ATTACHMENT A

SUMMARY REPORT OF CHANGES, TESTS, AND EXPERIMENTS COMPLETED

AUGUST 1, 1999 to OCTOBER 31, 1999

SVP-99-211

SAFETY EVALUATION INDEX

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Tracking No. SE-97-109 Activity No. DCP 9100013

DESCRIPTION:

DCP 9100013 will make the Mobile Demineralizer trailer a permanent part of the Demineralized Water Makeup system. The trailer had been added previously as a temporary alteration. This modification will replace the PVC piping that provided well water to the trailer with 3-inch carbon steel piping (Line No. 1/2-42021-3"-O) and replace the PVC piping at the discharge of the trailer with 3-inch stainless steel piping (Line No. 1/2-43182-3"-H). This modification will also remove an open waste strainer and associated piping that was a part of the old system that was previously demolished by Design Change No. 9100014. The scope of this modification will also include updating station drawings to incorporate as-built changes on the Demineralizer Water Makeup and Well Water systems and updating R-4411 to include the design pressure for the additional piping. Sections of lines 2-42021-3"-O and 2-43182-3"-H already exist in the plant, but are not represented in the P&IDs. These sections of piping are on the same flowpath and serve the same function as the piping added to replace the PVC piping. This modification will incorporate these existing lines into the drawings.

The Portable Demineralizer trailer was added to the system due to problems with the old Demineralized Water Makeup system. The Portable Demineralizer has performed better than the old system, so it was decided to make the trailer a permanent part of the system. The existing PVC piping has been judged as not acceptable for a permanent installation, and thus, this piping will be replaced as part of this modification. Per Engineering Request No. ER9600227, the PVC pipe in the system is overspanned and its routing interferes with the available floor space for storage on the west end of the Unit 1 Trackway. Because of these reasons, this piping will be permanently replaced by more suitably routed steel piping. The existing piping that will also be incorporated into the drawings is part of the same flow path as the new piping. This flow path consists of the Well Water supply to the Makeup Demineralizer Portable Trailer and the downstream piping. The open waste strainer, which is abandoned in place, provides an unmonitored path to the discharge flume and to the river. The strainer and its associated piping will be removed and the path to the river will be blocked with a blind flange.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report is not increased because a change to the Makeup Demineralized Water system including the Well Water system supply does not affect the probability of any accident described in the UFSAR. The operation or failure of any part of these systems cannot initiate any accident or transient described in the UFSAR. During normal operation, these systems provide makeup water to the Clean and Contaminated Condensate Storage Tanks. These tanks provide the normal water supply for both HPCI and RCIC with both HPCI and RCIC taking suction from the torus if necessary. Therefore, it is concluded that this modification will not

increase the probability of occurrence of an accident or a malfunction of the subject tanks or any equipment important to safety.

The operation or failure of any of these systems would not adversely affect any release barriers or any equipment required to mitigate the consequences of any accident described in the UFSAR. During normal operation, the Demineralized Water Makeup system provides makeup water to the Clean and Contaminated Condensate Storage Tanks, but the Demineralized Water Makeup system is not required or assumed to function during any accident or transient described in the UFSAR. The operation or failure of these systems will not adversely affect any release barriers or equipment required to mitigate the consequences of any accident. Thus, the consequences of any accident or malfunction of equipment important to safety are not increased.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report is not created because this system is Non-Safety-Related and during normal power operation provides makeup water to the Clean and Contaminated Condensate Storage Tanks. The failure or operation of this system will not adversely affect any release barriers or any equipment that are important to safety, and thus will not create the possibility of an accident or malfunction of a type different from those evaluated in the SAR.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the station Technical Specifications were reviewed, and it has been determined that this design change does not affect any parameters upon which the Technical Specifications are based. Therefore, there is no reduction in the margin of safety.

Tracking No. SE-99-005 Activity No. DCP 9900002

DESCRIPTION:

This activity will be to modify the control circuitry for the 1B Fuel Pool Cooling Water Pump to alarm for a low discharge pressure condition only when the pump is running. The existing configuration for the low-pressure pump discharge alarm circuit is such that it alarms for any low discharge pressure condition as sensed by a pressure switch. This change will be performed by modifying the alarm logic circuit to have a breaker contact in series with the pressure switch contact.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this change does not affect the initiating events of any accident in the

UFSAR. Any new potential failures are already bounded by the existing design and do not result in a malfunction of equipment important to safety.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the operation of the fuel pool cooling water pump has not changed. The change to the alarm circuitry affects only the conditions that give the alarm. Any new types of failures will not result in a condition that has not already been analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change does not affect any parameters upon which Technical Specifications or safety functions are based. Therefore, there is no reduction in the margin of safety.

Tracking No. SE-99-012 Activity No. DCP 9800275

DESCRIPTION:

- 1. Modify Fire Doors 307 and 308, which provide a fire boundary between the Auxiliary Electric Room (AEER) and the Unit 1 and Unit 2 cable tunnels.
- 2. Revise the Fire Protection Report to reflect the fact that Fire Doors 307 and 308 have been modified by DCP 98000275.
- 3. Revise maintenance surveillance procedure QCMMS 4100-61, Fire Door Inspection, to add additional inspection requirements for Fire Doors 307 and 308.
- 4. Change safety classification for Fire Doors 307 and 308 from non-safety-related to safety-related.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the normal position, operation, fire loading, fire rating and air sealing capability for Fire Doors 307 and 308 is not adversely affected by this activity. Since these key component attributes are not being changed in a manner that would result in degraded performance of any SSC, there is no increase in the probability of occurrence or a malfunction of equipment important to safety.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the normal position, operation, fire loading, fire rating and air sealing ability of Fire Doors 307 and 308 are not adversely affected by this activity. This activity will not result in any physical change to

any other SSC, or adverse change in the operation of any SSC. Therefore, no new accident or malfunction scenarios will be created.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the margin of safety under consideration is the Technical Specification requirement to maintain Control Room pressure greater, or equal to 1/8-inch w.g. above all adjacent areas during the Emergency mode of operation of the Control Room Emergency Ventilation System (Technical Specification Section 4.8.D.5.c refers).

This activity will not change the normal position or operating characteristics of either Fire Door 307 or Fire Door 308. This activity will improve the air sealing capability of both fire doors, which improves the margin of safety with regard to the over-pressure requirements for the Control Room Emergency Zone imposed by the Technical Specifications.

Tracking No. SE-99-017 Activity No. DCP 9900035; UFSAR-99-R6-024

DESCRIPTION:

This change modifies the 1A Offgas Train to be configured similar to the 1B Offgas Train. This includes bypassing the after condenser and installing a larger Second Stage Steam Jet Air Ejector. The purpose of this design change is to prevent fires caused by catalyst particles that have migrated upstream of the recombiner and eliminate the operational transients associated with reversing condenser flow. The UFSAR has been updated in Sections 10.4.2.2 and 11.3.2.1 to reflect this design change.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the Offgas system does not impact the probability. The design basis accident or transient bound the configuration changes. The Offgas system will remove the same amount of noncondensables from the condenser system and maintain the same concentration of gasses downstream of the recombiner.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because this modification is being installed in accordance with the original code of construction. The composition of the gases is unchanged except for a short portion of piping upstream of the primary air ejector and downstream of the recombiner. For this short run of piping, the concentration of steam will be increased eliminating the potential for offgas fires.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this change does not affect the volumetric flow rate or composition of gases downstream of the recombiner.

Tracking No. SE-99-024 Activity No. DCP 9900056

DESCRIPTION:

The existing 1/2 Diesel Generator speed sensing panel will be replaced. This panel utilizes the Emergency Diesel Generator (EDG) frequency generator. The replacement panel will utilize a magnetic pickup installed at the EDG flywheel, (Bull Gear). An Electronic Tachometer will also be installed in the 0-2212-125 panel.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the replacement speed sensing panel, MPU, and tachometer do not exhibit performance characteristics, or have design features, that give an increased probability of a system malfunction resulting in an accident. These components function to provide start sequencing to the 1/2 emergency diesel generator.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the replacement speed sensing panel, MPU and tachometer introduce no new types of system-level failure modes that could cause a different type of accident than presented in the plant SAR. It is functionally equivalent to the equipment it replaces. This modification will not adversely affect system interfaces. It is functionally equivalent to the equipment to the equipment it replaces.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the components involved in this modification have no potential to introduce new failures. This modification does not introduce degradation of multiple diesel generators. The replacement SSP setpoints are the same as the existing. The possible failure modes and mechanisms associated with the new speed sensing unit have been evaluated or dispositioned. Therefore, the margin of safety as described for technical specifications is not affected.

Tracking No. SE-99-036 Activity No. DCP 9900037

DESCRIPTION:

This change replaces the Electronic Speed Switch with Mechanical Speed Switch for the 1/2 A Diesel Driven Fire Pump. It removes the electronic tachometer, speed switch and associated hardware/wiring and installs a mechanical tachometer, speed switch and associated hardware/wiring. The speed switch protection is required to prevent the engine from 'running away' if the pump shaft or similar component were suddenly to break (i.e., suddenly a no load situation). The engine is designed by Cummins to operate with either speed control device. This change will not effect how the engine is operated or performs. Therefore, this change will be transparent to the operation of the engine.

The Safety Evaluation was also used for DCP 9800038, which was not Op authorized during this report period. The summary will be included when the DCP becomes Op authorized.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because these changes are confined to a portion of the engine protection circuitry of the fire pumps. They do not affect the manner in which the pumps are operated or their ability to perform their design functions. These changes can have no affect on the probability of the occurrence of a fire.

Likewise, the consequence (increase in off-site dose levels) of a fire is not changed. A severe fire is assumed to 'destroy' all fire protection equipment within the affected fire area. The Safe Shutdown (SSD)/ Fire Protection system is designed to safely shutdown the plant without credit for any SSD equipment operable from the affected fire area. This is part of the "defense in depth" concept as per section 9.5.1 of the UFSAR. There are no changes to the operation of the pumps or affect on their capacity. Therefore, there can be no increase in the consequences of the postulated accident.

2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these design changes are to an engine protection feature of the Diesel-Driven Fire Pumps. There are 2 pumps, each rated for 100% of the required fire water capacity. If the speed protection trip is called upon to shut down the affected engine, then a single equipment failure has occurred and the redundant fire pump will operate to mitigate the consequences of the postulated accident. Loss of one fire pump is a previously evaluated condition. Therefore, replacement of the electronic speed switch with a mechanical speed switch cannot cause any accident or transient not previously evaluated.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the Fire Protection system is designed to function with a single equipment failure (loss of one diesel fire pump). Changes do not adversely affect method of operating, testing or maintaining safe-shutdown equipment or the ability to achieve and maintain safe shutdown in the event of a fire.

Tracking No. SE-99-041 Activity No. DCP 9600385; UFSAR-99-R6-002

DESCRIPTION:

The purpose of this design change is to remove clean demineralized water as a source of cooling for the Primary Containment Oxygen Analyzer Moisture Separator 1-8824, and tie in the Reactor Building Closed Cooling Water System (RBCCW) as the primary source for Unit 1. The UFSAR has been updated to reflect this change in RBCCW.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the Primary Containment Oxygen Analyzing System and the RBCCW system interface with the Primary Containment Boundary. However, these systems are isolated from containment in the event of a design basis accident or transient. The systems do not interface with the Reactor Vessel Pressure Boundary. Therefore, these systems do not impact the probability of an accident or transient nor the consequences.

The RBCCW system is a reliable source of cooling for the Primary Containment Oxygen Sampling Analyzer. In the event RBCCW is lost, operations is procedurally directed to shut down the reactor because of the cooling required by the Recirculation Pump Seals. The RBCCW system is being routed to the Primary Containment Oxygen Analyzer in accordance with USAS B31.1-1967 Power Piping and General Work Specification R-4411. The probability of a failure of this line is no different than any line attached to the RBCCW system.

The consequences of a RBCCW Leak or a Primary Containment Oxygen Analyzer failure are unchanged by this design change.

2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because there are no system interactions that could create the possibility of an accident or transient different than those previously evaluated in the SAR. The containment isolation system isolates the RBCCW system and Primary Containment Oxygen Analyzer in the event of an indicated failure.

This is not a functional change to either system. Both systems will continue to operate as designed. Therefore, this design change does not create the possibility of a malfunction of the RBCCW or Primary Containment Oxygen Sampling System.

In the event that RBCCW is lost to the Primary Containment Oxygen Sampling Analyzer, operations would direct the Chemistry Department to take air samples until the Contaminated Condensate can be tied into the system to restore operability of the oxygen analyzer.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because Technical Specification 3/4.7.J acceptance limit is <4% oxygen. The purpose of the Primary Containment Oxygen Sampling System is to monitor the oxygen levels in containment during normal operation. The Primary Containment Oxygen Sampling system does not contribute to the oxygen levels in containment. In the event of a failure of this system, the Chemistry Department has procedures in place to take the sample through alternate means.

Tracking No. SE-99-047 Activity No. UFSAR-99-R6-006; FPR CRN #99-05

DESCRIPTION:

This is a permanent change to the Safe Shutdown Report (SSR) Fire Protection Report, Vol. 2 and the Updated Final Safety Analysis Report (UFSAR).

The activity updates the referenced documents by extending the time line for establishing a highpressure injection capability to the reactor vessel level during an Appendix R fire scenario and providing the basis for establishment of this time line. The time allowed to begin high-pressure injection is increased from 31 minutes to 35 minutes. This additional time provides extra margin for operators to perform the required tasks associated with initiating the appropriate injection source. The Safe Shutdown Analysis (FPR Volume 2) will require revision to the following sections/tables/figures to incorporate the "time to TAF" increase from 31 to 35 minutes:

Table 5.2-1	Unit 1 Fire-Induced System/Component Failure Results
Table 5.2-2	Unit 2 Fire-Induced System/Component Failure Results
Section 6.2.1	Timelines and Manpower Requirements
Section 6.2.1.3	Reactor Water Makeup Time Consideration

The Updated Final Safety Analysis Report (UFSAR), will require revision to the following sections to remove specific timeline values in favor of a reference to the SSR for information on the correct timeline value:

Section 5.2.2.4"Equipment & Component Description", Page 5.2-9Section 5.2Endnotes; Page 5.2-27, Endnote

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because revision of the high pressure injection timeline does not require physical changes or additions to the plant and therefore, cannot increase the quantity or physical arrangement of combustible material, nor does it create additional ignition sources. The specific purpose of the SSR and UFSAR is to describe the systems & methods available to mitigate an accident (in this case, a fire as postulated in the fire hazards analysis) that has already occurred. This change does not increase the probability that the postulated accident (fire) may occur. Maintaining coolant level above the top of active fuel precludes fuel cladding damage, the primary defense against release of radioactive materials. The revision to the high pressure injection timeline is based upon mathematical modeling of a General Electric (GE) software code approved for use by the NRC for calculating temperature characteristic of BWR vessels. Increasing the timeline for high pressure coolant injection by 4 minutes does not directly impact operation of the systems or components responsible for control of off-site dose and does not compromise the analyses of radioactivity in station releases. The changes to the SSR and UFSAR are administrative in nature (incorporation of new information only) and do not require physical changes in structure or methods by which any plant System, Structure or Component (SSC) are operated or maintained. For this reason, the changes cannot increase the consequences of the accident.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the only equipment failures considered by Appendix R or analyzed in the SSR are those caused by fire damage. The possibility of an accident or transient's occurrence considered in the proposed revisions is the same as the current revisions. Therefore, this change does not adversely affect the ability to achieve and maintain safe shutdown following a fire.

Failure of the high pressure injection system to operate is no more likely to occur utilizing either timeline. Therefore, the incorporation of the timeline (35 minutes) to the uncovering of active fuel bundles rather than level in the bypass region could not lead to the occurrence of any accident or transient not previously evaluated.

- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because:
 - 1. Section 2.1.D & Bases Reactor Vessel Water Level

the change does not affect any parameters upon which this Technical Specification is based because it does not change the required vessel water levels or operational responses to vessel level changes in any plant mode; therefore, there is no reduction in the margin of safety.

2. T.S. Section 6.8.A.7 Implementation of the Fire Protection Program

The change does not affect the programmatic or procedural methods by which the station implements the Fire Protection Program.

3. License Condition h.3.f Changes to the Fire Protection Program

The change is administrative in nature and does not require any physical changes to Safe Shutdown SSC's. The change also does not affect the programmatic or procedural methods by which the station changes the FPR. Thus, there is no decrease in the specified safety limit/margin of safety.

Tracking No. SE-99-051 Activity No. DCP 9900108 Revision 1

DESCRIPTION:

This change will replace the existing GEMAC 555 Level Transmitters, LT 1-5441-31A and LT 2-5441-31A, with Rosemount 3051 Level transmitters. The new transmitters are microprocessor based and contain state of the art electronics. The obsolete GEMAC 555 transmitters operated on the old industrial standard 10-50 mA (dc) current loop whereas the new Rosemount transmitters use the new standard 4-20 mA (dc) current loop. To facilitate this replacement and make the new transmitters compatible with the existing circuitry, the input resistors on the level switches and level indicating controller will also be replaced. The new resistors' ohmage value will be increased such that the input voltage developed by the new lower current value is equal to the input voltage developed by the old higher current values.

The effect of this change will be to provide the appropriate level signal to the control system that maintains the proper level in the associated Off Gas Condenser, 1A-5407 and 2A-5407. Proper Off Gas Condenser level supports efficient operation of the Off-Gas system and the maintenance of Main Condenser Vacuum.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because review determined that the Loss of Condenser Vacuum transient described in UFSAR Section 15.2.5 was potentially impacted by this change. The probability of an accident or malfunction is not increased because:
 - a) The replacement transmitter will perform the same function as the old transmitter in providing a level input to the controller and alarm unit.
 - b) The new transmitter meets the electrical design standard requirements of the system.
 - c) The new transmitter is suitable for the environmental conditions in which it will be installed.
 - d) The new transmitter utilizes improved technology features which are expected to provide enhanced reliability and improved Off Gas Condenser Level control.
 - e) Improved Off Gas Condenser level control in operation reduces the probability of Off Gas System problems which in turn could contribute to a Loss of Condenser Vacuum transient.

The consequences of an accident or malfunction are not increased because:

- a) A failure of the replacement level transmitters does not affect the plant's response to the transient.
- b) The analysis presented in UFSAR Section 15.2.5 indicates that the worst case associated with a Loss of Condenser Vacuum transient would be an instantaneous loss of vacuum. A failure of the Off Gas Level transmitter cannot make the transient more severe.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because there are no new interfaces or energy sources created by this change. The only change is to the level control system for the Off Gas Condenser. The Off Gas Level Control System will still have the same types of failures once this activity is accomplished. These types of failures include maintaining level too low, too high, or not responding to level input changes. Therefore, the types of malfunctions of equipment important to safety will be unchanged by the replacement of the Level transmitter.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because there are no Technical Specifications affected or involved with the activity. Therefore, no margin of safety has been reduced.

Tracking No. SE-99-057 Activity No. Safe Shutdown Report (SSR) Fire Protection Vol. 2 CRN #99-06

DESCRIPTION:

This change updates the referenced document by revising the method of supply for 125VDC control power required to lower reactor vessel pressure by "blowing down" via the Relief Valves (RV's) during unit shutdown following an Appendix R-defined fire. The current revision of the SSR identifies a repair to provide the power required to actuate the RV's from mobile safe shutdown batteries (battery carts). The change will provide a different source of this power. The RV's used for depressurization of the reactor in support of hot/cold shutdown will be powered by the plant 125 VDC system.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the specific purpose of the SSR is to describe the systems, equipment and methods available to mitigate an accident (fire) that has already occurred. Therefore, this change cannot increase the probability that the postulated accident (Appendix R-defined fire) may occur.

A change in the source of 125VDC control power utilized to manually actuate the RV's during post-fire shutdown activities does not adversely impact operation of safe shutdown systems or components responsible for control of off-site dose and does not compromise the analyses of allowable radioactivity in station releases.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because Appendix R, Section III.L.(6) states that no other accident or transient is considered credible concurrent with this Appendix R defined fire-induced safe shutdown recovery. Changing the source of 125VDC control power utilized to operate RV's does not however change the method, manner or outcome of their operation. Because the change is functionally "transparent" to the safe shutdown SSC's affected, it does not create the possibility of any accident or transient of a type not previously analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because:
 - 1. T.S. Section 3/4.5.A Bases Automatic Depressurization System (ADS)

the change does not affect any parameters upon which this Technical Specification is based because it does not change or in any way affect the operational requirements for the ADS system in the applicable plant modes. (1, 2 or 3) The ADS Bases describe the automatic

function of the system in response to a small-break LOCA and describe overall OPERABILITY requirements but do not discuss manual blowdown as part of a controlled plant shutdown. Therefore, there is no reduction in the specified margin of safety.

2. T.S. Section 3/4.9.C Bases DC Sources - Operating

The change does not affect any parameters upon which this Technical Specification is based because it does not change or in any way affect the operational requirements for the DC Power system in any plant mode. The DC Bases describe the required system response to a safe shutdown scenario but already consider that a total loss of DC due to an additional single failure would result in a loss of ESF function for the affected unit. This forms the basis for the specified ALLOWED OUTAGE timeframes. The change does not affect these requirements. Therefore, there is no reduction in the margin of safety.

3. T.S. Section 6.8.A.7 Implementation of the Fire Protection Program

The change does not affect the programmatic or procedural methods by which the station implements the Fire Protection Program.

4. License Condition h.3.f Changes to the Fire Protection Program

The proposed change does not change the function or operability requirements for any Safe Shutdown SSC's. The change also does not affect the programmatic or procedural methods by which the station changes the FPR. Thus, there is no adverse affect on either unit's ability to achieve and maintain safe shutdown.

Tracking No. SE-99-062 Activity No. UFSAR-99-R6-009

DESCRIPTION:

UFSAR Section 10.4.3.2 incorrectly states the unit of measurement used to measure the amount of vacuum that the main turbine gland seal exhauster maintains on the main turbine gland seal condenser. The unit of measurement will be changed from 10-20 in. Hg to 10-20 inches of water gage.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the unit of measurement change in the UFSAR to measure vacuum cannot cause any event that would lead to any accident or transient scenario. The measurement change to inches of water is a design operating parameter for the gland seal

system. The main turbine gland seal system is not used to mitigate or prevent any accidents or transients.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the UFSAR is being revised to correctly state the design operating parameter used to measure vacuum on the gland seal system. There is no change to the system or design basis of the system. Therefore, no new accident or malfunctions are created.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because there are no Technical Specifications that are applicable to the main turbine gland seal system.

Tracking No. SE-99-063 Activity No. DCP 9900158; TMOD 99-1-008

DESCRIPTION:

This safety evaluation was prepared to evaluate the use of an unregulated power source for the Computer Bus. This temporary feed is necessary to provide power to the computer bus in the event that the remaining operable feed to the computer UPS (Bus 26) fails.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because a Loss of Auxiliary Power would cause the Emergency Diesel Generators (EDG) to start and supply power to the loads that are required to prevent or mitigate an accident. Buses 15, 26, and the Computer Bus are not supplied by the EDGs and are not required to be operable during the Loss of Auxiliary Power. Since the equipment and components associated with the TMOD do not interface with vital equipment, their failure cannot affect the consequences of a Loss of Auxiliary Power. The Computer Bus, the loads it feeds, and the buses that supply it cannot produce malfunctions that would cause a Loss of Auxiliary Power as described in the UFSAR. This equipment is not important to safety, nor can its failure affect equipment important to safety. The power circuits are isolated via breaker/fuses, and the cables do not traverse fire zones. The possibility of a malfunction of equipment important to safety will not increase.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because as stated in the previous step, the TMOD only interfaces with portions of the Auxiliary Power System that are not required to prevent or mitigate the consequences of an accident. A failure associated with the TMOD produces the same results as failures associated with the existing Computer UPS power feeds (i.e. loss of Computer Bus). Since the cables remain in the same fire zone, the

safe shutdown analysis is unaffected. This TMOD will not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the TMOD affects only the power source associated with the equipment used to maintain the limits. Should this equipment fail, alternate methods are available to verify the limits.

Tracking No. SE-99-064 Activity No. UFSAR-99-R6-010

DESCRIPTION:

UFSAR Table 12.3-2 was revised to correct the area dose rates outside the shield wall with hydrogen injection operating. Turbine-Generator, Stop-Intercept Valves, and Piping will be changed from 60 mrem to 80 mrem. Moisture Separators and Piping will be changed from 6 mrem to 0.6 mrem. Low Pressure Feedwater Heaters will be changed from 6 mrem to 1.0 mrem. The elevation of the turbine operating floor will be changed from elev. 561 ft. 6 in. to 639 ft. A third column was added to show what the area dose rates are after Noble Metal Chemical Addition on Unit 1 for the areas indicated in the table. Three clarifying notes will be added to identify where the dose rate information was taken from.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because there are no accidents or transients associated with this UFSAR change. The turbine building steam handling equipment shielding is not used to prevent or reduce off site dose that might result from an accident.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the change only documents the dose rates in the access areas outside the shielded turbine steam handling equipment in the turbine building that result from the operation to Hydrogen Water Chemistry and Noble Metal Chemical Addition. The resultant area dose rates due to the operation of this equipment will not create the possibility of an accident or malfunction of a different type.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the resultant documented dose rates that are the byproduct of operating the Hydrogen Water Chemistry and Noble Metal Chemical Addition systems will not effect Technical Specifications 6.11, "Radiation Protection Program".

Tracking No. SE-99-069 Activity No. UFSAR-99-R6-011; ER9901945

DESCRIPTION:

This change revises UFSAR Table 6.2-7, Penetrations of Primary Containment and Associated Isolation Valves, to accurately reflect "As Built" conditions and change drawing M-24 Sheet 13 to reflect actual conditions.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this portion of the containment isolation system is not connected to the reactor coolant system, the auxiliary power system, or the reactor protection system. In addition, these components are not connected with any initiators for the accidents of a LOCA inside or outside of the containment, loss of auxiliary power, or an ATWS. The system (Containment Isolation) is used in accident mitigation and is separated from accident initiators. This change does not affect actual plant response to these accidents and therefore, the consequences of the accidents, as the plant will not be physically modified and the containment isolation valves will provide the intended design function to isolate the containment and prevent a release. The newly added penetrations are designed and function in the same manner as the other penetrations already described in UFSAR. The changes do not affect any previous analysis for the release of radioactive materials from the containment as these new penetrations have always been challenged by Primary Containment Integrated Leak Rate Testing and are subject to the Technical Specification limit for allowed containment leak rate.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these changes revise the UFSAR to the actual plant configuration required to ensure that the design basis requirements are met. The actual plant configuration is correct. In some cases the changes are purely editorial or add additional clarifying information. In all cases, these changes will not result in the creation of any accidents or malfunctions different than those already evaluated in the SAR.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the changes to the table add instrumentation lines that contain isolation valves. Primary Containment Integrity is maintained. These affected penetrations involve normally closed manual valves that have been and will continue to be challenged during Primary Containment Integrated Leakage Tests and therefore, are accountable to the allowed leakage rate. Because of this, the basis for the Technical Specification limits are not reduced and there is no reduction in the margin of safety.

Tracking No. SE-99-071 Activity No. UFSAR-99-R6-018

DESCRIPTION:

This safety evaluation was previously submitted to support UFSAR-99-R6-005. When SE-99-056 was written (which SE-99-071 replaces) it was discovered that relief valves 1-2099-907 and 1-2099-908 were incorrectly shown between containment valves. This UFSAR change corrects this discrepancy. These valves have been removed from Table 6.2-7.

- The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the proposed changes have not resulted in any additions, deletions, or alterations to any equipment. All the Appendix 'J" procedures have been reviewed and there are no changes to any of these procedures as a result of the proposed changes. There will be no increase in the probability of occurrence or consequences of an accident or, malfunction of equipment important to safety previously evaluated in the safety analysis report. Attachment C& D of QCTS 0130-01 Rev. 9 will be revised to clarify qualified water seal. Ref AR # 16167.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the proposed changes have not resulted in any additions, deletions, or alterations to any equipment. All the appendix "J" procedures have been reviewed and there are no changes to any of these procedures as a result of these changes. These changes revise the UFSAR to the actual plant configuration to ensure that the design basis requirements are met. The proposed changes will; therefore, not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the margin of safety as described in the basis for any technical specification will not be reduced because the Leak Testing Program Procedures are not changed; the leakage limits have not been changed.

Tracking No. SE-99-075 Activity No. UFSAR-99-R6-021

DESCRIPTION:

To support the installation of the Unit 1 West Turbine Building Ventilation (1-5737) heating coils and condensate drainage piping, the previously abandoned in place evaporative cooler pump and motor, 1-5716, had to be removed. While reviewing the UFSAR for this change it was discovered that not all of the references to the evaporative cooling system had been removed. UFSAR change 96-19 was to remove all of the UFSAR references but some sections were missed. This safety evaluation was written for both the UFSAR change and the addendum letter. However, DCP 9700180 was not OP authorized during this report period. The summary will be included when the DCP becomes OP authorized.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the heating steam system is a support system used to maintain area temperatures. It can not cause or mitigate the consequences of any accident or transient.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the heating steam system is a support system used to maintain area temperatures. It can not cause or mitigate the consequences of any accident or transient.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because there are no Technical Specifications affected by this change.

Tracking No. SE-99-078 Activity No. UFSAR-99-R6-015

DESCRIPTION:

This change addresses UFSAR discrepancies (versus plant as-built condition) that were identified as part of the Station's Design Basis Initiative (DBI) review, as documented by PIF# Q1998-03895. These discrepancies are associated with Area Radiation Monitors (ARM), and are summarized as follows:

[1] Table 12.3-3 Unit 1 Station 9 - Revise range to 0.01 (from 0.02) - 10,000 mR/hr.

[2] Tables 12.3-3 & 12.3-4, identify that Unit 1 Stations 31, 35, & 36 and Unit 2 Stations 8, 25, 28, 29, & 30 as having a Local Unit Auxiliary and Alarm function.

[3] & [4]: Table 12.3-4 Unit 2 Stations 28 & 30 - transpose floor elevations from 594ft 6in to 561ft 0in.

[5] Table 12.3-5 Unit 1/2 Stations 5 & 6 - Revise range to 10 (from 0) - 100,000 mR/hr.

[6] Table 12.3-5 Unit 1/2 Station 7 - Revise range to 1 (from 0) - 10,000 mR/hr.

[7] Table 12.3-5 Unit 1/2 Stations 5, 6, & 7 - Delete the term "PPI" in the Local Unit Auxiliary and Alarm column.

[8] Table 12.3-3 Unit 1 Station 36 - Revise Column Row from "SE Corner" to "SW Corner" (identified during the change review).

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because ARM's provide monitoring function only, and have no interaction with the reactor coolant pressure boundary. The change Items are either negligible instrument range changes that have negligible impact on the affected ARM's function, constitute a system improvement of additional local indication and alarms identified, or are administrative in nature, with the following exceptions: Change item [5] is an instrument range change that eliminates the 10E0 decade for a high range instrument and therefore, has minimal impact on equipment function; high range indication for tracking accident or transient consequences are not affected. For change item [8], the detector is located in the SW versus SE corner of the Radwaste Tank Room; the effect on the detector function is minimal since it still provides over-all monitoring of the room and early warning of abnormal room dose levels.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these changes are either administrative in nature, or are instrument range changes that have negligible or minimal impact on the equipment function. There are no new failure modes introduced by this change.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the ARM System does not form the bases for any Technical Specifications.

Tracking No. SE-99-079 Activity No. UFSAR-99-R6-020

DESCRIPTION:

This safety evaluation addresses the correction of the maximum tank volume shown in UFSAR Table 11.2-1 for the Floor Drain Collector Tank. Table 11.2-1 currently shows the maximum volume for the Floor Drain Collector Tank as 22,000 gallons, whereas the correct volume is 21,000 gallons. No physical changes are made to the tank or any other component of the Liquid Radwaste System, no new equipment is added, and no changes are made to the interfaces of this system with any other plant system.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the change evaluated is a correction of the volume of the Floor Drain Collector Tank. No physical changes are made to the tank or any other component of the Liquid Radwaste System, no new equipment is added, and no changes are made to the interfaces of this system with any other plant system. The volume of the Floor Drain Collector Tank is not a factor in the evaluation of any event previously evaluated in the safety analysis report, and does not affect the probability of occurrence of any accident or malfunction of equipment important to safety.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because no physical changes are made to the Floor Drain Collector Tank or any other component of the Liquid Radwaste System, no new equipment is added, and no changes are made to the interfaces of this system with any other plant system. Therefore, no mechanism is introduced which could lead to the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the maximum volume which UFSAR Table 11.2-1 shows for the Floor Drain Collector Tank has no direct or indirect affect on the bases of any Technical Specification. Therefore, the activity does not reduce the margin of safety as described in the basis for any technical specifications.

Tracking No. SE-99-087 Activity No. UFSAR-99-R6-031

DESCRIPTION:

The safety evaluation addresses two changes to the UFSAR as follows:

a) In Section 8.3.1.6.1, the third sentence has been deleted from the third paragraph, which gives the torque and bhp specifications for the standby diesel generators. Documentation for verification of these specifications cannot be found. Since these parameters are not measured directly during diesel generator surveillances, the numbers have little value in the UFSAR.

b) Section 7.1.1 lists the ESF systems. The neutron monitoring and main steam line radiation monitoring systems are erroneously included in the list. The change deletes the neutron monitoring and main steam line radiation monitoring systems from the list.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this is a documentation change to correct the UFSAR description only. No physical or operational changes are made to any SSC, nor are any new SSCs introduced. Because all SSCs will continue to function as they have, there can be no increase in the probability of occurrence or the consequences of an accident or a malfunction of equipment previously evaluated.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because this UFSAR change is a documentation change to correct minor details in the description only. No physical or operational changes are made to any SSC, nor are any new SSCs added. Because all SSCs will continue to function exactly as they have, there is no possibility of creating a new type of accident or equipment malfunction.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because no changes are made to any SSCs that affect any setpoint, surveillance, or bases in the Technical Specifications. This change corrects minor details in a UFSAR description only.

Tracking No. SS-H-99-0076 Activity No. DCP 9900002; UFSAR-99-R6-016; SE-99-005

DESCRIPTION:

This summary is prepared for the validation of UFSAR change UFSAR-99-R6-016 (Safety Evaluation SE-99-005) prepared for DCP 9900002, modification of the alarm circuitry for the 1B Fuel Pool Cooling Water Pump. The change to the UFSAR changes the description in UFSAR Section 9.1.3 to indicate that the alarm in the control room is received on low discharge pressure when the pump breaker is closed.

The existing configuration for the low-pressure pump discharge alarm circuit is such that it alarms for any low discharge pressure condition as sensed by a pressure switch. This activity will modify the alarm logic for the Fuel Pool Cooling Water Pump for a low discharge pressure condition to alarm only when the pump is running. The design installs a pump breaker contact in series with the pressure switch contact in the alarm circuit. The effect is to allow the alarm to only function when an abnormal condition occurs and not to alarm when Operations turns the Fuel Pool Cooling Water Pump off.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this change does not affect the initiating events of any accident in the UFSAR. Any new potential failures are already bounded by the existing design and do not result in a malfunction of equipment important to safety.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the operation of the fuel pool cooling water pump has not changed. The change to the alarm circuitry affects only the conditions that give the alarm. Any new types of failures will not result in a condition that has not already been analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change does not affect any parameters upon which Technical Specifications or safety functions are based. Therefore, there is no reduction in the margin of safety.

Tracking No. SS-H-99-0116 Activity No. Station Blackout (SBO) Instrument Database; SE-97-0136

DESCRIPTION:

Currently, the U1 (2) SBO Instrument Database is formatted in a Microsoft ACCESS database. This database has been prepared, reviewed and approved by appropriate site personnel. The scope of work to be performed is the migration (download) of this database into the Electronic Work Management System (EWCS) at Quad Cities Station. EWCS contains the approved instrumentation databases and setpoints for plant systems and is the official design "database of record". This evolution will place the SBO Instrument database into EWCS for use by site operations, maintenance and engineering personnel.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the previous activity evaluated was the addition of the SBO systems and components description to the UFSAR. This work was performed after the SBO project was installed, tested and Operation Authorized at QCNPS in accordance with site procedures. The actual physical work has been completed and will be unchanged. The migration of instrumentation and setpoints from one database to another will have no physical affect on components, their descriptions as contained in the UFSAR or their operating, maintenance or testing procedures. The referenced safety evaluation is sufficient to credit it for this electronic evolution.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the previous activity evaluated was the addition of the SBO systems and components description to the UFSAR. This work was performed after the SBO project was installed, tested and Operation Authorized at QCNPS in accordance with site procedures. The actual physical work has been completed and will be unchanged. The migration of instrumentation and setpoints from one database to another will have no physical affect on components, their descriptions as contained in the UFSAR or their operating, maintenance or testing procedures. The referenced evaluation is sufficient to credit it for this electronic evolution.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the proposed activity (migration of instrumentation database from one electronic media to another) does not affect any parameters upon which the Technical Specifications are based.

Tracking No.SS-H-99-0135 Activity No. DCP 9900010 and DCP 9900013; SE-99-004

DESCRIPTION:

This change replaces Residual Heat Removal (RHR) Pressure Switches 1-1001-74A(B) and associated setpoint change.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the new switches will provide the same function as the original switches in that they will alert operators to potential reactor leakage past the 1-1001-29A(B) and 1-1001-68A(B) valves. The existing setpoint of 85 psig is erroneous and not in accordance with General Electric's original design standard of 400 psig. The new 350 psig setpoint for these switches will improve the system's performance in that operator challenges from the nuisance alarms will be eliminated. The switches will be procured safety-related meaning that their pressure retaining components are purchased to higher standards than the existing switches. Since the new switches will be procured and installed to higher standards than the existing ones, the chances of leakage from the RHR discharge piping is reduced. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety as previously evaluated in the safety analysis report does not increase.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the new switches are constructed and will be installed in a similar manner as the existing switches. Their failure

mechanisms are the same which is a failure of the pressure retaining components. Since a failure of the pressure retaining components for the new switches produces the same result as failures in the existing switches (i.e. RHR discharge piping leakage), the same accidents/transients are the result. The setpoint change is required to provide a more reliable alarm in the control room. A failure of this alarm would prevent operators from becoming aware of leakage past certain valves. However, the possibility of an alarm failure existed with the existing switch producing the same results which would be the lifting of an RHR relief valve. The possibility of an accident/transient of a different type than previously evaluated remains the same.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the subject pressure switches do not perform any functions required by the Technical Specifications.

Tracking No. SS-H-99-0142 Activity No. QCAP 1500-02; SE-99-057

DESCRIPTION:

This is a change to the administrative procedure for controlling out-of-service time for post-fire safe shutdown equipment. This change is being made in conjunction with the change to the Safe Shutdown Report (SSR) which is a SAR level document known as the Fire Protection Report volume II. The change updates the referenced document by revising the method of controlling the supply for 125VDC control power required to lower reactor vessel pressure by "blowing down" via the Relief Valves (RV's) during unit shutdown following an Appendix R-defined fire.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the specific purpose of the SSR is to describe the systems, equipment and methods available to mitigate an accident (fire) that has already occurred. Therefore, this change cannot increase the probability that the postulated accident (Appendix R-defined fire) may occur.

A change in the administrative procedure for controlling the source of 125VDC control power utilized to manually actuate the RV's during post-fire shutdown activities does not adversely impact operation of safe shutdown systems or components responsible for control of off-site dose and does not compromise the analyses of allowable radioactivity in station releases.

2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because Appendix R, Section III.L.(6) states that no other accident or transient is considered credible concurrent with this

Appendix R defined fire-induced safe shutdown recovery. A change in the administrative procedure for controlling the source of 125VDC control power utilized to operate RV's does not however change the method, manner or outcome of their operation. Because the change is functionally "transparent" to the safe shutdown SSC's affected, it does not create the possibility of any accident or transient of a type not previously analyzed.

- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because:
 - 1. T.S. Section 3/4.5.A Bases Automatic Depressurization System (ADS)

The change does not affect any parameters upon which this Technical Specification is based because it does not change or in any way affect the operational requirements for the ADS system in the applicable plant modes (1, 2 or 3). The ADS Bases describe the automatic function of the system in response to a small-break LOCA and describe overall OPERABILITY requirements but do not discuss manual blowdown as part of a controlled plant shutdown. Therefore, there is no reduction in the specified margin of safety.

2. T.S. Section 3/4.9.C Bases DC Sources - Operating

The change does not affect any parameters upon which this Technical Specification is based because it does not change or in any way affect the operational requirements for the DC Power system in any plant mode. The DC Bases describe the required system response to a safe shutdown scenario but already consider that a total loss of DC due to an additional single failure would result in a loss of ESF function for the affected unit. This forms the basis for the specified ALLOWED OUTAGE timeframes. The proposed change does not affect these requirements. Therefore, there is no reduction in the margin of safety.

3. T.S. Section 6.8.A.7 Implementation of the Fire Protection Program

The change does not affect the programmatic or procedural methods by which the station implements the Fire Protection Program.

4. License Condition h.3.f Changes to the Fire Protection Program

The proposed change does not change the function or operability requirements for any Safe Shutdown SSC's. The change also does not affect the programmatic or procedural methods by which the station changes the FPR. Thus, there is no adverse affect on either unit's ability to achieve and maintain safe shutdown.

Tracking No. SS-H-99-0144 Activity No. QCOS 0010-03 Revision 8; SE-99-057

DESCRIPTION:

This change deletes the listing of the Auto Blowdown Panel key and the 125 VDC power supply cart including equipment used to perform wiring activities at the cart. It adds a listing of additional cables required for routing power from the 125 VDC Distribution Panel in lieu of the dedicated 125 VDC power supply cart.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this change is to update the listing of equipment needed to support mitigation efforts for an accident (fire) that has already occurred. Therefore, this change cannot increase the probability that the postulated accident may occur. A change in the source of 125VDC control power utilized to manually actuate the Relief Valves (RV's) during post-fire shutdown activities does not adversely impact operation of safe shutdown systems or components responsible for control of off-site dose.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because changing the source of 125VDC control power utilized to operate RV's does not however change the method, manner or outcome of their operation. Because the change is functionally "transparent" to the safe shutdown SSC's affected, it does not create the possibility of any accident or transient of a type not previously analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the change does not affect any parameters upon which Technical Specifications are based.

Tracking No. SS-H-99-0145 Activity No. QCARP 0000-01 Revision 7; QCARP 0100-01 Revision 5;

QCARP 0200-01 Revision 8; QCARP 0300-01 Revision 10; QCARP 0400-01 Revision 11 QCARP 0500-01 Revision 3; QCARP 0600-01 Revision 5; QCARP 0700-01 Revision 6 QCARP 0800-01 Revision 6; SE-99-047; SE-99-057

DESCRIPTION:

This change extends the timeline for establishing a high-pressure injection capability to the Reactor vessel level from 31 minutes to 35 minutes and incorporates use of the 125 VDC Distribution Panel in lieu of the dedicated 125 VDC power supply cart.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the specific purpose of the SSR is to describe the systems, equipment and methods available to mitigate an accident (fire) that has already occurred. Therefore, these changes can not increase the probability that the postulated accident (Appendix R-defined fire) may occur.
 - a. Increasing the timeline for high pressure coolant injection does not directly impact operation of the systems or components responsible for control of off-site dose and does not compromise the analyses of radioactivity in station releases. This does not require physical changes in structure or methods by which any plant system, structure or component is operated or maintained.
 - b. A change in the source of 125 VDC control power utilized to manually actuate the Relief Valves (RV's) during post-fire shutdown activities does not adversely impact operation of safe shutdown systems or components responsible for control of off-site dose and does not compromise the analyses of allowable radioactivity in station releases.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because:
 - a. The only equipment failures considered by Appendix R or analyzed in the SSR are those caused by fire damage. The possibility of an accident or transient's occurrence considered in the proposed revision is the same as the current revision. Therefore, this change does not adversely affect the ability to achieve and maintain safe shutdown following a fire. Failure of the high pressure injection system to operate is no more likely to occur utilizing either timeline. Therefore, the incorporation of the timeline could not lead to the occurrence of any accident or transient not previously evaluated.

- Appendix R, Section III.L.(6) states that no other accident or transient is considered credible concurrent with this Appendix R defined fire-induced safe shutdown recovery. Changing the source of 125 VDC control power utilized to operate RV's does not however change the method, manner or outcome of their operation. Because the change is functionally "transparent" to the safe shutdown SSC's affected, it does not create the possibility of any accident or transient of a type not previously analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the changes do not affect any parameters upon which Technical Specifications are based.

The changes do not affect the programmatic or procedural methods by which the station implements the Fire Protection Program.

The changes do not change the function or operability requirements for any Safe Shutdown SSC's.

Tracking No. SS-H-99-0149 Activity No. QCOS 6600-01 IP 99-0035; SE-99-045

DESCRIPTION:

This change revises Emergency Diesel Generator (EDG) monthly surveillance test to prevent the 1/2 Diesel Generator Cooling Water Pump (DGCWP), Fuel Oil Transfer Pump, and Room Vent Fan from transferring to Bus 28 and to test run the 1/2 DGCWP on Bus 28 after the 1/2 EDG is shutdown.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this change does not affect the initiators of the subject accidents. It does not affect probability of a malfunction because only the 1/2 EDG is affected by the change, and the 1/2 EDG is already inoperable in this procedure. This change does not affect any release path, and the consequences of any malfunction remain the same.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the change only affects the 1/2 EDG, the 1/2 EDG is already inoperable, and all actions are independently verified.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this interim procedure continues to verify the 1/2 EDG operability and operability of its auxiliaries; therefore, no Technical Specification margins of safety are affected.

Tracking No. SS-H-99-0150 Activity No. QOA 900-55 A-4 Revision 2; QOA 900-56 A-4 Revision 2; Safety Evaluation for DCP 9600177 (9600179); M04-1(2)-92-028B

DESCRIPTION:

This change deletes the reference to automatic isolation of FCV 1(2)-2599-1B, A0 1(2)-2599-2B and A0 1(2)-2599-3B due to disabling of the Atmospheric Containment Atmosphere Dilution (ACAD) subsystem. It also revises OPERATOR ACTIONS to direct containment vent and purge in accordance with station procedures.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the ACAD air dilution subsystem does not interface with the primary pressure boundary system or with any other systems that could cause a small break LOCA inside the containment. Therefore, this system can not cause a failure that would cause a small break or large break LOCA inside the containment.

The ACAD air dilution injection piping has been cut and capped between the penetrations and containment isolation valve. This will assure that there will be no failure of the piping that could cause a break of primary containment at the penetrations. The Nitrogen Containment Atmosphere Dilution (NCAD) system is to control and maintain combustible gas concentrations below combustion limits during and after a LOCA. This system will not directly increase off site doses and may help to decrease off site dose release rates by diluting the primary containment atmosphere through purging.

2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because removal of the ACAD system will not cause any new failure modes. All equipment and piping that is abandoned in place meets seismic II over I criteria to ensure that the abandoned piping and equipment will not become missiles which could damage other safety-related equipment that could lead to the occurrence of an accident of a different type.

The NCAD system will not adversely impact systems or functions so as to create the possibility of an accident or malfunction of a type different from those evaluated in the UFSAR. The NCAD system does not tie into or interact with any system whose failure could lead to an accident or transient condition.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the changes do not affect any parameters upon which Technical Specifications are based.

Tracking No.SS-H-99-0151 Activity No. QCAP 0200-10; SE-99-034

DESCRIPTION:

This change implements a revision to the RHR and Core Spray NPSH graphs to reflect the new station calculation in QCAP 0200-10, Emergency Operating Procedures (QGA) Execution Standards, Revision 21.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because this change involves the torus coating and the design basis assumption for strainer debris loading following a DBA-LOCA. While this change affects the ability of the strainers to provide their required function following a DBA-LOCA, it does not increase the probability of the accident because there is no impact on the reactor pressure boundary.

The change to the torus coating will not adversely affect the integrity of the torus shell. The change to the strainer debris loading assumption will not affect any release barriers and does not adversely affect the ability of the ECCS pumps to provide the required flows following a DBA-LOCA. Therefore, the proposed activity does not result in an increase in consequences of the accident.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because this change deals with the torus coating and the design basis assumption for strainer debris loading following a DBA-LOCA. The new coating will not create the possibility of a new accident or transient. The head loss across the strainers as a result of the new design basis will not adversely impact any of the pumps taking suction from the suppression pool via the ECCS ring header. Therefore, this change will not create the possibility of a new malfunction, accident, or transient.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because there is no reduction in margin of safety. This change will not adversely affect the operation or operability of the ECCS pumps or RHR pumps, since conservative analyses that determine the maximum debris, including coatings, does not have an adverse effect on pump NPSH. Therefore, the requirements of this Technical Specification are not adversely affected by this change.

Tracking No. SS-H-99-0157 Activity No. QCOS 6600-01, Rev. 31; SE-99-045

DESCRIPTION:

This change revises QCOS 6600-01, Diesel Generator Monthly Load Test, to add steps for placement (and subsequently for removal) of a finger block for 1/2 Emergency Diesel Generator (EDG) Auxiliary Services transfer logic relay contacts, to prevent a trip of the 1/2 Diesel Generator Cooling Water Pump (DGCWP) Breaker during performance of the 1/2 EDG Unit power feed transfer. References to procedure for relay contact configurations and a PIF regarding fast power transfer are added.

SAFETY EVALUATION SUMMARY:

- The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the scope of the procedure change is encompassed by the scope of IP 99-0028. Relay finger blocks are used as standard practice, and no new failure modes are introduced. The finger block being added serves solely to prevent tripping of the 1/2 EDGCWP Breaker for the Bus 18 or Bus 28 feed dedicated by the procedure in the Bus 18/Bus 28 selector switch. The normal configuration is restored prior to completing the surveillance procedure. This procedure change is bounded by SE-99-045, which was performed for IP 99-0028. The references are administrative changes.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the 1/2 EDG is already inoperable for the surveillance, due to operating it in parallel with the system grid.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this procedure continues to verify the 1/2 EDG operability and 1/2 EDGCWP operability.

Tracking No. SS-H-99-0160 Activity No. DCR 990235; SE-89-111

DESCRIPTION:

This change revises existing plant drawings to reflect completion of the electrical portion of stationdesigned modification M04-0-88-003C (DCP 8800004) to install a common unit traveling screen wash water debris filter in the cribhouse.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because SE-89-111 was written to evaluate the original installation of the referenced debris filter. The evaluation found that implementation of the modification would not create an unreviewed safety question, require changes to the UFSAR or result in any licensing basis changes. SE-89-111 is being validated for use with this "as-built" DCR because the modification was "station designed" per the old QAP 1270 block of procedures and did not have (or require) the issuance of a DCN. The update of the design documentation to reflect the design change's completion will have no physical affect on components, their descriptions as contained in the UFSAR or their operating, maintenance or testing procedures. The referenced safety evaluation is sufficient to credit it for this documentation update activity.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because SE-89-111 was written to evaluate the original installation of the referenced debris filter. The evaluation found that implementation of the modification would not create an unreviewed safety question, require changes to the UFSAR or result in any licensing basis changes. SE-89-111 is being validated for use with this "as-built" DCR because the modification was "station designed" per the old QAP 1270 block of procedures and did not have (or require) the issuance of a DCN. The update of the design documentation to reflect the design change's completion will have no physical affect on components, their descriptions as contained in the UFSAR or their operating, maintenance or testing procedures. The referenced safety evaluation is sufficient to credit it for this documentation update activity.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the proposed activity (incorporation into the design documentation database of a previously approved and newly installed Design Change) does not affect any parameters upon which the Technical Specifications are based.

Tracking No. SS-H-99-0164 Activity No. DCP 9900172; TMOD 99-1-009; SE-99-063

DESCRIPTION:

This Temporary Modification (TMOD) is required to facilitate the replacement of the Computer UPS Panels. The Computer UPS is currently feeding the Computer Bus via its alternate feed (Bus 26). This TMOD will disconnect the Bus 26 feed to Computer UPS Panel 943-1C and reroute it such that it feeds Transformer Panel 943-1D directly. The output of Panel 943-1D will then be disconnected from Rectifier Panel 943-1B and reconnected to Computer Distribution Panel 943-2.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because a Loss of Auxiliary Power would cause the Emergency Diesel Generators (EDG) to start and supply power to the loads that are required to prevent or mitigate an accident. Bus 26 and the Computer Bus are not supplied by the EDGs and are not required to be operable during the Loss of Auxiliary Power. Since the equipment and components associated with the TMOD do not interface with vital equipment, their failure cannot affect the consequences of a Loss of Auxiliary Power. The Computer Bus, the loads it feeds, and the buses that supply it cannot produce malfunctions that would cause a Loss of Auxiliary Power as described in the UFSAR. This equipment is not important to safety, nor can its failure affect equipment important to safety. The power circuits are isolated via breaker/fuses and the cables do not traverse fire zones. The possibility of a malfunction of equipment important to safety will not increase.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because as stated in the previous step, the TMOD only interfaces with portions of the Auxiliary Power System that are not required to prevent or mitigate the consequences of an accident. A failure associated with the TMOD produces the same results as failures associated with the existing Computer UPS power feeds (i.e. loss of Computer Bus). Since the cables remain in the same fire zone, the safe shutdown analysis is unaffected. This TMOD will not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the TMOD affects only the power source associated with the equipment used to maintain the limits. Should this equipment fail, alternate methods are available to verify the limits.

Tracking No. SS-H-99-0166 Activity No. QCOP 6700-27 Revision 5; SE-98-165

DESCRIPTION:

This change added PREREQUISISTES to ensure that Technical Specification requirements are satisfied when performing this activity in Operational Modes 1, 2, and 3. This included the requirements for the LPCI mode of RHR, the Emergency Diesel Generators, Core Spray and HPCI.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the performance of this activity does not affect any of the initiators to the affected events and can, in no way, cause initiation of an accident. The LPCI system will be declared inoperable during the activity as allowed for, and required by, Technical Specifications.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because Technical Specifications allow for the loss of the LPCI system, provided that the Core Spray systems are operable. With the LPCI system unavailable, the appropriate LCOs are entered per Technical Specification. Loss of LPCI, as occurs in the affected procedures, does not increase the possibility of an accident.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the loss of the LPCI system is already accounted for in Technical Specifications. This procedure, which results in the temporary loss of the LPCI system; therefore, does not decrease the existing margin of safety.

Tracking No. SS-H-99-0167

Activity No. QCOA 5400-04 Revision 3; Loss of Steam Pressure or Off-Gas Flow QOA 5400-01 Revision 10 (delete) Off Gas Explosion –Recombiner and Filters Bypassed QOA 5400-02 Revision 12; Off-Gas Explosion Filters Bypassed QOA 5450-02 Revision 8; Off-Gas Recombiner System Excess Pressure QOA 5450-03 Revision 9; Loss of Recombination QOA 5450-06 Revision 9; Off-Gas Recombination Other Than at Recombiner QOA 900-7 G-15 Revision 2; Dilution Steam to an Off-Gas Train Low Press SE-99-017

DESCRIPTION:

The following describes the procedure changes as listed above:

- a. Revise wording of various steps from referencing Unit 1 Booster Steam to referencing Dilution steam as the Booster Air Ejector has been removed.
- b. Formatted the following to make them Unit specific: listing of AUTOMATIC ACTIONS, steps to bypass PCV 1(2)-5425A/B for controlling of steam pressure.
- c. Indicate that bypassing of the Recombiners is no longer specific to Unit 2.
- d. Indicate that the 1A Recombiner Train is now available for operation.
- e. Reflect deletion of Unit 1 SFAE HIGH FLOW alarm.
- f. Indicate which Off Gas system components are now only specific to Unit 2.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the Off Gas system does not impact the probability. The design basis accident or transient bound the configuration changes. The Off Gas system will remove the same amount of noncondensables from the condenser system and maintain the same concentration of gases downstream of the recombiner.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these changes reflect installation of the referenced modification which has been installed in accordance with the original code of construction. The composition of the gases is unchanged except for a short portion of piping upstream of the primary air ejector and downstream of the recombiner. For this short run of piping, the concentration of steam will be increased eliminating the potential for Off Gas fires.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this change does not affect the volumetric flow rate or composition of gases downstream of the recombiner.

Tracking No. SS-H-99-0169 Activity No. QOA 900-54 B-1 Revision 4; SE-99-017

DESCRIPTION:

This change deletes the reference for 1A Recombiner Train unavailability. (DCP 9900035).

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the Off Gas system does not impact the probability. The design basis accident or transient bound the configuration changes. The Off Gas system will remove the same amount of noncondensables from the condenser system and maintain the same concentration of gases downstream of the recombiner.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these changes reflect installation of the referenced modification which has been installed in accordance with the original code of construction. The composition of the gases is unchanged except for a short portion of piping upstream of the primary air ejector and downstream of the recombiner.

For this short run of piping, the concentration of steam will be increased eliminating the potential for Off Gas fires.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this change does not affect the volumetric flow rate or composition of gases downstream of the recombiner.

Tracking No. SS-H-99-0171

Activity No. QOA 90056 B-4, Rev. 2; QCOP 4100-05, Rev. 7; QOM 2-4100-01, Rev. 5; QCOS 4100-02, Rev. 13; QCOS 4100-04, Rev. 13

DESCRIPTION:

The following procedures have been revised by changing the position of the 2-4199-119 valve from open to close because the ACAD system has been abandoned making the fire protection system unneeded:

QOA 900-56 B-4 Rev. 2, Compressor Overload/Spare QCOP 4100-05, Rev. 7, Resetting Grinnell Flooding Valves QOM 2-4100-01, Rev. 5, U2 Fire Protection Valve Checklist QCOS 4100-02, Rev. 13, Annual Suppression System Valve Operability QCOS 4100-04, Rev. 13, Quarterly Fire Suppression Valve Position Inspection

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the combustible that dictates the presence of the ACAD fire protection system has been removed (the ACAD compressor and its lubricating oil), the probability of a fire occurring has been decreased. The ACAD fire protection system is no longer required, therefore, the removal of the equipment and the closure of the fire protection valve will not increase the probability of a fire.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because these changes do not introduce any potential equipment failures or impacts any analyzed failure. They also introduce any potential for new failure modes because the ACAD compressor has been abandoned and no longer serves any role in the operation of the plant.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because since the oil has been removed from the compressor, the probability of a fire has been decreased. Without fuel for a fire, the proposed fire becomes non-existent. There are no changes to any parameters upon which Technical Specifications are based. Therefore, there is no reduction in the margin of safety.

Tracking No. SS-H-99-0172 Activity No. QCEPM 0400-14, Rev. 3; SE-99-024

DESCRIPTION:

This DCP installed an alternate Speed Sensing Panel on the 1/2 Emergency Diesel Generator (EDG). This procedure is being revised to include/consider all equipment changes installed by this modification.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the replacement speed sensing panel, MPU, and tachometer do not exhibit performance characteristics, or have design features, that give an increased probability of a system malfunction resulting in an accident. These components function to provide start sequencing to the 1/2 emergency diesel generator.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the replacement speed sensing panel, MPU and tachometer introduce no new types of system-level failure modes that could cause a different type of accident than presented in the plant SAR. It is functionally equivalent to the equipment it replaces. This modification will not adversely affect system interfaces. It is functionally equivalent to the equipment to the equipment it replaces.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the components involved in this modification have no potential to introduce new failures. This modification does not introduce degradation of multiple diesel generators. The replacement SSP setpoints are the same as the existing. The possible failure modes and mechanisms associated with the new speed sensing unit have been evaluated or dispositioned.

Tracking No. SS-H-99-0175 Activity No. QCOS 6600-20 Revision 18; SE-99-045; SE-99-024

DESCRIPTION:

This change adds use of a finger block for transfer logic relay contacts to prevent a trip of the 1/2 DGCWP breaker during transfer of 1/2 EDG Unit power feeds. This resulted in addition of the finger block to the REQUIRED EQUIPMENT LIST, an explanation of the trip in a LIMITATION AND ACTION, incorporating the length of time that the block is installed as part of the LCO time, testing of the 1/2 DGCWP from a specific Unit on alternating months, and independently verifying all actions. It also replaced use of a hand held tachometer for determining 1/2 EDG speed with use of a permanently installed tachometer at Panel 2212-125.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because:
 - a. The scope of the procedure change is encompassed by the scope of IP 99-0028. Relay finger blocks are used as standard practice and no new failure modes are introduced. The finger block being added serves solely to prevent tripping of the 1/2 EDG CWP breaker for the Bus 18 or Bus 28 feed dedicated by the procedure via the Bus 18/Bus 28 selector switch. The normal configuration is restored prior to completing the surveillance procedure. This procedure change is bounded by SE-99-045 which was performed for IP 99-0028.
 - b. The addition of the tachometer does not exhibit performance characteristics or have design features that give an increased probability of a system malfunction resulting in an accident.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because:
 - a. The 1/2 EDG is already inoperable for the surveillance due to operating it in parallel with the grid.
 - b. The addition of the tachometer introduces no new types of system-level failure modes that could cause a different type of accident than presented in the plant SAR. This change will not adversely affect system interfaces.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because:

- a. This procedure continues to verify the 1/2 EDG operability and the 1/2 EDG CWP operability.
- b. The addition of the tachometer has no potential to introduce new failures. This change does not introduce degradation of multiple diesel generators.

Tracking No. SS-H-99-0176 Activity No. QCOS 6600-01 Rev. 32; SE-99-024

DESCRIPTION:

This change replaces use of a hand held tachometer for determining 1/2 Emergency Diesel Generator (EDG) speed with use of a permanently installed tachometer at Panel 2212-125.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the addition of the tachometer does not exhibit performance characteristics or have design features that give an increased probability of a system malfunction resulting in an accident.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the addition of the tachometer introduces no new types of system-level failure modes that could cause a different type of accident than presented in the plant SAR. This change will not adversely affect system interfaces.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the addition of the tachometer has no potential to introduce new failures. This change does not introduce degradation of multiple diesel generators.

Tracking No. SS-H-99-0178 Activity No. Interim Procedures 99-0037 & 99-0038; SE-99-063

DESCRIPTION:

Procedures QOA 9900-01 and QOP 6800-04 will be revised (IP) to reflect changes to the Computer Bus power sources that will be made by Temporary Modifications (TMODs) 99-1-008 and -009. The procedures will be changed to use Bus 26 as the Computer Bus primary source and a weld receptacle fed from Bus 15 as the alternate source. The procedures will also have steps to prevent both sources from powering the Computer Bus at the same time.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because a Loss of Auxiliary Power would cause the Emergency Diesel Generators (EDG) to start and supply power to the loads that are required to prevent or mitigate an accident. Buses 15 and 26 and the Computer Bus are not supplied by the EDGs and are not required to be operable during the Loss of Auxiliary Power. Since the equipment and components associated with the TMOD do not interface with vital equipment, the procedure changes cannot affect the consequences of a Loss of Auxiliary Power. The Computer Bus, the loads it feeds, and the buses that supply it cannot produce malfunctions that would cause a Loss of Auxiliary Power as described in the UFSAR. This equipment in not important to safety, nor can its failure affect equipment important to safety. The power circuits are isolated via breaker/fuses and the cables do not traverse fire zones. The possibility of a malfunction of equipment important to safety will not increase.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because as stated in the previous step, the TMOD procedure changes only interface with portions of the Auxiliary Power System that are not required to prevent or mitigate the consequences of an accident. A failure associated with the TMOD procedures produce the same results as failures associated with the existing Computer UPS power feeds (i.e. loss of Computer Bus). Since the cables remain in the same fire zone, the safe shutdown analysis is unaffected. These procedure changes will not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the TMOD procedure changes affects only the power source associated with the equipment used to maintain the limits. Should this equipment fail, alternate methods are available to verify the limits.

Tracking No. SS-H-99-180 Activity No. QCOA 6100-03 Revision 8; QCOA 6600-14 Revision 5 QCOP 6600-05 Revision 15; QCOP 6600-06 Revision 14 QCOP 6600-10 Revision 3; QCOP 6600-11 Revision 13 QCOP 6600-13 Revision 2; QCOP 6600-14 Revision 1 QCOP 6600-15 Revision 1; QCOS 6600-38 Revision 4 QCOS 6600-39 Revision 2; SE-99-045; SE-99-024

DESCRIPTION:

These changes dedicate the 1/2 Diesel Generator Cooling Water Pump (DGCWP) to a specific power supply for certain activities to prevent trip of the Pump during transfer of 1/2 Emergency

Diesel Generator (EDG) Unit power feeds. Encompassed by this change is use of a finger block for transfer logic relay contacts, an explanation of the trip in a DISCUSSION/LIMITATION AND ACTION, use of the 1/2 DGCWP power feed selector switch, and independently verifying all actions. These changes also replace use of a hand held tachometer for determining 1/2 EDG speed with use of a permanently installed tachometer at Panel 2212-125.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because:
 - a. The scope of the procedure change is encompassed by the scope of IP 99-0028. Relay finger blocks are used as standard practice and no new failure modes are introduced. The finger block being added serves solely to prevent tripping of the 1/2 EDG CWP breaker for the Bus 18 or Bus 28 feed dedicated by the procedure via the Bus 18/Bus 28 selector switch. The normal configuration is restored prior to completing the procedure. This procedure change is bounded by SE-99-045 which was performed for IP 99-0028.
 - b. The addition of the tachometer does not exhibit performance characteristics or have design features that give an increased probability of a system malfunction resulting in an accident.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because:
 - a. The 1/2 DGCWP transfer occurs to ensure that power source for the 1/2 DGCWP is the 1/2 EDG. This change continues to ensure that the 1/2 EDG is the power source.
 - b. The addition of the tachometer introduces no new types of system-level failure modes that could cause a different type of accident than presented in the plant SAR. This change will not adversely affect system interfaces.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because:
 - a. This activity will prevent a potential trip of the 1/2 DGCWP and resultant degradation of the 1/2 EDG when the 1/2 EDG is in operation.
 - b. The addition of the tachometer has no potential to introduce new failures. This change does not introduce degradation of multiple diesel generators.

Tracking No. SS-H-99-0184 Activity No. QOM 1-8800-01, Rev. 3; QOM 1-3700-01, Rev. 7; QCOP 8800-01, Rev. 7; SE-99-041

DESCRIPTION:

This change revised the QOM checklist to show newly installed valves and position changes for existing valves. QCOP 8800-01 was revised accordingly to provide instructions for lining up cooling water to the oxygen analyzer moisture separator based on the plant modification.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the Primary Containment Oxygen Analyzer and the Reactor Building Closed Cooling Water (RBCCW) System interface with the Primary Containment. These systems are isolated from the containment in the event of an accident and do not impact the probability or consequences of an accident. The probability of a loss of RBCCW does not change due to this modification and the Oxygen Analyzer operation or its loss does not change.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because there are no interactions that could create the possibility of an accident or transient different than those previously evaluated in the SAR. Both systems will function as designed, as there is no functional change to either system.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because Technical Specifications are not affected by these changes. The purpose of the Primary Containment Oxygen Sampling System is to monitor oxygen levels in the Primary Containment during normal operation. RBCCW provides cooling to essential plant equipment. Both systems will operate as before these changes and the margin of safety is not reduced for any Technical Specification basis.

Tracking No. SS-H-99-0193 Activity No. QCOP 4100-03, Rev. 10; QCOS 4100-01, Rev. 11; SE-99-036

DESCRIPTION:

This change revises these procedures to reflect installation of a mechanical speed indicator, speed switch, and associated wiring from DCP 9900037.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the changes are confined to a portion of the engine protection controls of the diesel fire pumps and do not change the method of operation or adversely affect the pump's ability to perform their design function. These changes cannot affect the probability of a fire's occurrence or consequences of a fire as the pump's capacity is not changing and the pump will still perform its safety function.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the changes are an engine protection feature. If one pump should fail, the other pump will operate as designed. Loss of a pump has been previously evaluated. The changes that reflect the equipment modification cannot cause any accident (fire occurrence) or transient (loss of a fire pump) that has not been previously evaluated.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because no margin of safety is reduced because the system is designed to function with a single equipment failure (loss of one diesel fire pump) and no new accidents are created by these changes.

Tracking No. SS-H-99-0195 Activity No. QOS 0005-S13 Revision 64; QOS 0005-S14 Revision 58; SE-98-052

DESCRIPTION:

This procedure change routinely ensures that Reactor Building equipment hatches are < 50% blocked when the respective Reactor is in Operational Modes 1, 2, and 3.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because there are no physical or functional changes being made. All equipment will continue to function as designed.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because there are no physical or functional changes being made. Normal plant operation is not affected. Operation during design basis transients and accidents is not affected.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this change does not affect any parameters upon which Technical Specifications are based.

Tracking No. SS-H-99-0197 Activity No. QCIP 0100-03 Revision 3; SE-98-091

DESCRIPTION:

Incorporate into QCIP 0100-03 revision 3 the M&TE requirements for PS 0-4641-43A/B and PS 1(2)-4641-42A/B from engineering calculation QDC-4600-I-0242 due to new switches installed per DCP 9600384, DCP 9700029, DCP 9600383, DCP 9700028, DCP 9600377, and DCP 9600453.

SE-98-091 was originally written to install a new switch and change the mounting for PS 1-4641-42A, with minor changes and safety evaluation validations SS-H-99-0010, SS-H-99-0070 and SS-H-99-0054 this safety evaluation was extended to cover PS 0-4641-43A/B (DCP 9600384 and DCP 9700029), PS 1-4641-42B (DCP 9700028) and PS 2-4641-42A/B (DCP 9600377 and DCP 9600453). The original engineering calculation for the first modification that SE-98-091 was written for has not changed. Engineering calculation QDC 4600-I-0242 was written for all six switches (PS 0-4641-43A/B, PS 1-4641-42A/B and PS 2-4641-42A/B).

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the calculation changes associated with this procedure change affect M&TE selection only. Also, this change replaced a test gauge with another of comparable range made by a manufacturer of a currently allowed gauge.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the procedure specifies M&TE to be used but does not specify any methodology of use nor provide any instructions for physical work. No new system interfaces result from this activity, therefore, new accident or malfunction scenarios are not created.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because System parameters and technical specification parameters are not altered by the updating of the M&TE, thus, the margin of safety is not reduced.

Tracking No. SS-H-99-0198 Activity No. QCAN 901(2)-4 H-22 Revision 4; SE-99-005

DESCRIPTION:

This change updates the procedure to indicate that fuel pool cooling pump breaker must be closed for alarm to be received.

SAFETY EVALUATION SUMMARY:

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the change does not affect the initiating events of any accident in the UFSAR. Any new potential failures are already bounded by the existing design and do not result in a malfunction of equipment important to safety.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the operation of the Fuel Pool Cooling Water Pump has not changed. The change to the alarm circuitry affects only the conditions that give the alarm. Any new types of failures will not result in a condition that has not already been analyzed.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because this change does not affect any parameters upon which Technical Specifications or safety functions are based.

Tracking No. SS-H-99-0199 Activity No. QOM 1/2-5700-01, Rev. 6; SE-99-075

DESCRIPTION:

This change revised this procedure U 1/2 Heating Steam Valve Checklist, due to upgrading the heating system by repairing the heating coils, repairing/replacing/installing new steam traps, repairing/replacing condensate drain piping, and upgraded the condensate return units.

SAFETY EVALUATION SUMMARY:

1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the heating system is a support system used to maintain area temperatures. It cannot cause or mitigate the consequences of any accident or transient.

- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the heating system is a support system used to maintain area temperatures. It cannot cause or mitigate the consequences of any accident or transient.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because there are no Technical Specifications affected by this change, no margin of safety is affected.

Tracking No. SS-H-99-0202 Activity No. QCAN 901(2)-3 C-8, Rev. 8; QCOA 1000-01, Rev. 8; SE-99-004

DESCRIPTION:

QCAN 901(2)-3, C-8, RHR Discharge Header Hi/Lo Pressure and QCOA 1000-01, Abnormal RHR Discharge Header Pressure, have been revised to reflect RHR discharge header pressure switch being changed out and increasing the upper setpoint to \geq 350 psig.

- 1. The probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased because the new switches provide the same function as the original switches. The new setpoint is in accordance with the original design standard. This will improve system performance as the alarm will not challenge the operators as previously. The new switches will be safety-related. This means that the new switches will perform their function in a manner that is equal to or exceeds that of the existing switches. The probability of occurrence or the consequences of an accident will not increase because if the new switch installation.
- 2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created because the new switches are installed as the original switches. The failure modes are the same. The setpoint change will make the alarm more reliable and eliminate erroneous alarms. The possibility of an accident or malfunction than previously evaluated in the UFSAR is not changing.
- 3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the pressure switches do not perform any functions as required by Technical Specification. Therefore, the margin of safety is not affected.