

WOLF CREEK NUCLEAR OPERATING CORPORATION

Wolf Creek Generating Station

Docket No.: 50-482
Facility Operating License No.: NPF-42

ANNUAL SAFETY EVALUATION REPORT

Report No.: 9

Reporting Period: January 1, 1993 through December 31, 1993

SUMMARY

This report provides a brief description of changes, tests, and experiments performed at Wolf Creek Generating Station pursuant to 10 CFR 50.59(a)(1). This report includes summaries of the associated safety evaluations that were reviewed and found to be acceptable by the Plant Safety Review Committee for the period beginning January 1, 1993 and ending December 31, 1993. This report is submitted in accordance with the requirements of 10 CFR 50.59(b)(2).

On the basis of these evaluations of changes, the following has been determined:

- There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Updated Safety Analysis Report (USAR).
- There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.
- The margin of safety as defined in the basis for any Technical Specification is not reduced.

Therefore, all items reported herein were determined not to involve an unreviewed safety question.

Safety Evaluation: 59 91-0178 Revision: 0

Installation of Gravel Around the Essential Service Water Valve Pit

This modification removes 12 inches of existing soil around the Essential Service Water (ESW) valve pits and replaces it with crushed rock. This area, which will be used for temporary parking of truck/trailer mounted air compressor skids during Integrated Leak Rate Testing of Containment, is located west of the Control and Diesel Generator Buildings. The area will be excavated so that the finished elevation will be approximately the same as that of the surrounding grade and it will be sloped so that the runoff is towards the road. This change in surface texture will not introduce any significant change to the storm drainage analysis in the USAR. Also, bumper posts will be placed around the ESW valve pits so that no excessive loads will be placed on the structural walls of the pits. The change in loads caused by the different surface has no affect on the safety-related structures beneath the surface.

Safety Evaluation: 59 92-0023 Revision: 0

Removal of Silicon Controlled Rectifiers From Emergency Exhaust System

This modification to the safety related Emergency Exhaust System eliminates silicon controlled rectifiers, which are used for the purpose of moisture control. Emergency exhaust heating coils help ensure the operability of the emergency filter-absorber unit by reducing the amount of moisture in the air before the air enters the charcoal absorber bed. This modification will provide for full power operation of the duct heaters in this system.

This modification assures the Updated Safety Analysis Report limit of 70% humidity will be achieved and temperature will be significantly lower (72 degrees Fahrenheit) than the high temperature alarm limit of 200 degrees Fahrenheit.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0039 Revision: 0

Revision of USAR to Clarify the Design Basis of the Hydrogen Mixing Fans

This modification revises the appropriate sections in the USAR to ensure consistency between the USAR and the Plant Technical Specifications. Specifically, the USAR is being revised to indicate that proper containment mixing can be achieved without reliance on the hydrogen mixing fans following an accident which corresponds with a statement in the Bases section of the Technical Specifications. The fans will continue to be maintained in a qualified state. The clarification of the USAR does not adversely affect plant operations.

Safety Evaluation: 59 92-0061 Revision: 0

Installation of Five Self-Contained Breathing Apparatus holding devices to the Wall of the Communication Corridor

This modification installs five Self-Contained Breathing Apparatus (SCBA) holding devices and the SCBAs in the block wall of stairway CC-1 in the Communication Corridor. This is a non-safety related zone, and is physically separated from all safety related areas and the equipment therein. Adding the SCBAs to the stairway provides a designated storage place for these items, helping to improve the fire protection requirement of the plant by aiding members of the fire brigade. This change has no impact on the margin of safety.

Safety Evaluation: 59 92-0069 Revision: 0

Relocation of Sample Point For The Condenser Air Discharge Radiation Monitor

This modification relocates the sample point for the Condenser Air Discharge Radiation Monitor from downstream of the Demineralized Water Degassifier Vacuum Pump exhaust. The oil mist eliminators on these vacuum pumps have produced oil which has clogged the pre-filters and coated the beta detector windows on the radiation monitor. The present location provides a poor air sample since the upstream air is diluted with Turbine Building air. The new location of the sample point is upstream of the vacuum pump exhaust, Turbine Building dilution air, and also exhaust air from the Miscellaneous Condensate Drain Tank. Also, the radiation monitor is no longer being used for particulate monitoring.

The radiation monitor is part of a non-safety related system which does not have an accident evaluated in Chapter 15 of the Updated Safety Analysis Report. The only accident postulated in Chapter 15 which could be affected by this change is a Steam Generator Tube Failure since the subject radiation monitor provides a back-up for detecting this type of accident. The consequences of this accident are not increased because the relocation of the monitor remains downstream of the source of radiation due to this accident.

Safety Evaluation: 59 92-0075 Revision: 0

Revision of the USAR to Describe Use of Hydrogen Purge Subsystem to Control Containment Pressure

This modification provides a revision to the USAR to describe the use of the Hydrogen Purge Subsystem to control Containment atmospheric pressure during non-accident conditions when normal Containment Purge Systems are out of service. The Containment penetration used by the Hydrogen Purge Subsystem is normally isolated but is equipped with isolation valves which receive an automatic Containment Isolation Signal. When the Hydrogen Purge Subsystem is used to control Containment atmospheric pressure, administrative controls are placed on the isolation valves to ensure closure in the event of a Loss-of-Coolant Accident. The use of the Hydrogen Purge Subsystem does not increase the probability or consequences of any previously evaluated accident, nor increase the malfunction failure rate or consequences of any equipment important to safety.

Safety Evaluation: 59 92-0095 Revision: 0

Clarification of Design Code Classifications of Certain Components

This drawing change clarifies the code classifications of certain components in the Auxiliary Turbine and Auxiliary Feedwater Systems. The clarification identifies the design code interface points on the Turbine-Driven Auxiliary Feedwater Pump turbine. These interface points identify where the ASME piping system classification ends. The design specifications for the Turbine-Driven Auxiliary Feedwater Pump turbine clearly indicates that the turbine is designed safety-related and is seismically analyzed for its safety-related function. However, the design code is not ASME Section III. The design classification for the turbine and its associated components is NEMA SM22.

No physical modification is being made by this drawing change. This change only clarifies the existing piping code boundaries and since the code boundaries are not being modified, there is no impact on previous accident analyses.

Safety Evaluation: 59 92-0099 Revision: 0

Replacement of Barton Pressure Transmitters With Rosemount Pressure Transmitters

This modification replaces six of the existing normal and wide range containment pressure transmitters manufactured by Barton with similar transmitters manufactured by Rosemount. These transmitter are being replaced due to concerns regarding maintenance of the Barton pressure transmitters. The four normal range containment pressure transmitters are located outside containment and are used for sensing the atmospheric pressure inside containment. These pressure transmitters provide electrical signals to the Engineered Safety Features Actuation System which actuates safety equipment upon high containment pressure. The two wide range pressure transmitters provide continuous Control Room indication of containment pressure as required by NUREG-0737 and Regulatory Guide 1.97. The six pressure transmitters are located immediately adjacent to the outside of the containment wall and each one is connected to a sealed bellows, located immediately adjacent to the inside of the containment wall, by means of a sealed fluid filled capillary.

All existing design requirements associated with the existing Barton transmitters are satisfied by the new Rosemount transmitters. The two transmitter models are similar in operation, mounting configuration, and installed configuration. Both transmitters produce an electrical signal which corresponds to actual containment pressure. The containment pressure and sealed bellows design configuration assures that containment integrity will be maintained under normal and accident conditions. Therefore, the replacement of the Barton pressure transmitters with Rosemount pressure transmitters will not adversely affect plant operations.

Safety Evaluation: 59 92-0107 Revision: 0

Differential Pressure Test of the Thermal Barrier Valves

This temporary procedure provides instructions for differential pressure testing of the Reactor Coolant Pumps Thermal Barrier Component Cooling Water Return Isolation valves in order to satisfy the requirements of Generic Letter 89-10. The differential pressure testing consists of opening and closing the thermal barrier valves against flow and pressure provided by the Component Cooling Water System. To measure system pressure upstream and downstream of the valves during stroking of the valves, the test specifies connection of temporary gages to the Component Cooling Water System.

The temporary procedure ensures that essential Component Cooling Water loads are isolatable from any leakage which could occur through failed test connections. Also, the capability of the Component Cooling Water System to transfer heat to the Essential Service Water System is not degraded by the temporary procedure.

Safety Evaluation: 59 92-0129 Revision: 0

Revision of UAR Table to Clarify Leak Detection Systems

This change to the Updated Safety Analysis Report revises Table 5.2-6 to clarify which leak detection systems are required to be operable by Technical Specification 3/4.4.6 in order to monitor Reactor Coolant System leakage. This change has no affect on any equipment important to safety. No systems, components, or structures required to mitigate the consequences of any accident are affected by this change.

Safety Evaluation: 59 92-0134 Revision: 0

Differential Pressure Tests of Containment Spray Pump Discharge Valves

These temporary procedures provide instructions for differential pressure testing of the Containment Spray Pump discharge valves in order to satisfy the requirements of Generic Letter 89-10. These procedures require the valves to be stroked with pressure and flow in the system using Motor-Operated Valve diagnostic test equipment and temporary indicators for pressure and flow data collection. The procedures require installation of temporary piping in either Modes 5, 6, or E and testing will be performed in Mode E only. These tests have no impact on the margin of safety since the Containment Spray System is not required to be operable during Mode E.

Safety Evaluation: 59 92-0136 Revision: 0

Differential Pressure Tests of RHR Mini-Recirculation Control Valves

These temporary procedures provide instructions for differential pressure testing of the Residual Heat Removal Mini-Recirculation control valves in order to satisfy the requirements of Generic Letter 89-10. These procedures require the valves to be stroked with pressure and flow in the system using Motor-Operated Valve diagnostic test equipment and temporary indicators for pressure and flow data collection. Stroking of the valves for the performance of these tests will be accomplished with the valves considered inoperable with only one train being tested at any one time. The procedures also require the tests to be performed in Mode 6 with water level greater than 23 feet above the vessel flange or in Mode E. Since only one train of the Residual Heat Removal System will be inoperable at any one time, as allowed by Technical Specifications, there is no impact on the margin of safety.

Safety Evaluation: 59 92-0138 Revision: 0

Revision of USAR Figure 10.4-3 to Show Devices in the Condenser Air Removal System Assigned Plant Tag Numbers

This modification has been implemented to revise USAR Figure 10.4-3 to show existing devices Condenser Mechanical Vacuum Pump Skids which have been assigned plant tag numbers. These skids are vendor supplied, skid mounted, non-safety related devices located in the Turbine Building. The assignment of plant tag numbers to the existing devices will be an aid during plant maintenance. No plant system, process, function, or setpoint is altered by this equipment identification.

Safety Evaluation: 59 92-0143 Revision: 0

Atomic Absorption Spectrophotometer Valve Number Revision

This modification renumbers Domestic Water System valves associated with the Atomic Absorption Spectrophotometer in the Updated Safety Analysis Report (USAR). The Domestic Water to Atomic Absorption Spectrophotometer Isolation Valve number is being changed from KDV323 to KDV530. The Domestic Water to Atomic Absorption Spectrophotometer Check Valve number is being changed from KDV324 to KDV531. These changes are being made to achieve consistency with Drawing M-12KD02 "P&ID Domestic Water System" and Drawing M-13KD05 "Domestic Water System Turbine Building Condenser."

These changes will be incorporated by Revision 5 to Plant Modification Request (PMR) WO84-RM068. Revision 2 to this PMR incorporated these changes into the drawing identified above, but overlooked the USAR. Modifications incorporated by Revision 2 were reported previously as PMR WO84-RM068.

The editorial changes incorporated by this modification have no adverse affect on system integrity or operation. This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0151 Revision: 0

**Revision to the USAR to Clarify Operator Actions Taken to Limit
Cooldown and Repressurization Following a Steamline Break**

This modification provides a revision to the USAR to clarify that operator-required actions to limit Reactor Coolant System (RCS) repressurization following a steamline break do not have to be recognized, planned, and performed within 10 minutes of the break. The operator actions to terminate the auxiliary feedwater water to the affected Steam Generator to limit cooldown and actions to secure the charging/Safety Injection flow to prevent RCS repressurization were not modeled in the licensing basis transient analyses. These operator actions are only required during the post-accident recovery process. Operator actions are based on Emergency Procedures which provide guidance to maintain or increase the margin of safety during accident conditions.

Safety Evaluation: 59 92-0158 Revision: 0

**Modification of the Secondary Liquid Waste Evaporator to Process
Recycle Holdup Tank Waste**

This modification will allow the use of the Boron Recycle Evaporator to process Recycle Holdup Tank waste from the Secondary Liquid Waste Evaporator, to accommodate current radwaste operational philosophy. Specifically, this modification includes the routing of a pipeline from the concentrates discharge of the Secondary Liquid Waste Evaporator to the concentrates discharge of the Boron Recycle Evaporator so the Secondary Liquid Waste Evaporator concentrates can be returned to the Boric Acid Tanks, the Recycle Holdup Tanks, or the Fuel Transfer Canal. Also, the Secondary Liquid Waste Evaporator vent line will be routed to the Gaseous Radwaste System in order to contain the noble gasses released by the evaporator. This modification has been designed in accordance with Regulatory Guide 1.143.

This modification does not have an adverse affect on any hazards analysis and involves only the Radwaste Building, which contains no safety related equipment. Therefore, this modification does not affect any system, structure, or component that is important to safety.

Safety Evaluation: 59 92-0159 Revision: 0

Miscellaneous Drawing Changes to Correct Typographical and Editorial Errors

This modification changes various drawings to correct typographical and editorial errors. Specifically, the drawings are being changed to show the Auxiliary Boiler Room instrument air branch isolation and drain valves, the actual configuration of the return line vent valves on the Reactor Coolant Pump No. 1 seal, and the proper interface between the Auxiliary Boiler fuel oil booster pumps supply and excess return piping and the site Architectural/Engineering drawing. These drawing changes do not modify plant equipment or affect the design function of any safety related equipment.

Safety Evaluation: 59 92-0162 Revision: 0

Addition of Drain Valves to the Condensate Demineralizer Acid and Caustic Day Tanks' Pump Suction Headers

This modification adds drain valves to the condensate demineralizer acid and caustic day tanks' pump suction headers to aid in maintenance activities. These drain valves will be installed on piping and connections currently in place. The Condensate System serves no safety related function. The modification only changes a non-safety related plugged connection to a valved hose connection and has no affect on plant safety.

Safety Evaluation: 59 92-0165 Revision: 0

Evaluation of One Time Deviation in Essential Service Water Flowrate Through Component Cooling Water Heat Exchanger "A"

This evaluation was conducted for a one time deviation of Essential Service Water (ESW) flowrate through Component Cooling Water (CCW) Heat Exchanger "A" due to the mispositioning of the ESW throttle valve for the "A" CCW Heat Exchanger. The flowrate was returned to its required value upon discovery. This evaluation concluded that the "A" CCW Heat Exchanger would be capable of removing the required heat loads with the reduction in ESW flowrate. If an accident had occurred during the period in which the ESW flowrate was less than the required minimum, the plant would have been capable of being shutdown safely without any adverse consequences.

Safety Evaluation: 59 92-0168 Revision: 0

Revision of Heat Rejection Rates to the Ultimate Heat Sink Following a Postulated LOCA

This modification revises the heat rejection rates to the Ultimate Heat Sink (UHS) following a postulated loss of coolant accident (LOCA) based on redefined essential service water flow rates to the containment air coolers and plant operation at power levels defined by the power rerate program. These new flow rates were approved by the NRC as Amendment No. 50 to the Technical Specifications and the power rerate was approved by the NRC as Amendment No. 69 to the Technical Specifications. Engineering calculations determined that under the redefined conditions the plant heat rejected to the UHS exceeded the existing UHS analysis input. However, the potential affect is insignificant. Thus, the existing UHS thermal performance would not be affected by this change in heat rejection and remains valid with the reduced containment air cooler flow rates and conditions of the power rerate program. This design change has no impact on the ability of the UHS to supply sufficient cooling water at a maximum temperature of 95 degrees Fahrenheit to shutdown the reactor and maintain safe shutdown for 30 days, assuming maximum engineered safety feature operation with the minimum heat transfer coefficient and the most severe meteorological conditions.

The UHS is required to provide sufficient water volume for emergency makeup to the spent fuel pool and component water systems and is a backup water supply for the Auxiliary Feedwater System. It was determined that the forced evaporation, and thus total UHS cooling water losses, were insignificant compared to the 190 acre-feet of water remaining after 30 days. Therefore, the very minor change in heat rejection to the UHS would not change the draw down from the UHS and the current thermal analysis remains valid.

Safety Evaluation: 59 92-0169 Revision: 0

Differential Pressure Test of the Residual Heat Removal System Cross-Tie and Hot Leg Injection Valves

These temporary procedures provide instructions for differential pressure testing of the "A" and "B" Train Residual Heat Removal (RHR) Pump's Cross-Tie valves and the RHR Pumps Reactor Coolant System Hot Leg Injection valve in order to satisfy the requirements of Generic Letter 89-10. The differential pressure testing consists of taking pressure, flow, temperature, and stroke times while opening and closing the valves against the pressure and flow provided by the RHR Pumps.

No abnormal pressure or flow transients will exist and the RHR system will remain within design limits during the performance of these temporary procedures. The performance of these temporary procedures is restricted to plant conditions that allow one train of the RHR system to be out of service. These tests will only affect the train of the RHR system that is out of service. Therefore, the performance of these temporary procedure will not adversely affect plant operations.

Safety Evaluation: 59 92-0171 Revision: 0

Motor Operated Valve Test (TP-TS-103)

The purpose of this temporary procedure is to perform a differential pressure test on the A Train Residual Heat Removal System to the Accumulator Injection Loops 1 & 2 Isolation Valve (EJ HV-8809A.) The test of this motor operated valve is being performed to satisfy the requirements of Generic Letter 89-10.

The differential pressure test consists of recording pressure, flow, temperature, position indication, and stroke time while opening and closing the motor operated valve against pressure and flow provided by the Residual Heat Removal Pump "A". This test will expose EJ HV-8809A to its bounding operational conditions of differential pressure, flow, and minimum voltage when cycling open and closed. Piping and components will not be degraded by this test. Performance of this test is restricted to modes 5, 6, or E.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0181 Revision: 0

Margin to Saturation Caution Setpoint Adjustment for the Thermocouple/Core Cooling Monitoring System

This safety related modification to the Margin to Saturation Caution for the Thermocouple/Core Cooling Monitoring System changes the setpoint from 25 degrees Fahrenheit to 9 degrees Fahrenheit.

The core cooling monitor compares both core outlet thermocouple temperatures, hot leg temperatures and cold leg temperatures with the saturation temperature based on the lowest of three pressure signals. Two levels of alarm are provided for the core cooling monitor function. These alarms are used as an operator aide during normal operations to alert the operator that a possible abnormal condition exists in the core. These alarms are not used to meet the requirements for inadequate core cooling of NUREG 0737, "Clarification of TMI Action Plan Requirements, November 1980," and they are given no credit in the accident analysis. There are no requirements for these alarms. Currently, annunciator 56B "RCS <50 SUBCOOL" (T/C Margin to Saturation Caution) annunciates frequently during steady-state full power operations when no abnormal conditions exist and is considered a nuisance by the operators.

The setpoint change to 9 degrees Fahrenheit subcooled will eliminate the nuisance alarm but will still provide the operator adequate time to respond to the warning condition as recommended in NUREG 0700 "Guidelines for Control Room Design Review September, 1981," section 6.3.1.2. Changing the Margin to Saturation Caution setpoint will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0189 Revision: 0

Transportation of Spent Fuel Pool Transfer Gates

These procedure changes provide allowance for the spent fuel pool transfer gates to be raised for transportation through the fuel transfer canals and to ensure that spent fuel will be moved from the load path of the gates. Specifically, the changes require the removal of the mechanical stop on the spent fuel pool bridge crane to allow the transfer gates to raised to the proper height to allow transport through the fuel transfer canals. The as-found condition of the mechanical stop on the spent fuel pool bridge crane will be marked to allow restoration of the stop to its initial condition. Also, the changes provide instructions to ensure that spent fuel is moved from the transfer gates load path which is detailed in an attachment to the procedure. These changes will aid in the inspection/replacement of the spent fuel pool transfer gate seals.

Administrative control are in place to ensure that the transfer gates are not lifted over spent fuel. Equivalent temporary safety cables are in place to prevent the gates from falling. Fuel handling accidents have also been previously evaluated in the USAR. Therefore, these temporary procedure changes will not adversely affect plant operations.

Safety Evaluation: 59 92-0190 Revision: 0

Pressurizer Logic Drawing and Circulating Water System Drawing Discrepancies

This modification corrects discrepancies in Drawings M-744-00023 "Functional Diagram Pressure Trip Signals," M-744-00039 "Functional Diagram Pressurizer Relief System," and M-744-00040 "Functional Diagram Pressurizer Pressure Relief System," to show Power Operated Relief Valve (PORV) Block Valves BBHV8000A and B closing on decreasing Pressurizer pressure less than 2185 pounds per square inch gauge. The PORV Block Valves close, should the relief valve fail or stick in the open position. This drawing correction will not affect system integrity or operation because the correct configuration is present in the field.

In addition, this modification corrects drawing discrepancies on Drawing E-1022 "Key diagram Circulation Water Screen House 480V MCC," and Drawing E-1023 "Key Diagram Circulation Water Screen House 480V MCC, SL4A (ISL22E). These drawings incorrectly documented which breakers were feeding the Circulation Water Pump Discharge Valves (1CW0001A, 1CW0001B, and 1CCW0001C). These changes are editorial in nature and will not require field changes.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0194 Revision: 0

Installation of Quick Connectors on the Hydrogen Mixing Fans

This modification installs EGS quick connectors on the hydrogen mixing fans. The hydrogen mixing fans are determined and temporarily moved during refueling outages to allow access to the reactor coolant pumps. The determination and reterminations are made with Raychem motor termination kits which is very time consuming. Therefore, the change to quick connectors will reduce time, cost, and potential changes of damaging the field cables.

The quick connectors have been successfully tested and qualified for safety related applications for a design basis event. Also, the connectors are equivalent to the Raychem splices and have been qualified for Class 1E applications. Therefore, the modification has no impact on the operability of the hydrogen mixing fans.

Safety Evaluation: 59 92-0196 Revision: 0

Makeup Demineralizer System Drawing Discrepancies

This modification to a non-safety related system corrects drawing discrepancies to reflect the as-built configuration in the field. Drawing M-0025 "P&ID Makeup Demineralizer System" will be revised to reflect changes incorporated as a result of this modification. In addition, some equipment in the field will require tagging changes to implement this modification. No changes will be made to the system configuration in the field. System integrity and operation are not affected by this modification.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 50 92-0199 Revision: 0

Instrument Air Compressor Replacement

This modification replaces Instrument Air Compressor (CKA01B). Instrument Air Compressor (CKA01A), was replaced by a previous modification and Instrument Air Compressor (CKA01C), will be replaced by a future modification.

Several design modifications are necessary to effect change out of CKA01B. Design modifications are necessary in the Compressed Air System to replace the 150 horsepower Ingersoll-Rand air compressor with the new 250 horsepower Atlas Copco air compressor. Power circuit design modifications are required to provide the necessary power to the new air compressor. Control Circuit modifications are required to allow the new air compressor to interface with air compressors CKA01A and CKA01C, as well as the Control Room annunciator and sequence control panel. Raceway modifications are necessary to accommodate the new air compressor and the power circuit changes. Essential Service Water System piping modifications are necessary to provide increased cooling water flow required by the new larger air compressor. Modifications are also necessary on the air receiver skid.

The design changes provided by this modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0204 Revision: 0

Interim Configuration During Unavailability of Essential Service Water to the Spent Fuel Pool Room Cooler and as Emergency Spent Fuel Pool Makeup

This safety evaluation addresses the interim configuration during which essential service water will be unavailable to Spent Fuel Pool Room Cooler "A" and as emergency spent fuel pool makeup due to the replacement of a portion of essential service water piping from carbon steel to stainless steel. During an approximately three month period, the supply and return piping will be isolated by blind flanges at the essential service water headers in the north piping penetration room of the Auxiliary Building.

The interim configuration piping/support stresses are acceptable. Spent Fuel Pool Room Cooler "A" is not required in the analysis of any USAR Chapter 15 design basis accidents. In the extreme case without room cooling available, 155 degrees Fahrenheit has been determined to be the maximum expected pump room temperature assuming a fuel pool temperature of 160 degrees Fahrenheit. All equipment in the Spent Fuel Pool Room "A" is qualified to temperatures higher than 156 degrees Fahrenheit. Also, there are several sources of makeup water for the spent fuel pool besides the essential service water. The appropriate procedure will be revised to address an alternate makeup source of essential service water to the spent fuel pool and the interim condition will be red lined on the control room drawings. Therefore, the interim configuration will not adversely affect plant operations.

Safety Evaluation: 59 92-0205 Revision: 0

Leading Edge Flow Meter Removal

This modification removes the non-safety related leading edge flow meters and associated cabinets. Associated conduits and cables will be disconnected, but left installed. The leading edge flow meters are a monitoring system which was designed to provide a more accurate measurement of true reactor power to plant operators. The leading edge flow meters have not functioned to design capability and do not provide relevant information to plant operators. Therefore, the system is being removed and returned to the vendor.

The leading edge flow meters are not required for plant operation and removal of this non-safety related equipment will not adversely affect plant operations.

Safety Evaluation: 59 92-0206 Revision: 0

Temporary Freeze Seal to Support Maintenance of Essential Service Water to Motor Driven Auxiliary Feedwater Pump "A" Isolation Valve

This temporary modification isolates essential service water to Motor Driven Auxiliary Feedwater Pump "A" by the use of a freeze seal in order to conduct maintenance on the Essential Service Water to Motor Driven Auxiliary Feedwater Pump "A" Isolation Valve. This modification will temporarily isolate one of the two auxiliary feedwater trains which each have 100 percent capacity and the appropriate Technical Specification action statement will be entered for the inoperability of one train of auxiliary feedwater. In case of a freeze seal failure a blind flange with gasket will be kept ready to block leakage. Also, other suitable emergency measures in the event of seal failure will be in place. The freeze seal will be prepared in accordance with procedures which will give reasonable assurance that the freeze seal will remain in place under design pressure and not adversely affect piping integrity. A dimensional verification will be performed on the freeze seal area after this temporary modification to ensure piping integrity. The design function of the remaining redundant auxiliary feedwater train or either of the essential service water trains are not affected by this modification. Therefore, this temporary modification will not adversely affect plant operations.

Safety Evaluation: 59 92-0210 Revision: 0

**Replacement of Quality Program Violations and Deviations With
Performance Improvement Requests**

This procedure change notice to KGP 1210 "Performance Improvement Requests" changes the mechanism the Quality Assurance department uses to document Quality Assurance (QA) findings. QA program deficiencies are presently being reported by utilizing Form KZF-61 "WCNOC Quality Program Violations/Deviations." This revision requires Quality Assurance personnel to use Form KZF-69 "Performance Improvement Request" (PIR) to document QA program findings. The unique requirements imposed specifically on QA by both ASME and ANSI standards are being included in the PIR process for those PIRs generated during a QA Audit or Surveillance. Program requirements and commitments remain intact. Only the document used to accomplish the commitment is changing.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0212 Revision: 0

Halon System Modification in the Security Building

This modification to non-safety related equipment disables the Halon 1302 Fire Suppression System in the security electronics room and the secondary alarm station (SAS) console and underfloor area. A hand-held CO2 fire extinguisher will be added in the SAS to provide manual fire suppression in the immediate area. Both areas have adequate ionization detection devices installed and Security personnel can respond in seconds to an alarm in either area.

this modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0216 Revision: 0

Component Cooling Water Temperature Evaluation

This modification allows operation of the Component Cooling Water System (CCW) at temperatures below 60 degrees Fahrenheit following a Safety Injection Signal (SIS).

The existing design basis minimum CCW temperature is 60 degrees Fahrenheit. This temperature is maintained by the CCW heat exchanger (HX) and regulating valves (EGTV29/EGTV30) on bypass lines during normal plant operation. During the cold season, the Essential Service Water (ESW) flowrate is reduced through the CCW HX by manually throttling valves on the ESW System. Upon initiation of a SIS all valves are positioned in post-Design Basis Accident (DBA) configuration such that the minimum temperature cannot be maintained.

This modification documents the engineering evaluation performed to demonstrate that the CCW System and the associated safety-related components are capable of performing their design basis safety-related function post-DBA, assuming a lake water temperature of 32 degrees Fahrenheit.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0219 Revision: 0

Lifting and Rigging

This procedure provides site specific standards for lifting and rigging in support of on going maintenance activities. This procedure allows for the use of buildings and various support structures for temporary riggings and ensures the additional stresses because of the rigging loads are within the allowable design limits. The structural integrity and operational readiness of the structures and components will be maintained at all times.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 92-0220 Revision: 0

Remote Control for Feedwater Preheating

This modification to the Main Steam Supply System incorporates two controllers (AB-PIC-359 and AB-PIC-360) on panel RL027 of the Main Control Board in the Control Room for the purpose of providing remote control of feedwater preheater steam let-down valves. This modification will provide improved control for the operators during critical start-up periods. This modification is considered safety related because of the potential to affect the seismic qualification of the Main Control Board. Installation of the controllers in the Main Control Board is considered special scope, seismic II/I.

An engineering evaluation has determined the net weight change on Panel RL027 is insignificant and the seismic qualification of the panel remains valid. System integrity and operation are not compromised as a result of this modification. This modification does not involve making any changes in the safety related portion of the Main Steam Supply System or pose any hazard to any safety related system.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0001 Revision: 0

Radiation Monitor Setpoint Change

This modification involves setpoint changes to non-safety related monitors in the Radiation Monitoring System. New setpoints have been calculated utilizing 10CFR20 and NUREG 0800 "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, LWR Edition." New setpoints are for the Radwaste Building Exhaust Particulate Monitor (GHRE0022), the Auxiliary Building Ventilation Exhaust Monitor (GLRE0060), and the Access Control Area Ventilation Exhaust Monitor, (GKRE0041). New set points have been calculated to reduce the number of nuisance alarms received on these monitors. The new setpoints are within the requirements of 10CFR20 and NUREG 0800.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and has no potential for the creation of a new type of accident. This change will not reduce the margin of safety as defined in the basis for any technical specification.

Safety Evaluation: 59 93-0002 Revision: 0

Addition of Component Numbers to Water Treatment System Pump Switches

This modification provides a revision to Figure 9.2-5, sheet 2, in the Updated Safety Analysis Report. Component numbers for the coagulant aid pumps, lime softeners agitators, and hand switches for line feeders will be installed for better component identification in the water treatment system. The addition of component identification numbers will not adversely affect plant operations.

Safety Evaluation: 59 93-0003 Revision: 0

USAR CH. 13.1 AND 17.2

This revision to the Updated Safety Analysis Report (USAR) defines the change in responsibilities and reporting because of reorganization. The Manager Supplier/Materials Position is being deleted. The Supervisor Supplier Quality will retain all his duties and responsibilities and will report to the Manager Quality Assurance. The Supervisor Materials Quality will retain all his duties and responsibilities and will report to the Manager Quality Control.

This revision to the USAR will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0004 Revision: 0

Replacement of Meteorological Chart Recorder

This modification to the meteorological chart recorders replaces the ink pen recorders with a recorder which uses a heat sensitive chart paper. These recorders are part of the Meteorological Monitoring Measurement System. This system is designed to provide a reliable means to acquire the meteorological data required by Regulatory Guide 1.23 "Onsite Meteorological Programs." This modification will reduce the maintenance now required to keep the meteorological pen chart recorders in working order. The chart recorders for the wind speed, wind direction, wind deviation, and the rain gauge are affected by this modification. This modification will eliminate the clogging problems encountered with the ink pen recorders and increase system reliability.

Safety Evaluation: 59 93-0006 Revision: 0

Surface Preparation and Coating of Reator Internals Lifting Device

This modification involves removing the original zinc primer and repainting the Reactor Internals Lifting Device with two coats of epoxy paint. Westinghouse Specification PS 597755-1 requires an epoxy top coat be applied over the inorganic primer. The epoxy top coat was not applied and the zinc primer has failed resulting in corrosion and deterioration of the carbon steel parts of the lifting device. To correct the problem, the lifting device will be painted with two coats of resistant epoxy coating. Test results show the epoxy paint will not adversely chip, peel, blister or chalk when exposed to normal or design basis accident environments.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0007 Revision: 0

USAR Change For "Inadvertant RCS Depressurization"

This revision to the Updated Safety Analysis Report (USAR) page 3.9 (N)-13 paragraph 3 and 4 is being implemented to reflect the analysis results of the "Inadvertent Reactor Coolant System Depressurization" design transient that was actually used in the Wolf Creek Generating Station (WCGS) design.

Current wording in the USAR is based on System Standard 1.3, which is applicable to plants with Westinghouse Model D steam generators. System Standard 1.3F is the appropriate design transient document for plants with the Westinghouse Model F steam generators, which was incorporated into the WCGS design. The Nuclear Steam Supply System design for WCGS was based on the System Standard 1.3F design transient document. Therefore, the change will not affect the postulated failure modes and mechanisms which cause design basis events.

This revision has no impact on accidents and malfunctions evaluated as the licensing basis and has no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety as defined in the basis for any technical specifications.

Safety Evaluation: 59 93-0008 Revision: 0

Updated Safety Analysis Report Revision to Reflect Organizational Changes

This revision to the Updated Safety Analysis Report changes the reporting relationship of the Manager Nuclear Safety Engineering and the Nuclear Safety Engineering organization. The Manager Nuclear Safety Engineering previously reported to the Vice - President Engineering and Technical Services. The revised reporting relationship is through the Vice - President Nuclear Assurance.

Changing the reporting relationship of the Manager Nuclear Safety Engineering does not affect the overall operating philosophy of the Wolf Creek Generating Station organization.

Safety Evaluation: 59 93-0009 Revision: 0

Replacement of Water Treatment System Chlorinator

This temporary modification to non-safety related equipment will remove the existing chlorinator which supplies chlorine in a gaseous form to the Water Treatment System. The modification will replace the existing chlorinator with one which supplies chlorine in a liquid form (bleach). The modification supplies a more diluted form of chlorine than that supplied by the existing chlorinator. The habitability of the Control Room and other vital areas is not affected by this modification. Other Water Treatment System equipment will be unaffected by the modification.

Safety Evaluation: 59 93-0010 Revision: 0

Yarway Hy-Drop Valve Replacement

This modification replaces Yarway Hy-Drop valves with Dragon valves. Valve replacement is being implemented because of the high failure rate and low availability of parts for the Yarway Hy-Drop valves. Valves replaced by this modification include BGV-0198, "Reactor Coolant Pump (RCP) 'A' Seal Injection Throttling," BGV-0199, "RCP 'B' Seal Injection Throttling," BGV-0200, "RCP 'C' Seal Injection Throttling," BGV-0201, "RCP 'D' Seal Injection Throttling," BGV-0202, "RCP Seal Leakoff Return to Seal Water HX," BMV-0003, "Steam Generator Blowdown to Flash Tank," BMV-0014, "Steam Generator Blowdown to Flash Tank," BMV-0025 "Steam Generator Blowdown to Flash Tank," BMV-0036 "Steam Generator Blowdown to Flash Tank," BGV-0001, "Regenerative HX to Letdown HX," BGV-0002, "Steam Generator Blowdown to Flash Tank," BGV-0003, "Steam Generator Blowdown to Flash Tank," BBV-0082, "Pressurizer Spray Bypass," EBV-0083, "Pressurizer Spray Bypass," BGV-0319, "BA Filter to BAT Miniflow," and FBV-0032 "Auxiliary Steam to Blowdown Tank."

The replacement valves will reduce the amount of damage because of cavitation induced vibration. Installation of the new valves will result in no change to the existing design conditions, such as design pressures or flow rate or to any operating procedure.

Replacement valves are the same type of valve and are to be installed in the same location and will perform the same function as the existing valves. No failure of the replacement valves can occur which is different than any postulated failure of the existing Yarway valve.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0011 Revision: 0

Essential Service Water System Return Line Pipe Replacement

This temporary modification is being installed to implement the permanent modification described in Safety Evaluation 59 92-0204 which replaces carbon steel piping with stainless steel piping in the Essential Service Water System. This temporary modification places a freeze seal on the Essential Service Water System return line to the Spent Fuel Pool Pump Room Cooler "A." The purpose of the freeze seal is to permit blind flange installations on the return line piping without performing a drain down of the Essential Service Water System. The Essential Service Water System supplies water to the Spent Fuel Pool Pump Room Cooler "A" and provides a safety related makeup water source for the spent fuel pool. The freeze seal has been qualified in accordance with approved procedures and installation is governed by approved procedures. The interim condition of the blind flanged installation has been evaluated by Safety Evaluation 59 92-0204.

Spent Fuel Pool make-up water is being provided by alternate sources should the need arise. The unavailability of the Essential Service Water System does not effect the operating parameters of the Spent Fuel Pool other than pump room temperature. The hypothetical temperature in the spent fuel pool pump room will not exceed the qualified equipment operating temperatures.

Safety Evaluation: 59 93-0012 Revision: 0

Essential Service Water System Supply Line Pipe Replacement

This temporary modification is being installed to implement the permanent modification described in Safety Evaluation 59 92-0204 which replaces carbon steel piping with stainless steel piping in the Essential Service Water System. This temporary modification places a freeze seal on the Essential Service Water System supply line to the Spent Fuel Pool Pump Room Cooler "A." The purpose of the freeze seal is to permit blind flange installations on the supply line piping without performing a drain down of the Essential Service Water System. The Essential Service Water System supplies water to the Spent Fuel Pool Pump Room Cooler "A" and provides a safety related makeup water source for the spent fuel pool. The freeze seal has been qualified in accordance with approved procedures and installation is governed by approved procedures. The interim condition of the blind flanged installation has been evaluated by Safety Evaluation 59 92-0204.

Spent Fuel Pool make-up water is being provided by alternate sources should the need arise. The unavailability of the Essential Service Water System does not effect the operating parameters of other than temperature. The hypothetical temperature in the spent fuel pool pump room will not exceed the qualified equipment operating temperatures.

Safety Evaluation: 59 93-0015 Revision: 0

Inservice Inspection Program

This modification to the InService Inspection Program Plan is being implemented to allow the use of American Society of Mechanical Engineers (ASME) Code Case N-498 leakage/pressure tests at nominal operating pressures as an alternative to the 10-year hydrostatic tests on Code Class 1 and 2 systems.

ASME Code Case N-498 was approved May 13, 1991 by the Board of Nuclear Codes and Standards and was subsequently accepted by the Nuclear Regulatory Commission as specified in Regulatory Guide 1.147, Revision 9, (April 1992). This code case provides alternate rules which may be used in lieu of those required by ASME Section XI for 10-year hydrostatic pressure testing of Class 1 and 2 systems. Specifically, in lieu of the 10-year hydrostatic tests, Code Case N-498 allows performance of a system leakage test on Class 1 systems and a system pressure test of Class 2 systems at nominal operating pressure. The required hold back times prior to performing VT-2 visual examinations are 10 minutes for non-insulated piping and 4 hours for insulated piping.

Technical justification for eliminating the 10-year hydrostatic test requirement discussed by ASME Section XI Work Group as the basis for issuing Code Case N-498 includes: 1) testing does not verify structural integrity, 2) testing does not encompass peak pressures associated with the limiting design basis upset event, 3) testing provides no assurance of detecting all flaws which may be present, 4) testing induces cyclic stress to system piping.

Industry experience has demonstrated that leaks and through-wall flaws are not found during 10-year hydrostatic tests. Instead, these service-induced flaws are typically found during system walkdowns at normal operating pressures. Accordingly, frequent system walkdown inspections at normal operating conditions have proven to be more effective than 10-year hydrostatic tests, especially for detecting erosion and corrosion induced flaws.

In conclusion, no additional benefit would be realized by conducting 10-year hydrostatic tests on Class 1 and 2 systems. Therefore, alternative testing of Class 1 and 2 systems at their normal operating pressures would not affect the quality or safety of the safety related systems.

Safety Evaluation: 59 93-0021 Revision: 0

Reactor Coolant System Leakage Monitoring

The monitoring instrumentation installed by this modification is recommended by NRC Bulletin 88-08, "Thermal Stress in Piping Connected to Reactor Coolant Systems," to check for leakage from the reactor coolant system into connecting system piping. This modification installs non-safety related temperature monitoring instrumentation on the Chemical and Volume Control System piping to the pressurizer. This instrumentation is temporary and installed for a short duration (one fuel cycle). Resistance temperature detectors (RTD) will be strapped to safety related piping inside the containment building and connected to an existing data logger inside containment. The signal cable between the RTDs and the data logger will be field routed away from existing cabling. The signal cable will be supported from structural steel and large pipe supports. The signal cable weight is one-fourth pound per foot and is not considered to be a II/I seismic hazard. The cable will not affect the integrity of the supporting structure. The cabling will be installed in compliance with physical separation criteria.

Based on the above discussion, there is no impact on accidents and/or malfunctions evaluated as the licensing bases. Also there is no potential for the creation of a new type of unanalyzed event and there is no impact on the margin of safety as defined in the bases for the technical specifications.

Safety Evaluation: 59 93-0022 Revision: 0

Professional Training Requirements

This Safety Evaluation addresses Revision 4 to procedure KGP-1851, "Professional and Supervisory Training Program", which is being changed to incorporate the guidance of ACAD 91-017, "Guidelines for Training and Qualification of Engineering Support Personnel." This revision formalizes the training and qualification requirements for much of the WCNOC professional staff and redefines the population of WCNOC personnel covered by the Professional Staff Training Program described in the Updated Safety Analysis Report. The current revision of the Updated Safety Analysis Report describes the training program for engineering support staff which complies with the guidelines of ANSI/ANS-3.1-1978, "Standard Selection and Training of Personnel for Nuclear Power Plants." Training is described for the non-licensed technical staff which provides support for the safe and reliable operation of the plant. ACAD 91-107, "Guidelines for Training and Qualification of Engineering Support Personnel," also provides guidance for the training and qualification of engineering support professional personnel with the purpose of achieving safe and reliable plant operation.

The current revision of KGP-1851, "Professional and Supervisory Training Program," identifies all personnel holding exempt job positions for inclusion in the Professional and Supervisory Training Program. This population includes a large number of personnel whose job duties do not directly affect the safe and reliable operation of Wolf Creek Generation Station. The more specific guidance of ACAD 91-107 "Professional and Supervisory Training Program" reduces the number of personnel subject to this type of training from approximately 540 to 215. While there is a reduction in the number of personnel receiving training, the training and qualification of personnel who have a direct affect on the safe and reliable operation of Wolf Creek Generating Station is not reduced.

Safety Evaluation: 59 93-0023 Revision: 0

Steam Generator Vertical Drop Whip Restraint Removal/Deactivation

This modification removes/deactivates the crossover leg and Steam Generator vertical drop whip restraints. It has been demonstrated that with the crossover leg whip restraints deactivated, the loads and stresses in the piping, supports and primary equipment nozzles are still within the allowable values. The functions of the reactor coolant system and attached auxiliary systems are maintained. The normal and accident mitigation functions of the affected systems are not impacted by this modification.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0024 Revision: 0

Equipment Hatch Portable Generator

This temporary modification installs a portable generator in the Containment Building during modes five and six only, when the equipment hatch is open. Installation of the portable generator will allow the equipment hatch to be closed should an emergency occur. The location designated for the generator is on the concrete deck just north of the equipment hatch, which is remote from any non-structural safety related components.

This temporary modification will not alter or affect any equipment important to safety. The generator will only supply power to the equipment hatch door hoist motors which are not considered to be important to safety. The presence of this generator in the Containment Building will not affect any equipment important to safety. This temporary modification is being implemented to reduce the consequences of core boiling as identified in Generic Letter 88-17.

Safety Evaluation: 59 93-0025 Revision: 0

Fuel Oil Storage Tank Letector Removal

This modification removes the heat detector from the Diesel Fuel Oil Storage Tank (1F001T). The tank is located a sufficient distance from any safety-related structures and equipment to prevent loss of function of essential equipment in the event of a fire consuming the complete storage inventory. The tank is equipped with a foam type fire suppression system. Because of the corrosive atmosphere inside the tank, the thermal detector has experienced numerous spurious alarms, requiring personnel to enter the tank for repairs. Review of National Fire Protection Association Codes indicate no internal fire detection is required for this tank. In the event of a tank fire, Control Room annunciation will be provided manually by the Operations Site watch or Security personnel via the manual pull station.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

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Safety Evaluation: 59 93-0026 Revision: 0

Mechanical Equipment Room Temperature Analysis

This change to the Updated Safety Analysis Report incorporates the revised design basis accident temperature in Mechanical Equipment Rooms 1501 and 1512. This change is discussed and evaluated by Safety Evaluation 93-0074.

Safety Evaluation: 59 93-0028 Revision: 0

Component Cooling Water Heat Exchanger Monorail

This modification provides monorail beams above the 9800 lb. flat head covers of the Component Cooling Water Heat Exchangers (EEG01A and EEG01B). The beams will be utilized for hoisting. The beams are attached to Auxiliary Building Seismic Category I walls and floors which have been structurally evaluated for the addition of the beams and their use during associated lifts including dropping of the heat exchanger head. The monorail beams have been designed as Seismic Category I and have no adverse impact on any safety related equipment.

The addition of the monorail beams will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0030 Revision: 0

Motor Operated Valve Test (TP-TS-95)

The purpose of this temporary procedure is to perform a differential pressure test on the Refueling Water Storage Tank to Residual Heat Removal System, "A" train, Motor Operated Valve, (BN HV-8812A). This test is being performed to satisfy the requirements of Generic Letter 89-10.

The differential pressure test consists of recording pressure, flow, temperature, position indication, and stroke time while opening and closing the motor operated valve against pressure and flow provided by the Residual Heat Removal Pump "A". Residual Heat Removal Pump "A" is taking suction from the Reactor Coolant System, and discharging to the Refueling Water Storage Tank header, then back to the suction of the pump.

This test is being performed with the core unloaded, and the functions of the affected equipment in the Refueling Water Storage System and the Residual Heat Removal System are not required. Pressures and temperatures during this test will remain within design limits. Piping and components will not be degraded by this test.

Safety Evaluation: 59 93-0033 **Revision:** 0

Silica Analyzer Sample Configuration

This modification to a non-safety related system changes the sample tubing and valves to the silica analyzers in the Water Treatment System. The existing configuration of a single pressure regulator does not permit the proper flow of water to the silica analyzer when the demineralizer train is off-line, causing inadvertent alarms.

This modification removes the single pressure regulator and installs two pressure regulators for the silica analyzer. One regulator will control the pressure/flow to the silica analyzer during on-line operations. The second regulator will control the pressure/flow when the demineralizer train is off-line.

The design change to the non-safety related Water Treatment System does not affect system function or failure modes. Accidents or malfunctions evaluated as the licensing bases are not impacted by this modification. The margin of safety has not been reduced. This modification has no potential for the creation of a new type of unanalyzed event.

Safety Evaluation: 59 93-0034 Revision: 0

Potable Water Coalescing Air Filter Replacement

This modification to the non-safety related Potable Water System involves the replacement of an air filter which is obsolete and no longer available to purchase. The existing coalescing air filter assembly has 3/4" FNPT inlet and outlet openings. The modification replaces the coalescing air filter assembly with a model that has 1/2" FNPT openings. The new filter assembly meets all other requirements for this application.

This modification to non-safety related equipment will not adversely impact accidents and malfunctions evaluated as the licensing bases. There is no potential for the creation of a new type of unanalyzed event and there is no reduction in the margin of safety.

Safety Evaluation: 59 93-0036 Revision: 0

Positive Displacement Pump Gland Packing Coolant Tank and Plunger Pot

This modification installs an air eductor system that takes suction from the Positive Displacement Pump (PDP) packing gland and plunger pot for removing noble gases and discharging them to the HVAC return duct, (24-5NL-4"). This modification will prevent airborne radioactivity in the PDP room. The safety function of the PDP room HVAC return duct to Auxiliary/Fuel Building Normal Exhaust Fan (CGL03B) is based on Updated Safety Analysis Report section 9.3.4.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0037 Revision: 0

Motor Operated Valve Test (TP-TS-108)

The purpose of this temporary procedure is to perform differential pressure tests on the Centrifugal Charging Pump/Safety Injection Suction Piping Motor Operated Valves (EM HV-8807A and B). These tests are being performed to satisfy the requirements of NRC Generic Letter 89-10.

The differential pressure test consists of recording pressure, flow, temperature, position indication, and stroke time while opening and closing the motor operated valves against pressure and flow provided by Residual Heat Removal (RHR) Pump "A". RHR Pump "A" is taking suction from the Reactor Coolant System. These tests are performed with the electrical interlocks of valve EJ HV-8804A defeated.

Tests provided by this temporary procedure will expose valves EM HV-8807A and B to their bounding operational conditions of differential pressure, flow and minimum voltage when cycling open and closed. The acceptance criteria is to achieve design bases verification checklist thrust requirements under these conditions. The test conditions will demonstrate the valves' functional capability. The performance of this test is restricted to plant modes 6 and E.

These tests have no impact on accidents and malfunctions evaluated as the licensing bases and there is no potential for the creation of a new type of unanalyzed accident. There is no impact to the margin of safety.

Safety Evaluation: 59 93-0038 Revision: 0

Motor Operated Valve Test (TP-TS-109)

The purpose of this temporary procedure is to perform differential pressure tests on the Centrifugal Charging Pump/Safety Injection Suction Piping Motor Operated Valves (EM HV-8807A and B). This test is the same as reported in Safety Evaluation 93-0037, except this test utilizes Residual Heat Removal (RHR) Pump "B" instead of "RHR Pump "A." This test is being performed to satisfy the requirements of NRC Generic Letter 89-10.

The differential pressure test consists of recording pressure, flow, temperature, position indication, and stroke time while opening and closing the motor operated valves against pressure and flow provided by RHR Pump "B". RHR Pump "B" is taking suction from the Reactor Coolant System. This test is performed with the electrical interlocks of valve EJ HV-8804A defeated.

This test will expose EM HV-8807A and B to their bounding operational conditions of differential pressure, flow and minimum voltage when cycling open and closed. The acceptance criteria is to achieve design bases verification checklist thrust requirements under these conditions. The test conditions will demonstrate the valve's functional capability. The performance of this test is limited to plant modes 6 and E.

These tests have no impact on accidents and malfunctions evaluated as the licensing bases and there is no potential for the creation of a new type of unanalyzed accident. There is no impact to the margin of safety.

Safety Evaluation: 59 93-0039 Revision: 0

Motor Operated Valve Test (TP-TS-110)

The purpose of this temporary procedure is to perform differential pressure tests on the Residual Heat Removal "A" train to Centrifugal Charging Pump Suction Piping Motor Operated Valve EM HV-8804A. This test is being performed to satisfy the requirements of NRC Generic Letter 89-10.

The differential pressure test consists of recording pressure, flow, temperature, position indication, and stroke time while opening and closing the motor operated valve against pressure and flow provided by the Residual Heat Removal Pump "A". Residual Heat Removal Pump "A" is taking suction from the Refueling Water Storage Tank.

This test will expose EM HV-8804A to its bounding operational conditions of differential pressure, flow and minimum voltage when cycling open and closed. The acceptance criteria is to achieve design bases verification checklist thrust requirements under these conditions. The test conditions will demonstrate the valve's functional capability. The performance of this test is limited to plant modes 6 and E.

This test will have no impact on accidents and malfunctions evaluated as the licensing bases and there is no potential for the creation of a new type of unanalyzed accident. There is no impact to the margin of safety.

Safety Evaluation: 59 93-0040 Revision: 0

Motor Operated Valve Test (EJ HV-8804B)

The purpose of this temporary procedure is to perform a differential pressure test on Motor Operated Valve EJ HV-8804B. This valve is located in the Residual Heat Removal "B" to Safety Injection Pump suction piping. Performance of this test will satisfy NRC Generic Letter 89-10.

Differential pressure testing consists of measuring pressure, flow, temperature, and stroke time while opening and closing valve EJ HV8804B against the pressure and flow provided by Residual Heat Removal Pump "B." Residual Heat Removal Pump "B" will take it's suction from the Refueling Water Storage Tank.

This test will expose valve EJ HV8804B to its bounding operational conditions of flow differential pressure, and minimum voltage when cycling open and closed. These test conditions will demonstrate the valves functional capability. Testing will be performed in Mode 6 or E when the Emergency Core Cooling System is not required to be operational.

This test will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0041 Revision: 0

Process Sampling System Setpoints

This modification of non-safety related equipment changes the conductivity setpoint for the low pressure feedwater from 4.5 micro mhos per centimeter to 10 micro mhos per centimeter. The conductivity setpoint is being increased because low pressure feedwater pH and ammonia concentrations are higher than originally planned. These higher operating ranges cause frequent alarms because the setpoint is too low.

The function of this process sampling system is to provide representative samples of non-nuclear process fluids in a safe and convenient manner to facilitate analysis for fluid properties necessary for plant operation, corrosion control, and monitoring of equipment and system performance.

Failure of this non-safety related system would have no impact on accidents and malfunctions evaluated as the licensing bases and would not have a potential for the creation of a new type of unanalyzed event. There is no impact to the margin of safety.

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Safety Evaluation: 59 93-0043 Revision: 0

Correction of Drawing Discrepancies

This modification to drawings of non-safety related equipment is being implemented to correct drawing discrepancies and to reflect as-built conditions. The discrepancies deal with identification of incorrect power sources for various circuitry. The discrepancies concern the sulfuric acid pumps for the Circulating Water System, which serve no safety related function. Acid feed equipment is provided to inject acid into the Circulating Water System as needed to reduce alkalinity and pH of the circulating water and minimize scale formation on heat exchanger components.

This modification has no impact on accident and malfunctions evaluated as the licensing bases and has no potential for the creation of a new type of unanalyzed event. There is no impact to the margin of safety.

Safety Evaluation: 59 93-0044 Revision: 0

Fire Protection Program Revision (Compensatory Measures)

This change to the Fire Protection Program addresses compensatory measures for inoperable fire barriers inside the containment structure. Upon review of NRC Bulletin 92-01, "Failure of Thermo-Lag 330 Fire Barrier System," it became apparent that there was a need to address compensatory measures for inoperable fire barriers inside containment. The need for alternate compensatory measures in the Containment Building was discussed with NRC Region IV personnel. Based on these discussions, compensatory measures from Westinghouse Standard Technical Specifications for inoperable sprinkler systems inside the containment structure were adopted. These compensatory measures are consistent with those at other nuclear plants and are commensurate with the hazard because of the low combustible loads and absence of ignition sources inside the containment structure.

This revision will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0045 Revision: 0

Hourly Fire Watch For Passive Fire Barriers

This revision to the Fire Protection Program involves compensatory measures required for inoperable passive fire barriers. This change will require hourly fire watches in areas of the Control Building and the Auxiliary Building. Areas where a hourly fire watch will be required have a low combustible load. The probability of fire in these areas is very low. Based on the low combustible load, control of ignition sources and transient combustibles, and a well trained fire brigade, hourly fire watches in these areas are acceptable.

This revision will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0046 Revision: 0

Installation of Neutron Dosimetry

This temporary modification involve temporary placement of radiation monitoring devices inside the Containment building at five different locations. The measurement of neutron radiation levels at carefully chosen locations near some safety related equipment will provide data to help confirm environmental qualification of the equipment. Measurement of neutron radiation levels across the permanent reactor cavity seal/neutron shield system will provide data to estimate neutron shielding capability of the permanent reactor cavity seal. this temporary modification will provide information which will help enhance plant reliability.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0047 Revision: 0

Reactor Coolant Vacuum Vent System

This Engineering Disposition establishes the design criteria and the method of venting the reactor coolant system prior to plant startup. The design includes a vacuum vent skid connected to the reactor vessel head vent and the pressurizer vent and drain connections to remove air from the Reactor Coolant System (RCS) and steam generator tubes. The Reactor Coolant will be maintained at Mid Loop while RCS pressure is decreased to 3 pounds per square inch actual. An air driven eductor is used to remove air and non-condensables from the RCS by pulling a vacuum on the system. This safety evaluation has reviewed the effect of vacuum venting on the RCS and safety systems.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0048 Revision: 0

Main Steam Safety Valve Clarification

This modification to vendor drawing M-140-0003, "Nozzle Type Relief Valve, Sheet 2," and the Updated Safety Analysis Report is being implemented to clarify the capability of the Main Steam Safety Valves. As a result of testing of the Main Steam Safety Valves, strong and weak springs were found to vary the rate of relief of the valves. Based on Engineering Calculation AB-M-013, it has been determined that the above referenced documents must be revised to accurately reflect the expected range of operational capability of the Main Steam Safety Valves.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0049 Revision: 0

Installation of Permanent Instrumentation Tubing for High Pressure Coolant Injection System Test Flow Indication

This modification adds permanent instrument tubing from the High Pressure Coolant Injection (EM) System piping within containment to associated valve manifolds on instrument stands. The permanent tubing/manifold connections will be used for 18 month flow testing of the of the EM System piping. No permanent flow indicators are being installed by this modification.

With the existing design, the code boundary is at the piping root valves for these flow points and the root valves are closed during normal plant operation. The piping is currently equipped with blind flanges downstream of the root valves, which form a high pressure boundary. This modification replaces blind flanges with socket welded flanges with suitable tubing adapters. This will relocate the high pressure isolation boundary to the respective manifolds. Manifolds will be closed during normal operation.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0050 Revision: 0

Westinghouse Procedure for Fuel Repair

This vendor procedure, FP-SAP-2 "Fuel Repair For Wolf Creek" provides for repair of fuel by Westinghouse. Performance of fuel reconstitution or reassembly does not increase the probability of accidents described in the Updated Safety Analysis Report (USAR). Plant procedures provide administrative control on fuel movement. Fuel assemblies are designed to facilitate these activities and the fuel repair basket is designed to provide sufficient cooling for the fuel assembly. Performance of the activities will not affect the integrity of the Spent Fuel Pool or the Spent Fuel Pool Cooling and Cleanup System.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0051 Revision: 0

Pressure Gauges For Potable Water Pumps

This modification to the non-safety related Potable Water System adds pressure gauges and associated valves to the discharge of Potable Water Pumps (1WD01PA) and (1WD01PB). This modification is being implemented to provide a means to monitor pump performance and to aid in system trouble shooting.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

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Safety Evaluation: 59 93-0053 Revision: 0

Personnel Change and Resume Update

This change to the Updated Safety Analysis Report deletes personnel identified as Shift Supervisor and adds other qualified licensed personnel to the Shift Supervisor position. In addition, the resume of another Shift Supervisor is being updated with this revision to reflect additional education.

This revision will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0055 Revision: 0

Loss of Freeze Seal

This temporary modification and safety evaluation addresses the installation of a freeze seal on line EC-012-HCC-2" between valve ECV0124 and the spent fuel pool. The line is the "B" Essential Service Water makeup water for spent fuel pool. The loss of makeup water is evaluated by Safety Evaluation 92-0204. This safety evaluation only evaluates the possibility of partial fuel pool draining because of failure of the freeze seal.

Normal water level in the spent fuel pool is at the 2045'-0" level. This level is above the inlet for the spent fuel pool cooling pumps and is also above the required water level 6 feet above the spent fuel assemblies. If the freeze seal should fail the spent fuel pool would drain down to the 2044'-6" level which would not violate the Technical Specifications or affect any spent fuel pool support systems.

Safety Evaluation: 59 93-0056 Revision: 0

Emergency Diesel Generator Load List

This modification is being implemented to eliminate discrepancies in brake horsepower values identified by comparison of Drawing E-11005 "List of Loads Supplied By Diesel Generator" to the maximum brake horsepower shown on manufactures' pump performance curves. Drawing E-1105 is being revised to reflect the maximum brake horsepower shown on the manufactures' pump performance curves. Discrepancies between the documents were relatively small and implementation of this revision will result in a decrease of worst case loading of the diesel generators. This change affects only the drawing referenced above and the Updated Safety Analysis Report. No changes were made to any process or equipment. Therefore, the safety function, reliability, and availability of the Emergency Diesel Generators are maintained.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0057 Revision: 0

Post Accident Sampling System Liquid Nitrogen Fill System

This modification to non-safety related equipment replaces the liquid nitrogen cooling system for the germanium detector on the Post Accident Sample Sampling System with an electrically driven refrigeration system. The current method used to cool the Post Accident Sampling System germanium detector presents a "Life Safety Hazard" because the large Dewar flasks used to store the liquid nitrogen are too large to pass through the passageway into the Post Accident Sampling System Sample Room. Therefore the Dewar flasks must be rolled by hand into the Sample Room, presenting the safety hazard.

The Post Accident Sampling System is designed to analyze the reactor coolant, containment sump, and containment atmosphere. System design allows for grab sampling and online chemical and radiological analysis. The Post Accident Sampling System is not essential for the safe shutdown of the plant and serves no safety function except piping and valves associated with containment penetrations. This modification does not involve piping and valves associated with containment penetrations. The replacement refrigeration system is non-safety related.

This modification to non-safety related equipment has no impact on accidents and malfunctions as evaluated as the licensing bases and there is no potential for the creation of a new unanalyzed event. There is no impact to the margin of safety.

Safety Evaluation: 59 93-0058 Revision: 0

Clarification of Set Pressure

This modification revises Drawings M-141-00054 "Nozzle Type Relief Valve" and M-151-00030 "Nozzle Type Y Relief Valve" to clarify the set pressure for safety related and non-safety related nitrogen supply relief valves. This change clarifies information which was previously available on the drawings. The pressure settings are also being added to the Updated Safety Analysis Report for consistency. No physical changes to the valves or their set pressure are involved with this change.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0059 Revision: 0

Relocation of Radiological Controlled Area Boundary

This modification relocates a section of the Radiological Controlled Area boundary which is currently located on the west side of the Auxiliary Building near the Hot Machine Shop. Relocation of the Radiological Controlled Area boundary will be accomplished by building a new fence inside the existing fence. The existing fence will remain in place for possible future use should the need arise to enlarge the Radiological Controlled Area because of increasing radiation levels from the Refueling Water Storage Tank or other sources. The location of the new fence leaves the Emergency Diesel Generator access doors and the underground fuel oil storage tank access hatches outside the Radiological Controlled Area boundary. This modification provides a permanent barrier for the Radiological Controlled Area. The new fence will be installed in accordance with the guidance provided in Regulatory Guides 1.13 and 1.115 as they pertain to internally and externally generated missiles.

The relocation of this section of Radiological Controlled Area fence does not adversely affect the safe shutdown capabilities. The revised arrangement of gates does not affect egress from the Auxiliary Building during emergency conditions.

Safety Evaluation: 59 93-0060 Revision: 0

Reactor Coolant Pump Thermal Barrier

This modification replaces each of the 3" check valves in the Component Cooling Water (CCW) supply lines to each Reactor Coolant Pump (RCP) thermal barrier with two 1-1/2" check valves. Test connections will be added upstream and downstream of each check valve to facilitate testing of the valves. The valves and their associated piping are part of the safety related Reactor Coolant System (BB) and the Component Cooling Water System (EG). The valves and piping are located within the Reactor Building and inside the secondary shield wall.

The increased system pressure drop because of this modification has been evaluated and found to be acceptable. The required CCW flow to the RCP thermal barriers will be maintained with this modification. The modification will improve CCW function and operation by reducing the valve size and therefore ensuring full disc lift. The modification will improve the ability of the CCW system to withstand a RCP thermal barrier rupture by adding double isolation valves.

This modification will not adversely affect the systems function or operation. Structural integrity, reliability and regulatory commitments are not impacted by this modification. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0062 Revision: 0

Attachment of VOTES Sensors to Safety Related Valves

This modification provides for the installation of Valve Operation Test Evaluation System (VOTES) Force Sensors on the inside of the yokes of American Society of Mechanical Engineers (ASME) Section III safety related motor operated gate and globe valves. The installation of the VOTES force sensor on these valves will permit installation of the VOTES Monitoring System to determine valve operability in accordance with NRC Generic Letter 89-10.

The addition of these sensors will have no affect on any pipe break, missile, flooding, seismic or fire hazards analyses. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0066 Revision: 0

Computer Room Halon System Removal

This modification removes the halon system from Room 3613, in the Control Building, which formerly housed the Nuclear Steam Supply System (NSSS) computer. The NSSS computer was replaced and relocated by Plant Modification Request (PMR) 1479. Room 3613 has been converted to office space and halon fire suppression is no longer required.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0069

Revision: 0

Static Discharge Circuit Test

This temporary procedure provides instruction for implementation of a Static Discharge Circuit Test of the Main Generation Excitation and Regulation System. Performance of this procedure tests the operability of the Main Generator Protection System. This test will be implemented with the Main Generator off-line during Refuel VI. Actuation systems associated with the Main Generator Protection System will be inoperable when the test is conducted.

The performance of the test described in this temporary procedure has no impact on accidents and malfunctions as described in the licensing bases and there is no potential for the creation of a new type of unanalyzed event. The margin of safety is not impacted by the performance of this test.

Safety Evaluation: 59 93-0070

Revision: 0

Storage of Blind Flanges Used to Plug Refueling Pool Drain Lines

This procedure change concerns the storage of the blind flanges used to plug the refueling pool drain lines in containment following their removal following a refueling outage. This change allows the blind flanges to be stored in the cavity pool to improve ALARA, reduce the job time requirements, and to prevent any problem that may be caused by their misplacement. The flanges will be attached to the lower internals storage stand using 18 gage stainless steel wire and will be resting on the bottom of the cavity pool.

Movement of the blind flanges during a seismic event will be prevented since the flanges will be tied to the lower internals storage stand. Seismic evaluations indicate that additional stresses on the lower internals storage stand, which is considered non-safety related, due to seismic forces are negligible. There is no II/I concern since the failure of a flange and/or wire will not affect the function of any safety related feature of the plant. Therefore, this procedure change will have no affect on the safety of the plant.

Safety Evaluation: 59 93-0072 Revision: 0

Safety Injection Pump Discharge Header Depressurization Procedure

This new procedure provides a method of depressurizing the Safety Injection Discharge Header. During the performance of this procedure valves BNV0004 "Safety Injection Header to Refueling Water Storage Tank" and EMV0120 "Safety Injection Test Header to Recycle Holdup Tank Isolation Valve" are closed. These non-safety related valves are manually operated. The position of these valves does not affect the ability of the Emergency Core Cooling System to perform its' design basis function.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0074 Revision: 0

Mechanical Equipment Room Temperature

This modification revises mechanical/nuclear design criteria M-000(Q) to reflect new calculations for maximum post-design basis accident temperature in Mechanical Equipment Rooms 1501 and 1512. Maximum temperature for these rooms was previously identified as 104 degrees Fahrenheit and is being changed to 105 degrees Fahrenheit. The new temperature of 105 degrees Fahrenheit is within the established Wolf Creek Generating Station criteria for a mild environment.

Also, this modification revises System Description M-10GK(Q) to reflect new calculations for cooling capacities of the Main Control Room Heating, Ventilation and Air Conditioning units, SGK04A & B and SGK05A & B. The new calculations show capacities for these units are greater than existing capacities and therefore there is no safety concern.

Appropriate drawings are being revised to address the necessary changes resulting from the new calculations. Vendor documents affected by this modification are being changed through the proper document control process.

This modification has no impact on accidents and malfunctions evaluated as the licensing bases and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0075 Revision: 0

Resin Sampler Addition

This modification installs a sampler unit in the Primary Resin Storage Tank (THC08) in the inlet transfer header. The sampler and associated parts are designed to ANSI B31.1 D-Augmented requirements. This unit will be used to withdraw resin samples during each transfer to the storage tank enabling Health Physics to accurately estimate the activity contained in the tank. The sample analysis results will allow proper selection of shielded vendor transport and storage casks, thus minimizing exposure at the time of cask loading and during transportation and assist in meeting 10CFR61 reporting requirements. The Solid Radiological Waste System serves no safety function and has no safety design bases. This modification has no affect on the ability of the Solid Radiological Waste System to fulfill it's design bases.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0076 Revision: 0

Component Cooling Water Operating Temperature Change

This procedure revision to SYS EG-120, "Component Cooling Water System Startup," changes the minimum operating temperature of the system from 60 degrees Fahrenheit to 40 degrees Fahrenheit. Based on an engineering study and Safety Evaluation 59 92-0216, this change in operating temperature will have no adverse affect on system operation, individual components, or associated systems and components. Performance and integrity of the system and associated systems are unaffected.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0077 Revision: 0

Reactor Coolant Pump Underfrequency Relay Replacement

This modification replaces the obsolete underfrequency relay for Reactor Coolant Pumps (PBB01A), (PBB01B), (PBB01C), and (PBB01D). The new relays are designed to replace the obsolete relays in function and performance. The new relays have a setpoint range of 40 Hertz to 70 Hertz and the obsolete relays have setpoint range of 54 Hertz to 59 Hertz.

This change will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0078 Revision: 0

Pressurizer Pressure Lead/Lag Modification

This modification turns off the safety related Pressurizer Pressure Protection Lead/Lag Units. The lead/lag feature of the low pressurizer pressure signal allows for reactor trip in anticipation of reaching the actual setpoint. The original basis for this anticipatory feature was to possibly avoid an actuation of safety injection on low pressurizer pressure following the pressure drop because of a reactor trip for some cooldown/depressurization transients. Turning the lead/lag compensation off is intended to simplify the low pressurizer pressure setpoint calibration process.

This modification has been evaluated considering large and small break loss of coolant accidents and has been found to have no adverse affects as related to safety, system integrity or operation. Turning off the anticipatory feature of the low pressurizer pressure reactor trip signal will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0080 Revision: 0

Liquid Nitrogen Dewar Flask Exemption

This revision to procedure ADM 01-201 "Control of Temporary Equipment", provide for and exemption of Dewar Flasks containing low pressure nitrogen from the temporary equipment list. These containers are designed to be a free standing unit. The design of these containers provides a low center of gravity and are difficult to tip. When these Nitrogen containers are located in safety related areas they will be properly secured.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0081 Revision: 0

Replacement of Portal Monitors

This change in Health Physics facilities removes portal monitors and replaces the function with personnel contamination monitors which provide a more reliable and sensitive method of personnel radiation monitoring. This improvement in personnel monitoring has no affect on personnel dose limits or radiation releases as defined by plant procedures, 10 CFR 20, or 10 CFR 100. Personnel monitoring equipment is not considered safety related equipment nor does it interface with existing safety related equipment.

This change will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0082 Revision: 0

Unretrievable Foreign Object In RCS

This evaluation provides justification to continue operation with the presence of foreign objects in the Reactor Coolant System (RCS). During preparation for fuel load during the sixth refueling outage, a piece of nylon fiber string, approximately 9 inches long and 1/8 inches in diameter, and a paint scale approximately 3-3/4 inches by 2 inches, were observed lying on the core plate. These objects could not be located later, when an attempt at retrieval was to be made, and were presumed to be inside the RCS.

Due to the material composition of the foreign objects and the temperature and flowrate in the RCS, it is highly probable that the objects will dissolve during power operation. The size and mass of the objects are not considered to be sufficient to impart any significant impact loads on the reactor internals, and the objects will have negligible impact upon the operation of the systems and components of the RCS.

Operation with the foreign objects will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0083 Revision: 0

Circulating Water Automatic Pump Trip Modification

This modification implements design changes to reduce harmful water hammer effects, to provide Circulating Water (CW) pump operation within recommended limits, and to decrease operator action with respect to the CW pumps and discharge valve operation.

The CW pump discharge valve circuitry is modified to close the valves in 50 seconds in all pump shutdown scenarios involving valve closure. The circuitry is also modified to enable the valves to automatically close fully after tripping the corresponding CW pump at the valve 25% open position. Limit switch setpoint changes and circuitry are provided at the CW pump discharge valves to trip the corresponding CW pump if the valves do not fully open or close within a specified time period. The CW circuitry is modified such that in the event of a condenser pit high level signal, all operating CW pumps are directly tripped, leaving the discharge valves open. The CW pump discharge valves and if necessary, the condenser outlet valves, will be throttled back during periods of operating two CW pumps to maintain flow within recommended limits and to avoid cavitation.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0084 Revision: 0

Acid Line Modification

This modification to the non-safety related Acid Supply System replaces piping, pumps, and other components because of corrosive deterioration caused by sulfuric acid. A large portion of the modification work is limited to the Shop Building and yard with the remainder being in the Turbine Building.

This modification does not involve a change to any safety related structures or equipment. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0085 Revision: 0

Component Changes in the Compressed Air (KA) System.

Revision 25 of PMR 02495 modified the control logic for air compressor CKA01A to improve compressor availability, to reduce flowswitch failures and provide protection to booster pump PKA01A. This modification removed flowswitch EF-FS-117, and removed local alarm KA-FAL-290. Also changed were instrument tag numbers, wiring changes, and several drawing changes to reflect the above modification.

The components being changed are non-safety related and are not credited in the analysis for any Design Basis Event. Safety related actions required of the Compressed Air System are provided by safety-related Nitrogen accumulators, which are not affected by the modification described above.

The proposed changes will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0087 Revision: 0

Manual Starting of the Turbine Driven Auxiliary Feedwater Pump

This temporary procedure provides instruction for manual starting of the Turbine Driven Auxiliary Feedwater Pump utilizing Operator Aid OP88-05. The purpose of this temporary procedure is to perform OP 88-05 to ensure the sequence of steps are logical and workable and to determine what indications will be available in the Control Room and locally. Information gained from performance of this temporary procedure will be used to replace Operator Aid 88-05 with an Off Normal procedure and provide training to the operators. This procedure will be performed when the plant is in mode 6.

Performance of this test has no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0089 Revision: 0

Temporary Backup Power for Positive Displacement Pump

This new temporary procedure provides for temporary power to the Positive Displacement Pump Motor (DPBG04) in the emergent condition of loosing all offsite power and no emergency backup diesel is available. This porcedure will be implemented only after an accident which is not addressed in our design basis accidents. This procedure will be implemented at the direction of the Shift Supervisor.

This temporary procedure will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0090 Revision: 0

Temporary Backup Power For the Emergency Diesel Generators

This temporary procedure provides for the installation of temporary power to Battery Chargers NK25 and NK21. This temporary procedure will be implemented only in the emergent condition of a loss of all off-site power and if both Emergency Diesel Generators are unavailable. Power will be provided to the Battery Chargers by a 250 kilowatt generator located outside the Control Building. This procedure will be implemented only after an accident has occurred which is not addressed as a design basis accident. This procedure will help to mitigate the consequences of such an accident. The implementation of this procedure will be at the direction of the Shift Supervisor and only when the above conditions exist.

This temporary procedure will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0092 Revision: 0

Turbine Building Service Water Supply Flange Installation

This modification to the non-safety related Service Water System (EA) installs flanges to pipelines (EA-007-HBD-24" and EA -029-HBDO-20") to allow easier access to portions of pipelines buried under the Turbine Building floor (Elevation 2000').

The EA System is non-safety related and no safety function. The proposed change of installing additional flanges will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0093 Revision: 0

Turbidimeter Replacement

This modification to non-safety related equipment replaces three existing turbidimeters, the Sand Filter Influent Turbidimeter (1TUIWM002), the Sand Filter Effluent Turbidimeter, (1TUIWM003), and the Raw Water Turbidimeter (1TUIWM0010). The existing instruments do not function properly and repair parts are unavailable. The replacement turbidimeters will allow the operators to accurately monitor water conditions to achieve compliance with the new Surface Water Treatment Rule. Turbidimeters are required for proper monitoring of plant potable and demineralized water. This non-safety related change does not affect system function or failure modes.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0094 Revision: 0

Steam Generator Feedwater Pump Seal Injection

This modification removes orifice plates AE-FO-001 and AE-FO-002 from the Turbine Driven Steam Generator Feedwater Pumps (SGFP) seal water return lines. This modification is in the Condensate and Feedwater System (CFS) in the Turbine Building. The portion of the CFS system where this modification will occur is non-safety related. The CFS system provides a continuous feedwater supply to the four Steam Generators at required pressure and temperature conditions under anticipated steady-state and transient conditions.

It has been determined there is sufficient backpressure in the system, because of piping configuration, to allow removal of the orifice plates without impacting operation of the function of the SGFPs or impacting the ability of the SGFPs to perform safety design bases functions. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0097 Revision: 0

Instrument Air Compressor Replacement

Revision 1 to Plant Modification Request (PMR) 2980 changes the control logic and alarm functions of Instrument Air Compressor (CKA01B) and Air Compressor Cooling Water booster Pump (PKA01B). This change removes flow switch KA-FS-355, and local alarm KA-FAL-355. These changes are being implemented to improve system reliability by replacing the flow switch with a delay timer which is believed to be more reliable. The only system affected by this change is the compressed air system and affected components are all non-safety related. PMR 2980 Revision 0, addresses the other aspects of the Instrument Air Compressor replacement and are reported by Safety Evaluation 92-0199.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0098 Revision: 0

Chemical Pump Timers

This modification to the Auxiliary Steam Chemical Addition System Drawing, M-02FE01, corrects Note 3 of the drawing. The drawing currently reflects chemical pump timers with a range from 0 to 24 hours. The modification will reflect the as-built condition of the timers which have a range from 0 to 30 hours.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0099 Revision: 0

Correction of Demineralizer Equipment Names

This modification revises equipment names on Updated Safety Analysis Report (USAR) Figure 9.2-5, Sheet 2, "Water Treatment System P&ID" to accurately reflect the name plate information displayed on control panel 1LP12J. In addition to the USAR change, Water Treatment System P&ID (Drawing M-0025) will be revised to reflect the as-built condition of the system. These changes to the non-safety related Water Treatment System will reflect the as-built condition in the plant. Changes made by this modification are administrative in nature and have no impact on the physical configuration of the Water Treatment System in the plant.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0100 Revision: 0

Diesel Starting Air Tank Design Pressure

This modification addresses the pressure requirements in the Starting Air Tanks for the Emergency Diesel Generators. Pressure in the tanks was lowered from the previous setting of 700 pounds per square inch gauge (psig) to the current setting of 670 psig. Review of vendor documentation indicates that the pressure should be maintained at 670 psig. Surveillance testing has demonstrated that this lower pressure will provide adequate cranking time for starting the diesel generators.

Changing the pressure in the Emergency Diesel Generator Starting Air Tanks as indicated above will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0101 Revision: 0

Seal Injection Verification.

This temporary procedure provides the necessary instruction to determine if BGHV8357B "Seal Injection Flow Control Valve" will provide fine control with plant pressure being controlled by the pressurizer bubble. This procedure will be performed with the plant in cold shutdown. Performance of this procedure does not cause the valve to malfunction; rather, it is used to determine the operability of the valve. Operator actions are provided in case the valve were to cause erratic seal injection flow.

Performance of this temporary procedure will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0102 Revision: 0

Saddle Dams and Baffle Dikes Inspection Frequency

This change to the Updated Safety Analysis Report reduces the surveillance frequency for the Wolf Creek Cooling Lake Main Dam, Saddle Dams, and Baffle dikes. This revision is not related to any safety related equipment or structure. Consistency of surveillance results during the last 10 years justifies reduction of surveillance requirements.

This revision will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0103 Revision: 0

Water Treatment Component Clarification

This modification to the non-safety related Water Treatment System corrects discrepancies on Drawing M-25, "P&ID Makeup Water Demineralizer." Two components were identified with the same component number. A new component number is assigned to one of the components by this modification. A new identification tag will be installed in the plant to clarify any confusion because of the duplication of numbers. This change is administrative in nature and does not affect the system integrity or operation.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0104 Revision: 0

Pressurizer Safety Valve Flange Misalignment

This modification involves reworking of the safety related pressurizer discharge line piping (93-ECD-6") to correct flange misalignment between the outlet flange of BB8010C, "Pressurizer Safety Relief Valve," and the discharge piping flange. Visual inspection and system walkdown shows the inlet flange of valve BB8010C on pipe 92-BCA-6" to be lower than the as-built elevation shown on Drawing M-13BB02(Q), "Piping Reactor Coolant System." It was found that the piping slopes away from the Pressurizer at the rate of 3/8" per foot. Design calls for a horizontal configuration of the piping leaving the Pressurizer.

The cause of the deformation of this piping is believed to be an event which occurred prior to November 1987, during which the plant was operated with the constant load support FF02-H004/261 in a pinned condition. It is believed that operation of the plant with this support in a pinned condition, constrained the thermal expansion motion of the pressurizer and applied a downward force on the safety valve piping. Extensive inspections, non-destructive tests, and stress analyses were performed following discovery of the pinned pipe support in 1987.

Based on the results of those tests and analyses, it was concluded that the discharge piping of valve BB8010C had not been significantly degraded and was suitable for the remaining license life of the plant. Rework of the discharge piping to correct misalignment will not invalidate the results or conclusions of tests previously performed.

The net effect of the rework covered by this modification is to shorten the vertical height of pipe 93-ECD-6" by three inches and to change the elevation of the safety relief valve discharge piping by a similar amount.

This change will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0105 Revision: 0

Post Indicator Valve Limit Switch Removal

This modification provides for the removal of limit switches from the Fire Protection System post indication sectional isolation valves located underground inside a security isolation zone. The modification requires the post indication isolation valves to be locked open. Administrative controls will be utilized to ensure the valves remain in the locked position.

The affected equipment is located underground to reduce interference with the microwave intrusion detection system. Underground compartments housing this equipment have been subject to water intrusion causing the affected equipment to give false indication. This modification meets the requirements of Nuclear Regulatory Commission Branch Technical Position APCSB 9.5-1, the applicable codes of the national Fire Protection Association, and American Nuclear Insurers.

This change will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0106 Revision: 0

Installation of a Loop Seal in the Oily Waste Drain System

This modification provides a loop seal on Oily Waste System drain line LE256XND-4" which prevents the flow of air through this line during the negative pressure condition when Auxiliary Building Supply Fan (SGL01) is in operation. The function of the Oily Waste System drain line is to transfer oily waste collected from the Auxiliary Building containment mini purge air supply unit to the oily waste sump in the Control Building. This change does not affect the Oily Waste System pressure boundary.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0107 Revision: 0

Containment Air Cooler Flow Reduction

This modification evaluates and approves reduced flow of 953 gallons per minute to Containment Air Cooler (SGN01C) until Refuel VII. The reduced flow to SGN01C is adequate to meet the heat removal requirements. No equipment important to safety is affected by this modification.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0110 Revision: 0

Component Cooling Water System Drain Line Replacement

This modification to the component Cooling Water (EG) System involves replacing existing one inch drain lines with three inch drain lines. The process lines that the drain lines are located in are a continuation of the Essential Service Water (EF) System emergency makeup supply lines that feed the Component Cooling Water pumps.

The larger drain lines are required to facilitate full flow testing of the makeup lines. Existing piping and replacement piping affected by this modification is located in the Auxiliary Building and is designed to American Society of Mechanical Engineers (ASME) Section III Class 3 requirements.

The modifications will not adversely affect the system function or operation, structural integrity, reliability, or regulatory commitments. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0111 Revision: 0

CYCLE 7 OPERATION

This Safety Evaluation addresses the mixed fuel design of the Cycle 7 core.

During the operation of Cycle 5, the coolant activity increased because of the presence of failed fuel. Three failed fuel assemblies were identified during Refuel V through ultrasonic testing. The three failed assemblies (F05, F17, and F31) contained a total of forty failed rods. These three assemblies were located at positions G09, J09, and L09. During the operation of Cycle 6, the coolant activity again increased because of the presence of failed fuel. Three failed fuel assemblies were identified during Refuel VI through ultrasonic testing. The three assemblies, (F43, F54, and F67) contained a total of fourteen failed rods. These three assemblies were located at core positions R08, F08, and H06. These failures appear to have a common failure mechanism of grid/rod fretting. Each of these cores have operated with a mixed fuel design, which may have contributed to the failure mechanism. The Cycle 7 core will also contain mixed fuel designs.

Investigations performed as a result of failed fuel have identified three postulated root causes: 1) handling related damage, 2) manufacturing related damage, and 3) flow induced vibration damage. Based on the findings of the investigation, handling and manufacturing have been eliminated as possible root causes. A flow induced vibration was indicated by the severe fretting observed on the fuel rods. This fretting is hypothesized to be the result of fluid elastic instability.

The Cycle 7 core is configured to preclude fretting caused by flow induced vibration. This fuel design will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0114 Revision: 0

Reactor Head Vent Drip Pans

This temporary modification installs two catch pans below the Reactor Head vent outlet pipe. Very slight leakage of Reactor Coolant System (RCS) fluid has been observed to be dripping from the vent line and it is desired to prevent boron from crystallizing on the reactor head seismic support structure. The location of the pans will be directly below the vent line and will not impair the operation of any plant equipment. The pans do not pose a seismic II/I threat because they have a small mass and they will not dislodge because the kickplate around the support structure is high enough for restraint during a seismic event.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0115 Revision: 0

Reclassification of Sentinel Relief Valve

This revision to the Updated Safety Analysis Report (USAR) is being implemented to reflect the current safety classification of the sentinel relief valve FCV0998 on the Turbine Driven Auxiliary Feedwater Pump (TDAFWP). The sentinel relief valve has been reclassified by Safety Classification Analysis 93-0353 as non-safety related.

The sentinel relief valve is used to provide a warning that the turbine exhaust pressure is excessive. At a preset exhaust pressure the relief valve lifts providing a visual indication that the turbine exhaust pressure is high. The relief valve is required as a personnel safety device to warn people in the area to leave and to take corrective action.

The sentinel relief valve is securely fastened to the exhaust side of the turbine casing so it does not interfere with inlet steam. It does not affect the seismic qualification of the TDAFWP. The sentinel relief valve has no automatic or safety related function. It serves only to provide a local warning.

This revision will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0116 Revision: 0

Revision to Purchase Order Review Process

This revision to the Updated Safety Analysis Report allows Quality Assurance (QA) to review purchase orders prior to issue rather than performing in-line review of the purchase requisition. This allows QA to review the final product for inclusion of the appropriate requirements.

This revision will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0119 Revision: 0

Removal of Recorders From The Process Sampling System

This modification removes recorders RM AR-565 and RM CR-462 from the Process Sampling System. These recorders are used to trend sampling analysis for the Condensate Pump discharge (dissolved oxygen and hydrazine) and the Low Pressure Feedwater condensate (pH and conductivity). Recorders RM AR-565 and RM CR-462 are no longer used to monitor the sampling data for the Condensate Pump and the Low Pressure Feedwater. These points are read from the Speedomax multi-point recorders which are more reliable.

The Process Sampling System includes sampling and analysis equipment for the main steam, condensate and feedwater systems, circulating water systems, and steam generator blowdown. The process sampling system has no safety related design basis function.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0120 Revision: 0

Spare Cables in The Access Control Laundry Area

This modification will provide the necessary controls to disconnect and identify as spares, two cables that were originally intended to be utilized as control and power cables for a dishwasher in the Access Control Laundry Room. The dishwasher was never physically installed. This modification will correct the appropriate drawings and remove power from the cables.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0122 Revision: 0

Damper Tag Discrepancy

This modification is being implemented to correct a discrepancy on Drawing M-12GE03 "P&ID Turbine Building HVAC." This drawing shows the numbers on Heating Ventilation and Air Conditioning (HVAC) Dampers (GE-D0017) and (GE-D0018) to be reversed from their as-built condition and from the configuration shown on design drawing M-1H3721 "HVAC Com Corridor EL 2061-6." This modification has no impact on plant equipment and does not affect the integrity or operability of the system or the plant. This modification corrects the drawing discrepancy only.

Safety Evaluation: 59 93-0123 Revision: 0

Rerouting of The Hydrazine Analyzer Drain Line

This modification to non-safety related equipment will be implemented by Temporary Modification 93-029-RM and made permanent by Plant Modification Request (PMR) 04705. The modification reroutes the hydrazine analyzer drain line to the steam generator blowdown recovery tank.

The drain from the hydrazine analyzer was originally routed to the miscellaneous condensate drain tank which flowed back to the condenser hot well. The reagent used in the hydrazine analyzer is a 10% NaOH solution. About one cup a week is discharged from the drain. The drain from the Hydrazine Analyzer (RMAIT0164) will be rerouted to the steam generator blowdown recovery tank to eliminate the hydrazine analyzer as a source of sodium contamination in the condensate. The effect of this modification on the steam generator blowdown system is negligible.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0124 Revision: 0

Decontamination Spray Booth Drain Lines

This modification replaces valves HV-V003 "Spray Booth Normal Drain to LF System" and HV-V037 "Spray Booth Drain Line Check Valve" with a different style of valves. These valves are located in the drain line leaving the Decontamination Spray Booth (SHD04). The current design of the valves hinders the flow through the piping causing the spray booth to drain slowly. The new valves will provide an improved flow path from the spray booth, allowing it to drain faster.

The function of the decontamination Spray Booth and associated drain lines is to preclean components to reduce the contaminants to a level low enough to permit maintenance of the components. This system does not have any safety design basis.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0125 Revision: 0

Drawing Discrepancies on Piping Class

This modification is being issued to correct discrepancies on Drawing M-12GT01 "P&ID Containment Purge System" and M-13GB06 "PP ISO Central Chilled Water System Return." The change to Drawing M-12GT01 involves the correction of a piping class which was incorrectly changed from "HBD" to "HBC" by a previous revision. References to "unit 2" will also be deleted from this drawing. Drawing M-13GB06 will also be revised to correct incorrect piping class and component identification. Inaccuracies in Drawing M-13GB06 are also the result of a previous revision.

No hardware changes are involved with this modification. Previous errors made during the drawing revision process were editorial errors only, and do not affect the integrity or operability of the system or plant.

Safety Evaluation: 59 93-0126 Revision: 0

Main Control Board Meter Replacement

This modification replaces the existing steam pressure/feed pressure meter on panel RL005 of the Main Control Board and installs a new dual meter which will monitor steam/feed pressure and a differential pressure meter which will monitor steam/feed differential pressure. Both the old and new meters are non-safety related. The replacement meter will improve operator information on the Main Control Board. The replacement meter will fit in the existing cutout in panel RL005.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0128 Revision: 0

Lube Oil Reservoir Extractor Pressure Switches

This modification is being issued to reconfigure the sensor tube on the high pressure side of Pressure Switches (CBPS70A and CBPS70B) which are designed to sense a differential pressure across the Lube Oil Vapor Extractors (CCB01A and CCB01B). These pressure switches provide a trouble signal to Computer Point CFQ10 if trouble exists. The current design configuration for the high pressure sensor does not provide optimum performance.

This modification extends the pressure switch high pressure sensing tubing from the existing threaded plug locations to tapped locations on the discharge pipe of each extractor, utilizing tubing and fittings. This modification to non-safety related equipment has no impact on system integrity or performance.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0129 Revision: 0

**Removal of Silicon Controlled Rectifiers From Control Room
Pressurization System**

This modification to the safety related Control Room Pressurization System eliminates silicon controlled rectifiers (SCR) which are used for the purpose of moisture control. The existing SCRs provide power to duct heaters which help ensure the operability of the filter-absorber unit by reducing the amount of moisture in the air before the air enters the charcoal absorber bed.

This modification will provide for full power operation of the duct heaters in this system instead of the controlled power provided by the SCRs. Plant Modification Request (PMR) 3138, Revision 2, expanded the scope of PMR 3138, Revision 1, to include the Control Room Pressurization System. PMR 3158, Revision 1, was reported by Safety Evaluation 92-023. This modification assures the Updated Safety Analysis Report limit of 70% humidity will be achieved.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0130 Revision: 0

Pressure Indicator Location Reference Change

This modification revises Drawing M-12AB02 "P&ID Main Steam System." This drawing incorrectly references Main Steam/Feedwater Isolation Valve Accumulator Pressure Indicators (AB-PI-65) and (AB-PI-76) as being on the Control Room Main Control Board Panel RL025. This modification will revise Drawing M-12AB02 to correctly reference Panel RL026 for Pressure Indicators AB-PI-65 and AB-PI-76. This modification is editorial only and does not affect the integrity or operability of this non-safety related system or the plant.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0132 Revision: 0

Emergency Diesel Generator Rocker Arm Lube Oil Instrumentation

This modification replaces the Emergency Diesel Generator (EDG) rocker arm lubrication oil filter differential pressure instrumentation devices (KJ-PDI-0028, KJ-PDI-0128, KJ-PDSH-0028, and KJ-PDSH-0128). This instrumentation monitors the differential pressure across the lubrication oil filter to determine when the strainer is clogged. Instrumentation currently installed, with the existing setpoint, has indicated that the lubrication oil filter requires cleaning about every four hours.

Instrumentation installed by this modification will have a wider range with an increased differential pressure setpoint. These switches are intended to provide information to the operators concerning the state of the lubrication oil filter; they are not intended to provide system protection. Pressure switches down stream of the filter are available to alert the operator to low pressure in the system. There are no control functions associated with the instruments affected by this modification, only local monitoring functions.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0133 Revision: 0

Potable Water System Upgrade

This modification provides the additional equipment, instrumentation, and piping necessary to ensure compliance with the new 1993 Surface Water Treatment Rule and Disinfection By-Products Rule. This modification adds a filter unit, a turbidimeter, a chlorine analyzer, and a recorder to the non-safety related Water Treatment System. In addition piping will be changed from carbon steel to PVC to reduce rust in the water. This material change from carbon steel to PVC does not affect system function or failure modes.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0134 Revision: 0

Radiological Controlled Area Access Modification

This modification to the Health Physics Radiological Controlled Area (RCA) Access Control Area will be implemented in the Control Building at the 1984 elevation.

This modification encloses the women's locker room (Room 3212) with new walls and a door, creating an extension of existing hall (3214). The women's protective clothing room (Room 3205) will be utilized as a Health Physics (HP) area. The women's disrobe room (Room 3207) will become an exit monitor area, as part of the RCA egress path. A new wall and door will enclose the men's disrobe room (Room 3209) creating and extension of RCA ingress corridor (3204). Room 3209 will become a unisex decontamination area. A new wall will separate the existing men's locker room into a HP office area and an ingress corridor. First Aid Room (3219) will become a HP office.

A new electrical power supply and distribution panel will be added to the area to support new receptacle circuits in the office areas. Lighting will be relocated to support new corridors and modified rooms. Fire detectors and sprinklers will be replaced to provide adequate fire protection. Plumbing will be removed in rooms 3206 and 3207, and chemical detergent drains will be capped.

The RCA ingress/egress rooms are effectively separated resulting in quicker and safer personnel movement. Fire zone and radiation boundaries are unaffected. Existing design bases of modified systems remain unaffected. This modification involves no safety related systems or components. No safety related equipment exists in this area of the Control Building.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0135 Revision: 0

Turbine Driven Auxiliary Feedwater Steam Drain Line

This modification is being implemented to minimize the amount of steaming which occurs when the Turbine Driven Auxiliary Feedwater (TDAFW) Pump (PAL02) is in operation. This modification will install a steam trap on the associated TDAFW drain line that caused the steaming condition. This will eliminate the emission of live steam from the draining system. In addition an atmospheric vent line will be added to assist in the elimination of backpressure on the steam leakoff lines and the turbine gland seal drains. This modification affects only non-safety related piping and components, which are seismically restrained such that they will have no adverse impact on safety related equipment.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0139 Revision: 0

Fire Protection Hose Reel Modification

This modification provides hose reels and 100 feet of fire hose at Fire Protection Hose Stations KCHR0044 and KCHR0049. Existing hose reels at these locations in the hallway on the 2026' level of the Auxiliary Building provide 75 feet of hose at these stations. This modification is being made to facilitate actions required by Emergency Procedures in the event of a loss of all AC power.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

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Safety Evaluation: 59 93-0142 Revision: 0

Personnel Changes-CEO

This revision to the Updated Safety Analysis Report (USAR) incorporates the resume' of the new WCNOG President and Chief Executive Officer.

This revision will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0149 Revision: 0

Reactor Coolant Drain Tank Flow Indicator Accuracy Verification

This temporary procedure collects data to compare the accuracy of the permanent Reactor Coolant Drain Tank Heat Exchanger Discharge Flow Indicator to that of a calibrated temporary flow indicator, and to determine the accuracy of the totalizer for the permanent flow indicator. The hose, piping, and check valve used in this test meet or exceed the pressure and flow rating of the Liquid radwaste System. Failures associated with the Liquid Radwaste System have been analyzed in the USAR. The performance of this temporary procedure will not affect the assumptions made in the failure analysis for the Liquid Radwaste System. This temporary procedure will not create flows or pressures outside the design of the system affected by the performance of the procedure. Therefore, the performance of this temporary procedure will have no effect on plant safety.

Safety Evaluation: 59 93-0150 Revision: 0

Diesel Generator Room Headsets

This modification provides for head set jacks to be installed in the Emergency Diesel Generator Rooms to allow access to the Gaitronics communication system. Communications in these areas have been difficult because of the high noise level when the Emergency Diesel Generators are running.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0154 Revision: 0

Clarification of Fire Hose Requirements

This modification revises and clarifies the requirements for fire hose at Wolf Creek Generating Station (WCGS) while maintaining consistency with the requirements of NRC APCSB 9.5-1. Original design requirements for fire hose specify 1-1/2" woven polyester jacketed, neoprene lined fire hose for use in the hose rack assemblies for the power block wet standpipe system. Current National Fire Protection Association (NFPA) requirements allow the use of new types of hose lining which make the hose more flexible and easier to handle.

This modification allows the use of all woven jacket, lined, Underwriters Laboratories (U.L.) listed fire hose. This change does not impact the Fire Hazards Analysis for WCGS.

Safety Evaluation: 59 93-0155 Revision: 0

Manual Hoist Lift Limits

This modification changes the words "elevation limit" to "lift limit" for the 5 Ton manual hoist on the Spent Fuel Bridge Crane (HKE04). The elevation limitation of the hook (1'-0") is to maintain the lift limit as a protection against the effects of a heavy load drop of the spent fuel transfer gate on a spent fuel assembly. The new term "lift limit" will also restrict lifting the spent fuel gate by the same amount.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0160 Revision: 0

Plant Heating System Drawing Update

This modification to the non-safety related Plant Heating System implements revisions to Drawing M-601, "Plant Hot Water Heating Package," and Drawing M-12GA01, "P&ID Plant Heating System," which will reflect the as built configuration of the Plant Heating System. These revisions include the deletion of the Hot Water Expansion Tank Fill Line Vent Valve (GAV0703), the addition of Hot Water Heating Package Pressure Sensing Line Valve (GAV0742), the relocation of the Hot Water Pump A Casing Vent Valve (GAV0728), and the relocation of Hot Water Pump B Casing Vent Valve (GAV0731).

This modification is for the purpose of drawing changes only, plant equipment and systems remain in their present configuration. This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0161 Revision: 0

Ethanolimine Use in The Condensate Chemical Addition System

This revision to the Updated Safety Analysis Report (USAR) incorporates language to reflect "pH control chemical" instead of "ammonia" for the chemical which is added to the condensate system to control pH. Because ammonia is not the best choice for controlling pH, this revision allows Ethalimine (ETA) to be utilized for pH control in the condensate system.

This revision will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0166 Revision: 0

Minimum Storage in Condensate Storage Tank

This modification clarifies minimum water level requirements for the Condensate Storage Tank (CST). During a review of the CST requirements, an error in the bases for having a minimum of 281,000 gallons of water in the CST was identified. The bases was for 200,900 gallons plus the unusable volume and instrument uncertainties equals 281,000 gallons. The 200,900 gallons was identified as the volume of water required to support the Auxiliary Feedwater System in maintaining the plant at standby for four hours and to cooldown the Reactor Coolant System (cold leg) from 557 degrees Fahrenheit to 327 degrees Fahrenheit. This would allow the Residual Heat Removal System to be started and further cooldown the plant.

Engineering evaluation has determined that the volume of water required to provide four hours of cooldown is 240,000 gallons. This amount, plus the 23,000 gallons of unusable volume, subtracted from the 281,000 gallon minimum tank volume, leave an 18,000 gallon margin. Therefore, existing Technical Specifications and the Updated Safety Analysis Report (USAR) are conservative, requiring 18,000 gallons more than are actually needed. The level and setpoint requirements are not being revised. However, USAR data which was derived from incorrect information is being deleted.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0167 Revision: 0

Automatic Rod Control Dynamica Calibration

This modification is being implemented to change the lead/lag ratio in the Temperature Average (Tavg) circuit of the Automatic Rod Control System from 80/10 to 40/10 and increase the filter time constant from 5.0 seconds to 10.0 seconds. This modification is being performed to address spurious rod actuation signals resulting from a upper head flow anomaly. Temporary procedure TP-TS-155 has been developed and approved to implement this modification.

The results of this Safety Evaluation confirm the acceptability of the reduction in the lead/lag time constant ratio from 80/10 to 40/10 and increased filter time constant from 5.0 seconds to 10.0 seconds. The justification is based on the Wolf Creek Generating Station-specific rod controller model which predicted no spurious rod actuation signal for the new values.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0168 Revision: 0

General Office Building Construction

This modification involves the addition of a new office building inside the Protected Area Boundary (PAB). Appropriate evaluations have been performed in the areas of Updated Safety Analysis Report (USAR), Security, Fire Protection, Emergency Planning, and environmental impact. A temporary change to the PAB will be implemented for the duration of the construction project. This three story building will be located East of the Administration Building. The location of the new office building is not near any safety related structures or components.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0169 Revision: 0

Alternate Filter Replacements

This plant modification to non-safety related equipment involves the approval of Babcock & Wilcox (or an approved equal) as an alternate supplier for replacement filter cartridges. Replacement filters approved by this modification meet or exceed design requirements. The Updated Safety Analysis Report is being revised to reflect the alternate filters.

This modification will have no impact on accidents and malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0170 Revision: 0

Reclassification of Combustible Loading

This modification involves the reclassification of 7,100 BTUs/square foot of transient combustible loading to fixed combustible loading in room 3102 "Pipe Space, Tank and Storage Area" on the 1974 level (basement) of the Communications Corridor. Reclassification adds the combustible loading value to the Fire Hazards Analysis. The combustible loading is in the form of acetylene gas. No safety related or safe shutdown equipment is located in this area. A three hour fire barrier separates this room and the Control Building. Therefore, a fire in this area cannot affect safe shutdown.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0171 Revision: 0

Procedure for Pump Down of the Radwaste Tunnel Sump

This procedure provides for the installation of a duplex pump to the Radwaste Building Tunnel as a backup to the existing Non-Radioactive Pipe Tunnel Sump Pumps (PLF13A) and (PLF13B). The purpose of this pump is to pump the clean radwaste tunnel floor drain or ground water to Waste Monitor Tank (WMB) "B." Existing pumps discharge to their flow to the floor drain tank. The new pump will prevent contamination of clean floor drain water or ground water when in use because it discharges to the WMB. This procedure does not handle the release of radiological waste to the environment.

This procedure will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0174 Revision: 0

Instrument Air Compressor Drain Line Installation

This modification to the Instrument Air Compressor (KA) system installs a drain valve (KAV1474), which returns to the Essential Service Water (EF) System. This modification will meet or exceed existing design criteria and will not affect operating characteristics of the EF or KA systems.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0175 Revision: 0

Inservice Testing Program for Pumps and Valves Revision

This revision to the Inservice Testing Program for Valves and Pumps uses Essential Service Water (ESW) Return From Instrument Air Compressor (CKA01A) After Cooler Isolation Valve (EFV0346) to isolate flow to the non-seismic lines at CKA01A. Loss of water through a line break has been considered. This change enhances the mitigation of such a break.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0177 Revision: 0

Auxiliary Feedwater Pump Room Sump Pump

This modification addresses the placement of flex hose on the discharge of Auxiliary Feedwater Room Sump Pumps (AFRSPs) PLE12A&B and replacement of AFRSPs (PLE02A&B), (PLE05A&B), and (PLE12A&B). Engineering evaluation has determined the capacity of the existing pumps is too small creating vibration problems. Replacement pumps will have a larger capacity and less run time.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0179 Revision: 0

Conductivity Monitor Replacement

This special scope modification to the Secondary Liquid Waste (SLW) Evaporator system replaces Conductivity Monitors HFCI 0812 "SLW Evaporator Distillate Pump Discharge Conductivity," HFCI 0859, "SLW Evaporator Head Outlet Conductivity," and HFCI 0882, "SLW Evaporator Concentrates/Recalculating Pump Seals Conductivity." This modification is being implemented because the existing "Blasbaugh" units are obsolete and repair parts are unavailable. Rosemount Analytical monitors are being used as the replacement monitors. Replacement monitors retain the same functionality as the existing monitors. System integrity and operation will not be adversely impacted by this modification. No safety related systems or equipment is affected by this modification.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0184 Revision: 0

This modification corrects discrepancies in piping and instrument diagrams (P&ID) for the Essential Service Water System, the Residual Heat Removal System, and the Chemical and Volume Control System. These discrepancies concern incorrect indication of the locked status of valves on the P&IDs. Procedure ADM 02-102 "Control of Locked Component Status" is being revised to be consistent with the P&IDs. This change is editorial only and does not change any valve positions or physical configuration in the plant.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0188 Revision: 0

Replacement of Water Treatment System Gate Valves

This modification to non-safety related equipment replaces a 1/2 inch Smith gate valve (1WM0587) with a 1/2 inch Hancock gate valve, and will allow utilization of a different vendor to replace 3/4 inch valves by removing vendor specific requirements from the design document. This modification also corrects drawing discrepancies to reflect the as-built condition of the non-safety related Water Treatment System.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0189 Revision: 0

Breathing Air System Drawing Discrepancy

This modification is being issued to address a discrepancy in Drawing M-12KE-02 "P&ID Breathing Air System." The discrepancy listed duplicate drain trap numbers. The modification to correct this duplication in this non-safety related system affects the drawing only. No hardware changes are being implemented.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0192 Revision: 0

Radiation Monitor GE-RE-92 Sample Point Relocation

This modification is a revision to Plant Modification Request 3811 which was reported by Safety Evaluation 92-0069. The effect of this revision is to relocate the sample point for GE RE-0092 "Condenser Air Removal System Radiation Dectector" to within two inches of the center of the duct.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0195 Revision: 0

Organizational Changes

This revision to the Updated Safety Analysis Report (USAR) incorporates recent organizational changes in the Operations Department as well as corrections to reflect earlier organizational changes. The changes being made in Chapter 17 of the USAR do not relax any previous commitments as described in Chapter 17. The changes being made are from Nuclear Services to Nuclear Assurance. The responsibilities and controls remain the same. A new procedure, AP38-021 "Exposure Budgeting" reflect a portion of the changes described above.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0197 Revision: 0

Target Rock Valve Replacement

This safety related modification Plant Modification Request 04394, involves replacing existing modulating Target Rock Solenoid operated valves BGHV-8357A&B "Alternate Seal Injection Valves" and BBHV-8157A&B "Excess Letdown Valves," with Anchor Darling Motor Operated Valves (MOVs) as existing valves have experienced continual problems with leakage and positioning. The above valves are used as a safety related means to place the plant in a safe shutdown condition if the normal paths are lost. The valves are manually throttled from the control room to supply the required flow.

Valves BGHV-8357A&B are located in the branch lines from the Centrifugal Charging Pumps (CCP) discharge header to the seal water injection header supplying the reactor coolant pump seals. Valves BBHV-8158A&B are located in the line connecting the outlet of the excess letdown heat exchanger to the pressurizer relief tank (PRT). This path is provided as an alternate letdown from the Reactor Coolant System (RCS) in the event that the normal letdown path is lost or provides insufficient capacity.

The modification will involve removing control and power circuits and associated devices for the existing DC powered Target Rock valves and installing new 480 VAC power and associated control circuits to the new motor operated valves. In addition this modification will remove the Main Control Board mounted Operator Interface Modules and replace them with jog controls.

This valve replacement modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0198 Revision: 0

Elimination of Target Rock Solenoid Valves

This modification involves deletion of SOVs EMHV8837A&B, which are located in the high pressure coolant injection (HPIC) flow path from the centrifugal charging pumps (CCPs) to the boron injection tank (BIT) and capping of the bypass line. The SOVs are located in the bypass lines around the BIT inlet isolation valves EMHV8803A&B. Each of the SOVs is a 1" Target Rock Model 79AB-006 with throttling capability. These valves are located in the BIT room.

These valves serve no specific function during plant startup. These valves are not used during normal operations or shutdown operations. Other valves may be used to perform the functions of these valves during emergency operating procedure applications.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0202 Revision: 0

Quality Control and Health Physics Personnel Changes

This revision to the Updated Safety Analysis Report (USAR) deletes the qualifications for the Manager Quality Control and reflects changes in personnel in Quality Control and Health Physics. The qualifications for the Manager Quality Control were added to the USAR after the 1992 reorganization. These qualifications are not required by any regulatory document.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0203 Revision: 0

Water Treatment System Valve Relabeling

This modification to the non-safety related Waste Water Treatment System corrects valve labeling on Drawing M-12WT01 "P&ID Waste Water Treatment Facility." The Carbon Filter Inlet Valve (1WM1060), and Carbon Filter A Wash Inlet Valves (1WM1061 and 1WM1062) are incorrectly labeled. The new numbers which will be respectively assigned to these valves are 1WM276, 1WM277, and 1WM278. This modification to a non-safety related system does not affect system integrity or operation.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0207 Revision: 0

Installation of Permanent Steam Generator Bowl Drain Line

This modification removes the existing flange and blind flange located on each steam generator bowl drain and installs an additional isolation valve and quick disconnect fitting. In addition, the pipe size at the steam generator nozzle is increased from 3/8 inch to 3/4 inch. During draining, a length of flex hose with quick disconnect fittings will be used to connect this piping to a new length of drain piping routed under the steam generator access platform, discharging into the containment sump floor trench.

The piping connected to the steam generator is designed to ASME Section III, Class 2 requirements through the first isolation valve and ANSI B31.1 requirements downstream of that valve. The lower portion of piping, routed to the trench, is designed to ANSI B31.1 requirements. The design, material, and construction standards applicable to the Reactor Coolant System are applicable to this modification. Piping stresses have been shown to be within Code allowables and pipe support designs are adequate for the new loads. Loads on the steam generator nozzles are within the allowables. The second isolation valve is identical to the existing isolation valve. System performance is enhanced by the increase in pipe size at the nozzle since the pipe strength is increased. The only safety related function of the drain piping is to maintain the Reactor Coolant System pressure boundary. This modification does not change the size of the drain hole in the bottom of the steam generator.

Safety Evaluation: 59 93-0215 Revision: 0

Performance Improvement Requests

This revision to the Updated Safety Analysis Report (USAR) revises sections 17.2.15.7, "Trend Analysis," and 17.2.16.2 "Performance Improvement Requests (PIR)," to clarify how the PIR program functions after it is combined with the Hardware Failure Analysis and Radiological Occurrence programs. This change does not affect system, components, or procedures required to mitigate the consequences of an accident. These changes do not affect the safe, reliable operation of Wolf Creek Generating Station.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0216 Revision: 0

Primary System Sample Frequency Clarification

This modification addresses the system description for the Primary Sampling System in the Updated Safety Analysis Report (USAR) and in the design bases document 10466-J-10SJ "System Description Nuclear Sampling." These documents describe the sample frequency as intermittent. Intermittent is not the best description of the actual sample frequency because samples may be taken monthly, daily, or weekly. In addition, the USAR and Drawing M-12SJ01 "P&ID Nuclear Sampling System." will be revised to eliminate the detailed tubing and valve arrangement shown for sampling configuration.

This modification only clarifies the affected documents. There are no changes to any equipment or process as a result of this modification. This modification does not affect the safety design function of the Primary Sampling System, system integrity, or operation.

Safety Evaluation: 59 93-0221 Revision: 0

Addition of Normally Open Cross-Tie Line Between the Normal Letdown and Charging Systems

This modification adds a normally open, seismically designed, 1/4 inch stainless steel instrument tubing cross-tie line between the normal letdown and charging systems. Specifically, the cross-tie line would be between the letdown system vent valve and the charging system vent valve. The charging system will provide makeup water to collapse any steam bubbles formed in the letdown system due to letdown system cooldown, post-isolation. The cross-tie will include normally open manual isolation valves, a check valve, and a mechanical pressure gauge. The pressure gauge, installed outside the primary shield wall, will enable operators to ensure that the pressure across the letdown system isolation valves is equalized before the valves are re-opened.

This modification is designed to the original Chemical and Volume Control System (CVCS) requirements and satisfies all CVCS safety design bases requirements. The cross-tie and the portions of CVCS piping being modified are located in the Reactor Building and are designed to ASME Section III, Class 2 requirements. The only malfunctions of equipment that could occur as a result of the equipment modified by this modification is the failure of the cross-tie to repressurized the normal letdown piping, resulting in the loss of normal letdown and charging subsystems. These malfunctions have already been addressed in the Updated Safety Analysis Report and redundant systems will remain available.

Safety Evaluation: 59 93-0223 Revision: 0

Containment Cooler Fan

The safety concerns of this temporary modification have been previously addressed by Safety Evaluation 87 SE-026 which is still valid for this location. Cavity Cooling Fan (CGN02A) is out of service. This fan is a part of the Containment HVAC which is not safety related. To compensate for the loss of CGN02A two 25 horse power fans will be installed in series in the discharge plenum of the out of service fan. Necessary ductwork modifications will be implemented to facilitate installation.

The cavity cooling duct work that the temporary extension piece is fastened to is not seismic I rated. The ductwork added is not coupled to a seismic component nor supported off of a seismic component.

This temporary modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0229 Revision: 0

Removal of Emergency Diesel Generator Jacket Water Heater Valve

This temporary modification to the Emergency Diesel Generator Jacket Water Keep Warm System removes valve KJV0771B which provides thermal relief protection for the section of piping and components between isolation valves KJV0858B and KJV0774B and replaces the valve with a 3/4" pipe plug. Included in this section of piping are the Jacket Water Keep Warm Heater (EKJ01B) and the Jacket Water Keep Warm pump (PKJ01B). This modification is acceptable temporarily because the relief valve is for thermal protection only and the possibility over pressurization is extremely remote.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0230 Revision: 0

Maintenance Supervisors Upgrade to Managers

This revision to the Updated Safety Analysis Report (USAR) revises table 13.1-1 to reflect changes to the titles of Supervisor Electrical Maintenance, and Supervisor Mechanical Maintenance. These positions have been upgraded to Manager. This change does not affect the reporting relationship of these positions and does not reflect a change to the operating philosophy of Wolf Creek Generating Station.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0231 Revision: 0

Conversion of Rooms to Office Space

This modification relocates/replaces the existing plant public address system in rooms 3612 and 3613 in the Control Building and remodels the rooms from their designed function of computer room and instrument shop to office space/conference room. All equipment associated with this modification is non-safety related. Equipment associated with this modification does not interface with any plant equipment important to safety.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

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Safety Evaluation: 59 93-0236 Revision: 0

Implementation of New 10 CFR 20

This revision to the Updated Safety Analysis Report (USAR) incorporates the requirements of the new 10 CFR 20. Instrumentation setpoints are re-established in accordance with the latest revision of 10 CFR 20. This revision will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 93-0238 Revision: 0

**Relocation of Floor Penetrations and Rerouting of Cables and Raceways
in the Control Room**

This modification relocates the floor penetrations and reroutes the cables and raceways to accommodate relocation of computer and communications equipment in the Control Room. This equipment is being relocated to improve the working environment for the operators. This modification provides the design for cables and raceways associated with the non-safety related equipment being replaced/relocated inside the Control Room. All of the equipment associated with this modification is non-safety related. Replacement equipment is of the same type as used in other places in the plant. None of the equipment associated with this modification will affect any plant equipment important to safety.

Safety Evaluation: 59 93-0241 Revision: 0

Drawing Change to Show the Essential Service Water Pumps' Stator Temperature Instruments

This modification changes a drawing to show Essential Service Water Pumps "A" and "B" Motor Stator Temperature Instruments. These instruments are non-safety related, do not perform a design basis function, and are currently installed in the plant. All temperature monitoring locations on the Essential Service Water pumps are referenced on the drawing except the stator temperature instruments. Therefore, it would be useful to include the stator temperature instruments for quick reference.

Safety Evaluation: 59 93-0242 Revision: 0

Replacement and Addition of Carpet in the Control Room and Associated Areas

This modification replaces the carpet in the Control Room and installs carpet in the Shift Supervisors Office, the Secondary Alarm Station Room, the Instrument Shop, and the Computer Room. The carpet addition and replacement also involves the removal and replacement/addition of the vinyl wall base and the use of adhesives which are not flammable. The existing carpet in the Control Room is being replaced with an equivalent carpet that is identical in material with the existing carpet pile (Nylon), that is non-combustible (does not add to the fire loading), and provides an identical function to the existing carpet. The carpet colors have been selected to improve the Control Room environment from a human factors point of view. The carpet is being added to the Shift Supervisors Office, the Secondary Alarm Station Room, the Instrument Shop and the Computer Room to enhance the environment for the operators. The carpet added in these areas is non-combustible and identical to the carpet in the Control Room.

Safety Evaluation: 59 93-0245 Revision: 0

Relocation of Air Discharge Line from the Control Room Radiation Monitors

This modification allows the discharge for the sample line of the Control Room Radiation Monitors to discharge directly into the Control Building Ventilation Supply Unit Room. This air currently discharges back into the duct from which the sample was taken and then back into the Control Room. This change will aid in the elimination of unnecessary noise in the Control Room. The discharge line will be disconnected at the duct with the line being plugged in accordance with approved procedures. Also, an air silencer will be attached to the discharge line from the sample pump for the Control Room Radiation Monitors.

The Control Room Radiation Monitors provided control room ventilation isolation; however, diverting the sample air into the Control Room Ventilation Supply Unit Room instead of discharging back into the sampled duct does not affect the function of the radiation monitors. Therefore, there will be no adverse effect on plant operations.

Safety Evaluation: 59 93-0250 Revision: 0

Replacement of Essential Service Water System's Supply Lines to Auxiliary Feedwater System's Pump Suction Lines Isolation Valves

This modification replaces the existing four isolation valves between the Essential Service Water System's supply lines to the Auxiliary Feedwater System's pump suction lines with C&S tricentric torque seated butterfly valves. The existing valves have a history of seat leakage due to corrosion of the T-ring groove area which holds the rubber T-ring in place so that a seat is obtained between the disc and T-ring. These valves are being replaced with valves that have a metallic seat which provides superior sealing for this application. This is due to the stainless steel materials that are practically impervious to corrosion.

The affected isolation valves maintain the pressure boundary of the Essential Service Water System or allow Essential Service Water to the Auxiliary Feedwater System to provide a source of auxiliary cooling water. The affected valves were originally designed as safety-related ASME Section III Class 3 valves. The replacement valves have been designed, fabricated, installed, and tested to the original requirements with respect to the pressure boundary requirements of the component. In addition, the electrical supply to the valves has been maintained with respect to train separation and safety related classification. Since the original design, fabrication, installation, and testing, requirements of the affected valves has been maintained. The ability of the replacement valves to perform their safety-related function is not adversely affected.

Safety Evaluation: 59 94-0032 Revision: 0

Residual Heat Removal System Flow Indicators

This Modification provides for the addition of permanent differential pressure (DP) flow indicators EJ-FI-0001, 0002, 0003, 0004, 0005, and 0006 across existing orifices EJ-FO-0001, 0002, 0003, 0004, 0005, and 0006 respectively. Installation of the DP flow indicators will provide for permanent local indication of Residual Heat Removal System (EJ) flow. The indicators are being added in the Containment Building at approximately the 2000' 0" elevation. the reason for the modification is to provide a more convenient manner to conduct EJ System flow testing. The permanence of the indicators should serve to reduce the dose received and reduce parts control efforts.

The new indicators and their associated tubing serve no safety related function other than to maintain their own integrity at all times. The EJ System is the only system affected by this modification. No safety functions are served by their indication.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 94-0033 Revision: 0

Radiological Emergency Response Plan Revision 38

This annual revision to the Radiological Emergency Response Plan (RERP) contains administrative changes, corrects typographical errors, updates figures and tables with current information, and updates titles of Wolf Creek Nuclear Operating Company (WCNOC) personnel. The changes in Revision 38 of the RERP provide current and updated information which will increase RERP effectiveness.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.

Safety Evaluation: 59 94-0034 Revision: 0

Diesel Generator Starting Air Compressor Drawing Update

This modification to Drawings M-12KJ02 and M-KJ05 "P&ID Standby Diesel Generator," provides updates to correct conflict between drawings and reflect the as-installed configuration for the Diesel Generator Starting Air Compressor. This modification does not constitute a change in design because the Starting Air Compressor was developed and test qualified to meet the requirements of specification M-018 "Standby Diesel Generator." This modification is editorial and has no impact on the integrity and intended function of the Diesel Generator Starting Air Compressor.

This modification will have no impact on accidents or malfunctions evaluated as the licensing basis and there is no potential for the creation of a new type of unanalyzed event. There is no reduction in the margin of safety.