

November 14, 2001

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20556

Gentlemen:

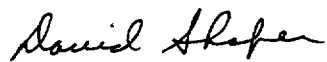
ULNRC-4568



**DOCKET NUMBER 50-483  
UNION ELECTRIC COMPANY  
CALLAWAY PLANT  
FACILITY OPERATING LICENSE NPF-30  
10 CFR 50.59 SUMMARY REPORT**

In accordance with 10 CFR 50.59(d)(2), this letter transmits a report which summarizes written safety evaluations of changes, tests, and experiments approved and implemented for activities a Callaway Plant from January 1, 2000 through June 30, 2001.

Very truly yours,

  
for John D. Blosser  
Manager - Regulatory Affairs

BFH/jdg

Enclosure

IE47  
led 12/19/01

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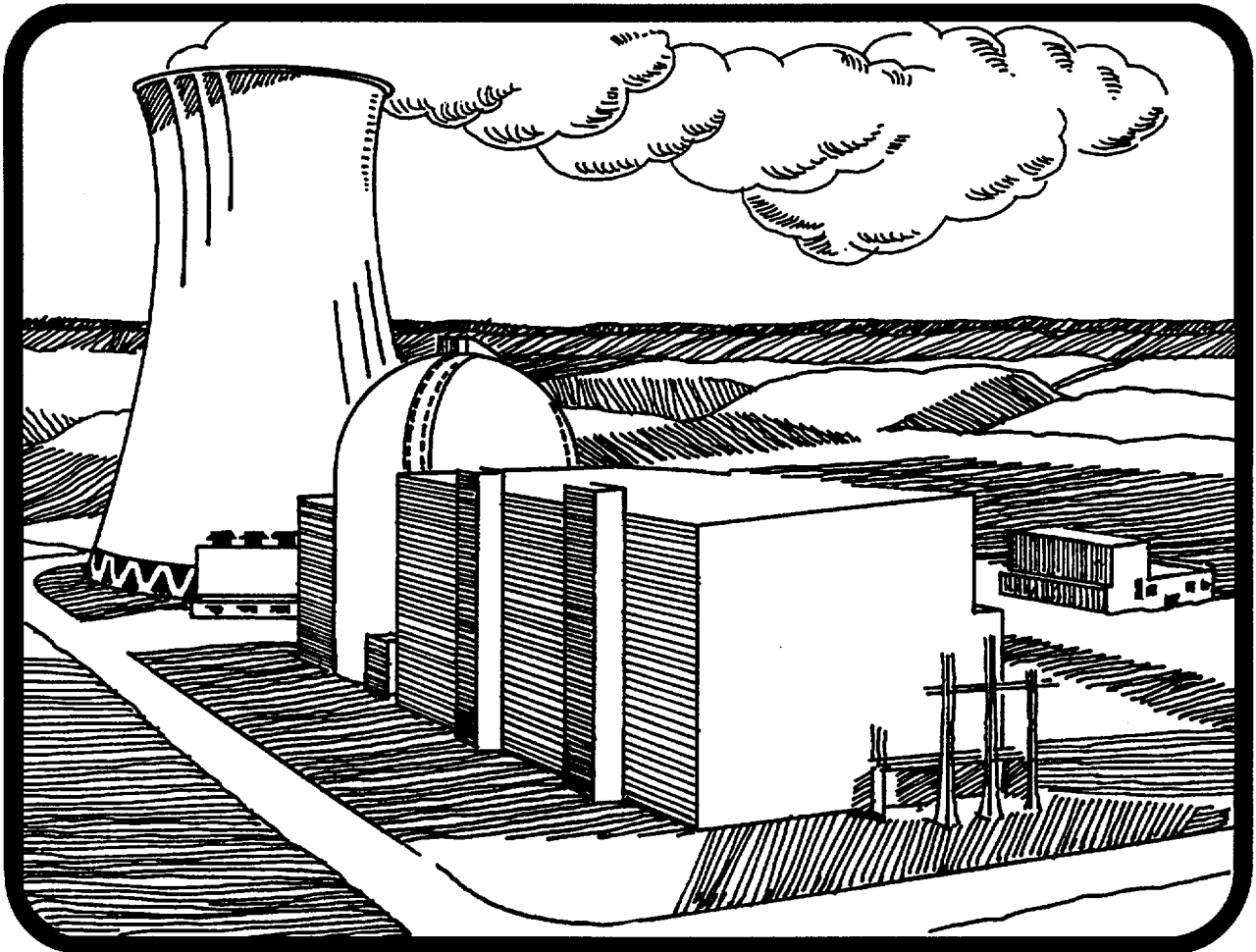
**UNION ELECTRIC COMPANY  
CALLAWAY PLANT**

**10CFR 50.59 SUMMARY REPORT**

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**January 2000 — June 2001**



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# CFR 50.59 SUMMARY REPORT FOR CALLAWAY PLANT

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28-Apr-00

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## EXECUTIVE SUMMARY

In accordance with 10CFR50.59(b)(2), the following report was prepared, which summarizes written safety evaluations of changes, tests, and experiments approved and implemented for activities at Callaway Plant.

The report covers all written safety evaluations that were implemented from January 1, 2000 through June 30, 2001.

During this period there were 216 changes, tests, and experiments implemented that required a written safety evaluation. Based on these evaluations, we have concluded:

- The probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated in the Final Safety Analysis Report has not increased.
- That an accident or malfunction of equipment important to safety of a type different than those evaluated previously in the Final Safety Analysis Report has not been 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.

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# CFR 50.59 SUMMARY REPORT FOR CALLAWAY PLANT

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28-Apr-00

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## REFERENCE/ABBREVIATION KEY

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CN — FSAR Change Notice.

### MODIFICATION PACKAGES (Design Changes)

- CMP — Callaway Modification Package
- RMP — Restricted Modification Package
- EMP — Exempt Modification Package

OL — Operating License Change (Tech. Spec.)

### PROCEDURES

- ETP — Engineering Technical Procedure
- OSP — Operations Surveillance Procedure
- OTO — Off-Normal Operating Procedure

RFR — Request for Resolution

CARS — Callaway Action Request System

TM — Temporary Modification

TSI — Technical Specification Interpretation

W — Work Control Document

FSAR and Technical Specification changes are also submitted under 10CFR50.71 and 10CFR50.90 as applicable.

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### **CN 00-014**

Revise FSAR discussion on radiological consequences of RCCA Ejection sequence.

SOS 99-2570 identified problems with the previous analyses of RCCA Ejection radiological consequences. These problems were resolved by Calculation ZZ-360, Revision 1 and Addendum 1 to Calculation ZZ-360, Revision 1. This FSAR Change notice revised Section 15.4.8 to ensure consistency between the Licensing Bases analyses of RCCA Ejection radiological consequences and the FSAR description of the analyses. No unreviewed safety question was created by the re-analysis of this accident sequence.

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### **CN 00-018**

Clarify testing requirements for Turbine Bypass System in the FSAR.

This FSAR Change Notice removed the testing frequency statement and rephrased the FSAR Section 10.4.4.4, "Inspection and Testing Requirements" for the Turbine Bypass System (TBS) to clarify the testing performed before initial startup and the routine testing performed during operation. No physical equipment changes were performed by this change. The TBS serves no safety function and has no safety design basis. There is no safety related equipment in the vicinity of the TBS. The evaluation determined that this change did not result in an unreviewed safety question.

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### **CN 00-025**

Update FSAR to reflect the requirements of 10 CFR 50.55a.

FSAR Change Notice 00-025 updated the FSAR to reflect the requirements of 10 CFR 50.55a, which mandates the use of ASME Section XI Appendix VIII. The new requirements are intended to enhance the performance of ultrasonic examinations under the ASME Section XI Inservice Inspection Program. This change has no impact on plant design or operation. No unreviewed safety question was created by this change.

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### CN 00-027

#### Safe Shutdown following Control Room Evacuation due to fire.

This FSAR change notice clarified sections of the FSAR that certain manual actions are required for shutdown of the plant following a Control Room fire. The use of manual operator actions for plant shutdown did not change the failure mode of any safety related equipment. A fire event was previously evaluated for the Control Room in the FSAR Fire Hazards Analysis. The analysis determined that a fire in this area would not prevent safe shutdown of the plant. This analysis was not adversely affected by these changes. This change did not involve an unreviewed safety question.

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### CN 00-054

#### Revise FSAR to incorporate elimination of the requirements for PASS by OL-1214.

FSAR Change Notice 00-054 revised the FSAR to incorporate the elimination of the Post Accident Sampling requirements requested by OL change # 1214.

OL change # 1214 would delete Technical Specification (TS) 5.5.3, "Post Accident Sampling System (PASS)," and thereby eliminate the requirements to have and maintain the PASS. The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 as part of the consolidated line item improvement process (CLIP).

The change notices did not change the design, operation, or failure modes of any plant equipment important to safety beyond those, which have been previously evaluated. These changes did not adversely impact the safety of the public or the plant. These changes did not result in an unreviewed safety question.

Ref: OL-1214

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### CN 00-068

#### Revise FSAR to update information based on the results of surveillance capsule X

FSAR Change Notice 00-068 incorporated changes into the FSAR as a result of updates based on the examination of the fourth surveillance capsule removed. The continuing surveillance program monitors the effects of neutron irradiation on the reactor vessel. An unreviewed safety question was not created by this change.

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### CN 00-075

#### Exception to augmented quality requirements for Quality Group D Components

This FSAR change notice updates the FSAR to reflect the original design of the plant for Quality Group D Augmented instrumentation and sampling piping. This evaluation is not associated with any physical changes to the plant.

CARS 200002298 identified a deficiency in which Callaway commits to Revision 0 of Regulatory Guide 1.143 for Quality Group D Augmented instrumentation and sampling piping per FSAR Appendix 3A. Callaway was designed and built to standards specified by Bechtel in MS-01 which states in footnote 3 on page 7 of 7 of the general notes "Augmented requirements do not apply to instrumentation and sampling piping downstream of the system root or isolation valve". The exception to meet augmented requirements for instrumentation and sampling piping downstream of the system root or isolation valve did not constitute a safety concern since the same exception is allowed in Revision 1 of Regulatory Guide 1.143.

This change notice revised the FSAR to recognize that the plant took exception to augmenting the quality of Quality Group D instrumentation and sampling piping downstream of the first root valve. This evaluation did not affect any safety related component, equipment, or structure. This evaluation concluded that no unreviewed safety question was created.

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### CN 96-015

Revise Gas Storage Tank surveillance interval to "at least once per 18 months".

This change notice revised FSAR SP 16.11.2.8, GAS STORAGE TANK, surveillance interval from "at least once per 7 days when radioactive materials are being added and within 7 days following any addition of radioactive material to the tank" to "at least once per 18 months." This evaluation concluded that increasing the surveillance time period to 18 months is justifiable and warranted based on dose and man-hr savings with no reduction in plant safety. The proposed 18 month surveillance frequency coincides with the normal sampling and WGDТ discharge period, and is sufficient to ensure that the limit of 2.5 E+0 5 Ci will not be exceeded. This change did not adversely impact the safety of the public or the plant. This change did not create an unreviewed safety question.

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### CN 97-061

Clarify usage description of the condensate storage tank.

This FSAR CN clarified the description of the use of the Condensate Storage Tank (CST) as a source of water for the auxiliary feedwater system. It was determined that the non-seismic, non-safety related CST could not be assumed to function post-accident. The change eliminated any misconceptions about creditability of the CST for accident mitigation. This change did not result in an unreviewed safety question.

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### CN 97-082

Revise FSAR to remove criticality monitoring from FB 2000 cask handling area.

This change notice removed the cask handling area from the areas identified for criticality monitoring and removed the "criticality monitoring" designation from area radiation monitor SD-RE-34. SD-RE-34 is not required to act as a criticality monitor since the cask handling area on elevation 2000' of the fuel building did not meet the 10 CFR 70.24 criteria for requiring criticality monitoring. This change did not physically change any plant component nor will it impact any accidents or the original accident analyses. This change did not create an unreviewed safety question.

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### CN 97-086

Revise FSAR Tables 16.11-1 & 16.11-5 to correct errors and provide clarification

FSAR change notice 97-086 clarified the definition of delta-t in the calculation of liquid effluent samples LLD and changed the compensatory action for an inoperable sample flow rate monitor to match the design of the radioactive effluent release monitors. This change notice did not change the design, operation, or failure modes of any plant equipment beyond those, which have been previously evaluated. These changes did not adversely impact the safety of the public or the plant. This change notice did not result in an unreviewed safety question.

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### CN 97-096

Revise FSAR 12.5.3.2 objective c of the radiation work permit program.

FSAR change notice 97-096 deleted the statement "by signing the permit" from objective c of the radiation work permit program. This change allows greater flexibility in the mechanisms by which the worker makes the acknowledgement that they have read and understand the radiation work permit (RWP). This change was necessary due to the advances in computer software has made it possible for the worker to now acknowledge electronically. This change notice did not change the design, operation, or failure modes of any plant equipment beyond those, which have been previously evaluated. The change did not adversely impact the safety of the public or the plant. This change notice did not result in an unreviewed safety question.

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### CN 98-041

#### Relocate CTS requirements to FSAR chapter 16.

This FSAR Change Notice revised Chapter 16 to incorporate the requirements that were move or relocated from Current Technical Specifications (CTS) as a result of the conversion of the CTS to the Improved Technical Specifications (ITS). The ITS conversion process allowed administrative changes, relocating requirements which did not meet the technical specification criteria, and information that was descriptive in nature regarding the equipment, systems, actions or surveillances identified by the specification to be removed from the specifications and included in FSAR Chapter 16. In addition, for several relocated CTS surveillances a less restrictive LCO ACTIONS were created. The new ACTION statement allows the manager, Callaway Plant to determine the necessary ACTIONS to be taken when LCO or allowed outage time are not met. Non-compliance with the relocated surveillance does not warrant the imposition of the CTS ACTION, such as a plant shutdown, given the relative insignificance of the relocated specifications to plant safety.

These change did not result in any physical changes to the plant and the accident analyses were not affected. No unreviewed safety question was created by these changes.

Ref: Licensing Amendment 133

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### CN 98-069

#### Revise FSAR description of fire brigade training and drill requirements.

FSAR CN 98-069 made clarification to frequencies listed in fire brigade training and drill requirements. These changes are administrative in nature and did not reduce the effectiveness of the fire brigade. These changes did not adversely affect the ability to achieve and maintain safe shutdown of the plant in the event of a fire. This change notice did not result in an unreviewed safety question.

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### **CN 98-079**

Revise FSAR description for safety analysis performed to support Amendment 128.

This change notice reconciled any changes required to the FSAR identified during the Requests for Additional Information (RAI)/ Approval of Operating License Amendment 128 which increased the Main Steam Safety Valves setpoint tolerance. Westinghouse provided the FSAR Chapter 15 changes more than a year previous to the NRC RAI/Approval of the amendment. This change notice also made changes to the FSAR which were outside the Westinghouse recommendations. This evaluation determined that no unreviewed safety question exists for these changes.

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### **CN 98-084**

Added clarification statement to FSAR on valve and damper position on P&ID's.

FSAR change notice 98-084 added a clarifying statement to FSAR Section 1.7.2 and provided clarification to Callaway's commitment to Regulatory Guide 1.70 (Rev. 3). The clarification is that the designation of valve and damper positions on piping and instrumentation diagrams in the FSAR are beyond the level of detail needed in the FSAR. This clarification is based on Regulatory Guide 1.70 Revision 3 and new regulatory guidance detailed in document NEI 98-03. The formal safety evaluation for this change notice clarifies that sufficient information is available in other portions of the FSAR with regard to valve and damper positions to meet the intent of 10 CFR 50.34(b) for FSAR content. The evaluation concluded that no unreviewed safety question exists for this change.

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### CN 98-088

Revise FSAR Section 6.3.2.2 to incorporate changes made by CMP 90-1007.

CMP 90-1007 installed manual isolation valves EMV0248, EMV0249, EPV0127 and EPV0128 in the drain paths for the Safety Injection (SI) System Accumulators, to isolate unwanted leakage. The DIR, LIR, and FSE for CMP 90-1007 identified the changes to the Process and Instrumentation Diagrams (P&ID's) in the FSAR, but did not identify the required changes to the FSAR text contained in FSAR SP Section 6.3.2.2. More specifically, the second paragraph under the 'Accumulators' heading in FSAR SP Section 6.3.2.2, which states, "Connections are provided for remotely adjusting the level and boron concentration of the borated water in each accumulator during normal plant operation, as required". When one of the manual valves installed under CMP 90-1007 is isolated (closed) to stop unwanted leakage, the level or boron concentration of the associated SI Accumulator cannot be adjusted remotely.

This potential change in the method of adjusting the level or boron concentration of the SI Accumulators did not affect any accidents, the malfunction of equipment important to safety, or reduce the margin of safety as defined in the basis for any Technical Specification. Therefore, an unreviewed safety question was not created by this change.

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### CN 99-007

FSAR changes due to the licensing basis review of the ESW system.

This change notice evaluated changes to the FSAR as a result of a detailed FSAR Review of the Essential Service Water (ESW) system. This change notice corrected the FSAR to match current design documents. During the review no degraded conditions were discovered and no physical changes were made to the plant design or operation. No unreviewed safety question exists for these changes.

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### CN 99-008

#### Auxiliary Feedwater FSAR review updates.

This FSAR change notice evaluated changes to the FSAR as a result of a detailed FSAR review of the Auxiliary Feedwater (AFW) System. The change evaluated was to better describe the diversity of the Turbine Driven Auxiliary Feedwater pump and supporting equipment. Since the FSAR is being corrected to match current design documents, no degraded conditions were discovered, no physical changes to the plant, procedures, tests, experiments or Technical Specifications. This review concluded that no unreviewed safety question exists.

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### CN 99-017

#### Revise FSAR classification of various Standby Diesel Generator subcomponents.

FSAR Change Notice 99-017 revised the FSAR to bring it in compliance with design basis documents and other FSAR sections. The changes deal with classification of various Standby Diesel Generator subcomponents. There was no physical change to the plant, nor any changes to the original accident analysis. These changes were found not to involve an unreviewed safety question.

Ref: RFR 19590, Revision A  
RFR 19602, Revision A

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### CN 99-028

#### Correct inconsistencies in FSAR description of the emergency fuel oil system.

This FSAR CN revised the FSAR to bring it in compliance with existing plant configuration and design basis calculations. The change deals with operational configuration of the fuel oil line between the emergency fuel oil storage tank and the standby diesel generator fuel oil day tank. The FSAR text described this piping as being drained when the system is not in use. The actual plant configuration maintains these lines full of fuel oil when the system is not operating. This change did not result in an unreviewed safety question.

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### CN 99-029

Revise FSAR description of the domestic hot water system.

This FSAR CN removed references to the type of heat (steam or electric) that is supplied to the domestic hot water heaters. This CN also removed a reference to an out dated plumbing code used for the installation of the domestic water system. The domestic water system is no safety design basis and performs no safety function. This change did not result in an unreviewed safety question.

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### CN 99-030

Revise FSAR text regarding capacity of Fire Water Storage Tank.

RFR 19379 evaluated the capacity requirements for the fire water storage tanks. This RFR was initiated by the FSAR Review team during the review of the fire protection sections. The FSAR has several statements regarding the capacity of the fire water supply. This RFR evaluation generated an FSAR Change Notice to delete unnecessary over-commitments for fire water capacity. As a result of this RFR no changes were made to the design or function of any plant equipment. The FSAR Fire Hazards Analysis was also not affected by this change. No unreviewed safety question was created by this change.

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### CN 99-060

Revise FSAR to reflect organizational changes in the Quality Assurance Dept.

This evaluation is for organizational changes and title changes detailed in primary licensing document changes FSAR CN 99-066 and OQAM CN 99-009 as follows:

1. Transfer of the Quality Control Group function from the Quality Assurance Department to the Work Control Department.
2. Reporting / organization structure changes within the work control organization due to the above change.
3. Removal of reference to specific titles for supervising Engineers, QA-Operations Support and QA-Technical Support deferring to a more generic supervisor reference as to their current responsibilities.
4. Revision to resumes for several superintendent level individuals who will change position within the Callaway plant organization as a result of this change.

These Organizational changes and Title changes do not involve any safety related equipment, increase the possibility or probability of any accident, or create any new type of unanalyzed event. There was no unreviewed safety question as a result of this change.

Ref: OQAM CN 99-009

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### CN 99-061

Addition of non-safety related QA program for AMSAC per 10CFR50.62(d) into FSAR

This FSAR Change Notice incorporated the non-safety related quality assurance program for AMSAC into the FSAR. The change notice described the details of this program that is a result of NRC recommendations to comply with 10 CFR 50.62(d) requirements. This change did not affect the design or operation of the AMSAC system. No unreviewed safety question was created by this change.

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### CMP 00-1002

#### Cycle 12 Reload Design

Revision A documents the Cycle 12 reload design and includes operation up to a cycle burnup of 22790 MWD/MTU. The Cycle 12 reload design satisfies all of the applicable safety parameter limits and acceptance criteria, and has been evaluated using standard reload design and approved fuel rod design models and methods. The evaluation concluded that there was no unreviewed safety question as documented in the Callaway Cycle 12 Reload Safety Evaluation, Revision 0, other evaluations performed by Westinghouse, the Callaway Reload 11 RDS, Nuclear Engineering Calculations NFDC01-002, ZZ-500, and EC-26.

FCN01 of this modification applies to the Cycle 12 RSE revision, which included 1) evaluation of use of one reconstituted fuel assembly from Cycle 11, N42 rod F2; 2) referencing documentation supporting operation in Cycle 12 at a reduced Tavg; and 3) evaluation of the boron dilution event in MODES 3, 4, and 5. This evaluation concluded that there was no unreviewed safety question as documented in the RSE and Westinghouse letter 01SCP-G-037.

Ref: FSAR Change Notice 01-007

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### CMP 00-1003

#### Install isolation manual valve in the Safety Injection Test Line.

In order to stop check valve leakage from the RCS, CMP 00-1003 installed a manual isolation valve in the Safety Injection (SI) test line. Flow through the line is used for check valve testing operations during periods when the reactor is shutdown. During normal plant operation the new valve may be closed to stop leakage via this path. The new valve is not an ASME Code component, but serves as a non-safety boundary in the event upstream valves experience seat leakage.

The modified configuration is designed to meet existing system design requirements. The SI system has been analyzed as acceptable considering this change. The system is not adversely impacted, and remains capable of performing all its safety functions. An unreviewed safety question did not exist for this change.

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### **CMP 00-1007**

#### Health Physics Access Control renovation.

CMP 00-1007 revision A renovated the Health Physics Access Control area which comprises most of the 1984' floor in the Control Building. Room sizes and arrangements were changed to provide an improved workspace and an improved floorplan configuration. Upgrades to architectural features were made including new sheet vinyl floor covering, new suspended ceilings and new moveable steel walls. Various associated items were also relocated and/or renovated including lighting, electrical power outlets, fire-protection sprinklers, fire detectors, public address equipment, phones, HVAC and plumbing. The modifications did not create an operability concern nor adversely effect structures, systems or components important to nuclear safety. An unreviewed safety question did not exist for these changes.

Revision B to CMP 00-1007 constructed a temporary room in the Auxiliary Building lower floor corridor area for use as a Temporary Health Physics Access Control facility. It was used as the control point for personnel entering and exiting the Radiological Control Areas of the plant. This modification did not create an operability concern nor adversely effect structures, systems or components important to nuclear safety. The evaluation concluded that an unreviewed safety question did not exist for this change.

Revision C removed the temporary room from the Auxiliary Building lower floor corridor area which had served as a Temporary Health Physics Access Control Facility. This modification did not create an operability concern nor adversely effect structures, systems or components important to nuclear safety. The evaluation concluded that an unreviewed safety question did not exist for this change.

Ref: FSAR Change Notice 00-041

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### **CMP 00-1012**

Remove CCW drain valves EGV0355 and EGV0360.

Modification 00-1012 removed two Component Cooling Water (CCW) drain valves located on the discharge piping downstream of the CCW heat exchanger. The remaining pipe nipples were capped with socket weld pipe caps, this alleviated vibration concerns associated with the drain lines.

This modification did not increase the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. The CCW System has been analyzed as acceptable considering this change. The possibility of an accident or malfunction of a different type than previously evaluated in the FSAR was not created. In addition, there was no reduction in the margin of safety as defined in the bases for any Technical Specification. Therefore, no unreviewed safety question exists for these changes.

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### **CMP 00-1015**

Install SIS Test Line Manual Isolation Valves.

This CMP modified the SIS test line by adding three manual isolation valves, removing five snubbers and replacing one additional snubber with a strut. During normal plant operation the new isolation valves may be closed to isolate leakage into the SIS test line. The new valves serve as a non-safety related boundary in the event the upstream safety related isolation valves experience seat leakage.

The modified configuration is designed to meet existing system design requirements. The SIS test line was evaluated and found acceptable with these changes. The Safety Injection System was not adversely impacted and remains capable of performing all its safety design basis functions. An unreviewed safety question did not exist for this modification.

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### **CMP 95-1003**

#### Install a bypass line around the Spent Fuel Pool Demineralizer.

This modification provided for the installation of a bypass line around the Spent Fuel Pool (SFP) Demineralizer (FEC03). The bypass line was installed in the non-safety related supply and return headers near the demineralizer inlet and outlet isolation valves. This installation provides the option of full system flow around or through the demineralizer based upon SFP water chemistry conditions. The bypass line was designed and installed to the same design and construction codes that were utilized on the existing system. This modification had no adverse affect on accident analysis or equipment important to safety. This change did not create an unreviewed safety question.

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### **CMP 97-1004**

#### Replacement of Steam Generator Feedwater Check Valves.

This modification involved the replacement of the steam generator feedwater check valves with units fabricated entirely from stainless steel. The existing tilting disk check valves had experienced flow induced erosion / cavitation damage to the valve disc and excessive bushing wear due to disc flutter. The replacement nozzle type check valves were evaluated to provide equal or better performance with no adverse impact to the plant. There were no unreviewed safety questions associated with this change.

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### CMP 97-1008

Convert RCP seal water injection blind flanges to instrument valve with cap.

CMP 97-1008 modified the end connection of 10 vent and drain locations on the Reactor Coolant System (RCS). The locations were on the Reactor Coolant Pumps seal water injection lines. The current end termination is a blind flange. This modification approved the installation of a 1/2" tubing valve with a plug downstream.

In the vent/drain assemblies, the existing 3/4" valve provides the ASME Code boundary. The existing blind flange, which was modified, is not an ASME Code component, but serves as a non-safety boundary in the event the upstream valve experiences seat leakage. During venting and draining operations, ALARA is greatly improved with the new configuration.

The modified assemblies were designed to meet existing system design requirements. The RCS has been analyzed as acceptable considering this change. The system was not adversely impacted, and remains capable of performing all its safety functions. An unreviewed safety question did not exist for this change.

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### CMP 97-1011

Install bypass line around normal letdown flow orifice.

This modification installed a 2" bypass line with double isolation valves around the 45 gpm normal letdown orifice to increase flow capacity during operations with low Reactor Coolant System (RCS) pressure. FCN01 allowed the use of socket weld fitting as opposed to the originally specified butt weld fitting for installing the bypass line. The change decreased the time required for RCS cleanup during cooldown and heat-up. The bypass will be isolated during normal power operation. The addition of the letdown bypass line coupled with plant administrative controls governing its use ensures that plant parameters and transient response remain as assumed, evaluated, and approved in the FSAR without an increase in consequences or probabilities, creation of a new accident or malfunctions, or a reduction in the margin of safety. Therefore, no unreviewed safety question was created by this change.

Ref: FCN 01

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### **CMP 97-1016**

Install offset handling tool on the spent fuel pool bridge crane.

FCN 16 approved the installation of an offset handling tool on the spent fuel pool bridge crane to allow access to fuel storage cells beyond the travel capability of the existing handling tool. The offset tool will use the original hoist and original fuel handling tools. The added crane structure components associated with the offset handling tool were designed for the normal and accident loading conditions. Installation activities will be in accordance with plant procedures. Heavy loads will not need to be transported over or near the spent fuel pool as part of the offset tool installation. All changes are in accordance with the licensing change amendment request OL-1196 and amendment 129 which determined that no significant hazards exist as a result of the modification.

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### **CMP 97-1027**

Permanent removal of Boron Injection Header Pressure Transmitter.

CMP 97-1027 permanently removed the boron injection header pressure indicating loop EMP-0947 and three associated valves going to the transmitter from service. The indicating loop and valves are not essential to normal or emergency operation. The components were isolated from the safety related injection header by cutting and socket welding a cap on the line going to them. This improved the pressure boundary integrity by reducing the number of components. No unreviewed safety question was created by this modification.

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### **CMP 98-1002**

Install platforms in the Auxiliary Building to access vent valves.

Modification 98-1002 installed platforms and handrail in the Auxiliary Building. Changes to plant equipment drawings M-2G020 and M-2G022 required changes to Figures 1.2-9 and 1.2-11 in the FSAR. The change to the figures changed to plant as described in the FSAR. The safety evaluation concluded that there was no adverse affect on the plant or license documents and an unreviewed safety question did not exist.

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### **CMP 98-1003**

Replace insulation on the Terry Turbine and associated piping.

This modification involved the installation of new blanket insulation on the auxiliary feedwater turbine and associated piping. The additional insulation will reduce the temperature of the auxiliary feedwater turbine room and aid in keeping this room below its maximum temperature per the FSAR. This replacement did not alter any safety design basis nor accident analysis. In addition, the modification did not affect the operation of the auxiliary feedwater pump turbine nor any of the associated flowpaths as addressed in the Technical Specifications. No unreviewed safety question was created by this change.

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### **CMP 98-1018**

Install LLRT test connections for containment shutdown purge isolation valves.

Technical Specification section SR 3.6.3.7 provides a leakage rate test frequency for the containment Mini-purge and Shutdown Purge valves (with resilient seals) when the associated blind flanges are removed. This modification installed test lines on the Shutdown Purge Supply and Return headers to allow testing of the valves associated with both Mini-purge and Shutdown Purge Containment penetrations. The test lines were constructed and installed using the same quality standards and codes that were used in the original design of the system. This review determined that the implementation of this modification did not increase the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor was the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR be created. This change did not create an unreviewed safety question.

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### **CMP 98-1025**

#### Change power source for Diesel Generator Supply Fans.

Modification 98-1025 installed conduit and cable to change the power supply for the Emergency Diesel Generator Supply Fans, DCGM01A and DCGM01B. The fans were fed from the Motor Control Center (MCC) located in each Diesel Generator room. The new power source is load center breakers NG0313 and NG0413. In addition, this modification changed the hand switches located on the Main Control Board used to start and stop the supply fans. The safety evaluation indicated there were no nuclear safety concerns associated with this change and no unreviewed safety question was created.

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### **CMP 98-1031**

#### Replace obsolete controllers on 1E air conditioning skids SGK04A/B & SGK05A/B

This CMP upgraded the single loop controllers on the control room and class 1E equipment room air conditioner skids. Since the functionality of the new controller is the same, it meets relevant 1E requirements, and since any hypothetical common mode software failure would be mitigated in a timely manner, no unreviewed safety question existed.

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### CMP 98-1036

Replace the A ESW pump with a higher capacity pump.

Revision A rerouted the prelube piping from TEF01A to PEF01A. The purpose of this change is to reduce manpower requirements during Refuel 10. In addition to rerouting the pipe, it will be changed to stainless steel to increase its corrosion resistance. The prelube piping supplies water to the bearings of PEF01A when the pump is not running. While this is required to minimize wear during normal operation, it is not required during emergency conditions. The change in pipe routing will not adversely affect the flow to the bearings; therefore this change will not increase the probability of a malfunction of equipment important to safety. To increase the accessibility to the pump, supports EF11R001011 and EF11C002011 were modified. This modification can occur with the system operable since the new support configuration was installed before the old is removed. This modification addresses the replacement of studs in the discharge flange and sole plate to pump connection one stud at a time while the pump remains operable.

FCN-03 addressed several items that were unavailable at the time of the original issue of this modification. The modification installed a new ESW pump with a slightly larger impeller. This increased pump performance beyond the original design performance. The new pump also had the major wetted components changed to stainless steel from carbon steel. They have the same fit, form and function as the previous carbon steel components and are more corrosion resistant. Also FCN-03 addressed the installation of alignment lugs on the pump to aid in motor to pump alignment. The lugs are used during maintenance and have no operational effect when the pump is returned to operable status.

None of the changes identified above result in exceeding existing design limits, thus original margins of safety are satisfied. This change did not create an unreviewed safety question.

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### **CMP 99-1001**

#### Revise Alert and High alarms for Containment High Area Radiation Monitors.

This modification revised the Alert and High alarms for the Containment High Area Radiation Monitoring System (CHARMS) in the Callaway Equipment List (CEL) to correspond to the values given in the Emergency Action Levels (EALs) that are used to declare emergencies. These setpoints have no controlling function. They are only used to alert operators to significant increases in containment radiation levels. Although the CHARMS are listed in Table 3.3.3-1 of the Technical Specifications as required Post-Accident Monitoring (PAM) instrumentation, their setpoints are not listed. This change only affected the alarm setpoints and did not adversely affect the operation of the monitoring system. Therefore, no unreviewed safety question was created by this modification.

Ref: FSAR Change Notice 00-065

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### **CMP 99-1003**

#### Install lead shielding support beam for the pressurizer spray line.

Modification 99-1003 installed permanent lead shielding and support beams for approximately 80 feet of 3" pressurizer spray lines near steam generator "D". The installation meets all seismic II/I design requirements. Existing plant structures and components were not adversely affected by this modification. The safety evaluation concluded that an unreviewed safety question did not exist for this change.

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### CMP 99-1007

#### Cycle 11 Core design

FCN 1 of this modification package applies to the Cycle 11 COLR, Revision 1, which incorporated the new TS. The only substantive change made to the COLR aside from renumbering sections to coincide with new TS, is the addition of a 60 ppm MTC limit in the event that the 300 ppm surveillance is not met.

FCN 2 of this modification package applies to the Cycle 11 COLR, Revision 2, which incorporated additional W(z) factors to account for a range of measured axial offset in Cycle 11 and increased the FQ RTP limit from 2.45 to 2.50. The Cycle 11 RSE remains valid for this COLR revision.

The Cycle 11 reload design satisfies all of the applicable safety parameter limits and acceptance criteria, and has been evaluated using standard reload design and approved fuel rod design models and methods. This evaluation concluded that there was no unreviewed safety question as documented in the RSE and Westinghouse letters 000-SCP-G-0015 and OOSCP-G-0038.

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### CMP 99-1030

#### Replacement of the main generator negative sequence protection relay.

Modification 99-1030 removed the negative sequence relay, its meter and the associated wiring no longer needed. A new Beckwith M-3430 generator protection relay was designed in its place. A modem was added to provide the relay with remote communications. Additionally this change removed a trip transfer panel used during plant construction.

No changes to the generator protection as described in the FSAR has taken place. The telephone station was added for a modem to provide remote communication. The change to the telephone system did not affect equipment important to safety. No unreviewed safety question exists.

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### CMP 99-1035

#### Replace main steam PORV actuator helper springs and stem guide bushing

This modification replaced the main steam Power Operated Relief Valves (PORV's) actuator helper springs, lower guide bushings, and installed an actuator travel limiter. These changes did not alter the valve's design function of opening to provide a controlled method of heat removal. The changes served the function of increasing the valve closure force, better actuator shaft stabilization, decrease actuator shaft to bushing operational friction, and prevention of valve over travel with subsequent position indicating limit switch damage. In addition, the replacement parts were "like kind" material maintaining the current equipment qualifications. These changes did not create an unreviewed safety question.

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### CMP 99-1039

#### Modify RHR Recirculation Sump Valves to address pressure locking concerns.

This modification installed an anti-pressure locking bypass line from the existing packing leakoff line to the Residual Heat Removal (RHR) system piping for each RHR containment recirculation sump isolation valve. These lines provide a path to eliminate the potential for pressure buildup in the valve bonnet, and thus prevent the occurrence of pressure locking.

The RHR Class 2 valves, piping and associated systems were analyzed as acceptable considering these changes. This system was not adversely impacted, and remains capable of performing all its safety functions. Therefore, an unreviewed safety question does not exist.

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### **CMP 99-1044**

#### Replace the Emergency Diesel Generator Governor Control System

This modification replaced the existing Emergency Diesel Generator (EDG) governor control system on both of Callaway's EDGs. The new governor control system provides a method to "slow" start the EDG to reduce excessive wear and stress on the engines. An emergency start signal will over-ride the slow start process and ensure the EDG achieves rated voltage and frequency within the Technical Specification time requirements. The new control system design ensures the EDGs are protected from potential open circuits, short circuits, hot shorts, and grounds in the Control Room caused by Control Room fires. The new governor control system characteristics (response time, stability, reliability, etc.) are equivalent or better than the existing control system. The new EDG governor control system contains no microprocessors, software, or firmware. The new control system was qualified and evaluated to meet FSAR and Technical Specification requirements. No unreviewed safety question exists nor is created by the actions/activities described in this evaluation.

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### **EMP 99-3003**

#### Add new floor area to the Turbine Building.

This modification expands the ground floor area on the east side of the Turbine Building. The additional floor area was created by installing floor grating over an area that is presently open. The additional area is used for storage. This change did not adversely impact plant safety or the Fire Protection Program. No unreviewed safety question exists for this change.

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### RMP 00-2001

#### Replace tube bundles in Low Pressure Feedwater Heaters 3A, B, and C.

This modification replaced the number 3 A, B, and C Low Pressure Feedwater Heater tube bundles with a new U-tube design. The new design replaced the straight tube design which had fixed tube sheets on both ends. The previous design had inherent design concerns which lead to several material failure mechanisms within the heater. This modification did not affect or interface with any safety-related components or systems and does not have any safety design basis associated with the portion of the systems affected by the modification. These changes did not create an unreviewed safety question

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### RMP 00-2003

#### Installation of a Turbine shell/valve chest auxiliary warming line.

Modification 00-2003 installed a new auxiliary steam pressure control valve. The new pressure control valve directs auxiliary steam through the normal Main Feedwater Pumps steam supply line (hot reheat) back to the turbine for warming. This will be used to begin preliminary turbine shell and mainsteam control valve chest warming after a cold shutdown of the turbine. This evaluation determined that the change made under this modification did not increase the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor did the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR be created. Therefore, this change did not create an unreviewed safety question.

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### RMP 00-2010

#### Remodeling of the Equipment Operator's Room, 3613B.

This modification remodeled the Equipment Operator's Room (3613B). This room is located in the Communication Corridor, elevation 2047'-6". A partition and door between 3613B and 3613A was removed. This Partition is shown on M-2G052 and in the FSAR Figure 1.2-25. Lighting and communications shown on drawing E-24QE01 and E-2L9901 was changed to suit the revised equipment layout. These drawings are in the FSAR as Figures 9.5.2-1 and 9.5.3-1.

FCN 01 changed communications (telephone and Gai-Tronics) and convenience power receptacles as part of the Equipment Operator's Room remodel. This resulted in an additional drawing change E-2L9903 which is include as Figure 9.5.2-2 in the FSAR

The evaluations concluded that no unreviewed safety question exists for these changes.

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### RMP 95-2006

#### Modify condenser water box level gauges and install chemical injection ports.

This modification provided for the removal of the 36 condenser water box level gauges and the installation of pressure indicators on the six high pressure condenser water boxes and 18 chemical injection ports on the low and intermediate pressure condensers. The gauges were removed due to the high cost of maintenance and their infrequent use. The additional pressure gauges are providing level indication in key areas. Chemical injection is used to determine locations of tube leaks. The Circulating water system is non-safety related and not associated with accident analysis. This modification did not result in an unreviewed safety question.

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### RMP 98-2005

Install new actuator and trim design on Main Feedwater Regulating Valves.

RMP 98-2005 installed new trim and actuators on the Main Feedwater Regulating valves. This change was required because the valves had excessive stem movement which caused frequent packing leaks. All affected equipment was non-safety related and the functions of the valves were not altered by this change. This change did not create an unreviewed safety question.

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### RMP 98-2007

Replacement of cartridge and CUNO filter housings with bag type filter housings.

This modification replaced several non-safety related cartridge type filter housings in the Liquid Rad Waste system (LRW) and Secondary Liquid Waste system (SLW) with bag type filter housings. This replacement reduced the cost associated with supplies, changeouts, and disposal. The replacement filter housings were connected to the existing supply, discharge, vent, and drain lines, and the design flow capacities were maintained. This modification did not affect the safety related portions of these systems or any other safety related system. No unreviewed safety question exists for this modification.

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### RMP 98-2010

Replace tube bundles in Low Pressure Feedwater Heaters 1A and 1B.

This modification replaced the 1A and 1B Low Pressure Feedwater Heater tube bundles with a new U-tube design. The new design will replace a straight tube design which had fixed tube sheets on both ends. The existing design had inherent design concerns which lead to several material failure mechanisms within the heater. This modification did not affect or interface with any safety-related components or systems and does not have any safety design basis associated with the portion of the systems affected by the modification. No unreviewed safety question exists for this modification.

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### RMP 98-2013

Replace Blue Phone notification with a radio system for emergency communication.

This modification replaced the blue phone Notification and Coordination line with a radio system control base unit at the Main Control room, Technical Support Center, Emergency Operating Facility, and Plant Simulator Emergency Communication Desk on-site and at the state and county emergency operating centers. The blue phone Notification and Coordination Line has been found to be unreliable and required replacement. The intended applications for this system had no impact on any plant safety system and did not alter the previous impact for non-safety systems it supports. No unreviewed safety question was created by this change.

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### RMP 98-2016

Install a vent silencer on the Auxiliary Boiler relief valve vent piping.

This modification disconnected the 3" vent line (FA-036-HBD-3") down stream of Auxiliary Boiler pressure control valve FAPV0013 from the main vent piping. The 3" line was rerouted through the roof to vent to atmosphere. On the end of the new 3" line a vent silencer was added to eliminate the nuisance noise that was emitted by this line during Auxiliary Boiler operation. This modification was installed on the non-seismic, non-group D augmented, and non-safety related portion of the FA system in the turbine building. If this line failed, the resulting area impact would not result in the degradation of equipment important to safety. No unreviewed safety question exists.

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### RMP 98-2018

Install plant wide pager system amplifier and antenna.

The plant Ameritech pager system has been improved onsite by adding amplifiers and antennas to the Power Block, Service Building, Intake Structure, Training Center, Training Annex, and Stores Building #1 for improved coverage. By adding the antennas and amplifiers to the building and connecting them to the existing plant radio system coaxial cable, the pager signal available to the users within these building was increased. This change did not affect any plant safety-related systems or components. The implementation of this modification did not create an unreviewed safety question.

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### RMP 98-2020

Install conductivity monitors into each of the six condenser hotwell sections.

This modification provides a means to monitor all six condenser hotwells at the same time in order to better determine the location of possible tube leaks. Conductivity cells were installed in each of the six hotwell outlet lines. This change installed three conductivity analyzers and will connect the conductivity cells to the analyzer. Additional connections were made between the analyzer and the MicroMax computer located in the Cold Lab.

The Condensate System and the Process Sampling System are non-safety related and not associated with any accident analysis. This modification did not increase the consequences or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor was the possibility of an accident or malfunction of a different type than previously evaluated in the FSAR be created. It was concluded that no unreviewed safety question was created by these changes.

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### RMP 99-2019

Convert temporary Titanium Dioxide Skid into permanent plant equipment.

This modification added a non-safety related power supply to the Titanium Dioxide chemical addition skid, assigned CEL ID's to skid components, and added carbon steel plate around the Titanium Dioxide tank for housekeeping purposes. This change did not affect any pressure boundary or safety related component, equipment, or structure. This evaluation concluded that an unreviewed safety question did not exist for this modification.

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### OL-1177

#### Conversion from CTS to ITS

This amendment converted the current Technical Specifications (CTS) for the Callaway Plant to the improved Technical Specifications (ITS). The ITS are based on the CTS, on NUREG-1431, "Standard Technical Specifications [STS], Westinghouse Plants," Revision 1, dated April 1995, and on guidance provided in the Commission's Final Policy Statement, "NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactor," published on July 22, 1993, and in 10 CFR 50.36, "Technical Specifications," as amended July 19, 1995. The objective of the amendment was to rewrite, reformat, and streamline the CTS to improve safety and the understanding of the Bases underlying the Technical Specifications.

These change were approved by the NRC via Amendment 133, dated May 28, 1999.

Ref: CMP 99-1041, Revision A

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### OL-1198

#### Revise reactor trip setpoints with inoperable MSSV's.

This amendment request revised Technical Specification Limiting Condition for Operation (LCO) 3.7.1, in that the maximum allowable reactor power for a given number of operable Main Steam Safety Valves (MSSVs) per steam generator is reduced in Table 3.7.1-1 and in Required Action A.1. These changes will result in decreasing the setpoint values for the power range neutron flux high channels, which are part of the reactor trip system(RTS) instrumentation in Table 3.3.1-1, and will result in the reactor operating at a lower power for a given number of operable MSSVs per steam generator. In addition, two format errors in the actions for LCO 3.7.1 were corrected.

NRC approved these changes via Amendment 136, dated May 26, 2000

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### OL-1199

#### Revise SGTR and MSLB Radiological Consequences

This amendment request revised the description of the steam generator tube rupture and main steam line break accident in the Callaway Final Safety Analysis Report (FSAR) to reflect increases in the radiological dose consequences calculated for these accidents. These revisions will be incorporated into FSAR update revision OL-12.

NRC approved these changes via Amendment 139, dated September 27, 2000.

Ref: FSAR Change Notice 99-039  
Technical Specification Bases CN 00-035

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### OL-1203

#### Approve plant specific application of the PTLR methodology.

This amendment request revised Section 5.6.6, "Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)," of the improved Technical Specifications (ITS) that were issued on May 28, 1999. The changes to the ITS would add criticality to the list of conditions for the reactor coolant system pressure-temperature (RCS P/T) limits, expand the PTLR to include the analytical methods for the low temperature overpressure protection (LTOP) power operated relief valve (PORV) lift settings, and change the list of documents that provide the analytical methods for the RCS P/T limit curves and PORV lift settings in ITS Section 5.6.6. There is a separate P/T limit curve for reactor heatup to power operation and for reactor cooldown from power operation to shutdown. The LTOP system for Callaway, in the plant-specific technical description, is the cold overpressure mitigation system (COMS). With this amendment, the RCS P/T limit curves and the COMS PORV lift settings were removed from the technical specifications and placed in the PTLR.

These changes were approved by the NRC via Amendment 134, March 24, 2000.

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### OL-1204

#### Editorial corrections to Improved Technical Specifications.

This amendment request would revise several sections of the improved Technical Specifications (ITS) to correct 14 editorial errors made in either (1) the application dated May 15, 1997, (and supplementary letters) for the ITS, or (2) the certified copy of the ITS that was submitted to the NRC and issued as Amendment 133. This change was approved by the NRC via Amendment 135 on March 27, 2000.

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### OL-1206

#### Revise pressurizer safety valve setpoint and allowable setpoint tolerance

This amendment request expanded the range of acceptable lift settings and tolerance of the as-found, measured lift settings for the pressurizer safety valves (PSVs) to be considered operable. Following testing, the as-left lift settings of the PSVs would remain at the current tolerance of +/- 1%, but the nominal lift setting would be reduced. The amendment request (1) revised Technical Specification 3.3.2, "Engineered Safety Features Actuation System Instrumentation," 3.4.10, "Pressurizer Safety Valves," and 3.4.11, "Pressurizer Power Operated Relief Valves (PORVs)," and (2) approved Callaway Plant not having to comply with TMI Action Plan Item II.K.3.1 for automatic PORV block valve closure.

NRC approved these changes via Amendment 137, dated September 25, 2000.

Ref: CMP 00-1005  
FSAR CN 00-001

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### OL-1208

#### Add ESF response time verification testing to Technical Specification 3.3.2

This amendment revised Table 3.3.2-1, "Engineering Safety Feature Actuation System (ESFAS) instrumentation," of the TSs. This revision added Surveillance Requirement (SR) 3.3.2.10 for the following two ESFAS instrumentation in the table: item 6.f, loss of offsite power, and item 6.h, auxiliary feedwater pump suction transfer on suction pressure-low. This change was approved by the NRC via Amendment 141 on February 12, 2001.

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### OL-1209

#### Allow open containment penetrations under admin. control during core alterations

This amendment revised Limiting Condition for Operation (LCO) 3.9.4, "Containment Penetrations," of the Callaway Plant Technical Specifications (TS) to allow containment penetrations with direct access to the outside atmosphere to be open under administrative controls during refueling operations, by adding a note to the LCO that states "containment penetration flow path(s) providing direct access from the containment atmosphere to the outside atmosphere may be unisolated under administrative controls." In addition, there was a format and editorial correction to TS 3.8.3 "Diesel Fuel Oil, Lube Oil, and Start Air," to correct an error in the conversion to the improved TS issued May 28, 1999, in Amendment No. 133.

NRC approved these changes via Amendment 138, dated September 26, 2000.

Ref: TS BASES CN 00-028  
FSAR CN 00-035

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### OL-1210

#### Replace ESF Transformers with Automatic Load Tap Changers Transformers.

This amendment authorized changes to the FSAR related to the installation of replacement engineered safety feature (ESF) transformers. This amendment allows the replacement of the ESF transformers with new transformers having active automatic load tap changers (LTCs). This change was approved by NRC via Amendment 143 on April 6, 2001.

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### OL-1212

Revise Technical Specification 3.5.2 to incorporate NOED footnote to SR 3.5.2.5.

This amendment added a footnote to Surveillance Requirement (SR) 3.5.2.5 that states that verification of the automatic closure function of the residual heat removal (RHR) pump suction Valve BNHV8812A shall be performed prior to startup from the first shutdown to Mode 5 occurring after September 8, 2000, but not later than June 1, 2001. The next refueling outage for Callaway is scheduled for April 2001.

NRC approved these changes via Amendment 140, dated October 4, 2000

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### OL-1213

Revise Technical Specifications to incorporate changes made to 10CFR50.59.

This amendment revised TS 5.5.14 "Technical Specifications (TS) Bases Control Program" to reflect the changes made to 10 CFR 50.59 as published in the Federal Register on October 4, 1999. This change was approved by NRC via Amendment 142, dated March 15, 2001.

Ref: FSAR Change Notice 00-069

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### OL-1214

Post Accident Sampling System Elimination

This amendment deletes Section 5.5.3, "Post Accident Sampling," from the Technical Specifications and thereby eliminates the requirements to have and maintain the post-accident sampling system (PASS). This change was approved by NRC via Amendment 144 on April 6, 2001.

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### ETP-EA-ST001

#### Service Water Strainer Installation Retest.

Procedure ETP-EA-ST001 tested the automatic strainers installed in the discharge of the Service Water pump under modification 00-2007. The failure modes identified with this test did not affect equipment important to safety, or any accident precursors. During accident conditions, the Service Water system is isolated by the Essential Service Water system. Consequently, this test could not have adversely affected safety related equipment. This test did not result in an unreviewed safety question.

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### ETP-EF-0002A & B

#### Revise procedures to reduce the required ESW flow to the containment coolers

This FSE supports implementation of a minimum required Essential Service Water (ESW) flow rate to the containment coolers of 3200 gpm per train. Technical Specification Bases 3.6.6 and FSAR 6.2.2.2.2 reference a minimum cooling water rate of 4000 gpm per train.

RFR 20207, Revision B and its associated Formal Safety Evaluation have already been approved and demonstrate the acceptability of lowering the minimum required flow rate to as low as 2000 gpm. Calculation GN-03, Revision 4 determined that a 3200 gpm flow rate per train is desirable given the existing material condition of the containment coolers.

This evaluation conclude that no unreviewed safety question was created by this change.

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### ETP-NB-ST001

#### Capacitor Bank NB03 Energization and Testing

Engineering test procedure ETP-NB-ST001 tests CMP 99-1038, Rev. B which installed two 6 MVAR non-safety related voltage correction capacitor banks on the secondary side of the non-safety related Engineered Safety Features Transformers. This procedure only covers capacitor bank NB03 energization and testing. The 6 MVAR capacitor banks equipment will help assure that the minimum required NB bus voltage established by AmerenUE calculation ZZ-62, Rev. 6 is met for a wider variance in the switchyard grid voltage. PRA Evaluation Request No. 00-117 documents that the installation of the capacitor bank equipment will create a net decrease in the Callaway core damage frequency when compared to the Callaway core damage frequency which could result from an increased probability of a loss of the preferred offsite source due to wider variances in the switchyard grid voltage. It was concluded that no unreviewed safety question was create by the performance of this procedure.

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### ETP-NB-ST002

#### Capacitor Bank NB04 Energization and Testing

Engineering test procedure ETP-NB-ST002 tests CMP 99-1038, Rev. B which installed two 6 MVAR non-safety related voltage correction capacitor banks on the secondary side of the non-safety related Engineered Safety Features Transformers. This procedure only covers capacitor bank NB04 energization and testing. The 6 MVAR capacitor banks equipment will help assure that the minimum required NB bus voltage established by AmerenUE calculation ZZ-62, Rev. 6 is met for a wider variance in the switchyard grid voltage. PRA Evaluation Request No. 00-117 documents that the installation of the capacitor bank equipment will create a net decrease in the Callaway core damage frequency when compared to the Callaway core damage frequency which could result from an increased probability of a loss of the preferred offsite source due to wider variances in the switchyard grid voltage. It was concluded that no unreviewed safety question was create by the performance of this procedure.

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### ETP-NB-ST004

#### Capacitor bank NB04 switching surge analysis testing

Engineering test procedure ETP-NB-ST004 provides additional testing for modification CMP 99-1038, Revision B, which installed two 6 MVAR non-safety related voltage correction capacitor banks on the secondary side of the non-safety related Engineered Safety Features transformers. The 6 MVAR capacitor bank equipment will help assure that the minimum required NB bus voltage established by AmerenUE calculation ZZ-62, Revision 6 is met for a wider variance in the switchyard grid voltage. PRA Evaluation Request No. 00-117 documents that the installation of the capacitor bank equipment will create a net decrease in the Callaway core damage frequency when compared to the Callaway core damage frequency which could result from an increased probability of a loss of the preferred offsite source due to wider variances in the switchyard grid voltage.

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### ETP-NB-ST005

#### Transformer XNB01 Energization and Testing.

This procedure tested the new automatic load tap changing Essential Safety Features transformer, non-safety related voltage correcting transformer installed by CMP 99-1038. This test procedure tested the automatic load tap changer (LTCs) feature. The LTCs will work in conjunction with the capacitor banks, installed under revision B to CMP 99-1038, to control the voltage on class 1E busses NB01 and NB02. Initial testing was done with the transformers not tied to their associated busses. Additional testing was done tied to the bus under controlled conditions. During this portion of the test, the transformer being tested was not the Operable Train. This testing assured that the new transformers provided the minimum required NB bus voltage established by AmerenUE ZZ-62 for a wider variance in the switchyard grid voltage. Performance of this test did not create an unreviewed safety question, due to the equipment manipulations being done in accordance with existing procedures, which did not create any situation that was not already been evaluated.

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### ETP-NB-ST006

#### Transformer XNB02 Energization and Testing

This procedure tested the new automatic load tap changing Essential Safety Features transformer, non-safety related voltage correcting transformer installed by CMP 99-1038. This test procedure tested the automatic load tap changer (LTCs) feature. The LTCs will work in conjunction with the capacitor banks, installed under revision B to CMP 99-1038, to control the voltage on class 1E busses NB01 and NB02. Initial testing was done with the transformers not tied to their associated busses. Additional testing was done tied to the bus under controlled conditions. During this portion of the test, the transformer being tested was not the Operable Train. This testing assured that the new transformers provided the minimum required NB bus voltage established by AmerenUE ZZ-62 for a wider variance in the switchyard grid voltage. Performance of this test did not create an unreviewed safety question, due to the equipment manipulations being done in accordance with existing procedures, which did not create any situation that was not already been evaluated.

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### ETP-NE-ST001

#### Diesel Generator NE01 Governor Testing

This procedure performed the initial energization, setup and Operability testing of the new diesel generator controls being installed by CMP 99-1044. The new governor control system performs the same functions of the existing control system in addition to allowing "slow" start testing of the engine to reduce wear and stress during surveillance testing. The new governor control system continues to control the Emergency Diesel Generator such that all starting times, response times, stability, and reliability requirements discussed in the FSAR and Technical Specifications are met. No unreviewed safety question exists nor is created by the actions/activities described in this evaluation.

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### ETP-NE-ST002

#### Diesel Generator NE02 Governor Testing

This procedure performed the initial energization, setup and Operability testing of the new diesel generator controls being installed by CMP 99-1044. The new governor control system performs the same functions of the existing control system in addition to allowing "slow" start testing of the engine to reduce wear and stress during surveillance testing. The new governor control system continues to control the Emergency Diesel Generator such that all starting times, response times, stability, and reliability requirements discussed in the FSAR and Technical Specifications are met. No unreviewed safety question exists nor is created by the actions/activities described in this evaluation.

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### ETP-SK-ST002

#### Iriscan site acceptance test procedure.

This evaluation covers the site acceptance test for the iriscan biometric identification system. The iriscan system identifies a person using the eye's iris. The security computer compares this identity to the card inserted at the entrance card readers and grants access only if they match. Since the iriscan system did not affect any safety related systems or components, and therefore does not increase the possibility or magnitude of an accident or malfunction. No unreviewed safety question exist for this procedure.

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### ETP-SP-ST001

#### RM-11R Site Acceptance

This procedure verified proper installation and operation of the new RM-11R computer system installed under CMP 97-1018. The testing of the RM-11R computer system did not impact the ability of the safety related radioactivity monitors to perform their required safety function. The evaluation determined that no unreviewed safety question was created by performing this test procedure.

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### ETP-ZZ-ST025

#### Control Cabinet Seismic Modal Testing.

Procedure ETP-ZZ-ST025 was performed to provide data of the in-cabinet response spectra for future seismic evaluations. This test used a mechanical excitation device to test the cabinet for seismic modes below 50 Hz. There was no threat to the capability of the cabinet since the seismic level is less than the level of the SSE in the cabinet. Further, the EMI concerns were addressed by adequate test precautions. The evaluation conclude that the performance of this testing would not adversely effect the plant and that no unreviewed safety question exists.

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### OSP-EF-P001A & B

#### Revise procedures to reduce the required ESW flow to the containment coolers

This FSE supports implementation of a minimum required Essential Service Water (ESW) flow rate to the containment coolers of 3200 gpm per train. Technical Specification Bases 3.6.6 and FSAR 6.2.2.2.2 reference a minimum cooling water rate of 4000 gpm per train.

RFR 20207, Revision B and its associated Formal Safety Evaluation have already been approved and demonstrate the acceptability of lowering the minimum required flow rate to as low as 2000 gpm. Calculation GN-03, Revision 4 determined that a 3200 gpm flow rate per train is desirable given the existing material condition of the containment coolers.

This evaluation conclude that no unreviewed safety question was created by this change.

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### OSP-EP-V0006

#### SI Accumulator Discharge Check Valve Test.

This procedure satisfies the Inservice Test (IST) Program and Technical Specification requirements that the open stroke capability of the SI Accumulator Discharge Check Valves be verified in accordance with the established IST program. Procedural controls were established to ensure accumulator temperature and pressure is maintained at levels such that the design transient analysis for the SI Accumulators remains bounded by existing analysis. Additionally, procedural steps are provided to prevent the possibility of gas intrusion into an operational RHR pump. There are also procedural steps added to ensure there was no challenge to the shutdown margin in the Reactor Coolant System. Finally, RFR 21015 reviewed the test procedure conditions and verified that there were no thermal-hydraulic concerns with performing this test. It was determined that the performance of OSP-EP-V0006 did not create an unreviewed safety question.

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### OTO-ZZ-00001

#### Control Room Inaccessibility

Revision 18 added steps for operator actions to ensure lockouts are reset on NE106 and to manually close breaker NB0211. The changes made in this revision will increase the efficiency of the Control Room Evacuation procedure and did not adversely affect safe shutdown of the plant. The evaluation concludes that there was no unreviewed safety question associated with this procedure revision.

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### **RFR 05259**

#### Evaluate increased flood level in Auxiliary Building rooms 1206 and 1207

Revision B to this RFR evaluated the increased flooding level due to covering two of the four floor drains in the Auxiliary Building rooms 1206 and 1207. Covering of the two drains was approved in Revision A to this RFR. The evaluation concluded that the flood level in the rooms would increase from 0 inches to 6 inches. This increase did not adversely impact any previous accident analysis, safety related equipment, or the Technical Specifications. No unreviewed safety question was created by this change.

Ref: FSAR CN 00-029

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### **RFR 06597**

#### Operability evaluation of diesel generator during cross-connect operations.

This RFR evaluated the performance of the fuel oil cross tie procedure OSP-JE-00001 and its effects on diesel generator operability. The evaluation concludes that if possible the procedure should be performed when the core is off loaded. If the procedure must be done in mode 5 or 6, then additional controls must be in place to ensure diesel generator operability. These additional controls consist of Operations personnel stationed in each diesel generator room during the performance of OSP-JE-00001. The Operations personnel must have established communications between the rooms and with the control room during the performance of OSP-JE-00001 in mode 5 or 6. This evaluation did not identify an unreviewed safety question.

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### RFR 13311

Change BGV0638 to a normally open valve.

Revision D to this RFR changed the alignment of the cross tie line between the charging and letdown lines by making BGV0638 a normally open versus normally closed valve.

Operating with BGV0638 in the open position during normal and off-normal lineups has no detrimental affects on the function of the Chemical and Volume Control System, nor did it adversely affect the plant's accident analysis. The evaluation concluded that operating with this cross tie line unisolated during normal plant operation did not create an unreviewed safety question.

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### RFR 15205

Replace temporary drain valve downstream of AEV0256.

This material equivalent design change removed a temporary valve connection and a temporary drain valve. The temporary drain valve was replaced with a 1" gate drain valve. The new drain valve meets or exceeds the original design requirements of the original 1" drain valve, AEV0256. The affected piping segment and valves are not safety related and are not seismic. The function of this section of piping is to help facilitate draining of the Main Feedwater Pump A suction header. This material equivalent design change did not affect the original design function of the drain line, did not affect the Technical Specifications, and did not create an unreviewed safety question.

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### RFR 15893

Evaluate the use of flanges on the CCW system with the core offloaded.

The disposition of revision B limits this evaluation to the period of time when fuel has been off-loaded from the reactor. During this time, the safety-related function of the CCW system is to provide cooling flow to the spent fuel pool heat exchanges for removal of decay heat. The spent fuel pool is designed to preclude criticality even in the event of loss of borated water. Multiple sources of makeup water are available to the pool should a loss of cooling to the pool lead to excessive evaporation. This includes redundant emergency makeup trains from the essential service water system. Based on this evaluation, no unreviewed safety question was created by this change.

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### RFR 16214

#### Operability of the High Head Safety Injection with BGHV8357A/B inoperable & open

Revision B to this RFR determined that the Operability of the High Head Safety Injection System (HHSIS) was unaffected by the position of either BGHV8357A or B. In the event of a Safety Injection Signal in conjunction with an assumed mechanical or electrical single failure associated with either Centrifugal Charging Pump (CCP), the flow through the boron injection header is maintained by the closure of the associated CCP discharge check valve (BG8481A/B). BG8481A/B are tested in the closed position in accordance with the Inservice Test Program. Flow from the operating CCP is still limited through the RCP seals by the seal injection throttle valves. The position of the seal injection throttle valves ensures the flow balance of the HHIS through the boron injection header. This evaluation did not identify an unreviewed safety question.

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### RFR 16346

#### Provide guidance for testing M&TE to determine potential for intrusiveness

Revision C established testing of M&TE to be used at Callaway Plant in order to determine what happens to the impedance of the M&TE during various potential failures. The information gathered by these tests are used to evaluate whether the M&TE would be intrusive in the event of a failure of the M&TE or its power source. The testing will only be performed on M&TE and not on permanently installed plant equipment, so this RFR cannot result in any accident or malfunction of plant equipment. This RFR did not create an unreviewed safety question.

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### RFR 17164

#### Increase turbine low vacuum alarm and trip switch setpoints

This change increased the turbine low vacuum alarm and trip switch setpoints. The setpoints are being increased to the allowable limits specified by the turbine manufacturer as a result of a GE specific evaluation for Callaway Plant turbine number 170X732. This setpoint change did not have any adverse impact and did not affect or interface with any safety-related component or system. The changes represented in this modification did not represent an unreviewed safety question.

Ref: OTA-RL-RK113, Revision 2  
OTA-RL-RK116, Revision 3  
OTA-RL-RK117, Revision 3  
OTA-RL-RK118, Revision 4  
OTO-AD-00001, Revision 9

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### RFR 17184

#### Evaluate Function of Purge Damper Flanges

This evaluation determined that the proposed Improved Technical Specification change allowing the blank flanges for the Containment Shutdown Purge Isolation Valves to remain open in Modes 1 through 4 is acceptable provided the Containment Shutdown Purge Isolation Valves are disabled in the closed position and the integrated leak rate test (ILRT) is performed with the blank flanges removed. The valves are qualified to perform their containment isolation function and will perform the same function as the blank flanges. The valves will continue to be verified capable of performing their safety function during performance of the local leak rate tests (LLRT's) per 10 CFR 50 Appendix J requirements every refuel. The Containment Purge System will not be adversely impacted by this change and will remain capable of performing its safety functions. No unreviewed safety question is created by this change.

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### RFR 17787

#### Install fuel transfer canal cover.

This RFR installed a 9 foot long section of floor plate at the south end of the fuel transfer canal in the fuel building. This floor plate provides a staging point for the manbasket when access to the transfer canal is required. This installation did not adversely affect any plant safety system, plant design, or plant operation. There was no unreviewed safety question created by this change.

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### RFR 18471

#### Evaluate boration flow paths from RWST during Mode 6 with reactor head removed.

This evaluation addressed the use of boration flow paths from the RWST during MODE 6 when the reactor vessel head is removed and water level greater than or equal to 23 feet above the reactor vessel flange (RHR, CCP, or SI pump), and during MODE 6 when the reactor vessel head is removed and water level is less than 23 feet above the reactor vessel flange (CCP or SI pump). Restricting the use of RHR flow paths to those not otherwise required for shutdown cooling and maintaining an OPERABLE RWST ensures that all safety functions of plant systems are maintained. Procedure OSP-BG-0001A was implemented to identify and control these boration flow paths. The evaluation determined that use of the alternate flow paths did not result in an increase in the probability or consequence of accidents and malfunctions currently evaluated, did not generate new or different accidents or malfunctions, and does not reduce the plant's margin of safety. No unreviewed safety question was generated by these changes.

Ref: Procedure OSP-BG-0001A, Revision 0

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### RFR 18534

#### Redesign ladder to the roof of the Radwaste Building.

Revision B reconfigured an existing ladder to the roof of the Radwaste Building to enhance personnel safety when accessing. There were no plant systems or equipment affected by the incorporation of this RFR. This change did not adversely affect the Fire Protection Program, Seismic II/I Program, or any other plant program. No unreviewed safety question exists as a result of this change.

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### RFR 18601

#### De-oxify Boric Acid Tanks using nitrogen sparging.

Revision C to this RFR approved de-oxifying Boric Acid Tank "A" by sparging the tank with nitrogen from a liquid nitrogen dewar. In order for this to be done, the Refueling Water Storage Tank and its outlet valves and Boric Acid Tank "B" must be operable during the sparging. The sparging was performed with the "A" tank isolated and declared inoperable. The tank's transfer pump was placed in pull to lock but could be returned to service and cross connected to the operable tank if the other pump was removed from service. All accident analysis as documented in the FSAR remains valid and there were no adverse affects on any safety related equipment. No unreviewed safety question exists.

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### RFR 19131

#### Install a permanent temperature indicator in Auxiliary Building Area 5.

This RFR approved the installation of a permanent temperature indicator in the Auxiliary Building Room 1508 (Area 5). The modification will permit the monitoring of ambient temperature. The new temperature indicator is solar powered and mounted per seismic II/I instrument support details.

The installation of the new temperature indicator in Area 5 did not challenge any plant system important to safety or create any accident scenarios not previously analyzed in the FSAR. This change did not create an unreviewed safety question.

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### RFR 19205

Evaluate impact of Limitorque Technical Update 98-01 on plant equipment.

This RFR documented an engineering evaluation of Safety Related Motor Operated Valves (MOV) with consideration of the revised Limitorque actuator sizing equation incorporating Limitorque Technical Update 98-01 changes. These changes effect the Actuator Output Thrust at Reduced (Degraded) Voltage Capacity. For the opening stroke of the MOV, this capacity should be in excess of the thrust required to unseat the valve and to open against any DP effect. For the closing stroke of the MOV, this capacity should be in excess of the thrust required to close against DP effects. Since Calculation ZZ-224 Revision 7 confirms that the present setup of the MOVs is acceptable, no unreviewed safety question exists.

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### RFR 19222

Change the normal position of valve KAV0038 from LOCKED CLOSED to CLOSED

This RFR revised drawing M-22KA02 to changed the designated position of valve KAV0038 from LOCKED CLOSED to CLOSED. This valve is normally closed to isolate service air from containment during plant operation. The valve position will remain normally closed but it was not necessary that this valve be locked. Valve KAV0118 is the LOCKED CLOSED isolation valve for this containment penetration. The disposition of this RFR does not represent any physical changes to any plant component, nor did it impact any original accident analyses. No unreviewed safety question exists for this change.

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### RFR 19267

Determine valves required to be include in Tech. Spec. 4.7.3.a surveillance.

RFR 19267 evaluated the required Technical Specification flow path for Component Cooling Water (CCW) to provide flow to safety related equipment. The RFR required several valves to be locked in their normal position. These valves are manual valves whose normal position and accident position is the same. Locking these valves to ensure that CCW in maintained properly aligned to provide flow to safety related equipment. There is no change to the method by which any safety related plant system operates or performs its safety function. No unreviewed safety question exists.

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### RFR 19362

Evaluate discrepancies between FSAR and CEL on safe shutdown equipment.

RFR 19362 evaluated discrepancies between FSAR Table 9.5B-2, Equipment Required for Safe Shutdown following a Fire, and the Callaway Equipment List (CEL). These inaccuracies were identified during the FSAR review effort. The errors identified in the FSAR and CEL were editorial in nature and did not require any physical changes to the plant. The conclusions of the FSAR Fire Hazards Analysis for the plant were not changed as a result of this RFR. This RFR resolution did not result in an unreviewed safety question.

Ref: FSAR CN 99-020

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### RFR 19480

Revise drawing notes to clarify seismic analysis boundary for EGFT0108.

This RFR revised note 2 in drawing M-22EG03 to indicate that the seismic analysis extends beyond the flow transmitter, EGFT0108. The Component Cooling Water (CCW) piping is seismically analyzed beyond the flow transmitter to the floor penetration as shown in Bechtel Stress Problem P-083A. This RFR did not involve any physical changes to the plant, plant operations, or design bases. This change did not create an unreviewed safety question.

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### RFR 19515

Generic evaluation of non-plant equipment storage.

Revision B updated the baseline engineering analysis for permanent storage of future non-plant equipment items in the plant. This generic evaluation will provide the basic criteria and licensing reviews which future evaluations may utilize as long as the conditions specified in this RFR are met. Individual RFR's will verify the applicability of this generic evaluation and will update the affected design documents. Permanent storage of non-plant equipment items, as described in the RFR, in the plant will not affect plant safety. These changes did not adversely affect the Fire Protection Program, Seismic II/I Program, or any other plant program. No unreviewed safety question exists as a result of these changes.

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### RFR 19585

Replace carbon steel valves in SWS and ESW with stainless steel valves.

Revision D to this RFR approved the replacement of five carbon steel gate valves in the Service Water System (SWS) with stainless steel valves and the change of one of the gate valves to a globe valve.

Revision E to this RFR approved the replacement of 4" and 2-1/2" carbon steel gate valves in the Essential Service Water System (ESW) to stainless steel.

Revision F allowed the installation of stainless steel 3" and 4" manual globe valves as equivalent replacement to the original plain carbon steel valves in the Essential Service Water system.

RFR 19585 revision G approved the installation of stainless steel 10" manual gate valve as equivalent to the original plain carbon steel valves on the Essential Service Water (ESW) supply to the Containment Coolers.

Revision J allowed the installation of stainless steel 3" motor operated gate valves as equivalent to the original plain carbon steel valves in the Essential Service Water System

The change to stainless steel improved the corrosion resistance and reduces the possibility of line blockage. These changes will not alter the system design function or effect any associated plant equipment necessary for accident mitigation or safe plant shutdown. The changes did not result in an unreviewed safety question.

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### RFR 19637

#### Approve the use of an ultrasonic fuel cleaner.

This RFR approved the use of an ultrasonic fuel cleaning apparatus to remove crud from partially burned fuel assemblies to be reloaded into the reactor and the immersion of the treated coupon assembly while fuel cleaning operations are being performed.

The ultrasonic cleaning process was developed by Dominion Engineering, Inc., under the sponsorship of EPRI's Robust Fuels Program. This evaluation concluded that use of the ultrasonic fuel cleaning apparatus in the spent fuel pool as described in this RFR would not adversely affect any safety related systems or components. Also it was determined that the use of the ultrasonic cleaning process on the fuel assemblies would not adversely affect the fuel assemblies such that they could not be operated for the remainder of Cycle 11. It was determined that no unreviewed safety question exists for this change.

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### RFR 19673

#### Evaluation of open penetrations in building pressure boundaries.

Per RFR 19673, it is permissible to have concurrent open penetrations in the Control Room pressure boundary, such as between the Control Room and Control Building and between the control room and the environment. Open penetrations between the Control Room and Auxiliary Building are not permitted. Total open penetration areas are limited as described in the RFR and calculation ZZ-428 Addendum 3. In addition, administrative controls will limit penetration breach time when penetrations openings are added between Control Room and areas outside the Control Building, or the Control Room filtration system discharge flows are verified greater than or equal to 2000 cfm for each train per the latest surveillance data. Control Room filtration system flows (makeup and recirculation) may be revised in the FSAR to agree with previously approved license amendment documents and plant procedures. No unreviewed safety question exists as a result of these changes.

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### RFR 19717

#### Review of ESF, ESFAS, and RPS Response Time.

RFR 19717 revision A reviewed the Engineering Safety Features (ESF) Response Times required by Technical Specifications 4.3.2.2 and FSAR Table 16.3-2. This review ensured that specific response times included in FSAR Table 16.3-2 are consistent with the response times stated in other FSAR sections and those assumed in all FSAR Chapter 15 analyses of record. The method of performing response time testing of parallel circuits was also evaluated and found to be acceptable. Based on the results of this review, a FSAR Change Notice was initiated to clarify the ESF response time requirements in FSAR Table 16.3-2 and to remove all identified inconsistencies with related FSAR sections. A paragraph was also added to section 7.1.2.6.2.b to clarify response time testing requirements.

Revision B reviewed all Reactor Protection System (RPS) and Engineered Safety Feature Actuation System (ESFAS) response times credited in accident analyses to ensure that they were included in and bound the response times listed in FSAR Tables 16.3-1 and 16.3-2. FSAR Table 16.3-2 was revised to add response times found to be credited in accident analyses that were not include in the FSAR and revised those response times that were not bound by those credited in the accident analyses.

It was concluded that these changes did not constitute an unreviewed safety question.

Ref: FSAR CN 99-044

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### RFR 19787

Clarify Hydrogen Analyzer Isolation valves are maintained normally closed.

Revision B to this RFR clarified in the FSAR that the Hydrogen Analyzer Containment Isolation Valves are normally closed during power operations. Also, the Failure Modes and Effects Analysis of the Device Level Manual Override circuits for the sample valves that are closed by a Phase A Containment Isolation Signal is being rewritten to reflect the as-built design. Since this is a clarification only, and there are no changes to the actual operation of the valves, there is no increase in the probability of occurrence or the consequences of any accidents or malfunction of equipment important to safety as a result of this change. This RFR and associated FSAR Change Notice did not result in an unreviewed safety question.

Ref: FSAR CN 99-036

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### RFR 19875

Change administrative control for 3 radiation monitors HI-Alarm setpoints.

This RFR allowed the Hi-Alarm setpoints for radiation monitors BM-RT-0025, GE-RT-0092, and SJ-RT-0002 to be administratively controlled by procedure to always correspond to 30 gpd primary to secondary leakage. These radiation monitors perform no function that are assumed to mitigate the consequences of any accident in the FSAR, they cannot create the possibility of an accident different than any evaluated in the FSAR, and they are not associated with any Technical Specification. Therefore, this change did not create an unreviewed safety question.

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### RFR 19888

#### Operation with UHS Cooling Tower Fill Bypass Valves Closed and De-Energized

Revision A of this RFR allowed operation of the Ultimate Heat Sink Cooling Tower with the tower fill bypass valves closed and de-energized. This was done to prevent excessive vibration in the Essential Service Water system. Previous RFRs 006103 and SOS 87-0034 had 10 CFR 50.59 Evaluations performed to support operations with the control power removed from these valves.

The previous evaluations determined that no unreviewed safety question existed. The conditions of RFR 19888A were not exactly the same as those evaluated in the previous RFR and SOS. However, the conclusions of the previously performed 50.59 Evaluation remain valid for the results of RFR 19888A for warm weather operations.

During the annual NRC inspection of 10 CFR 50.59 (3/19/01) the inspector noted that RFR 19888A met the screening criteria to have a 50.59 Evaluation performed. However, the personnel involved at the time (6/10/99) credited the former 50.59 Evaluations. The inspector agreed with the technical conclusions of these documents. However, not performing a new 50.59 Evaluation resulted in this RFR not being on the report at the time the RFR was processed.

This was identified on corrective action document 200101272. RFR 19888A was completed on 6/10/99 reporting of this RFR therefore timely.

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### RFR 19899

#### Evaluate rod control system design document discrepancies.

This RFR initiated an editorial change to section 7.7.2.2 of the FSAR to revise the text to read "12 steps" instead of "15 inches" for the discussion of a misaligned RCCA rod deviation alarm. This RFR did not change the design or function of any system, structure or component described in the FSAR or Technical Specifications. This change is strictly an editorial change to the FSAR text and did not result in an unreviewed safety question.

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### RFR 19933

#### Technical Specification Interpretation (TSI) 32, Revision 8

A concern was documented that inadequate actions were performed by the respondents to SOS 99-1227 to address the Rod Withdrawal from Subcritical (RWFS) event in Mode 3. To ensure protection was provided in the event of an uncontrolled rod withdrawal while in Modes 3, 4, and 5, a Technical Specification change was initiated to extend the operability and surveillance requirements for the Nuclear Instrumentation System (NIS) power range neutron flux (low) reactor trip function to Modes 3, 4, and 5 with the Rod Control System capable of rod withdrawal or one or more rods not fully inserted. Until this proposed Technical Specification change is approved, administrative controls were established in Technical Specification Interpretation (TSI) 32, revision 8. This RFR evaluated these administrative controls, as well as the option to response time test the Source Range Reactor Trip Function. The evaluation concluded that no unreviewed safety question existed for revision 8 to TSI-32.

Ref: Technical Specification Interpretation 32, revision 8.

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### RFR 19946

#### Evaluate discrepancy in FSAR Section 15.2.3.1.

This RFR evaluated a discrepancy in FSAR Section 15.2.3.1 regarding interaction between turbine stop valve position switches and the steam dumps. It was determined that the present wording in FSAR section 15.2.3.1 incorrectly states that the limit switches on the turbine stop valves will initiate steam dump. In actuality, the limit switches on the turbine stop valves initiate a reactor trip above 50 percent power. Reactor trip will arm the steam dumps. The incorrect wording will be removed, with no impact on the plant design or operation. No unreviewed safety question exists.

Ref: FSAR CN 99-037

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### RFR 19956

#### Revise FSAR description of the High Energy Line Break Hazards Analysis.

Discrepancies were identified by the FSAR Review Task Team between the High Energy Line Break Hazards Analysis (HELBA) and the FSAR. This RFR corrected those discrepancies to ensure the FSAR correctly describes the plant as it was analyzed. Administrative changes were made to the FSAR figures and tables to ensure they are in agreement with the HELBA. This RFR does not represent any physical changes to any plant component nor will it change any of the original accident analyses.

This RFR did not increase the consequences or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor will the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR be created. In addition, there was no reduction in the margin of safety as defined in the basis for any Technical Specification. The changes did not result in an unreviewed safety question.

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### RFR 19998

#### Revise FSAR description of Turbine Bypass System.

Revision B to this RFR evaluated discrepancies identified by the FSAR Review Team between FSAR Sections 10.4.4, 10.2.2.3.4, and 7.7.1 on how the Turbine Bypass System operates. It was determined that FSAR Sections 7.7.1 and 10.2.2.3.4 provided the correct description of the operation of the Turbine Bypass System. The operation of this system was previously evaluated in the FSAR. This RFR evaluation resulted in editorial changes to FSAR Section 10.4.4 to reflect FSAR Sections 7.7.1 and 10.2.2.3.4. There was no physical changes to the plant, nor any changes to the original accident analysis. It was determined that no unreviewed safety question exists.

Ref: FSAR CN 00-009

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### RFR 20001

Evaluated airborne sample carts used to obtain samples of gaseous effluents.

This RFR provided clarification to the design documents for airborne grab sample points currently used for radioactive effluent monitoring by adding a note to drawings M-22GH02, M-22GS01, and M-22GT01 which are included in the FSAR. A review was performed on the sampling units used for this monitoring and no concerns with plant safety were found. This RFR did not represent any physical change to any plant system, structure or component nor will it change any of the original accident analysis or reduce the margin of safety. This change did not create an unreviewed safety question.

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### RFR 20019

Operability evaluation for 12 motor operated valves.

This RFR documents the operability of 12 motor operated valves (MOV). During incorporation of Limitorque Technical Update 98-01 into the MOV program, these valves were identified as having their torque switch set higher than the actuator capacity at reduced voltage. This means that the torque switch may not trip when the actuator goes closed resulting in the motor going locked rotor and failing. As a result, the actuator would no longer be able to be positioned electrically. However, it was determined that there was no immediate safety concern since all the valves remained capable of performing their safety function.

This RFR did not change the plant, procedures, Technical Specifications or propose a test not described in the FSAR. Since the plant as currently configured is acceptable, an unreviewed safety question does not exist.

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### RFR 20048

#### Clarify the RELAP 4 analysis description in FSAR Section 3.6.2.2.1.4.

This RFR revised FSAR Section 3.6.2.2.1.4 to clarify the scope of RELAP 4 usage in analyzing pipe breaks, and to clarify high energy line break locations and break types for these analyses. With these changes the high energy line break analyses remains valid and no plant changes or additional analyses are required. No unreviewed safety question was created by these changes.

Ref: FSAR CN 99-037

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### RFR 20052

#### Acid Day Tank Level Switch Replacement

This RFR replaces the Acid Day Tank level switches with a level transmitter with four switchable relay outputs. The new level transmitter consolidates three instruments into one. The replacement Acid Day Tank level instrument provides a more reliable method of level detection than the current instruments. The functions of the new level transmitter has no impact on any plant safety systems, nor does it impact any accidents previously evaluated in the FSAR. This change did not create an unreviewed safety question.

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### RFR 20068

#### Replacement of the Acid day tank.

This RFR evaluated a replacement Acid Day Tank, TAK05, for the Condensate Demineralizer System. The Acid Tank Design was modified to utilize a protective coating especially designed to withstand the corrosive effects of sulfuric acid, to facilitate installation and minimize acid attack on the sealing surfaces, and to accommodate a new level instrument. The Acid Day Tank is not safety related and does not interface with any equipment important to safety. A failure of this tank did not effect any accidents previously evaluated in the FSAR. No unreviewed safety question was created by this change.

Ref: FSAR CN 00-004

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### RFR 20070

Revise FSAR SP Figure 3.9(N)-10 to reflect plant design.

During the FSAR Review Team's review of the Reactor Coolant System (RCS), discrepancies between FSAR Figure 3.9(N)-10 and the applicable drawings for the SNUPPS upper internals assembly were identified. The discrepancies were evaluated and resolved in RFR 20070. As a result, FSAR Figure 3.9(N)-10 was revised with a modified version of drawing 1223E03 view A-A to accurately reflect Callaway's upper internals design. No changes to installed plant equipment were authorized by RFR 20070. This drawing change did not create an unreviewed safety question.

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### RFR 20080

Revise drawing to show FBLV0043AV1 isolating both FBLV0043A and FBLV0043B.

Drawing M-22KA09 was revised to show that FBLV0043 AV1 is the last isolation valve before the end user, FBLV0043A and FBLV0043B. This drawing is represented in the FSAR as Figure 9.3-1 Sheet 9. The disposition of this RFR did not represent any physical change to any plant component, nor did it change any of the original accident analysis. This RFR did not represent an unreviewed safety question.

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### RFR 20088

Change the design of the STA's Gai-Tronics

This RFR approved the rewiring of the Gai-Tronics handset located on the STA's desk so that it would not be part of the fuel handling loop and would not isolate after a plant emergency alarm. The Gai-Tronics system is not safety related and does not interface with any safety related systems. This change did not affect any of the FSAR accident analysis. No unreviewed safety question was created by this change.

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### RFR 20106

Revise fiber optic drawings to show as-built configuration.

This RFR revised telephone system fiber optic drawings to show the as-built configuration. The telephone communication system has no safety design basis. The function of the system is to provide a communications path through out the plant. The changes made were editorial in nature and did not impact any safety related system. This change did not affect any safety analyses perform in the FSAR. No unreviewed safety question exists.

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### RFR 20110

Evaluate seismic system trigger setpoints.

RFR 20110 changed the setpoint for the seismic trigger instruments SGAE0001 and SGAE0002. The trigger setpoint was changed from 0.01g to 0.02g acceleration. This change will eliminate the spurious actuation and nuisance alarms generated during plant transients. The safety evaluation concluded that the change would not adversely affect the seismic instrumentation system from performing it required function. This change did not create an unreviewed safety question.

Ref: FSAR CN 99-062

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### RFR 20114

Evaluate liquid argon storage in room 3102 of the communication corridor.

RFR 20114, Revision A, evaluated the storage of liquid argon dewars in room 3304, elevation 2000 of the communication corridor. This RFR allows the storage of argon dewars in the area adjacent to the central chillers. These dewars will be used with the ICP-AES in the hot lab. The dewars are secured to the wall. Steel tubing connects the dewars to the equipment in the hot lab through an existing floor penetration. This is a self contained system that does not interface with any safety-related equipment or any system that supports safety-related equipment. This change did not create an unreviewed safety question.

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### RFR 20118

#### Revised FSAR description of neutron fluence calculation.

WCAP-14040-NP-A provides a description of the methodology used by Westinghouse to perform neutron fluence calculations. This methodology has been reviewed, validated, and approved by the NRC staff. This RFR initiated a FSAR Change Notice to revise the Callaway specific description of neutron fluence calculations in the FSAR to reflect that described in WCAP-14040-NP-A. This change was evaluated and determined that there was no adverse affect to the reactor vessel. No unreviewed safety question exists for this change.

Ref: FSAR CN 00-006

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### RFR 20186

#### Revise FSAR calculational methodology & pipe stress values for snubber reduction

This RFR approved a change to FSAR Section 5.2 to discuss changes to calculation methodology and pipe stress values associated with a modification performed to reduce the number of snubbers on the pressurizer safety and relief piping. Piping stresses, deflections and loads remain acceptable considering the snubber reduction modification. All design basis and regulatory requirements associated with the modification were satisfied and the associated FSAR changes notice did not result in an unreviewed safety question.

Ref: FSAR Change Notice 00-072

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### RFR 20198

Install permanent trolley & hoist system in Auxiliary Building rooms 1322 & 1323.

This RFR fabricated and installed a lightweight permanent trolley and hoist system in both the north and south piping penetration rooms 1322 and 1323 in the Auxiliary Building. This modification was performed in response to a personnel injury that occurred while lifting material from the 2000' elevation to the upper platform.

The installation meets all seismic II/I design requirements. Existing plant structures and components were not adversely affected by this modification. The safety evaluation concluded that an unreviewed safety question did not exist.

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### RFR 20247

Material equivalency evaluation for PASS replacement gamma spec detector.

This change involved replacing the Post Accident Sampling System (PASS) gamma spectroscopy detector and preamplifier with equivalent model. The new detector and preamplifier meets or exceeds the design requirements for the PASS. This change did not reduce the level of plant safety and an unreviewed safety question did not exist for this change.

Ref: FSAR CN 99-058

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### RFR 20269

Operability evaluation for "B" Emergency Diesel Generator.

This RFR documents an operability evaluation on the "B" Emergency Diesel Generator with only one starting air tank in service and tank pressure of 604 psig. Revision 10 of TSI 18 limits tank pressure to 610 psig for one starting air tank in service. Based on a review of factory tests performed on the diesel generator, the RFR concluded that the diesel generator was operable with the reduced starting air pressure. No unreviewed safety question exists for this evaluation.

Ref: SOS 99-1910

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### RFR 20284

#### Evaluate FSAR Tables on Service Water System.

This RFR initiated FSAR CN 00-011 to revise the FSAR to make editorial improvements and technical corrections. The editorial improvements included removing the duplicate Table from the Site Addendum 9.2-7 and removing the duplicate Figure from the Site Addendum 9.2-2. The technical corrections include removing the Air Compressor and aftercoolers from FSAR SP Table 9.2-1 and adding the Breathing Air Compressor heat exchanger. FSAR SP Table 9.2-1 tabulates component flows and heat duty for the Service Water System. There was no physical change to the plant, nor any changes to the original accident analysis. An unreviewed safety question did not exist for this change.

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### RFR 20300

#### Determine correct geographic Coordinates for Callaway Plant.

This RFR determined the correct geographic locations for several plant structures to revise the location description in the FSAR. Clarifications were added and minor corrections were made to the geographic coordinate locations for the Unit #1 Reactor, The mid-point between Unit #1 Reactor and the cancelled Unit #2 reactor, and the primary and secondary meteorological towers. This RFR did not make any physical changes to any of these plant structures.

The RFR did not create an operability concern nor adversely effect structures, systems or components important to nuclear safety. An unreviewed safety question did not exist for these changes.

Ref: FSAR Change Notice 00-022

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### RFR 20313

Install seal weld plugs into sealant injection ports on valve AEV0331.

This RFR evaluated the installation of 1/8" NPT seal welded plugs into holes previously tapped to inject sealant into AEV0331, Steam Generator "C" Feedwater Check Valve Manual Bypass Valve. The plugs meet ASME Code requirements and did not adversely impact the integrity of the valve. This RFR did not increase the consequences or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor did the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR be created. This change did not create an unreviewed safety question.

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### RFR 20351

Replace drain plugs with isolation valves on the generator seal oil lines.

This RFR replaced three piping drain plugs installed in the Main Generator seal oil Auxiliary Detraining tank , and seal oil bearing oil header lines with drain isolation valves and caps. This change was implemented to provide a controlled means of line draining and eliminate the impact to house keeping due to oil leaks. These changes did not increase the possibility or consequences of any previously evaluated accident, or the probability or consequences of the failure of equipment important to safety previously evaluated in the FSAR. The safety evaluation conclude that no unreviewed safety question existed for these changes.

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### RFR 20359

Replace carbon steel drain lines and valves with stainless steel.

This RFR provided for the replacement of the existing carbon steel drains with stainless steel on the Service Water side of the Condenser Air Removal Seal Water Coolers.

Revision B to this RFR updated drawing M-22CG01 to show the line classification changes from 055-HBD-3/4" and 057-HBD-3/4" to 055-HCD-3/4" and 057-HCD-3/4" respectively.

Revision C changed five additional vent lines on the Service Water supply and return headers to the Chemical and Volume Control System (CVCS) Chiller unit from carbon steel to stainless steel.

Revision E provided for replacement of the existing carbon steel drain lines with stainless steel piping on the Service Water headers that supply the Generator Hydrogen Coolers.

These material equivalent replacements did not increase the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor did the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR be created. No unreviewed safety question exists for these changes.

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### RFR 20385

Revise drawing to clarify operation of duplex 3-way valve CDV5010.

This RFR revised drawing M-22CD01 to show that the Hayward Duplex 3-way Valve, CDV5010, isolates both the inlet and outlet to the Main Generator Seal Oil Filters, FCD53A and B. This drawing is represented in the FSAR as Figure 10.2-1, sheet 9. This RFR did not represent any physical changes to any plant system or component, nor will it change any of the original accident analysis. This change did not result in an unreviewed safety question.

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### RFR 20404

Use of freeze seal to support installation of a valve downstream of EMHV8889A.

This RFR evaluated the use of a freeze seal to support the installation of a manual isolation valve downstream of EMHV8889A. The location of the freeze seals and manual isolation valve are in non ASME Code piping not credited in the safety design basis of the plant. Failure of the freeze seal is bounded by existing FSAR analysis, which credits the 3/8" restriction orifice as limiting potential break flow within the capacity of a single charging pump. In case of a freeze seal failure during the new valve installation, an orderly plant shutdown could have been initiated as necessary to reduce RCS pressure to stop leakage past EMHV8889A. This was a commercial consideration not affecting nuclear safety. This change did not result in an unreviewed safety question.

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### RFR 20422

Revise drawing to show normal operating position of several valves.

This RFR updated drawing M-22EC02 to coincide with the normal operating positions of valves ECV0054, ECV0068, and ECV0201 as they are described in OTN-EC-00001. This drawing is represented in the FSAR as Figure 9.1-3. This RFR did not represent any physical changes to any plant component nor will it change any of the original accident analyses. No unreviewed safety question was identified for these changes.

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### RFR 20432

Evaluate alternate equipment labeling material for use in containment.

This RFR approved the use of Weber Marking System Inc. "Identiplat" labels in containment. The use of these labels would not add significant amounts of debris which could collect on the recirculation sump screens so there are no operability concerns. This evaluation concluded that no unreviewed safety question exists.

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### RFR 20460

Add isolation valve to the generator hydrogen and CO2 system.

This RFR approved a minor modification to the generator hydrogen and CO2 system to add an isolation valve to a non-safety system with no safety design bases that would facilitate the use of this test connection as a sample input. This is a far better sample point than current configurations as hydrogen is already flowing past CCAE5000HI. In addition, far less tubing is required for connecting the sample apparatus as compared to current practice. This isolation valve also made the system inherently safer for the technician when performing the monthly test of the main generator hydrogen system. This change did not create an unreviewed safety question.

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### RFR 20473

Operability evaluation for the "B" Motor Driven Auxiliary Feedwater Pump.

RFR 20473 evaluated the performance data used to determine the operability of the "B" Motor Driven Auxiliary Feedwater Pump, PAL01B, on surveillance S649098 and S652609 per OSP-AL-P001B. There was no physical change to any component or system; there is no change to the design bases as delineated in the FSAR. The pump meets the accident analysis requirements as stated in FSAR 15.2.8 as well as the general design requirements of FSAR 10.4.9 and the technical Specification requirements. No unreviewed safety question exists based on this evaluation.

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### RFR 20475

Operability evaluation of Gammametric Channels N60 and N61.

Revision B to this RFR determined that the Gammametric Channels N60 and N61 were operable with the 1/4 W Resistors in locations R5 and R7 instead of 4 W resistors as shown in the latest revision of the drawing and parts lists for drawing 100028, Revision T and PL100028, Revision T in Manual J-364-00022. It was determined that there was no unreviewed safety question created by this discrepancy.

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### RFR 20492

Flooding evaluation for penetration OP112W1387 and OP112W1388.

RFR 20492 performed a flood evaluation for the temporary opening of grouted penetrations OP112W1387 and OP112W1388. This request was made to allow the replacement of the Service Water System piping through these penetrations.

Through review of the applicable drawings and flooding calculations it was found the elevation of these penetrations (6'-4" above the floor) are well above the maximum flood depths in the Auxiliary Building basement (2'-5.75" above the floor) and the Control Building basement (4.75" above the floor). As a result, opening the subject penetrations had no affect on the maximum flood depth in the Auxiliary Building basement or the Control Building basement.

A review of the radiological aspects of opening the subject penetrations has been performed under EDP-ZZ-04107, HVAC Pressure Boundary and Watertight Door Control. In addition, the opening of the subject penetration will be administratively controlled in accordance with EDP-ZZ-04107. Through this review and administrative controls, the temporary opening of these penetrations was acceptable from a radiological standpoint.

It was determined that the temporary opening of grouted penetrations OP112W1387 and OP112W1388 did not create an unreviewed safety question.

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### RFR 20495

Install a communications box in the communication corridor building.

RFR 20495 added a communications box in the stairwell of the communications corridor at elevation 2024. This box should provide sufficient room for communication expansion to last the life of the plant. Currently only computer equipment is planned to be placed in the box, however, telephone equipment could be installed in the future. The new box was installed using construction similar to the existing communication boxes in the communication corridor. The area where the new box was installed did not contain any safety related equipment and the new box will not house any safety related equipment. Therefore, this change did not result in an unreviewed safety question.

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### RFR 20506

#### Replace reactor coolant pump thermal barrier assembly.

RFR 20506 approved the use of a replacement Reactor Coolant Pump Thermal Barrier Assembly manufactured to revision 8 of drawing 11167E43G03 versus original drawing revision 7. The spare thermal boundary assembly meets all Codes and Standards and associated Design Specifications. Addendum 3 was added to EM 5556 "Stress Report", to reflect the review of materials and procedures used in the replacement thermal barrier assembly. The form, fit, and function of the replacement thermal barrier assembly remains unchanged. This evaluation concludes that an unreviewed safety question was not created by this change.

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### RFR 20547

#### Evaluate fire hazards analysis for diesel generator room.

This RFR allowed additional combustible loading to the Emergency Diesel Generator Rooms. The RFR also added a clarifying statement indicating that actuation of the diesel generators will override the fire detection signal which stops the fuel oil transfer pumps. The Fire Hazard Analysis for the Emergency Diesel Generator Rooms concluded that these changes would not prevent safe shutdown of the plant in the event of a fire in the area. This change did not involve an unreviewed safety question.

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### RFR 20554

Delete the use of low pressure nitrogen to pressurizer during plant shutdowns.

This RFR examined the safety significance of leaving the higher pressure nitrogen/hydrogen gas mixture inside the Pressurizer while lowering Pressurizer water level. This higher pressure gas volume can remain in the Pressurizer vapor space while Pressurizer water level is reduced provided chemical degassing, mechanical off-gassing of the Pressurizer vapor space to the Pressurizer Relief Tank, oxygen control, and nitrogen injection are all performed per approved plant procedures and chemical samples ensure an explosive atmosphere does not exist nor will be created during this evolution. Leaving the higher pressure nitrogen/hydrogen bubble inside while the Pressurizer water level is reduced does not adversely affect the RCS or any of its supporting safety related systems. Plant response to all assumed design based accidents is also unaffected. Therefore, the described changes in plant shutdown did not result in an unreviewed safety question.

Ref: FSAR CN 00-037

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### RFR 20556

Evaluate replacement shaft material for Centrifugal Charging Pump

Revision A to this RFR approved two alternate Centrifugal Charging Pump shaft materials (Nitronic 50 and Custom Age 625), that have increased endurance during normal and transient conditions. Both materials exceed the material properties of the current 414 stainless steel and are approved alternates for use as new Centrifugal Charging Pump shaft designs. The alternate materials were evaluated and there is no adverse affect to the Centrifugal Charging Pumps and an unreviewed safety question does not exist.

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### RFR 20576

#### Correct discrepancies in FSAR Table 9.5B-2.

This RFR evaluated discrepancies identified within FSAR Table 9.5B-2, Equipment Required for Safe Shutdown Following a Fire. An FSAR change notice was generated to make the appropriate changes to the FSAR Table. The changes made did not affect any safe shutdown analyses or any conclusions within the Fire Hazards Analysis. These changes did not involve an unreviewed safety question.

Ref: FSAR Change Notice 00-058

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### RFR 20601

#### Change stroke time for EG system Containment Isolation Valves.

This RFR evaluated a proposed increase in allowed stroke time for remote-manual containment isolation valves EGHV0127, 0130, 0131, and 0133. The evaluation determined that an increase in stroke time for these valves did not result in an increase in the probability or consequences of accidents and malfunctions currently evaluated, did not generate a new or different accident or malfunction, and did not reduce the plant's margin of safety. This change did not create an unreviewed safety question.

Ref: FSAR Change Notice 00-048  
Technical Specification Bases Change Notice 00-036

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### **RFR 20619**

Eliminate automatic level control to the UHS Retention Pond.

Revision B to this RFR evaluated the loss of automatic level control to the UHS Retention Pond to support the modification to retire the automatic level control system. This modification was done since the automatic level control is no longer used and the equipment was obsolete and required equivalent material replacement or retirement.

These changes did not increase the consequences or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. The possibility for an accident or malfunction of a different type than previously evaluated in the FSAR was not created. The evaluation conclude that no unreviewed safety question was created by these change.

Ref: FSAR CN 00-049

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### **RFR 20622**

Remove abandon laundry equipment from Control Building Room 3208.

This RFR permanently removed two abandon-in-place clothes washing machines and two clothes dryers from room 3208 in the Control Building that previously served Health Physics laundry requirements. This minor modification did not create an operability concern nor adversely effect structures, systems or components important to nuclear safety. An unreviewed safety question was not created by this change.

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### RFR 20636

Evaluation of Cycle 11 AOA and core crud layer on DNBR and PCT parameters.

The Axial Offset Anomaly (AOA) was evaluated per RFR 19479 for impact on Departure from Nucleate Boiling Ratio (DNBR) and Peak Clad Temperature (PCT) parameters previously analyzed for Cycle 10. AOA was present for Cycle 11 and was evaluated per this RFR to assess the impact on DNBR and PCT parameters. Based upon this review, DNBR and PCT limits defined in plant safety analyses will not be exceeded and the Cycle 11 Reload Safety Evaluation remains valid for AOA-related crud buildup on the reactor core during the cycle.

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### RFR 20644

Install special tool 367 and a sampling tee on Condensate Demineralizer System.

This RFR permanently installed special tool 367 and a sampling tee in place of an existing chemistry sampling flange. The replacement allows for sampling and large quantities of resin to be removed from the Condensate Demineralizer System. The installation of this equipment did not affect any safety related components and did not affect the operation of the Condensate Demineralizers. This RFR did not increase the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor was the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR created. This modification did not create an unreviewed safety question.

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### RFR 20681

Determine maximum allowable stroke time for CVCS valves BGHV08105 and 08106.

This RFR determined the maximum allowable stroke time for Chemical and Volume Control System (CVCS) valves BGHV08105 and BGHV08106. As a result of a motor gear set change, the maximum allowed time for valves BGHV08105 and BGHV08106 to close is being increased from 10 seconds to 15 seconds. It was determined that increasing the allowable valve stroke time to 15 seconds did not invalidate the ECCS time delays assumed in any of the FSAR Chapter 15 analyses. Therefore, this change did not create an unreviewed safety question.

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### RFR 20682

#### Use of WABA insertion guideplates

WABA insertion guideplates were utilized to ease the installation of spent WABAs into discharged fuel assemblies. The guideplates were installed using a specially designed air-operated handling tool.

WABA insertion guideplates were only used on spent fuel assemblies designated for permanent storage. The fuel assemblies incorporating guideplates will not be reinserted into any subsequent operating cycles.

Evaluations were conducted to evaluate: 1) restricted flow through the top nozzle of affected assemblies, 2) additional mass loading of the assemblies and rack, and 3) geometry changes associated with the vertical WABA positioning. These evaluations concluded that all affected analyses would remain bounding.

No effect associated with the use of the guideplates were identified on the accident evaluated as design basis. No accidents of a different type were created through the use of the guideplates. Therefore, the evaluation determine that no unreviewed safety question existed.

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### RFR 20753

#### Replace two carbon steel vent lines with stainless steel on service water system

This RFR replaced existing carbon steel piping with stainless steel. This was due to problems with these lines becoming corroded and blocking flow. This material equivalent replacement will meet or exceed the original design parameters for this system. There was no increase in the consequence or probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Nor, was the possibility for an accident or malfunction of a different type than previously evaluated in the FSAR created. The evaluation conclude that this change did not result in an unreviewed safety question.

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### RFR 20773

#### Replace SHF08 hard pipe drip pan drain line with tubing

This RFR evaluated the replacing a hard piped stainless steel drip pan drain line from SHF08, SLW Evaporator Recirc Pump, with an acceptable tubing to reduce ALARA exposure when the drain line becomes plugged with boric acid. This material equivalent change will remove a section of drain pipe from SHF08, abandon in place a section of the same piping and install a new 3/4" nipple on the drip pan. At that point tubing may be attached to the nipple as needed to route any leakage to a floor drain located next to the pump. This system serves no safety function. This change did not result in an unreviewed safety question.

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### RFR 20815

#### Correct secondary liquid waste evaporator sample sink drawing M-22HF04.

This RFR approved a drawing change to M-22HF04 to show the proper configuration of piping in the Secondary Liquid Waste system, specifically for the Secondary Liquid Waste Evaporator sample sink and pump. This drawing revision has been evaluated and determined that there was no adverse affect to the Secondary Liquid Waste System and Evaporator. No unreviewed safety question was created by this drawing change.

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### RFR 20847

Approves the use of non-lithiated HOH resin in the CVCS mixed bed demineralizer.

RFR 20847 approved the use of a non-lithiated form resin in the Chemical and Volume Control System (CVCS) mixed bed demineralizers. This change was made to increase the operating life of the in service Li7OH resin used to support power operations. The less expensive non-lithiated form resin will be used for Reactor Coolant System (RCS) purification needs during plant shutdown conditions. Using a non-lithiated form resin in this capacity allows a reduction in generated waste resin as the operating life of the Li7OH resin bed will be extended. The non-lithiated form resin is chemically compatible with the connected systems. It was determined that the use of a non-lithiated form resin for RCS purification needs during plant shutdown did not represent an unreviewed safety question.

Ref: FSAR Change Notice 00-059

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### RFR 20876

Clarification of code requirements for filter housing in radwaste systems.

This RFR provided clarification of the code requirements of filter housings FHA01, FHB06, FHB08, FHB10, FHB11, FHC01, FHE04, FHE05 and FHE06, and removal of the higher than required code depiction from the filter housing drawings. These filter housings are installed in Group D augmented classified systems which only require the housings to be fabricated in accordance with ASME Section VIII and ANSI B31.1. These requirements were not changed by this RFR. This RFR did not represent any physical changes to any plant component, system or structure, nor did it change any of the accident analysis. No unreviewed safety question was created by this RFR resolution.

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### RFR 20898

Installation of rubber floor carpet tiles in the Communication Corridor.

This RFR approved the installation of rubber carpet tiles in the Communications Corridor. This change added combustible loading to the area. This change will not prevent safe shutdown of the plant in the event of a fire in the area. This change did not result in an unreviewed safety question.

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### RFR 20974

#### Revise drawing M-22HB05 with as-built information

This RFR updated drawing M-22HB05 (FSAR Figure 11.2-1 Sheet 5) with as-built information related to the Discharge Monitoring Tanks (DMT's). This was a drawing change only and had no impact on any structure, system or component. The change did not result in an unreviewed safety question

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### RFR 20988

#### Approve the use of mixed bed resin in the Recycle Evaporator Condensate Demin

This RFR approved the use of mixed bed resin in the Recycle Evaporator Condensate Demineralizer in place of anion resin. Since startup of the plant, mixed bed resin was used in this demineralizer. Use of mixed bed resin was given as an option in various sections of the FSAR, but was not clarified in the Site Addendum. This RFR did not represent any physical changes to any plant component, system or structure, nor did it change any of the existing accident analysis. This RFR resolution did not create an unreviewed safety question.

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### RFR 21032

#### As-built drawing M-22LF05 for Aux. Building Equipment Drain Sump Discharge line

This RFR revised drawing M-22LF05 to show the as-built location of two in-line pipe reducers in the discharge line for the "A" Auxiliary Building Equipment Drain Sump. This RFR did not represent any physical changes to any plant component nor did it change any of the original accident analyses. There was no unreviewed safety question created by this change.

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### RFR 21101

Add Equipment ID's to M-22KA09 for two valves.

This RFR revised drawing M-22KA09 to depict the actual configuration of the compressed air line within the Diesel Generator rooms by showing two existing non-safety related valves. This RFR did not authorize any physical change to any plant system or component, nor did it change any of the original accident analysis. This change did not result in an unreviewed safety question.

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### RFR 21102

Change operating position of EMV0264 from open to closed.

This RFR changed the normal position of EMV0264 from normally open to a normally closed valve. This valve provides manual isolation capability to deal with seat leakage past valves BB8949A and EMHV8889A. During normal plant operations there is no need or adverse consequence associated with maintaining EMV0264 in the closed position. The location of this manual isolation valve is in non ASME Code piping that is not credited in the safety design basis of the plant. A complete failure of the line in which this valve is installed is bounded by existing FSAR analysis, which credits the 3/8" restriction orifice as limiting potential break flow within the capacity of a single charging pump. This change did not result in an unreviewed safety question.

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### RFR 21104

Injection of sealant to stop socket weld leak at valve AFV0182.

This RFR evaluated the use of injectable sealant to stop a socket weld leak between valve AFV0182 and piping. AFV0182 is the feedwater high pressure heater 5A variable root valve to AFLSHH0024. The loss of AFLSHH0024 will prevent automatic closing extraction to the high pressure heater. These components are not required for accident prevention or mitigation. Therefore, no unreviewed safety question was created by this change.

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### RFR 21116

Approve alternate method of checking calibration of Loose Parts Monitor.

This RFR approved an alternate means of checking calibration of Loose Parts Monitoring Channels 1 and 2 (located beneath the reactor vessel). The current method is based on Regulatory Guide 1.133 and requires access to the sensor located under the reactor vessel. This presents an ALARA concern. This RFR approves an alternate method for validating channel response (alarm setpoints) which does not require access to the sensor. The evaluation determined that this change did not create an unreviewed safety question.

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### RFR 21135

Remove jumper on CAL-Bland 1 transmission line.

This change involved one of the transmission sources from the grid which power Callaway's switchyard. Transmission lines Callaway Bland 1, Montgomery-Callaway 7 and Montgomery-Callaway 8 provide access to the transmission / grid system. The Callaway-Bland 1 line is currently two paralleled lines that are jumpered together on both ends to form one electrical circuit. This change removed the jumper near each end to open one of the paralleled lines to stop flow on that line.

The studies provided with the request to removal of one of the paralleled set of lines of the transmission circuit showed that the operation of the line still meets requirements to ensure the continuity of power from the transmission system to the Class 1E power system.

FSAR-SP Section 8.3A "Station Blackout" is not affected by this change. This transmission line change does not increase the probability of a loss of the transmission line nor does lengthen the expected time of recovery from a station blackout.

This evaluation determined that no unreviewed safety question existed for this change.

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### RFR 21147

Inject sealant into the packing region of valve AEV0163 to stop steam leak.

This RFR allowed valve AEV0163 to be leak sealed around the valve packing. The leak seal components were designed to the same temperature and pressure ratings as the affected system. The packing leak was injected with the valve on the back seat in the open position. The valve was operational but would not close. Since this is a locked open valve, injecting the valve to seal it in the open position did not affect its operability. This evaluation concluded that no unreviewed safety question was created by this change.

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### RFR 21251

Change orientation of turbine bearing on the Terry Turbine.

This RFR approved the use of the vendor recommended bearing orientation for the turbine driven auxiliary feedwater pump. The new orientation was recommended by the vendor to decrease the possibility of the balls skidding causing premature wearing of the bearings. The new bearings are of the same design and material characteristics as the old bearings. This change was a equivalent material replacement and did not affect the safety-related function of the turbine driven auxiliary feedwater pump. This change did not create an unreviewed safety question.

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### RFR 21397

Encapsulation of valve BMV0185.

This RFR installed a minor modification to encapsulate valve BMV0185. This valve serves as isolation between the Steam Generator Blowdown Regenerative Heat Exchanger and the Heater Drain Tank. The valve serves no safety-related function and is not required to mitigate the consequences of a DBA as described in the basis for any Technical Specification or the FSAR. The encapsulation was designed utilizing the appropriate materials for the associated piping class. The encapsulation was designed for the maximum design pressure and temperature for the associated piping. This evaluation concluded that no unreviewed safety question was created by this modification.

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### CARS 200100515

#### Operability of PEF01B following removal of foreign material from pump suction.

The hydraulic performance of the "B" Essential Service Water Pump (PEF01B) was verified to be acceptable following removal of the foreign material from the pump internals. The hydraulic performance of PEF01B remained unchanged following removal of the foreign material when compared with previous inservice test results. PEF01B was capable of performing all design basis functions and is operable. This operability evaluation concluded that there was no unreviewed safety question.

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### CARS 200101168

Evaluate the scaffold event associated with valve ALV0012.

This CARS documented a scaffold event in which a scaffold was built around check valve ALV0012 which could have caused/posed an interface problem with valve operation.

The valve ALV0012 is a check valve in the piping system that supplies Essential Service Water (ESW) to the suction of the Terry Turbine pump. The Terry Turbine pump requires approximately 8 psia of supply suction pressure at rated flow to develop a pump discharge of 1145 gpm at 1693 psig with a pump speed of 3850 rpm. This pressure and flow rate meet the Technical Specification Bases for SR 3.7.5.2 required flow of 1145 gpm at 1221 psig for the AL system. The ESW system will supply water on plant demand at approximately 121 psig and rated flow to the Terry Turbine pump. This is over 15 times the required supply pressure for this application.

In the event the indicating lever had not slipped or bent and the valve ALV0012 had been limited to 50% of its stroke, the valve would still be operable. Calculation AL-21 showed that the potential increase in nominal DP across ALV0012 due to a 50% partial stroke (1.22 psid) would not have adversely affected the suction supply. The minor reduction in suction pressure and supply to the Terry Turbine pump would not have adversely affected pump's ability to operate or function.

Calculation AL-21 showed that a flow rate up to 9002 gpm could have passed through ALV0012 at 50 % given an upstream pressure of at least 100 psia.

The Terry Turbine pump and valve ALV0012 were fully operable in this condition and met all design requirements. Therefore, this event did not create an unreviewed safety question.

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### CARS 200102142

#### Evaluation of partially detached EAM on Main Steam Pipe Whip Restraint.

CARS 200102142 evaluated the as-found condition of the energy absorbing material (EAM) on a pipe whip restraint on a main steam line in containment. This evaluation determined that the EAM is confined to its current location and will perform its design function if the main steam line was to fail. The evaluation concluded pipe whip restraint would perform its design function and an unreviewed safety question did not exist.

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### SOS 00-2424

#### PASS Gamma Spec. Function Repair Deferral.

SOS 00-2424 evaluated a repair deferral on the PASS gamma spec. to allow the gamma spec. detector and associated electronic equipment to be inoperable until approval is obtained from the NRC on PASS elimination amendment request (OL-1214). In the interim the PASS diluted grab sample and on-site analysis capability will be used to replace the Pass gamma spec. function if required. Currently all emergency planning decisions and recommendations made in the first few hours of an event are made based on existing in-plant instrumentation without reliance on PASS.

This evaluation did not change the design, operation, or failure modes of any plant equipment important to safety beyond those, which have been previously evaluated. The repair deferral did not adversely impact the safety of the public or the plant. This evaluation concluded that no unreviewed safety question existed for this evaluation.

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### TM 00-00005

Install temporary camera to monitor valve AEV0331 for leakage.

This temporary modification installed a temporary camera in containment to monitor valve AEV0331 for leakage. This installation will ensure the valve is not leaking without requiring personnel to enter containment. All support structure for the camera will be built to meet Seismic II/I requirements. All cable meets IEEE 383 flame test requirements. The installation did not affect any safety related systems or components, and therefore did not increase the possibility or magnitude of an accident or malfunction. There was no unreviewed safety question created by this change.

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### TM 00-00002

Bypass function of chilled water differential pressure switch GBPDS0213A.

Temporary Modification 00-00002 bypassed the function of the Central Chilled Water differential pressure switch GBPDS0213A. The function of this switch is to trip the "A" Central Chiller on inadequate cooler flow. Other controls are provided to shut the chiller down to protect the equipment. This equipment is not safety related and has no safety design basis. This change did not create an unreviewed safety question.

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### TM 00-00003

Encapsulation of Guard Pipe to Thermowell Leading to RTD ACTE5072.

Temporary Modification 00-00003 installed an encapsulation on the LP turbine "A" 9th stage extraction thermocouple thermowell. The thermowell is installed through a guard pipe that penetrates the turbine lower exhaust hood support and transits through the condenser and into the thermowell in the ninth stage extraction piping. The external weld is failing where the thermowell is welded to the guard pipe. This encapsulation will contain the leakage and provide structural integrity for the thermocouple to guard pipe interface. This modification did not affect or interface with any safety related components or systems. The changes represented in this modification did not represent an unreviewed safety question.

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### TM 00-0006

Install vendor demineralizer system to provide waste water processing.

This temporary modification installed a vendor demineralization skid that is used to process liquid waste from the radwaste building. All hoses and equipment used for this temporary modification meet or exceeds the pressure and temperature requirements for the liquid radwaste system. The installation of this equipment did not affect any equipment required for safe shutdown of the plant or otherwise important to safety. This change did not create an unreviewed safety question.

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### TM 00-0008

Install vent valve on the inlet header of the generator hydrogen cooler.

This temporary modification installed a vent valve in place of an existing vent plug on the generator hydrogen cooler. This modification allowed future venting of the hydrogen cooler without removing the cooler from service. This change did not have any adverse impact on the operation of the generator and did not affect or interface with any safety related components or systems. The change represented in this modification did not represent an unreviewed safety question.

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### TM 00-0009

Install temporary liquid radwaste storage tanks outside the Radwaste Building.

This temporary modification installed two frac tanks outside the radwaste building to provide excess storage capacity for liquid radwaste. The tanks were surrounded by a temporary berm to contain any potential leakage. The frac tanks will interface with the Secondary Liquid Waste (SLW) and Service Air system and will not impact any equipment important to safety. This change did not result in an unreviewed safety question.

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### TM 00-0010

Install jumper to bypass central chiller "A" flow switch which is inoperable.

This change installed a jumper to bypass the "A" central chiller, cooler flow sensing pressure switch. The pressure sensing line to the switch was blocked, not allowing the flow permissive required to start the chiller compressor. Addition of the jumper to the chiller flow switch does not affect the consequences of any accident evaluated previously in the FSAR. This chiller unit was used as a backup emergency unit. This unit was not placed in service unless the "B" chiller failed. This change did not have any adverse impact on the operation of the chilled water system and did not affect or interface with any safety-related components or systems. The changes represented in this modification did not represent an unreviewed safety question.

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### TM 00-0011

Install NUKEN Liquid Waste Processing Equipment.

This temporary modification installed a vendor ultrafiltration skid and associated equipment to be used to process liquid waste from the radwaste building. All hoses and equipment used for this temporary modification meet or exceed the pressure and temperature requirements of the system. The vendor equipment and associated hoses and fittings provide no safety function and did not affect any equipment required for the safe shutdown of the plant or otherwise important to safety. No unreviewed safety question was created by this temporary modification.

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### TM 00-0012

#### Install bypass on the high discharge bearing temp. trip for B central chiller

This change installed a resistor to bypass the 'B' central chiller, discharge bearing temperature trip. The RTD input to this trip has opened causing a chiller trip. Bypassing the RTD with a resistor allows the chiller to run but removes the discharge bearing temperature trip for the chiller. This unit should not be placed in service unless the 'A' chiller fails. When placed in service, it is started manually by Operations. This change did not have any adverse impact on the operation of the chilled water system assuming there is no actual bearing problem and will not affect or interface with any safety-related components or systems. The changes represented in this modification did not result in an unreviewed safety question.

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### TM 00-013

#### Install temporary pumps at intake for low river level operation.

This Temporary Modification involved the installation of 6 submersible pumps at the intake structure to allow continued operation of the "A" intake pump during low river level conditions. This activity involved only non-safety related equipment and had no possibility of impacting any safety related equipment. The conclusion of this evaluation was that no unreviewed safety question existed.

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### TM 01-0001

#### Remove internals from Radwaste Discharge Valve HBV0403.

This temporary modification removed the wedge from the internals of valve HBV0403 to allow Radwaste to discharge wastewater from the Discharge Monitor Tanks. After new parts are received, the valve will be repaired to its design condition. This modification did not impact the operation of the plant nor will it affect the safety of plant personnel. The evaluation concluded that no unreviewed safety question was created by this change.

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### TM 01-0002

#### Install temporary camera to monitor valve AEV0163.

This temporary modification installed a temporary camera in containment to monitor valve AEV0163 for leakage. This installation will ensure the valve is not leaking without requiring personnel to enter containment. All support structure for the camera was built to meet seismic II/I requirements. All cables meet IEEE 383 flame test requirements. The installation did not affect any safety related system or components and therefore did not increase the possibility or magnitude of an accident or malfunction. There was no unreviewed safety question created by this change.

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### TM 01-0003

#### Install generator stator water leak monitoring system skid.

This temporary modification installed a generator stator water leak monitoring system skid to the main generator stator cooling water (SCW) system storage tank. This system provides air injection into the SCW system and sample the vent gas off the SCW tank vent. The addition of this system will not only ensure proper aeration of the stator cooling water to control copper corrosion rates in the generator, but will provide analysis of the SCW vent gas to allow continuous monitoring and trending of leakage rates from the generator windings. This change did not have any adverse impact on the operation of the stator cooling water system or the main generator system. These systems are not safety related and do not interface with any safety related components or systems. This change did not create an unreviewed safety question.

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### TM 01-0005

Install overload jumper on Fuel Transfer Machine Hydro Motors.

Temporary Modification 01-0005 installed two jumpers around the overload heaters for two phases of the hydraulic motor of the Reactor Building Fuel Transfer Machine. This modification was required to allow fuel movement until new parts arrive on site for replacement. The jumpers allowed the motor to operate with only one thermal overload installed. The effect of the jumpers was to reduce the motor overload protection. This was a commercial risk of damage to the motor. No portions of these systems are required to mitigate any Design Basis Accident or perform any safety function. It was concluded that this modification did not create an unreviewed safety question.

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### TM 01-0006

Install temporary bus bar splices in PB03 bus.

Temporary modification 01-0006 installed bus bar splices in place of the normal busbars in the main feeder breaker cubicle PB0306. The normal buswork in PB0306 was removed for repair. The installation of these temporary splices allowed Operations to run the Normal Charging Pump PBG04. The installation of this modification did not affect the bus or the ability of the bus to supply power to the loads. This change did not create an unreviewed safety question.

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### TM 99-0011

Defeat "Fan out" annunciator on AC119 Power Monitor Panel.

This temporary modification defeated the "+125 vdc Fan Out" annunciator for one fan on the +125 vdc house power supply. The annunciator receives input from either of two fan flow sensors within the power supply. One of the fans or flow sensors is failing and providing intermittent alarms to the control room. The output from the failing fan will be defeated to the EHC power supply monitor panel. The power supply is completely redundant and the fans within the power supply are completely redundant. This change did not represent an unreviewed safety question.

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### TS BASES CN 00-001

Revise TS Bases LCO section for diesel fuel oil transfer system.

This TS Bases Change Notice incorporates into the TS Bases, for the LCO Section of 3.8.3, revision 11 of TSI 18 evaluated by RFR 06597, Revision B. This change allows the performance of the surveillance requirements of OSP-JE-00001 while in Modes 5 and 6 under administrative control in lieu of declaring both diesels inoperable. RFR 06597, Revision B, determine that no unreviewed safety question exists for this change.

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### TS BASES CN 00-002

Remove reference to the COLR from TS BASES sections 3.9.1 and 3.9.5.

This BASES Change Notice removed the reference to the COLR from TS BASES sections 3.9.1 and 3.9.5 as the source for the limits on boron concentration. This information is no longer maintained in the COLR, since the limits are contained in TS LCO 3.9.1. This change is administrative in nature since it is only removing a reference which is no longer valid. The change had no effect on plant equipment or accident analysis, nor did it cause any unanalyzed event or a reduction in safety. No unreviewed safety question exists for this change.

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### TS Bases CN 00-003

Revise TS Bases 3.9.3 to change the name designation for Gamma-Metrics Monitors.

This TS Bases Change Notice re-designated the "Gamma-Metric Wide Range Neutron Flux Monitor" to "Gamma-Metric Source Range Neutron Monitor" in the BACKGROUND and LCO sections of Bases 3.9.3. This was an administrative change, without a change in actual equipment. The change was made to avoid confusion by using the terminology "Gamma-Metric Source Range Neutron Flux Monitors", because they are used only for source range function during refueling operations. It was determined that this change did not result in an unreviewed safety question.

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### TS BASES CN 00-004

Revise TS BASES SR 3.7.7.2 and SR 3.7.8.2 to remove valves not required by TS.

This TS Bases change notice revised the Bases for SR 3.7.7.2 and SR 3.7.8.2 to list only those valves that are required by Technical Specifications (TS). The current list includes valves that are not required by TS. During the review and approval of Licensing Amendment OL-1177, The NRC approved moving COT and CHANNEL CALIBRATION requirements to the FSAR for CCW surge tank level and flow instrumentation, and ESW high differential pressure instrumentation. This review and approval are documented in NRC RAI Q 3.7.7-1 and NRC RAI Q 3.7.8-11. The associated valves for the above instrumentation were not removed from the TS Bases. This change did not result in an unreviewed safety question.

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### TS BASES CN 00-006

Clarified TS 3.1.7 Bases on using alternate indications when DRPI is inoperable.

The Bases for TS 3.1.7 Required Action A.1 and B.3 were clarified to further discuss that the alternate use of peaking factor and SDM verification, in lieu of indirect rod position determination using incore detectors during DRPI inoperability, is limited to those rodged core locations where rod position can not be determined by incore detectors.

The Bases of TS Required Action A.1, B.3, D.1.1 and D.1.2 were revised to discuss how SR 3.1.4.1 is to be met while operating with inoperable DRPI(s) or group step counters. The Bases are clarified to discuss how SR 3.1.4.1 can be met with alternate indications. The changes to the Bases for Required Actions A.1 and B.3 would clarify that alternate rod position indications, whether they be from incore detectors or otherwise as discussed above, can be used with the indications from the group step counters to meet SR 3.1.4.1. A similar change to the Bases for required actions D.1.1 and D.1.2 would clarify that alternate demand position indication from the plant computer can be used with the DRPIs to meet SR 3.1.4.1.

This change did not involve an unreviewed safety question.

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### TS BASES CN 00-010

Incorporate various editorial changes to instrument related TS Bases.

This CN incorporates various editorial changes to instrument-related Technical Specification (TS) Bases in response to SOS 99-1942 and SOS 99-3291. The nature of these changes ranges from terminology preference and correct spelling and syntax to expanding the background discussions for neutron detector surveillance performance. For the latter, there are no changes to surveillance performance methodology or acceptance criteria. All protection systems will continue to function in a manner consistent with the plant design basis and will remain within the bounds of the previously performed accident analyses. These changes did not create an unreviewed safety question.

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### TS BASES CN 00-017

Correct editorial errors identified in the TS BASES.

This TS changes notice corrected editorial errors to the TS BASES that are associated with the original submittal of the certified copy of the TS BASES, revision 0. As such, the changes are considered as administrative changes and do not modify, add, delete, or relocate any technical requirement bases of the Technical Specifications. Therefore, these TS BASES changes did not create an unreviewed safety question.

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### TS BASES CN 00-019

Revise TS BASES 3.7.10 BACKGROUND to be consistent with TS BASES 3.3.7.

This TS BASES Change Notice modified TS BASES 3.7.10 BACKGROUND to be consistent with TS BASES 3.3.7 BACKGROUND. TS section 3.7.10 concerns the control room emergency ventilation system. TS section 3.3.7 concerns the control room emergency ventilation system actuation instrumentation. The section was revised to make the use of terminology between the two sections consistent and to refer to the instrumentation associated with actuation of the CREVS. This is an administrative change and has no technical impact upon the TS. Therefore, no unreviewed safety question was created by this change.

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### TS BASES CN 00-020

Added text to TS BASES SR 3.3.2.14 regarding SLAVE RELAY TEST of K620.

This TS BASES Change Notice added text to the BASES for SR 3.3.2.14 regarding the SLAVE RELAY TEST of K620 which was inadvertently deleted. During relocation of some text from BASES of SR 3.3.2.6 to a new SR 3.3.2.14, the text regarding slave relay testing of K620 was inadvertently not relocated to the new SR BASES. During the ITS review, NRC did not question the SR 3.3.2.6 BASES or the sentence in question, which was added to SR 3.3.2.14 BASES. This change did not affect the operation of the plant or any of the accident analyses in the FSAR. This change did not result in an unreviewed safety question.

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### TS BASES CN 00-022

Revise TS BASES 3.7.5 ACTIONS B.1, statement c, to include ESW outage impact.

TS BASES Change Notice 00-022 revised TS BASES 3.7.5 ACTION B.1 to reflect the fact that an Essential Service Water (ESW) train outage can impact statement c. In this section, several justifications are provided which collectively support the 72 hour Completion time allowed. Statement c was revised to include justifications for the condition where a Turbine Driven Auxiliary Feedwater Pump (TDAFP) supply line is inoperable due to an ESW train outage. When ESW train is inoperable and its associated motor driven auxiliary feedwater train is inoperable, redundant operable auxiliary feedwater pumps are not available. Instead, the following combination still justifies the 72 hour Completion time: (a) at least one motor driven auxiliary feedwater pump is available with water supplied from the non-safety grade condensate storage tank. This evaluation determined that this change did not result in an unreviewed safety question.

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### TS BASES CN 00-024

#### Elimination of several NSSS channel response time testing requirements.

This change revised the TS BASES for SR 3.3.1.16 and SR 3.3.2.10 (Reactor Trip System(RTS) and Engineered Safety Feature (ESF) response time testing) to adopt changes generically approved by NRC in their Safety Evaluation for WCAP-14036-P-A, Revision 1, dated October 6, 1998 and traveler TSTF-111 Revision 6. Elimination of response time testing of pressure and differential pressure sensors was approved by NRC in Operating License Amendment 133. This change would extend the response time testing elimination to the full channel for RTS and ESFAS functions within the scope of WCAP-14036-P-A, Revision 1. WCAP-14036-P-A was approved by the NRC for use at Callaway on March 3, 2000. The evaluation conclude that no unreviewed safety question was created by this change.

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### TS BASES CN 00-026

#### Revise TS BASES 3.6.6 to reduce the required ESW flow to the containment coolers

This FSE supports implementation of a minimum required Essential Service Water (ESW) flow rate to the containment coolers of 3200 gpm per train. Technical Specification Bases 3.6.6 and FSAR 6.2.2.2.2 reference a minimum cooling water rate of 4000 gpm per train.

RFR 20207, Revision B and its associated Formal Safety Evaluation have already been approved and demonstrate the acceptability of lowering the minimum required flow rate to as low as 2000 gpm. Calculation GN-03, Revision 4 determined that a 3200 gpm flow rate per train is desirable given the existing material condition of the containment coolers.

This evaluation conclude that no unreviewed safety question was created by this change.

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### TS BASES CN 00-027

Clarify radiation monitors descriptions and requirements in TS Bases sections.

The BASES Background Sections for Technical Specification (TS) 3.3.7 and TS 3.3.8 were revised to be consistent with BASES Background of TS 3.3.6 in regards to components required to support radiation monitor OPERABILITY. A statement was added to the BASES Background section for 3.3.7 to clarify that other components are required to support radiation monitor operability. This statement was consistent with the existing statement in TS 3.3.6 BASES. In addition, the BASES Background Section for TS 3.3.8 was revised to eliminate the requirements to have sample line heaters and filter motors as components required to support monitor operability. During the ITS approval process these words were removed from TS Bases Section 3.3.6 but were overlooked in TS Bases section 3.3.8.

Editorial changes were made throughout the BASES for TS 3.3.6 through TS 3.3.8 to clarify that these bases are discussing only the gaseous channels.

This change notice did not change the design, operation, or failure modes of any plant equipment beyond those, which have been previously evaluated. These changes did not adversely impact the safety of the public or the plant. This change notice did not result in an unreviewed safety question.

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### TS BASES CN 00-031

Extend the scope of TS SR 3.5.2.5 to include testing of auto-closure of BNHV8812

The Bases for Technical Specification Surveillance Requirements 3.5.2.5 was revised to extend the scope of the surveillance to include demonstrating that the RWST to RHR pump suction isolation valves, BNHV8812A/B, are capable of automatic closure after EJHV8811A/B are fully open. This change did not result in an unreviewed safety question.

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### TS BASES CN 00-033

Revise TS Bases to incorporate the elimination of the PASS requirements.

TS Bases change notice 00-033 revised TS Bases to incorporate the elimination of the Post Accident Sampling requirements requested by OL change # 1214.

OL change # 1214 would delete Technical Specification (TS) 5.5.3, "Post Accident Sampling System (PASS)," and thereby eliminate the requirements to have and maintain the PASS. The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 as part of the consolidated line item improvement process (CLIIP).

The change notices did not change the design, operation, or failure modes of any plant equipment important to safety beyond those, which have been previously evaluated. These changes did not adversely impact the safety of the public or the plant. These changes did not result in an unreviewed safety question.

Ref: OL-1214

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### W632108

Placement of fuel assembly N87 into upender basket and repair of Refuel Machine.

This evaluation applied to work request W632108, Placement of fuel assembly N87 into the fuel transfer system upender basket and repair of Refuel Machine, HKE-01. The refueling machine was affected by these activities. The engage/disengage limit switch cable was tangled in the mast. The automatic load trip and load reduction trip setpoints were overridden during this evolution by placing the Hoist Underload/Overload Bypass Key in "Bypass". The evaluation concluded that no unreviewed safety question was created by these activities.

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