gases. The safety function of the periodic surveillance is to assure acceptable system availability. The proposed change will extend the interval between successive tests from 20 months to 24 months. With the HVAC system operating, the only factor affecting the capability to pressurize the Control Room Envelope is degradation of the Control Room Envelope boundary penetration seals. It is not expected that penetration seals would significantly degrade over the additional four month period. The penetration seals are visually inspected following any repairs or maintenance. In addition, the plant Preventive Maintenance Program routinely inspects and replaces HVAC system components subject to wear, such as fan belts and expansion joints and assures system functionality. The proposed refueling outage interval change from 20 to 24 months will have no effect on the Control Room HVAC System availability since no significant degradation of penetration seals is expected over the additional four month period and, adequate inspection of Control Room Envelope penetration seals following any repairs or maintenance is performed to enable detection of any potential degradation and allow proper corrective actions to be taken, and Control Room HVAC System components subject to wear are routinely inspected and replaced in accordance with the Prevention Maintenance Program. Therefore, the proposed change has no effect on the safety function of the Control Room HVAC System.

   It should be noted that TSCR No. 175, submitted on October 18, 1989, also affects this Technical Specification Section by removing the 2000 cfm flow rate requirement.

Change No. 13 Integrity of Systems Outside Containment

1. Technical Specification Section 6.15, Subsection (2) currently requires performance of system leak tests at a frequency not to exceed refueling cycle intervals for the following systems:

   Core Spray
   Containment Spray
   Reactor Water Cleanup (not evaluated herein)
   Isolation Condenser
   Shutdown Cooling

   This surveillance implements the program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The proposed change will extend the interval between successive inspections from 20 months to 24 months. Evaluation of test results over the period 1980 to 1988 for the Core Spray System indicates that only minor shaft seal and flange leakage were identified (0.04 gpm) which was subsequently repaired. Evaluation of test results over the period 1980 to 1988 for the Containment Spray System indicates only minor flange leakage identified (0.34 gpm) for one test which was repaired. Evaluation of test results over the period 1980 to 1988 for the Isolation Condenser System indicates only minor leakage identified (0.03 gpm) for two tests, which was repaired. Evaluation of test results over the period 1980 to 1988 for the Shutdown Cooling System indicated only one test in 1980 which resulted in unacceptable system external leakage. The affected components were repaired and retested. Subsequent inspections indicated only minor pump flange leakage identified for one test, which was repaired. The proposed refueling outage interval change from 20 to 24 months will have no effect on the integrity of these systems located outside containment since these systems have demonstrated acceptable leak tight integrity over the eight year period cited above. Therefore, the proposed change has no effect on the integrity of these systems located outside containment.

Change No. 14 Refueling Outage Basis To 20 Month Interval

Several Technical Specification Sections which currently specify surveillance requirements on a refueling outage basis have not been completely evaluated for extension from 20 months to 24 months. These Technical Specification surveillance intervals are revised to specify a 20 month interval, which is the existing definition of a refueling outage interval. This change allows the Technical Specification definition of a refueling outage interval (Technical Specification Section 1.12) to be revised to 24 months, thereby extending the interval only for these systems and components evaluated and addressed herein. The following is a listing of the Technical Specification surveillance intervals which remain on a 20 month basis and are being revised accordingly:

1. License Condition 2.C.7- Core Spray Sparger Inspection

2. Table 4.1.1, Item 18 - Condenser Low Vacuum Instrument Channel Calibration/Test

3. Table 4.1.1, Item 20- Main Stem Line Tunnel High Temperature Sensor Calibration

4. Table 4.1.1, Item 25- Recirculation Loop Flow Instrument Calibration

5. Table 4.1.1, Item 27.a- Scram Discharge Volume Water Level High Instrument Calibration

6. Table 4.1.2, Item 13- Containment Vent and Purge Isolation Trip System Test

7. Technical Specification Section 4.2- Reactivity Control

8. Technical Specification Section 4.4.B.1- Automatic Depressurization System Valve Operability

9. Technical Specification Section 4.5.J.5.B(4) - Drywell to Suppression Chamber Leak Rate Test

10. Technical Specification Section 4.5.K- Reactor Building Standby Gas Treatment System Test

12. Technical Specification Section 4.8.A.2- Isolation Condenser Auto Actuation and Functional Test

13. Technical Specification Section 6.15- Reactor Water Cleanup System Leak Test and Inspection

The proposed change will revise the surveillance interval from a refueling outage interval to a once per 20 month interval. This change has no effect on the function of the subject surveillance since the existing refueling outage interval is defined as not to exceed 20 months. Therefore, the proposed change is editorial in nature and has no effect on the safety function of the subject systems and components.

5.0 Determination

GPUN has determined that this Technical Specification Change Request involves no significant hazards consideration as defined by NRC in 10 CFR 50.92.

1. Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability of occurrence or the consequences of an accident previously evaluated. The proposed amendment extends the interval between successive refueling outage based surveillances from 20 months to 24 months, and changes the surveillance interval from refueling outage based to once per 20 months for those systems and equipment not evaluated for extension. This change does not involve any change to the actual surveillance requirements, nor does it involve any change to the limits and restrictions on plant operations. The reliability of systems and components relied upon to prevent or mitigate the consequences of accidents previously evaluated is not degraded beyond that obtained from the currently defined refueling outage interval. Assurance of system and equipment availability is maintained.

This change does not involve any change to system or equipment configuration. Therefore, this change does not increase the probability of occurrence or the consequences of an accident previously evaluated.

2. Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed amendment extends the interval between successive refueling outage based surveillances from 20 months to 24 months, and changes the surveillance interval from refueling outage based to once per 20 months for those systems and equipment not evaluated for extension. This change does not involve any change to the actual surveillance requirements, nor does it involve any change to the limits and restrictions on plant operation. This change does not involve any change to system or equipment configuration. Therefore this change is unrelated to the possibility of creating a new or different kind of accident from any previously evaluated.

3. Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety. The proposed amendment extends the interval between successive refueling outage based surveillances from 20 months to 24 months, and changes the surveillance interval from refueling outage based to once per 20 months for those systems and equipment not evaluated for extension. This change does not involve any change to the actual surveillance requirements, nor does it involve any change to the limits and restrictions on plant operation. The reliability of systems and components is not degraded beyond that obtained from the currently defined refueling outage interval. Assurance of system and equipment availability is maintained. Therefore, it is concluded that operation of the facility in accordance with the proposed amendment does not involve a significant reduction in a margin of safety.

The proposed extension of the refueling outage interval surveillances from 20 months to 24 months does not degrade the reliability of systems and components beyond that obtained from the currently defined refueling outage interval. Reliable performance of the systems and equipment effected by this change has been demonstrated. Implementation of the proposed amendment will maintain the required level of assurance of system and equipment availability. The surveillance interval for systems and equipment that have not been evaluated for extension to 24 months are editorially changed to specify the existing 20 month refueling outage interval requirement. Thus, operation of the facility in accordance with the proposed amendment involves no significant hazards considerations.

6.0 Implementation

It is requested that the amendment authorizing this change become effective upon issuance.