

American Prangy Company IIC Oyster Crink US Route 9 South PO Box 388 Socied River NJ 08731 0388

10 CFR 50.59

## May, 4, 2001 2130-01-20021

.

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

Subject: Oyster Creek Generating Station Facility Operating License No. DPR-16 Docket No. 50-219 10 CFR 50.59 Report

Dear Sir:

Pursuant to the provisions of 10CFR50.59(d)(2), enclosed is a brief description of changes made to the Oyster Creek Nuclear Generating Station as authorized under 10 CFR 50.59(c)(1) for the period January 1999 through November 2000 (the end of refueling outage 18R).

In each case, the corresponding safety evaluation concluded that changes did not involve an unreviewed safety question.

If any additional information is needed, please contact Mr. John Rogers, of my staff, at 609.971.4893

Very truly yours,

Effort For

Ron J. DeGregorio Vice President, Oyster Creek

RJD/GWB/JJR

Enclosure

cc: H. J. Miller, Administrator, USNRC Region I
H. N. Pastis, USNRC Oyster Creek Senior Project Manager
L. A. Dudes, USNRC Oyster Creek Senior Resident Inspector

JE41

## <u>Enclosure</u> <u>10 CFR 50.59 Report 01/01/99 – 06/30/2000</u>

## **UFSAR Drawing**

SE 000821-009, Turbine Building HVAC System Drawing BR 2009, Sheet. 1

Changes are incorporated into drawing BR 2009, Sheet 1, which are based on inconsistencies identified during a UFSAR Review of the Turbine Bldg. HVAC system:

- Flow diagram BR 2009, Sheet 1, indicates that the air flow from SF 1-7 is 60,000 cfm. The drawing was revised to indicate an air flow rate of 68,000 cfm.
- The air flow rate from the operating floor to the condenser area shown on drawing BR 2009, Sheet 1, was corrected from 52,000 cfm to state 52,200 cfm.
- The flow rate from the South End Area was be changed from 6700 cfm to 6770 cfm.

The proposed changes will ensure that the correct air flow rates for the South End Area, from the operating floor, and in the feedwater and condensate pump room are consistent on Drawing BR 2009, Sheet. The proposed changes do not affect the way the TBHV system and components are operated. The TBHVC System design bases is not changed.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## **UFSAR Drawing**

SE 000822-043, Reactor Building Ventilation Flow Diagram – Flow Rates BR 2011, Sheet 2

A review of UFSAR Section 9.4.2.2.2 identified minor inconsistencies on Drawing BR 2011, Sheet 2. The following minor changes were made on drawing BR 2011, Sheet 2:

- Flow Diagram BR 2011, Sheet 2 indicates the air flow to El. 33'5" is 1,000 cfm. This elevation and elevation 51'3" are connected by a stairwell. Therefore, this air flow is shown to supply El. 51'3".
- The correct flow provided to El. 21'3" is 460 cfm instead of 400 cfm.
- The air flow to and from El. 38'0" is a total of 7680 cfm. Each of the two ducts in the area provides 3840 cfm.

This change revises drawing BR 2011, Sheet 2. The drawing was corrected to identify the correct air flow rate and flowpath for El. 23'6", El. 33'5" (Incore Probe Room), and El. 38'0" (Shutdown Cooling Pumps) consistent with correct ductwork drawings. This change is consistent with the current normal operating conditions for the RBHV system.

This change does not involve an unreviewed safety question and does not require any changes to the technical specifications.

## **UFSAR Drawing and Procedure**

SE 000822-041, UFSAR Figure BR 2011, Sheet 2

A review of UFSAR Section 9.4.2.2.2 identified minor inconsistencies on Drawing BR 2011, Sheet 2, and Procedure 329.

- Air flow from ducts surrounding the reactor cavity are shown on flow diagram BR 2011, Sheet 2
- Drawing BR 2011, Sheet 2 was revised to identify that Note 4 is applicable to Valves V-27-1 through -4.
- Procedure 329, Step 2.2.8, and Figure 329-1 identify valves V-27-1 and -2 as limited to 30 degrees open. The procedure step and figure was revised to include valves V-27-3 and -4 as limited to 30 degrees open.

These changes are consistent with the normal operating conditions for the RBHV system.

The changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## **Procedure / UFSAR**

SE 000213-020, Standby Liquid Control System Tank High and Low temperature Alarm Setpoints.

This change revises UFSAR Section 9.3.5.3 to indicate the tank and suction piping will be maintained at temperatures between the low limits specified in the plant Technical Specifications and the suction piping and tank design temperature of 150°F. The increased low temperature alarm setpoint and increased normal operating setpoint of the tank heater will prevent the possibility of boron solution precipitation in the poison tank and suction piping up to the maximum allowable B-10 concentration of 19.5 wt %.

The UFSAR change does not involve an unreviewed safety question and no changes are required to the technical specifications.

## UFSAR

SE 000733-042, Revise UFSAR Sections 8.3.1.1.4, 7.2, Table 7.2-4.

UFSAR Table 7.2-4 of Section 7.2 and Section 8.3.1.1.4 were revised to correct the RPS MG Sets' AC motors rated voltage from 460 to 440 VAC, generators output rated voltage from 120 to 115 VAC, Rotary Inverter AC motor rated voltage from 460 to 440 VAC, and Continuous Instrument Panel (CIP-3) voltage from 120 to 120/208 VAC. This revision to the UFSAR is in accordance with the existing configuration control documents and field installation.

There are no changes to the current configuration or system operation. The capability to maintain 120 Volt AC Vital Power System and Reactor Protection System in accordance with Technical Specifications 3.7 and 4.7.

SE 000423-011, Rad Waste

Configuration Change OC-CCD-0004223-001 removed valves from the regeneration system which could switch flow from the high conductivity tank to the low conductivity tank. Section 10.4.6.2 reads, "... from the J. O. Backwash process are normally routed to the chemical waste/floor drain collector tanks. However, they can be sent to the high purity waste collector tanks (Section 11.2)". In the first sentence, the word "normally" will be removed and the entire second sentence will be removed. This is consistent with the modification because with the valves being removed, flow can no longer be sent to the high purity waste collector tanks.

The UFSAR changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE 000225-038, Control Room Drives

The UFSAR indicated 5 fps as an absolute maximum control rod drop velocity. The control rod velocity limiters are currently designed for a maximum velocity of 3.11 fps. This is demonstrated by extensive control rod drop test results report in NEDO-10527.

UFSAR Sections 15.4.9.2 and 15.4..9.3.1 had previously been revised to reflect 3.11 fps. UFSAR sections 4.3.2.5, 4.6.4.3.1 and 4.6.4.3.2 were revised to incorporate 3.11 fps

The UFSAR changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE 000666-007, Oxygen Monitoring System for the Drywell & Torus Areas

The corrections of Section 6.2.5, 6.2.5.2.1 and 6.2.5.2.2 clarify the Oxygen Monitoring System comprised of AIT-38-0494 and AIT-38-0495 and the monitoring of the torus and drywell atmospheres during normal operation. This system is used by Operations to ensure that compliance with Technical Specification 3.5.A.6 is maintained ( $O_2$  levels below 4%). The description in the UFSAR, Update 10, described the accident  $H_2O_2$  analyzers (IT-0001A, IT-0001B) as the monitors used to ensure combustible gas within the drywell during power operations. In fact, the  $H_2O_2$  monitors are not placed into operation until an upset condition occurs. This revision is only a correction to clarify what analyzers are used during normal operating conditions.

SE 000421-021, Condensate Pumps

A review of Table 10.4-3 found the Total Displaced Head (TDH) and the Net Positive Suction Head (NPSH) values were incorrect as listed in the table. This was found when reviewing the vendor manual pump curve. The change corrects Table 10.4-3 of the UFSAR to state the total displaced head (TDH) is 660 ft.  $H_2O$  rather than 650 ft.  $H_2O$ . In addition, a negative sign was added in front of the NPSH to be in agreement with the pump manufacturer's pump curve. The change in the design point TDH is editorial and results in an increase of 10 ft. A negative sign is added to the NPSH value to conform to sign convention. There are no accident consequences that are affected or changed by either of these corrections.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

UFSAR

SE 000213-018, Standby Liquid Control System (SLCS) Instrumentation

UFSAR Table 9.3-7 is revised to include the following instrumentation.

- Continuity Meter Relays 14 MR1 and 14MR 2
- Pump Discharge Pressure Instrumentation
- Valve Position Switches

The Table was revised to identify that "Pump On" indication is provided when initiating the SLCS from the manual keylock switch. UFSAR Section 7.4.1.7 is revised to include the continuity meters provided in the back of Panel 4F in the control room. These changes are consistent with the current plant configuration of the instrumentation available to the operator to monitor the status of SLCS operation.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE 000240-007, Peak Drywell Temperature

UFSAR Table 3.11-1 identified a limit for drywell temperature of <175 degrees F. The correct drywell temperature limit is 292 degrees F consistent with Technical Specification 5.2.A and UFSAR Sections 6.2.1 as well as section 3.8.2. This change is consistent with the present design temperature and pressure.

SE 000242-008, Hardened Vent System

During a review of the Hardened Vent System (HVS) several corrections were identified.

- Section 6.2.7.2.1 was corrected to state isolation valves V-23-13 and V-23-14 and their associated accumulators are located in the west side of the Reactor Bldg. at floor elevation 75'3".
- Section 6.2.7.2.1 was corrected to state the vent discharge is located at approximately 38 feet inside the stack.
- Section 6.2.7.2.2 was clarified to indicate the top of the plant stack is located 368' above grade.
- Section 6.2.7.4 was corrected to state the torus-to-drywell vacuum breakers are valves V-26-1 through 14.

The current design basis and operating requirements for the HVS have not been changed. UFSAR Section 6.2.7 has been revised to reflect the current design characteristics of the HVS.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

# UFSAR

SE-000213-018, Standby Liquid Control System Boron Injection Rate

This change will revise UFSAR Section 9.3.5.3 to include a boron injection rate documented in Calculation C-1302-213-5370-009, Rev. 4. The boron injection rate to be added to the UFSAR is based upon the maximum B-10 concentration allowed by Technical Specification 3.2.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

SE-000621-015, Source Range Monitors

A review of the UFSAR identified inconsistencies between the UFSAR and Technical Specifications as follows:

- Technical Specifications state that the Source Range Monitor (SRM) rod block occurs a  $<5 \times 10^5$  cps, while the UFSAR states the setpoint is  $>1 \times 10^5$  cps.
- Technical specifications state the Retract Permit setpoint is >100 cps while the UFSAR states > 500 cps.
- Editorial changes correct the superscript and subscript values on various setpoints.

The UFSAR was changed to reflect the actual Technical Specification setpoint for the SRM Retract Permit and the Hi SRM Rod Block.

#### UFSAR SE-000713-009. Turbine Generator

The changes being made correct inaccuracies in the UFSAR Section 9 as it relates to the Turbine Generator and its Auxiliary Systems. This information is not used in the basis for any nuclear safety analysis or accident analysis.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

SE-000422-015, Feedwater

The UFSAR Table 10.4-4 indicates that the terminal voltage of the Feedwater Auxiliary Oil Pumps is 220 volts, but the motor is currently supplied with 440 volts. The Table also indicates the motors are terminated in MCCs 1All, 1Bll, and 1Bll. This is incorrect, they are terminated in MCCs 1A13, 1B13 and 1B13, respectively. No operational or accident analyses are affected by these changes.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

SE-000211-031, Isolation Condenser

This UFSAR change revises Section 6.3 to reflect the period of time the vent valve may remain closed without potentially impacting system operability of the Isolation Condenser System. It permits isolation of the vent for a maximum duration of 44 days. This change does not affect any operational or accident analyses.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000243-019, Containment Isolation

Section 1.9.21 was revised to state the correct setpoint for the high pressure containment isolation signal. While 3.5 psig is the Technical Specification limit, the value of 2.9 psig is the current instrument setpoint that accounts for instrument accuracy and additional margin.

SE-000301-002, Section 10

Changes to UFSAR Section 10 correct inaccuracies in the UFSAR. This information is not used as the basis for any nuclear safety analysis.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000251-022, Spent Fuel Pool Cooling System

The following UFSAR changes were made.

- UFSAR Section 9.1.3.2.1 was revised to state (1) carbon steel piping is provided up to the SFPCS filter, (2) the return piping is constructed of aluminum or stainless steel downstream of the filter; and (3) RBCCW flow is adjusted to each SFPCS heat exchanger by butterfly valves.
- UFSAR Section 9.1.3.2.2 was revised to state (1) the Augmented SFPCS heat exchanger is arranged alternately in an up and down configuration, (2) the fuel pool temperature is indicated locally on the 119' elevation, and (3) the reactor cavity and equipment storage cavity can be drained through the Reactor Cleanup Demineralizer System.
- UFSAR Section 9.1.3.3 was revised to delete discussion of compliance with NRC BTP 9.5-1 as this is discussed elsewhere.
- UFSAR Section 9.1.3.2.1 was revised to indicate that fuel pool flow is indicated locally on the 75' elevation.
- UFSAR Table 9.1-2 was revised to correct (1) the height of the surge tank to 23 feet; (2) the SFPCS pump suction temperature design conditions; (3) degree symbols; (4) design temperature of the shell side of the SFPCS heat exchanger; (5) the diameter of the SFPCS heat exchanger; (6) design temperature of the Augmented SFPCS heat exchanger; (7) the construction material of the covers of the Augmented SFPCS heat exchanger; (8) the SFPCS filter backwash conditions (400 gpm for 40 seconds); (9) the SFPCS filter operating differential pressure, and (10) the filter aid pump motor voltage rating.
  - UFSAR Table 9.1-3 was revised to (1) delete a redundant statement for the surge tank high level alarm, (2) clarify that several sensors are used for monitoring surge tank level, (3) correct the location of the Augmented SFPCS pump trouble alarms in the Old Radwaste Building; and correct the location of the SFPCS low-low surge tank level alarm

The design bases and operating requirements for the SFPCS were not changed. UFSAR Section 9.1.3 was revised to reflect the current design and operating characteristics of the SFPCS

SE-000543-005, New Radwaste Closed Cooling Water Review

Changes to UFSAR corrected the following errors:

- Table 9.2-3 describes New Radwaste Closed Cooling Water (NRWCCW) Heat Exchanger shell and tube side design flows as 2065 gpm and 1900 gpm, respectively. The correct values are 1875 gpm and 1717 gpm.
- Table 9.2-8 provides design basis loads for the NRWCCW System. These loads were used for sizing heat exchangers and pumps. Actual operational loads are different since some equipment loads are now cooled by the Condensate Transfer System and some components are abandoned. A note was added to the table for clarification.
- Table 9.2-9 indicated that the NRWCCW Surge Tank has a volume of 50 gallons. The correct volume is 500 gallons.

The changes to UFSAR Section 9.2 correct inaccuracies contained in the UFSAR. This information is not used as the basis for any accident analyses.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

SE-000822-050, Heating, Ventilation, and Air Conditioning

UFSAR Sections 11.3.2.5 and 11.3.2.7 were revised to add the ventilation flow rates from the Reactor and Turbine Buildings through the plant stack and the Turbine Building roof stack to be consistent with design documents.

UFSAR SE-000212-062, Core Spray System and ADS

UFSAR Section 6.3 and 7.3 were revised to reflect the current design and operating characteristics of the ADS and CSS. The design bases and operating requirements for the CSS and ADS have not been changed.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

000641-024, Reactor Protection System

UFSAR Section 7.2 was revised to reflect the current design and operating characteristics of the RPS. The design bases and operating requirements for the Reactor Protection System (RPS) have not been changed.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### **UFSAR / Modification**

SE-000822-045, Standby Gas Treatment System HEPA Filter

The High Efficiency Particulate Air (HEPA) filters that were installed in the Standby Gas Treatment System (SGTS) were replaced with filters manufactured by Farr Company. The replacement HEPA filters meet current design basis requirements contained in UFSAR Section 6.5.1 and Technical Specifications 3.5 and 4.5. UFSAR Table 6.5-1 has been revised to include the design information for the replacement filters.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000212-063, Core Spray System

The technical evaluation of these valves effected a change in the facility as described in the UFSAR, Table 6.3-4. The net results of this change was to update Table 6.3-4 to correctly state the design temperature of these valves is 350 degrees F.

SE-000573-013, Drywell Equipment Drain Tank Pump

UFSAR Table 11.2-5 was changed to state the material of construction for the drywell equipment drain tank pump impeller is bronze and a mechanical seal is used instead of packing. These differences do not affect the performance characteristics of the pump/motor assembly.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000665-013, Fire Detectors

The UFSAR was revised to correct errors in the description of the type of detectors at the fire pond pump enclosure. The description was changed to include both thermal rate of rise detectors as well as thermal rate compensated/fixed temperature detectors. The setpoint for the outside fire detectors was changed to 200 degrees F from 135 degrees F to prevent spurious operation. Any fire occurring at this location would generate temperatures considerably in excess of 200 degrees F which assures system actuation when needed.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000254-002, Installation of Fuel Racks

Additional high-density fuel racks where installed in the spent fuel pool. Additional thermal, hydraulic, and structural loads including seismic were analyzed and found acceptable. The new racks increase storage capacity in the spent fuel pool. A separate activity was initiated and completed to obtain approval for a change to the Technical Specifications allowing increased storage of spent fuel.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## **Temporary Modification and Special Test**

SE-000561-014, Temporary Modification and SF-6 Tracer Gas Test

A review of Chemistry data indicated a small salt-water leak into the main condenser as evidenced by reactor water chemistry. SF-6 injection into the Circulating Water System has been used to identify leakage paths into the condenser. The SF-6 injection for leak detection is not described in the UFSAR. There were no nuclear safety or operational concerns identified in a review of this evolution.

The temporary modification and the SF-6 injection do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### As-Found Condition /UFSAR Drawing

SE-000215-036, Reactor Water Cleanup Disable Signal

The original system design had a low pressure switch on the let down line to the main Condenser, which supplied a signal to the discharge flow controller. The intent of this trip was to close flow control valve FCV-ND22 to prevent steam flashing in the RWCU system. This function has been disconnected due to unstable controller operation. Disabling this switch by plugging the valve is acceptable because it does not adversely effect nuclear safety or safe plant operation.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000532-028, Coating of Replacement ESW Piping

A coating was applied on the internal and external surfaces of the new replacement piping spool pieces on the Emergency Service Water System for corrosion protection. The application of a proven durable coating system on internal and external surfaces of the replacement ESW piping will provide a long term erosion-corrosion protection.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### **UFSAR Change**

SE-000241-025, UFSAR Figure 6.2-18

This change corrects a typographical error in UFSAR Figure 6.2-18. FDSAR Amendment 11, the original licensing basis, Figure III-16-1 was incorporated into the UFSAR as Figure 6.2-18. Figure III-16-1 had a hand written number as .11 BTU/lb °F. Figure 6.2-18 is a typed version stated as 11 BTU/lb °F. The decimal (.) was missed when transposing from the hand written version to the typed version.

SE-000661-034, Stack Radiation Monitor Display Instrumentation

During a review of the UFSAR, the following minor inconsistencies were identified regarding (1) operation of the Stack RAGEMS radiation monitors and (2) the Post Accident Sampling System (PASS) exhaust air flow to the Reactor Building.

- Table 7.5-5 was revised to include a recorder with a range of 0-50 cps (linear) for the stack gas radiation levels displayed on Panel 1R. A recorder for the High Range Noble Gas Monitor for Channel 1 only is added. The recorder range was changed from 5-50 cps to 0-50 cps (linear). An editorial change is included to identify REC as RECORDER.
- Section 11.5.2.5 was revised to delete discussion of the various linear and logarithmic scales used for the stack RAGEMS monitors, and provide reference to Table 7.5-5 which provides the correct ranges that are indicated for stack gas radiation.
- Section 11.5.2.5 was revised to identify the maximum flow rate of 100 cfm from the PASS exhaust hood to the reactor building.

These changes are consistent with the original design basis and operation of the sampling station.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

# UFSAR

SE-000822-047, Standby Gas Treatment System

The following changes to the UFSAR were made to correct errors and enhance the system description.

- The diameter of the crosstie connection of the two filter trains was corrected (12" to 14")
- UFSAR Section 6.5.1.2.2 was revised to indicate that when the SGTS is placed in the standby readiness mode, all seven filter train valves are closed except for the crosstie valve.
- UFSAR Section 6.5.1.2.2 was revised to indicate the orifice value of the standby train will automatically close following failure of the operating SGTS train.
- UFSAR Section 6.5.1.2.4 was revised to indicate that the crosstie valve, and inlet orifice purge valve of the failed train will both open automatically upon filter train swap over.
- UFSAR Section 6.5.1.2.4 was revised to clarify that the secondary containment leak rate test confirms that the SGTS can maintain a negative 0.25" WG pressure in the Reactor Building with an air flow of less than or equal to 4000 cfm consistent with Technical Specification Surveillance requirement 4.S.G.2.

- UFSAR Section 6.5.1.2.4 was clarified to indicate that additional surveillance testing is completed to confirm that the SGTS air flow is within 2600 cfm +/- 10%. The UFSAR was clarified to indicate that during the functional test of the SGTS the strip heaters for the charcoal filters are checked for proper operation.
- UFSAR Section 6.5.1.3 was revised to delete reference to Chapter 15 for a description of the charcoal filter efficiency. The information is not presented in chapter 15, but is summarized in the following paragraphs of this section.
- UFSAR Section 6.5.1.4 was clarified to indicate each replacement filter will be checked for damage, however, this inspection may not be performed immediately before installation.
- UFSAR Table 6.5-1 was revised to indicate the following design information for the charcoal filters:
  - (1) The weight of charcoal is 300 pounds.
  - (2) The methyl iodide removal efficiency is 90%.
  - (3) The pressure drop across clean charcoal filter bank is 1.1" WG.
- UFSAR Sections 7.3.1.2.4 and 7.3.1.3.4 were revised to indicate that the setpoints and time delay sequence for initiation of the SGTS on high radiation were chosen to prevent spurious initiation. The discussion about the operator preventing spurious initiation was removed.
- UFSAR Section 11.3.2.5 was clarified to indicate the top of the plant stack is located 368' above grade.

The design basis and operating requirements for the SGTS have not been changed. UFSAR Sections 6.5.1, 7.3.1 and 11.3.2 were revised to reflect these operating and design characteristics of the SGTS.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

# UFSAR

SE-000153-027, R0, Secondary Containment

These changes were made to UFSAR Section 1.2.2, 3.8.4 and 6.2.3:

- UFSAR Sections 1.2.2.2 and 3.8.4.1.1 were revised to show the correct dimensions of the drywell support pedestal.
- UFSAR Section 6.2.3.1 was revised to remove the general statement that secondary containment is maintained during all modes of station operation except when in the shutdown mode. The UFSAR specifically indicates the conditions that must be satisfied so that secondary containment capability is not required.

UFSAR Section 6.2.3.3 was revised to indicate one common exhaust duct for the RBHV system. The UFSAR was clarified to indicate that the inlet and outlet isolation valves will close automatically upon initiation of the Standby Gas Treatment System.

UFSAR Section 6.2.3.3 was revised to specifically identify each signal that will isolate the RBHV system supply duct isolation valves including air inlet purge valves V-28-42 and 43.

UFSAR Section 6.2.3.4 was revised to indicate that inleakage is tested at least once per operating cycle not to exceed 20 months in accordance with current Technical Specification requirements.

UFSAR Table 6.2-11 was revised to indicate the Reactor Building internal design pressure is 0.20 psig and the correct exit diameter of the plant stack is 8 ft. 6 in. UFSAR Table 6.2-11 is revised to reflect the actual RBHV flow rate of 76,700 cfm.

These changes to Sections 1.2.2, 3.8.4.1.1 and 6.2.3 are consistent with the design basis of the RBHV system, reactor building foundation, plant stack and isolation capability of the secondary containment. No changes have been made to the current plant configuration or any system operation.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000574-007, New Radwaste Floor Drain Isolation Valve

The drain line for the Concentrated Liquid Waste Tank (CLWT) Cubicles in NRW was isolated from Floor Drain Sump No. 2 by valve DS-HV-0 1 32. During a field walkdown the valve was found to be located in the drain line from the valve gallery instead of the tank cubicle. The system is not safety related; has no impact on any safety related equipment, and is not credited in any safety analysis.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

## **UFSAR Change**

SE-000213-013, Control Room

UFSAR Section 3.1.15 was revised to include a discussion of the alternate shutdown capability provided to meet 10CFR 50, Appendix R requirements. The alternate shutdown capability, which includes operator actions prior to and after evacuation of the control room, is utilized for achieving hot and cold shutdown from outside the control room in accordance with GDC 19. These changes are consistent with current operating practices contained in emergency operating procedures and procedures for control room evacuation.

### **Modification and UFSAR**

SE-000232-065, HP-T-1B Coating Replacement

A damaged internal coating for High Purity Waste Collector Tank HP-T- 1B was replaced with an approved epoxy coating. To facilitate coating removal and replacement, the internal cooling coils to HP-T-1B were sectioned and removed. Two inch 150# 304 stainless steel flat faced blind flanges and gaskets were installed on the exterior of the tank at the joints where the cooling coil discharge pipe emerged.

The removal of the RBCCW cooling source from HP-T-1B does not adversely affect nuclear safety or safe plant operations. The activity does not change plant operation or degrade performance. The affected systems do not perform any safety related function and has no impact on safety related equipment.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-403070-001, Chlorination System

The hypochlorite metering pumps have been removed and eductors have been installed. Chlorine is injected into salt water systems to control biofouling of the heat transfer surfaces of the three main condensers, the RBCCW/TBCCW heat exchangers, and the Containment Spray heat exchangers. This system has no direct interface with nuclear safety related equipment.

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000212-051, Standby Liquid Control System

The UFSAR was corrected to state only a red light exists for pump operation. The green light for pump not running/power available is not necessary because power availability is indicated via the SQUIB continuity meters & annunciator indication.

SE-000161-003, Spent Fuel Pool

Oyster Creek UFSAR Sections 9.1.2.3.1 and 9.1.2.3.2 were revised to indicate the maximum allowable temperature gradient between the Spent Fuel Pool (SFP) water and the surrounding air, based on Technical Specification (TS) Section 5.3.1 provisions and on structural evaluations of the SFP. The information presently contained in these sections is not consistent with the TS or the structural calculations. Also the last paragraph of Section 9.1.2.3.1 "Seismic Analysis of the Cask Drop Protection System" (CDPS) is being revised for clarity.

Oyster Creek UFSAR sections 9.1.2.3.1 and 9.1.2.3.2 are being revised to reflect a permissible reactor building differential temperature of +60 F between the water in the spent fuel pool and the air temperature. This differential temperature is consistent with the differential temperature presently specified in the Oyster Creek Technical Specifications

These changes do not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000214-017, Shutdown Cooling System

FSAR, Section 5.4.7.2 was changed to correct an error regarding the SDC pump discharge pressure. The vendor manual and original GE Specification state the Shutdown Cooling Pump has a rated capacity of 3000 gpm at a head of 225 feet. The Shutdown Cooling Pump is RR, Passive Integrity, and QA/QC required. The Shutdown Cooling System components are designed to withstand 1250 psig due to its inter-tie with the Reactor Coolant System.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000251-021, Spent Fuel Pool Cooling System

UFSAR Section 9.1 has been changed to delineate the cooling capacity of the Spent Fuel Pool Cooling (SFPC) system. The SFPC system is capable of removing decay heat from a normal refuel offload, ten days after a reactor shutdown, based upon an expected RBCCW System cooling water temperature range of T = 45 F - 100 F. The SFPC System is also capable of removing decay heat from a full core offload, ten days after a reactor shutdown, based upon an expected RBCCW System cooling water temperature range of T = 45 F - 70 F. When the RBCCW System cooling water exceeds a temperature of T = 70 F, the SFPC System is not capable of removing, decay heat from a full core offload, ten days after a reactor shutdown. Station procedures contain the controls necessary to ensure that the decay heat from a full core offload is within the heat removal capability of the augmented SFPC system.

SE-000854-008, Combustible Gas Control

This change corrects several statements that are not consistent with current operating procedures. The reference to "automatic" makeup and venting controls is incorrect as the automatic function is no longer used. These automatic controls are not required to mitigate any accidents. The operating procedures direct the operators to maintain between 1.1 and 1.3 psig drywell pressure, because the low and high pressure alarms are 1.0 and 1.4 psig respectively. The band of 1.1 to 1.3 allows enough flexibility to maintain pressure, while not reaching any alarm setpoints.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000231-021, Augmented Off-Gas System (AOG)

A number of corrections were made to more accurately describe the system and its control functions. None of the changes affects the operation of the facility or any safety analyses

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000550-001, Post Accident Sampling System

Several inaccuracies in the chemistry facility and PASS descriptions were corrected. The changes do not affect system operation or any accident analyses associated with system function.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000331-006, Steam Seal Exhauster Exhaust Blower Discharge Valve

Section 10. 4.3.2 of the UFSAR "Turbine Steam Seal System", inaccurately indicated the set points of the gland (steam seal exhauster) exhaust blower fan discharge valves are automatically maintained. The motor operated discharge valves are manually adjusted to provide the minimum vacuum that will prevent steam from leaking past the turbine shaft gland packing seals and into the turbine building. There is no automatic feature to maintain this adjustment.

SE-000621-006, Power Indication

A tick mark was added at 127% reading on the meter face of the power indication on the Intermediate Range (IRM) instrumentation drawers. The tick mark was added for readability at 125%+2% during the Front Panel Test surveillance. The range of the meter is 0 - 125%. The tick mark was added to provide greater readability.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### FSAR

SE-000213-014, Standby Liquid Control System

The UFSAR has been revised to state the location used to collect a grab sample of the Liquid Poison Tank is the access cover on the top of the tank.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000213-011, Standby Liquid Control System

UFSAR Table 7.5-2 incorrectly listed the span of the squib valve electrical continuity meter as 0-100V. The span of the installed meter is 0-100%. Updating the UFSAR to reflect the current equipment within the plant will align the actual plant equipment with the design basis.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000542-018, TBCCW Instrumentation

Table 9.2-14 in the UFSAR has been revised as follows:

- Pressure transmitter PT-46 (for remote signal to the Control Room) is located on the heat exchanger discharge header, and not on the pump discharge header.
- Temperature Element TE-1, which transmits a signal to the control room, has been added.
- Reference to TBCCW outlet temperature has been deleted.

SE-000740-002, Revision of UFSAR Table 8.3-1

The lump sum load value following a loss of offsite power is deleted because the value is incorrect and the miscellaneous load value changes frequently. These changes are reviewed and evaluated when changes occur.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000821-007, Radioactive Waste Management

The UFSAR was changed to clarify the effluent velocities of potential radioactive gases exiting the plant stack (Table 11.3-7) and the number of radioactive release points (11.1.3.1) from the Turbine Building.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000571-018, Sump Tanks

UFSAR section 11.2.2.1 was changed to state sumps and tanks automatically discharge their contents to the Liquid Radwaste System, with the exception of the 1-1 and 1-5 sumps which are operated in the Manual Mode.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000542-017, Turbine Building Closed Cooling Water System

FSAR Table 9.2-13 was corrected to state the 'A' HVAC train is cooled by TBCCW while the 'B' HVAC train is cooled by an air cooled condenser coil.

SE-000161-006, Spent Fuel Pool Liner Thickness

The purpose of this safety evaluation was to evaluate the consequences of changing description of the liner thickness for the Spent Fuel Pool (SFP) in the UFSAR. Sections 3.8.4.1.3 and 9.1.2.2.1 of the UFSAR described the SFP liner thickness as <sup>1</sup>/<sub>4</sub>". The construction documents show that the installed liner is 1/4" thick on the pool floor, north wall, and at the opening to the reactor cavity. The liner on the other walls is a nominal 1/8" thick (12 gauge). This change does not affect plant operations or any accident analyses.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## UFSAR

SE-000821-008, Heating, Ventilation and Air Conditioning System

This change consisted of clarifying the effluent velocities of potential radioactive gases exiting the plant stack. This change has no affect on plant operation or any accident analyses.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000822-045, SGTS HEPA Filter

The HEPA filters formerly installed in the Standby Gas Treatment System (SGTS) were replaced with filters manufactured by Farr Company. High Efficiency Particulate Air (HEPA) filters that are currently installed in the SGTS were manufactured by Cambridge Filters, and are currently not available. UFSAR Table 6.5-1 was revised to include the design information for the replacement filters. The replacement HEPA filters meet the current design basis requirements contained in UFSAR Section 6.5.1 and Tech Specs 3.5 and 4.5.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000211-035, Cable and Conduit Modification

A new, larger power cable was installed for valve V-14-32 was installed. The purpose of this modification is to provide greater available valve actuator motor torque by increasing the voltage available at the motor terminals to assure that the valve completes its safety function during design basis events.

SE-000856-011, Replace NRW SA Backflow Preventers with Check Valves

The modification removes the backflow preventers, the upstream filters and associated piping. Two swing check valves, in series, with telltale drains for each were installed. The piping is located in the New Radwaste (NRW) Building, elevation 38'-6".

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## Modification

SE-400053-001, PCV-ND11 Trim Alternate Replacement

This Alternate Replacement replaces the trim and actuator of PCV-ND11 to improve system performance and eliminate the constant refurbishment of PCV-ND11. The CCI Drag trim is designed to breakdown the high pressure drop in multiple pressure reducing stages. These multiple stages eliminate cavitation. This trim performs the pressure reducing function without the trim itself eroding and the need for constant trim replacement. This Alternate Replacement improved the pressure control function of PCV-ND11 and did not change the ability of the valve to fail closed on loss of air.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000215-039, RWCU Conduit Re-configuration

The existing conduit and pull boxes have been modified to comply with cable bend radius requirements and to facilitate new cable installation.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Document

SE-000020-004, EQ Master List

Re-evaluates and justifies the historical deletion of various electrical components from the scope of the Environmental Qualification (EQ) Program. The historical deletion of components from the EQ Master List were technically evaluated and reviewed for safety significance.

SE 000251-025, Fuel Pool Skimmer Surge Tank Pipe Corrosion

Corrosion products were removed and the pipe was re-coated. Upon obtaining acceptable UT readings on the pipe, operation into cycle 18 is acceptable.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE 000215-042, Reactor Water Cleanup

The modification provided a seal weld on the pipe plug in the leakoff line connection of valve V-16-63. The seal weld provides positive isolation to preclude leakage past the pipe plug. The seal weld has no affect on the operation of the valve and provides additional system integrity.

This modification does not involve an unreviewed safety question and does not require any changes to the technical specifications.

## UFSAR

SE 000821-010, Turbine Building

This change clarifies the differential pressure required in the turbine building.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### UFSAR

SE-000541-040, Reactor Building closed Cooling Water

Certain discrepancies were uncovered in the text and tables in the UFSAR that are corrected with this revision. None of the changes challenge safe plant operation nor do they impact nuclear safety.

SE-000731-012, Electrical distribution

Existing degraded grid voltage relays were replaced with new relays with harmonic restraints. All changes are within the existing Technical Specification limits and no change is made to the plant's operating system. The relays will be mounted in the same manner as the old relays. They were purchased to comply with plant's seismic spectra to maintain compliance with the seismic design criteria.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### UFSAR

SE-000215-041, Reactor Water Cleanup System

This change revises the design discharge pressure and temperature listed for the RWCU Recirculation Pumps in Table 5.4-1. There is no change in operation of the system. The RWCU Recirculation Pumps are capable of supplying pressure in excess of the 1250 psig currently listed in UFSAR Table 5.4-1. The vendor calculations indicate that the new pressure is within the design capability of the system.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000534-013, Rad Waste Service Water System

A temporary modification was implemented to allow for continued Bearing Water supply to Radwaste Service Water Pump SW-P-1B while pump SW-P-1A and its support pedestal were replaced. The implementation of this temporary modification and the related temporary procedure change allowed the continued use of the New Radwaste Service Water System as a heat sink for AOG and/or WC-E-1A operation while repairs were made.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-320006-003, Reactor Cavity and Equipment Pool

A temporary removable barrier was installed on the stainless steel liner of the OC Reactor Cavity and Equipment Pool to aid in decontamination and to mitigate or prevent leakage of water during refueling operations.

### **Procedure Change**

SE-000153-035, Reactor Shield Plug Removal

This change allows removal of the first and second layers of the Reactor Cavity Shield Plugs at 50% power or less. The shield plugs are removed in preparation for refueling of the reactor. The remaining shield plugs provide adequate missile protection and 10CFR20 limits are not exceeded.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### **Procedure Change**

SE-000153-036, Reactor Shield Plug Removal

This change allows the removal of the third and fourth layers of the Reactor Cavity Shield Plugs at hot shutdown (mode switch in shutdown and reactor temperature greater than 212 degrees F). The shield plugs are removed in preparation for refueling of the reactor. Missile protection is not required since the turbine is offline and 10CFR20 limits are not exceeded.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### **Test / Inspection**

SE-000221-007, Reactor Pressure Vessel

The GERIS 2000 equipment will be utilized for the required RPV shell weld examinations. The manipulator was developed, fabricated and seismically analyzed by MAN Energie in Nurnberg, Germany for GE Nuclear Energy (GENE). The mechanical computer controlled manipulator system, coupled with a GENE designed Ultrasonic Test (UT) system has the capability to conduct UT inspection of the welds from the inner surface of BWR RPV wall.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000215-012, Reactor Water Cleanup System

Justification was provided to the Reactor Water Cleanup (RWCU) System Return Line from Reactor Recirculation System Loop "B" Discharge Piping to be isolated by means of the existing disc/stem in valve V-16-63 and/or a Nitrogen freeze seal. These isolation barriers may have been required in order to complete repairs to valve V-16-63. The isolation barriers would have been temporarily part of the Reactor Coolant (RC) System pressure boundary. The repair was actually accomplished using the disc/stem and a restraining device in lieu of the freeze seal.

SE-000535-020, Main Condenser

This modification removes valve V-3-0408 and caps the connection to the Condenser 1-A-North backwash line and the remaining line to the 1-1 Sump. At Condenser 1-C-South the connection at the spool piece downstream of V-3-0023 was plugged and the line to the 1-5 Sump was capped.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000531-037, Service Water

This change rehabilitates the 30-inch Overboard line to eliminate leakage and increases the reliability of the system.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000882-017, Reactor building Crane

This modification makes electrical changes on the Reactor Building Crane (RBC) to allow the bypass of an interlock that prevents bridge/trolley movement while operating either the main or auxiliary hoists.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000301-003, Low Pressure Turbine

The scope of this modification is to refurbish a spare turbine LP rotor removed from the Oyster Creek turbine to be used as a seed (spare) rotor during future turbine overhauls. This seed rotor will be designed as a replacement for the "A" LP turbine rotor.

SE-000241-029, Torus

This modification replaces the Torus Drain blind flange and nipple. Additionally, a drain valve was added to facilitate the installation of equipment for Torus Draining in the future.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-000531-034, Service Water System

This modification replaces an existing 90-degree elbow with a tee and set of isolation valves on the Service Water System line directly upstream of the Seal Well. The purpose of this tee and valves is to provide a tie-in point for a temporary line so that Service Water System flow can be diverted away from the Seal Well and the 30" Overboard Discharge line. A temporary line will be installed to divert water to the New Radwaste Service Water System.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## **Procedure Change**

SE-945100-357, Emergency Plan

An Emergency Plan revision allows assignment of the on-shift ECC Communications Coordinator as necessary to accommodate existing conditions. The ECC Communications Coordinator is no longer required to be a licensed Reactor Operator (CRO). The OSC Coordinator position in the OSEO is modified to allow appropriately qualified personnel to be assigned to the OSC coordinator position if activated by the ED.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000735-024, DC Power Distribution

This modification removes Auto Transfer Switch ST-C from the A/B Battery Room. This transfer switch is not used. The scope of this modification is:

- The removal of the Auto Transfer Switch
- Splicing of cables 12-471 and 12-510
- Removal of front door mounted devices and covering the holes with knockout plugs

SE-000711-004, Generator Protection Relays

This modification supports implementation of new reverse power setpoints in the Digital Protection Relay System [DPRS] (for sequential trip and anti-motoring) and the wiring changes necessary to implement the new setpoints.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### Modification

SE-403092-001, Main Steam Isolation Valves

This Modification will improve the seismic integrity of the support system for the existing Main Steam Isolation Valve (MSIV) Solenoid Operated Valve (SOV) racks No. 852-1050 and No. 852-1051. These racks support SOVs V-6-3306, V-6-3307, V-6-3308, V-6-3310, V-6-3311 and V-6-3312. The Modification will convert the existing MSIV SOV Racks into self-standing structures.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

#### **Procedure Change**

SE-000531-035, Reactor Building Closed Cooling Water

Procedure change allows isolation of service water flow to the RBCCW heat exchangers for a short time frame (6 hours).

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000221-008, Control Rod Drive (CRD) Housings

This Modification involves a 3" minimum (effective length) roll expansion of the CRD housing that will be plastically expanded into the bore region of the RPV lower head. The roll expansion repair will mitigate RPV bottom head leakage due to cracking of 1) the stub tube, 2) the stub tube-to-housing weld and/or 3) the RPV-to-stub tube weld.

SE-000821-017, Heating, Ventilation, and Air Conditioning

This change to the updated UFSAR consists of adding statements which clarify Section 9.4.3.2, "System Description", and Table 9-4-1 Sheet 2 of 2, "Reactor Building Heating and Ventilation System". This revision will identify the Turbine Building Ventilation envelope as being maintained negative with respect to atmospheric conditions when both the Turbine Building Ventilation System is in operation and the Reactor Building Ventilation System is in operation.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

## Modification

SE-000882-004, Reactor Building Crane Upgrade

The 100/5 ton Reactor Building Crane (RBC) was upgraded to a 105/10 ton Single Failure Proof system as defined by NUREG 0612. The RBC upgrade included replacement of the existing main and auxiliary hoist trolley with a new single failure proof trolley and a structural and seismic qualification evaluation of the crane bridge girders, the crane runway girders, and the reactor building steel superstructure. Structural modifications to the top lateral connection between the RBC runway girders and the RBC columns at 14 locations were also installed.

This change does not involve an unreviewed safety question and no changes to the technical specifications are required.

### Modification

SE-000621-17, LPRM High Alarm Setpoint Change

Local Power Range Monitor (LPRM) High alarms were experienced during power operations with high local flux peaks. These peaks did not represent operation in excess of any core thermal limits and there were no safety concerns based on the magnitude of these flux peaks. However, operation with LPRM High alarms and no operator action was considered unacceptable. The alarm setpoint was raised from 90/125 to 97/125 watts/ sq. cm. The new setpoint was high enough to eliminate the alarms while still providing a warning to the operators of excessive flux peaks which could potentially challenge fuel design limits.

SE-000541-039, Penetration Overpressure Protection

As a result of system reviews taken in response to Generic Letter 96-06, six primary containment penetrations were provided with overprotection devices. These penetrations were: Shutdown Cooling Return Line, Reactor Building Closed Cooling Water Return Line, Isolation Condenser Return Lines (2), and Recirculation Loop Sampling Line.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### Modification

SE-000211-036, Installation of Two New Isolation Valves to Replace the Function of the Existing Valves

In order to address the recommendations contained in Generic Letter 89-10, two new system isolation valves were installed upstream of the two existing isolation valves. The motor operators were removed from the old valves and placed on the new valves. The old valves had manual operators installed and were locked in the open position. The two new valves fully meet the Generic Letter Guidelines.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### Modification

SE-402885-001, Installation of a mobile pretreatment filter in the Domestic Water System

Due to the effects of weather exposure, components in the Domestic Water System had degraded to the point of inoperability. Iron Ions in the original water system fouled the anion demineralizer resins. A new mobile pretreatment filtration system was installed to provide clean water to the Domestic Water System and Demineralized Water Storage Tank.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

## **UFSAR Update**

SE-945100-323, Changes to the descriptions of the Core Spray System

This change to the UFSAR revised the opening time for the Core Spray outside isolation valves (allowed less time) and deleted the closing time from table 15.6-1. The closing time of the valve is not part of the accident mitigation for Core Spray. Additionally, the required voltage to the valve was corrected to 460volts, vice the 440 volts presently in the UFSAR.

SE-000624-005, Deletion of the Exhaust Hood High Temperature Turbine Trip

The Exhaust Hood High Temperature Trip sensors trip the main turbine (and thusly the reactor) when the exhaust hood exceeds 225° F. The original purpose of the trip was to limit the growth that could cause mechanical damage to the turbine. Administrative limits are in place to limit the temperature of the hood to 175°F. While unnecessary high temperature trips of the turbine will be eliminated, the alarm function will remain to alert the operators to take action.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

## **Description Change**

SE-000543-006, Placing the New RadWaste Closed Cooling Water System in Standby

Due to the reduction in heat loads over several years, the New RadWaste Closed Cooling Water System is no longer necessary on a regular basis. The system will be placed in a standby status, and only returned to operability approximately one month a year or for routine sampling.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### Modification

SE-000622-029, Removal of the Remote Readout and Trend Recorder in the Control Room

Recorder TR-IA0014 was originally designed to readout and record the delta temperature between the Reactor Vessel and Vessel Head Flange. The recorder has been non functional for years. The delta temperature is calculated by the operators from other indications when needed. This modification removed the non-functional recorder and installed a blank plate.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

## **UFSAR Change**

SE-000223-007, Change to the UFSAR to align limits with the Technical Specifications

The UFSAR was different from and more conservative than the Technical Specifications in the area of closing the suction and discharge valves for the five recirculation loops. The previous Section 5.4.1.2.3 and 6.3.1.3.3 invoked requirements that were not contained in the Technical Specifications. This change corrects the UFSAR to agree with the approved limitations in the Technical Specifications.

SE-000212-067, Removal of two Core Spray Relief Valves

The Core Spray System had two relief valves installed to provide protection for pressure caused by back leakage from the drywell, or thermal expansion. In Refueling Outage 15R, a constant vent system was installed, rendering the valves unnecessary. This modification removed the two valves and installed a blank flange in their places.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### **UFSAR** Correction

SE-000216-003, Changes to the description of the Reactor Head Cooling System.

The UFSAR in section 5.4.11.2 incorrectly described the Reactor Head Cooling System as being operated in either manual or automatic modes. The automatic control system was removed many years ago and no documentation remains of when the removal occurred. Additionally, the automatic control system utilized four magnetically attached thermal sensors. These sensors also no longer exist. The UFSAR is being corrected to eliminate the automatic mode of head cooling and the abandoned sensors which would have controlled the system.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### Modification

SE-000665-014, Replacement of Fire Detectors

This modification replaced the fire detection ionization detectors in the two cable bridge tunnels with two linear heat detection wire. The new wire detectors are more appropriate for the application.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

### **UFSAR Correction**

SE-000215-045, Reactor Water Cleanup Isolation Signal Correction

The UFSAR describes eight signals which can isolate the Reactor Water Cleanup System. A ninth isolation signal was omitted. This correction placed the ninth signal (the backup high pressure isolation) into the UFSAR.

#### **UFSAR** Correction

SE-000666-010, Deletion of the Primary Containment  $H_2/O_2$  Monitoring System from the List of Engineered Safeguards

The UFSAR List of Engineered Safeguards had been inappropriately revised to include the  $H_2/O_2$  monitoring system. Nothing in the  $H_2/O_2$  system provides any safety features to the reactor plant in any condition. This correction removed the system from the Safeguards list.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

#### Modification

SE-400035-001, Replacement of the Isolation Condenser Tube Bundle

The existing tube bundles in the A Isolation Condenser were replaced in 18R with new bundles constructed with upgraded materials to be more resistant to Inter Granular Stress Corrosion Cracking (IGSCC). The tube bundles in the B Isolation Condenser had been replaced during the last refueling outage (17R).

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

#### Modification

SE-000661-039, Abandonment of the RadWaste Overboard Discharge (High Purity) Monitoring System

Previously, the High Purity Radwaste Overboard Discharge System had been abandoned in place and capped. Due to a zero discharge policy at the plant, the system had not been used in years. This modification abandons the electronic monitoring system on the abandoned piping system.

This change does not involve an unreviewed safety question and no changes were made to the technical specifications.

#### **UFSAR Addition**

SE-000214-019, Addition of Seismic Information for the Shutdown Cooling System

Recent calculations documenting the Seismic capability provided new information about the Shutdown Cooling System. This SE added that information to the UFSAR.

# **UFSAR Update**

SE-316002-005, Pressure Transient Update

The Turbine Trip without Turbine Bypass System Available Transient was re-analyzed for cycle 18 operation and provided new values. This analysis provided the limiting value for reactor peak steam dome pressure. This transient is re-analyzed each reload cycle.