



A Centenor Energy Company

DONALD C. SHELTON
Vice President - Nuclear
(419) 241-2300

Docket No. 50-346

License No. NPF-3

Serial No. 1569

August 25, 1988

United States Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: 1987 Annual 10CFR50.59 Report of Facility Changes, Tests and Experiments

Gentlemen:

The Toledo Edison Company hereby submits, pursuant to 10CFR50.59(b)(2), the 1987 Annual 10CFR50.59 Report of facility changes tests and experiments for Davis-Besse Nuclear Power Station, Unit No. 1.

Those changes, tests and experiments identified via the safety review process during the reporting period of January 23, 1987 through January 22, 1988 are enclosed. Attachment 1 provides an executive summary of those changes, tests and experiments contained in the enclosure.

Very truly yours,

CJD/tlt

Enclosure

cc: DB-1 NRC Resident Inspector
A. W. DeAgazio, Project Manager
A. B. Davis, Regional Administrator (2 copies)

8809050031 880825
PDR ADOCK 05000346
R PNU

IE47
1/1

ATTACHMENT 1

10CFR50.59 SUMMARY SHEET

<u>NUMBER</u>	<u>TITLE</u>
DCR 87-0027	Drawing change to E-302A, "Electrical Notes, Standards, and Details"
FCR 78-201, Supp. 1	USAR Drawing Changes
FCR 79-176, Rev. A, Supp. 6	Removal of the Interim Anticipatory Reactor Trip System (ARTS)
FCR 79-307, Rev. A	Auxiliary Shutdown Panel Spare Switch Modifications
FCR 83-130	Reactor Protection System (RPS) Buffer Amplifier Modules
FCR 84-111	Service Water Pump (SWP) Discharge Strainer Setpoint Changes
FCR 85-046, Rev. A	Emergency Lighting DC Power Cable Reroute
FCR 85-148	Auxiliary Feedwater Pumps (AFP) Strainer Basket Removal
FCR 85-199	Turbine Plant Cooling Water (TPCW) System Modifications
FCR 85-231	Reactor Coolant Drain Tank (RCDT) Pressure Gauge Installation
FCR 85-243, Supp. 2	Emergency Core Cooling System (ECCS) Room Cooler Fan Temperature Switch Replacement
FCR 85-244	High Voltage Tap Setting of Start-Up Transformers No. 01 and 02
FCR 85-334	Door No. 215 Replacement
FCR 86-030	Modifications of Reactor Coolant System (RCS) Piping Support
FCR 86-035, Supp. 2	USAR Drawing Change (combined with FCR 78-201, Supp. 1)

FCR 86-105	Makeup and Purification System Feed and Bleed Flow Test
FCR 86-310	Installation of Crane Model IGS-3K-152H-IS Emergency Core Cooling (ECCS) Room Sump Pumps
FCR 86-396	Service Water Valve Room No. 2 Piping Penetration Seal Repair
FCR 86-411	Radwaste Ventilation Heater Setpoint Change
FCR 86-421	Auxiliary Feed Pump Turbine (AFPT) Trip and Throttle Valve Hand Grip
FCR 87-003	Fuse Rating Increase On Essential Instrumentation Power Supply
FCR 87-026	Component Cooling Water Pump Room HVAC Setpoint Changes
FCR 87-045	Flow Transmitter FT-2799 Range Resistor Replacement
FCR 87-087, Supp. 33	USAR Drawing Changes
SE 87-022	Evaluate Installation of Jumper Wires in the Fire Detection System
SE 87-029	Temporary Mechanical Modification for Installation of a Temporary Fire Hose
SE 87-031	Temporary Mechanical Modification (TMM) to Auxiliary Feedwater System
SE 87-135	Temporary Mechanical Modification for Main Steam Safety Valve (MSSV) Gagging
SE 87-140	Test Procedures, TP 870.29, Turbine Bypass Valve Stroke Testing
SE 87-359	Temporary Mechanical Modification for Auxiliary Feedwater Pump Turbine 1-1 Inboard Bearing Housing Cover Replacement
TMM 87-005 & 6	Temporary Mechanical Modification For Installation Of Temporary Fire Detectors
TMM 87-008	Temporary Mechanical Modification For Installation of Pump For Decay Heat Valve Pit Leakage
TMM 87-012	Temporary Mechanical Modification to the Control Room Normal HVAC

Docket No. 50-345
License No. NFP-3
Serial No. 1563
Attachment 1
Page 3

TMM 87-016	Temporary Mechanical Modification to the Component Cooling Water Ventilation System
TMM 87-019	Temporary Mechanical modification for Control Room Emergency Ventilation System (CREVS)
TMM 87-020	Auxiliary Feed Pump Turbine Steam Supply and Exhaust Piping Temporary Mechanical Modifications
TMM 87-155	Temporary Mechanical Modification to the Hydrogen Recombiner System
TMM 87-196, Rev. 1	Temporary Mechanical Modification for the Chlorination System
TMM 87-305	Temporary Mechanical Modification to Install a Controlled Bleed Off System for Decay Heat Valve DH-76 Leakage
UCN 87-014	Selection of Instrument Setpoint Ranges for Safety Related Systems
UCN 87-046	Surveillance Program for Reactor Vessel Material Integrity
UCN 87-047	Recalculation of Hydrogen Generation Rate

SAFETY EVALUATION SUMMARY
FOR
DCR 87-0027 (SE 87-0362)

TITLE:

Revision of design requirements for Class 1E conduit seismic supports as shown on drawing E-302A, "Electrical Notes, Standards, and Details."

CHANGE:

Revise drawing E-302A to delete redundant seismic support requirements.

REASON FOR CHANGE:

Revise Class 1E conduit design requirements to reflect the correct single failure criteria.

SAFETY EVALUATION SUMMARY:

Revise drawing E-302A, "Electrical Notes, Standards, and Details" to delete the requirements for redundant seismic supports when Class 1E conduits of different safety channels share a common support. Current single failure criteria excludes passive failure of passive components. Therefore, seismic support failure is not a credible failure and is not postulated.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 78-201, SUPP. 1 AND
FCR 86-035, SUPP. 2

TITLE:

USAR Drawing Changes

CHANGE:

Revise various Piping and Instrument Diagrams or Figures presently contained in the USAR to reflect current as-built configurations for the systems concerned.

REASON FOR CHANGE:

The FCR's involve changes to drawings for previously approved and controlled modifications to non-safety related systems. Safety evaluations were written due to the drawings being revised appearing in the USAR.

SAFETY EVALUATION SUMMARY:

According to 10CFR50.59, changes to drawings contained in the USAR require a safety evaluation even if the drawing relates to non-safety related systems or components. The changes to these USAR drawings were made solely to conform the drawings to current as-built configurations for the systems involved.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 79-176, REV. A, SUPP. 6

TITLE:

Removal of the Interim Anticipatory Reactor Trip System (ARTS).

CHANGE:

Remove the interim ARTS system.

REASON FOR CHANGE:

Installation of permanent safety grade ARTS system.

SAFETY EVALUATION SUMMARY:

A non-safety grade ARTS system has been installed under FCR 79-176. The system functions of the interim system are now being accomplished by the safety grade ARTS which has been installed under FCR 79-184. Therefore, the non-safety grade system is not needed and removal precludes human factors confusion between the interim and safety grade system.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 79-307, REV. A

TITLE:

Auxiliary Shutdown Panel Spare Switch Modifications.

CHANGE:

Remove the handles from four spare switches and add guards to four spare pushbutton switches.

REASON FOR CHANGE:

Improve Human Factors considerations.

SAFETY EVALUATION SUMMARY:

By removing the handles of Auxiliary Shutdown Panel (ASP) spare switches HIS 106D, HIS 107D, HIS 599D, and HIS 608D, and adding "Cutler-Hammer" guards on spare pushbutton switches HIS 106B, HIS 107B, HIS 599B, and HIS 608B the seismic analysis of the ASP is not affected. Adding these switch guards does not affect the safety function of the ASP.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 83-130

TITLE:

Reactor Protection System (RPS) Buffer Amplifier Modules

CHANGE:

Remove capacitor C2.1 on the Input Stage board of the Buffer Amplifier module.

REASON FOR CHANGE:

Vendor safety concern with the instability of the buffer amplifier modules with system configuration which employs a jumper between pins 9 and 10 on the module backplane connector. This configuration has the potential to be unstable during power-up and thereafter.

SAFETY EVALUATION SUMMARY:

Capacitor C2.1 has no safety function. It was originally installed to compensate for noise pickup when the amplifier was set up for a gain of .5 (jumper installed between pins 9 and 10).

In this configuration, this places a loading capacitor (C2.1) on the output of the Input Stage operational amplifier, thereby making the circuit potentially unstable. This instability appears as asymmetrical oscillations and thus can be integrated into DC signal errors in downstream modules in the string.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 84-111

TITLE:

Service Water Pump (SWP) Discharge Strainer Setpoint Changes.

CHANGE:

Change SWP discharge strainer setpoints for pressure switches PSH-2917, 2917A, 2918, 2918A, 2919, and 2919A.

REASON FOR CHANGE:

Service Water strainer motors run continuously, thereby reducing the life of the motors. The setpoint changes will decrease run time of the strainer motor, thereby increasing motor life.

SAFETY EVALUATION SUMMARY:

The resetting of the SWP discharge strainer motor start/stop setpoints will ensure that strainer motors will not be continuously run during periods of low service water flow demand. The resetting of the setpoints will ensure that SWP manufacturer minimum flow requirements are still met.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-0046, REV. A

TITLE:

Emergency Lighting DC Power Cable Reroute

CHANGE:

Reroute cable No. APD 112A through Room 514 (heater bay area) and delete the routing through Room 422 (cable spreading room).

REASON FOR CHANGE:

The cable is rerouted outside the cable spreading room to avoid the possibility of a fire induced fault in the cable caused by a fire in the cable spreading room.

SAFETY EVALUATION SUMMARY:

Rerouting cable APD 112A will not change the operation or function of the emergency lighting system. The modification is consistent with 10 CFR 50 Appendix R requirements.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-148

TITLE:

Auxiliary Feedwater Pumps (AFP) Strainer Basket Removal

CHANGE:

Remove strainer baskets from AFP strainers S-201 and 206.

REASON FOR CHANGE:

Due to the location and mesh size of strainers upstream of the AFP strainers, strainers S-201 and 206 are redundant and can be removed.

SAFETY EVALUATION SUMMARY:

The AFPs take suction from the condensate storage tank and from the Class I service water system. These systems provide in line strainers of appropriate mesh size prior to entering the AFPs suction lines. As these upstream strainers are considered "passive" components, a failure of them in such a mode as to cause failure of both AFPs is not considered to be a credible event.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-0199

TITLE:

Turbine Plant Cooling Water (TPCW) System Modification

CHANGE:

Install a chemical addition tank and associated equipment in the TPCW system.

REASON FOR CHANGE:

This change will allow the addition of water treatment chemicals directly to the TPCW low level tank.

SAFETY EVALUATION SUMMARY:

The proposed change will not affect any safety related components nor will it change any plant conditions. There are no safety related components in the vicinity of the low level tank. All piping for this modification is below the elevation of all other piping and will not affect any Seismic Class I equipment. A drain in the immediate vicinity of the change is capable of handling a line failure. The chemicals to be used are those currently employed in other plant systems therefore no corrosion or oxidation effects are of concern.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-0231

TITLE:

Reactor Coolant Drain Tank (RCDT) Pressure Gauge Installation

CHANGE:

Add a pressure gauge of 0 to 30 psig range so that operators may monitor normal RCDT pressure.

REASON FOR CHANGE:

Normal RCDT pressure is approximately 4 psig. The installed pressure gauge, PI-1720, has a 0 to 100 psig range which is inadequate for monitoring RCDT pressure.

SAFETY EVALUATION SUMMARY:

PI-1720, which is presently used for RCDT local pressure indication, serves no safety function since the RCDT is not safety related. The new gauge will be the same model as the existing gauge except for graduation span and figure intervals. The new gauge will allow operators to monitor RCDT pressure more accurately than with the existing gauge. The new pressure gauge, PI-6369, also serves no safety function.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-243, SUPP. 2

TITLE:

Emergency Core Cooling System (ECCS) Room Cooler Fan Temperature Switch Replacement.

CHANGE:

Replace temperature control switches for the ECCS equipment Rooms 105, 113, and 115. Revise switch setpoints to ensure room temperature is maintained below 95°F during normal plant operation.

REASON FOR CHANGE:

Relocating Auxiliary Feedwater System Turbine steam admission valves created a harsh environment in this room during a postulated high energy line break. This required replacement of existing temperature switches with switches environmentally qualified to higher temperatures.

SAFETY EVALUATION SUMMARY:

This modification will not effect the operation of ECCS room coolers during normal plant operation and emergencies. The switches are set to maintain a maximum temperature of 95°F during normal plant operation.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-244

TITLE:

High Voltage Tap Setting of Start-Up Transformers No. 01 and 02.

CHANGE:

Change transformer tap settings from position 3 to position 2 during plant outages.

REASON FOR CHANGE:

During plant shutdown, voltages on plant buses are higher than normal operating voltage. This is detrimental to plant equipment required to function during an outage.

SAFETY EVALUATION SUMMARY:

The changing of high voltage tap setting of the start-up transformers during light load conditions, such as plant outages, does not affect the operation of equipment required during the plant outage. This change improves operating life of the equipment because the plant buses will be maintained at normal operating voltage.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 85-334

TITLE:

Door No. 215 Replacement

CHANGE:

Replace Door No. 215 with new door of better design.

REASON FOR CHANGE:

Improper operation and excessive door weight lead to a failure in the door mechanism. Once this happened the door could no longer function properly.

SAFETY EVALUATION SUMMARY:

Door No. 215 is a pressure, fire, missile, and flood barrier between Auxiliary Feedwater Pump Rooms 237 and 238. The safety function of the door is to protect one train of the Auxiliary Feedwater System from fire, flood, missile, or high energy line break in the adjacent auxiliary feedwater pump room. The new door meets all seismic, pressure, and temperature design criteria. It is equivalent to the three hour fire rated door required for this area.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-0030

TITLE:

Modification of Reactor Coolant System (RCS) Piping Support

CHANGE:

Replace the #2 anchor bolt and add a shim plate for support
40-CCB-16-H3.

REASON FOR CHANGE:

The change resolves a nonconformance report which identified items
requiring repair.

SAFETY EVALUATION SUMMARY:

The modifications comply with the original support design criteria and
the repaired support will therefore, be capable of performing its design
function.

As summarized above, the proposed action will not increase the probability
or consequence of an accident or malfunction previously evaluated in the
USAR. The proposed action will not create the possibility for an accident
or malfunction of a different type than any evaluated previously in the
USAR, and does not reduce any margin of safety as defined in the Technical
Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-105

TITLE:

Makeup and Purification System Feed and Bleed Flow Test.

CHANGE:

Demonstrate feed and bleed cooling injection capability using the makeup system.

REASON FOR CHANGE:

Demonstrate the capacity of the system for feeding with two makeup pumps operating and the makeup control valve in the wide open position. The purpose of this test is to gather system flow capacity data to be compared with analytical input.

SAFETY EVALUATION SUMMARY:

The test procedure provided precautionary limits on RCS pressure, temperature, pressurizer level, and secondary side temperature during the performance of the test. The test did not invalidate any SAR assumptions and did not affect the ability of the makeup system to operate if it were required for any reason during the test. The test was performed in Mode 3 when the decay heat levels are low. The test did not involve any changes to boron concentrations during its performance.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-310

TITLE:

Installation of Crane Model IGS-3K-152H-IS Emergency Core Cooling System (ECCS) Room Sump Pumps.

CHANGE:

Replace two existing sump pumps with new model sump pumps.

REASON FOR CHANGE:

Replace with pumps of greater reliability.

SAFETY EVALUATION SUMMARY:

The replacement pumps are made by the same manufacturer and have an increased capacity. The pumps are safety related and seismically installed. The pumps have adequate NPSH and discharge pressure to perform their safety function of pumping water from the sump to the receiving tanks. The pumps are capable of starting at 70% undervoltage.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-0396

TITLE:

Service Water Valve Room No. 2 Piping Penetration Seal Repair

CHANGE:

Reseal penetration of 30" Service Water line HBC-36 at south wall of the intake structure. Cement based grout will be used to reseal the penetration.

REASON FOR CHANGE:

Ground water is leaking into the valve room.

SAFETY EVALUATION SUMMARY:

The proposed action has no effect on the safety functions of the Service Water System. Grouting the penetration does not affect the stress analysis of the piping and the increased loading to the south wall is determined to be acceptable. The modification has no adverse effect on any Seismic Class I systems within the valve room. Resealing this penetration prevents the room from potential flooding by water entering through this penetration.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-411

TITLE:

Radwaste Ventilation Heater Setpoint Change.

CHANGE:

Lower the heater pressure switch setpoint from 1.6 inches water column (W.C.) to the manufacturers' recommended setpoint of 0.4 inches W.C.

REASON FOR CHANGE:

At the present setpoint, the heater is continuously in the "off" mode, defeating the purpose of the heater. Revising the setpoint will allow the heater to operate normally.

SAFETY EVALUATION SUMMARY:

Revision of the heater setpoint from 1.6 inches W.C. to 0.4 inches W.C. will provide the proper control band, given the normal static pressure of 1.0 inches W.C. The purpose of this heater is to provide comfort heating to the access control area, and neither the heater nor the pressure switch controlling its operation serves a safety function. The setpoint change does not affect the radwaste area or access control area exhaust ventilation system.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 86-421

TITLE:

Auxiliary Feed Pump Turbine (AFPT) Trip and Throttle Valve Hand Grip

CHANGE:

Add a hand grip and associated key and set screw to the trip hook shaft on the trip throttle valve for each AFPT.

REASON FOR CHANGE:

This change will enhance the capability of manually tripping the auxiliary feed pump turbines.

SAFETY EVALUATION SUMMARY:

This hand grip will not affect the operation, performance, response time or actuation of the trip throttle valve nor will it cause the trip throttle valve to become locked, sealed, or cause a mis-trip. The grip is recessed and cannot cause a trip due to bumping or knocking. The hand grip will not affect the function of the AFPTs nor will any possible grip failure affect the AFPTs function.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 87-003

TITLE:

Increase the fuse rating for circuits Y103 and Y203 of the essential instrumentation power supply.

CHANGE:

Increase fuse ratings from 10 amps to 15 amps.

REASON FOR CHANGE:

Fuse rating at 10 amps provided insufficient margin to accommodate normally anticipated current transients (such as circuit energization) without needlessly opening the fuse and affecting the main inverter fuse. Main inverter fuse failure led in turn to rendering the associated AC bus inoperable and resulted in exceeding a Limiting Condition for Operation needlessly.

SAFETY EVALUATION SUMMARY:

Increasing the fuse rating from 10 amps to 15 amps is acceptable because the circuits by design can accept a maximum fuse rating of 20 amps. Neither the circuit design nor capacity is affected by changing the fuse size. The new fuses will still serve their intended function of opening in the event of a fault in the Process and Radiation Monitoring Cabinet.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 87-026

TITLE:

Component Cooling Water (CCW) Pump Room Heating and Ventilation System
Setpoint Changes

CHANGE:

Correct the setpoints of fan and damper temperature switches TS-5443 and
5444 by implementing the values 99°F/80°F (I/D).

REASON FOR CHANGE:

The current values of 104°F/80°F in combination with tolerances of +5/-10°F
exceeds the USAR stated maximum value of 104°F for the systems affected.

SAFETY EVALUATION SUMMARY:

There is no detrimental effect on safety caused by correcting the setpoint
to incorporate the +5°F tolerance and corresponding 99°F setpoint in order
to comply with the 104°F to 60°F range noted in the USAR. The decrease in
deadband caused by lowering the high setpoint would not be a concern
because of increased fan cycling operation. The system is equipped with
damper actuators that are designed for cycling/modulating service.
Modulating dampers preclude continual fan cycling operation.

As summarized above, the proposed action will not increase the probability
or consequence of an accident or malfunction previously evaluated in the
USAR. The proposed action will not create the possibility for an accident
or malfunction of a different type than any evaluated previously in the
USAR, and does not reduce any margin of safety as defined in the Technical
Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 87-045

TITLE:

Flow Transmitter FT-2799 Range Resistor Replacement.

CHANGE:

Replacement of the range resistor in the frequency to current converter of flow transmitter FT-2799. This flow transmitter is in the Cooling Tower makeup flow line to the collection box.

REASON FOR CHANGE:

The converter output is used by computer point F200 to provide flow rate in gpm. The computer converts the converter output to 0-30,000 gpm. It was noted that the flow was reading 10% higher than the estimated output from the pump curve. The vendor suggested the frequency range should be increased for the 0-30,000 gpm range.

SAFETY EVALUATION SUMMARY:

The information from this flow transmitter along with two other flow transmitters is used in the estimation of dilution flow for radwaste discharge. Operable flow transmitter or pump curve estimates are required to determine the dilution flow. This modification enhances the instrument range and provides more accurate flow information which matches the pump curve. Failure of this component will not cause an accident and this component is not used to mitigate consequences of an accident. This modification does not change the function of the component.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
FCR 87-0087 Supp. 33

TITLE:

USAR Drawing Changes

CHANGE:

Re-draw Piping and Instrument Diagrams (P&ID) on the computer aided drafting system (CADD). Split P&IDs into two or more drawings where necessary.

REASON FOR CHANGE:

Improve readability of the drawings, ease drawing updates, and provide reliable and economical storage of the current drawings. Some drawings are overcrowded thereby reducing their clarity.

SAFETY EVALUATION SUMMARY:

According to 10CFR50.59, changes to drawings contained in the USAR require a safety evaluation, even if the drawing relates to non-safety related systems or components. Redrawing the P&IDs and splitting crowded drawings will not affect the safe operation of any plant system. Bechtel Associates performed an independent review prior to issuing the drawings to Davis-Besse. Design Engineering performed an additional independent review upon receipt before issuing the drawings.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
JUMPER & LIFTED WIRE TAG 87-123 (SE 87-022)

TITLE:

Evaluate the Installation of Jumper Wires in the Fire Detection System.

CHANGE:

Install jumper wires to jumper out smoke detector DS 8679E in Room 428.

REASON FOR CHANGE:

The detector is in a constant alarm condition with no fire conditions present which will prevent the detection of a real fire in that fire zone.

SAFETY EVALUATION SUMMARY:

Installation of jumper wires for this detector did not affect the fire detection capability in the fire zone covered by this detector. Technical Specifications require 12 fire detectors for this zone. Even after jumpering this detector, there are 14 operable detectors available for this zone. Installation of jumpers alleviates the constant alarm condition. A roving fire watch was provided to meet NFPA requirements.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-029 (SE 87-029)

TITLE:

Temporary Mechanical Modification for Installation of a Temporary Fire Hose

CHANGE:

Install a temporary fire hose from hose reel HR-52 to the screen wash line that supplies traveling screen No. 2.

REASON FOR CHANGE:

To provide a temporary source of supply water to facilitate chlorinating the Circulating Water and Service Water systems.

SAFETY EVALUATION SUMMARY:

The installation of a temporary 2½ inch hose from the Station Fire Protection system to the Traveling Screen wash system allowed for a temporary water supply source to allow for chlorination of the Circulating and Service Water systems. This temporary jumper was used approximately 30 minutes every 6 hours and had no impact on the Station Fire Protection System availability or operation.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
SE 87-031

TITLE:

Temporary Mechanical Modification (TMM) to Auxiliary Feedwater System

CHANGE:

Remove check valve internals from Auxiliary Feedpump Turbine case drain steam traps ST 148 and 150.

REASON FOR CHANGE:

Ensure the turbine case always remains drained.

SAFETY EVALUATION SUMMARY:

The steam traps provide a drain path so water does not accumulate in the turbine case during normal operation (when the turbines are in the standby mode). Removing the check valve internals will allow a greater degree of assurance that the turbine case remains drained. A failure of the steam traps may pass some steam around the turbine, but this will not affect turbine operation or create an unsafe condition.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
SE 87-0135

TITLE:

Temporary Mechanical Modification for Main Steam Safety Valve (MSSV)
Gagging

CHANGE:

Evaluate the effects of gagging MSSV SP17B5.

REASON FOR CHANGE:

This safety evaluation is performed to meet the requirements of 10CFR50.59 to ensure no unreviewed safety question exists as a result of gagging SP17B5.

SAFETY EVALUATION SUMMARY:

Gagging a safety valve results in its being unable to lift and relieve an overpressure condition thereby rendering the valve inoperable. Actions to be taken with an inoperable safety valve are delineated in Limiting Conditions for Operation (LCO) of the Technical Specifications. The LCO allows for continued operation with one or more MSSVs inoperable provided thermal power is reduced and the high flux trip setpoint is reduced. The high flux trip setpoint and thermal power are reduced to ensure operable MSSVs are capable of providing removal of sensible and decay heat in a postulated accident thereby fulfilling heat removal from the reactor.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
SE 87-0140

TITLE:

Test Procedure TP 870.29, Turbine Bypass Valve Stroke Testing

CHANGE:

Review the affects of performing TP 870.29.

REASON FOR CHANGE:

This safety evaluation is performed to meet the requirements of 10 CFR 50.59 to ensure no unreviewed safety question exists as a result of performing this test.

SAFETY EVALUATION SUMMARY:

Testing of the Turbine Bypass Valve (TBV) does not affect the ability of the Main Steam system to perform its safety functions. With a Main Steam Isolation Valve open, the TBV opening will cause an estimated Reactor Coolant System (RCS) cooldown of not more than 10°F/min. As a result of this cooldown pressurizer level will be reduced approximately 50 inches per minute, RCS pressure will be reduced, and there will be a positive reactivity addition for the core. To mitigate the potential consequences of these affects, TP 870.29 defines the steam generator level to be held during test performance to assure the calculated cooldown rate remains conservative. Boron concentrations and control rod positions are defined to ensure adequate shutdown margin. Minimum pressurizer levels are defined for initiating the test. RCS cooldown limits are defined as are appropriate actions to stop the cooldown. Requirements for reestablishing steam generator level, RCS temperature, and pressurizer levels are given prior to testing subsequent TBVs.

The above administrative actions ensure that the test performance will not place the plant in a previously unanalyzed condition.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
SE 87-0359

TITLE:

Temporary Mechanical Modification for Auxiliary Feedwater Pump Turbine 1-1
Inboard Bearing Housing Cover Replacement

CHANGE:

Replace existing cover plate with a plate of the same dimensions
manufactured from A36 carbon steel.

REASON FOR CHANGE:

Existing cover plate has a hairline fracture that is leaking oil.

SAFETY EVALUATION SUMMARY:

The existing cover plate is made of A278 cast grey steel. ASTM A36 carbon steel plate has a higher yield strength than the plate material being replaced and is more ductile so that it will not crack as easily. Both materials have the same coefficient of expansion and similar chemical compositions. A36 material is compatible with the oil presently used in the turbine bearings and will not impact operation of the turbine in any way. No structural changes will be made thereby eliminating seismic concerns.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-C75, 87-006 (SE 87-005, 87-006)

TITLE:

Temporary Mechanical Modification (TMM) for Installation of Temporary Fire Detectors

CHANGE:

Install temporary fire detectors to plant Fire Detection Zones 211 and 400 (FDZ 211, 400). An hourly fire watch patrol is implemented with this change.

REASON FOR CHANGE:

Provide adequate protection for inoperable fire barriers in Stairwells AB-3 and AB-3A.

SAFETY EVALUATION SUMMARY:

This temporary modification has no direct impact on the safe shutdown systems of the plant. Temporary fire detectors will be installed on the ceilings of Stairwells AB-3 and AB-3A. A temporary electrical jumper will be installed from existing detectors to the temporary ones to provide fire coverage until such time dedicated circuits can be installed for these detectors. Zone checks will be performed per station procedures and any alarm conditions will be displayed in the control room. This action satisfies Technical Specification requirements and provides adequate protection until such time when a permanent detector can be installed or the fire barrier made operable.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-008 (SE 87-008)

TITLE:

Temporary Mechanical Modification for Installation of Sump Pump to remove Decay Heat Valve Pit Leakage.

CHANGE:

Install a temporary pump to remove leakage from the bottom of the Decay Heat Valve Pit.

REASON FOR CHANGE:

To ensure the level of any water accumulated in the pit remains less than six inches.

SAFETY EVALUATION SUMMARY:

Installation of a temporary pump to remove operational leakage from the bottom of the decay heat valve pit does not adversely affect seismically installed safety related equipment and does not interfere with any Class 1E electrical systems or cross-connected separate electrical channels. The associated pump tubing material is sufficient to resist heat and radiation effects, and does not interfere with the function of the decay heat valve pit vent. Installation of the pump ensures that the decay heat valve pit will perform its intended safety function in the event of a design basis LOCA.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-012 (SE 87-012)

TITLE:

Temporary Mechanical Modification (TMM) to the Control Room Normal HVAC

CHANGE:

Replace existing Auxiliary Building Chilled Water Chiller with new model chiller.

REASON FOR CHANGE:

Replace with chiller of greater reliability. This new chiller will be permanently installed under FCR 87-0002.

SAFETY EVALUATION SUMMARY:

The replacement of the Auxiliary Building Chilled Water Chiller with a different model chiller has no effect on safety. The operation of the chilled water system will not be adversely affected by this change. The new chiller has the same cooling capacity and is essentially an equivalent replacement for the original plant equipment. The existing chiller piping, and conduit is installed Seismic Category I and the new installation will meet Seismic Category II requirements. The existing water flooding and seismic analysis will bound the new installation.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-016 (SE 87-016)

TITLE:

Temporary Mechanical Modification (TMM) to the Component Cooling Water (CCW) Ventilation System

CHANGE:

Fail open exhaust damper HV-5443A and fail closed recirculation damper HV-5443B by de-energizing breakers for the damper's actuators.

REASON FOR CHANGE:

Due to problems with temperature controller TIC-5443, the dampers have not been actuating properly. This TMM will enable Train 1 of the CCW ventilation system to perform its specified functions.

SAFETY EVALUATION SUMMARY:

The safety function of the CCW ventilation system is not affected by this TMM. Failing exhaust damper HV-5443A in the open position and failing recirculation damper HV-5443B in the closed position will maintain the CCW ventilation system in a configuration that will provide maximum cooling to the CCW pump room until the problems with TIC-5443 are corrected. The flowpath will always be from outside to the CCW pump room and then to the turbine building. De-energizing the breakers for these dampers will in no way affect any other control function of the CCW ventilation system. No fire dampers are affected by this TMM and the CCW ventilation system will remain within the bounds of the USAR.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-019 (SE 87-019)

TITLE:

Temporary Mechanical Modification for Control Room Emergency Ventilation System (CREVS).

CHANGE:

Install covers over CREVS Train 1 and 2 Condensing Units pumpdown control switches NS-0331 and 0332.

REASON FOR CHANGE:

This change will prevent inadvertent switch actuation to ensure CREVS train operability.

SAFETY EVALUATION SUMMARY:

The installation of switch guards will not affect the switches function. The switch guard design consists of a Westinghouse supplied metal housing designed for this type of switch. The guard assembly will be fitted around the switch using the existing front locking ring on the switch. De-energization is not necessary for the installation therefore the CREVS system will remain operable. Seismic considerations are negligible due to the small mass of the switch. Environmental considerations for the switch guards are negligible as analyzed.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-020 (SE 87-020)

TITLE:

Auxiliary Feed Pump Turbine (AFPT) Steam Supply and Exhaust Piping
Temporary Mechanical Modifications.

CHANGE:

Temporary installation of temperature monitoring devices for AFPT steam traps ST-148, 149, 150, and 151. Temporary throttling of AFPT exhaust piping low point drain valves MS 51 and 53.

REASON FOR CHANGE:

To allow for monitoring of steam trap performance and to provide continuous removal of condensate from AFPT exhaust piping.

SAFETY EVALUATION SUMMARY:

This Temporary Mechanical Modification (TMM) provided for the installation of externally mounted temperature thermocouples upstream and downstream of steam traps ST-148, 149, 150, and 151 to provide operators with a means of evaluating and monitoring AFPT associated steam trap performance. This TMM also allowed for the throttling of AFPT exhaust piping low point drain valves MS 51 and 53 to allow for continuous removal of condensate.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-155

TITLE:

Temporary Mechanical Modification to the Hydrogen Recombiner System

CHANGE:

Purge the containment via the Hydrogen Recombiner piping using a temporary (portable) filtration unit.

REASON FOR CHANGE:

Numerous work activities inside containment have resulted in containment-to-annulus differential pressure approaching Technical Specification limits.

SAFETY EVALUATION SUMMARY:

Implementation of this temporary modification will have no affect on the safety function of the Containment Isolation System. The recombiner containment isolation valves will remain unaffected and capable of isolating upon receipt of a SFAS signal per design. The Hydrogen Purge system is required to be operable only in Modes 1 and 2. This modification will be utilized in Modes 3 or greater and with no fuel movement evolutions in progress.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-0196 (SE 87-0196, REV. 1)

TITLE:

Temporary Mechanical Modification (TMM) for the Chlorination System

CHANGE:

Install a temporary chlorination system. A permanent system utilizing sodium hypochlorite is to be installed at a later date.

REASON FOR CHANGE:

Existing chlorination equipment is being removed. The temporary system will allow the plant chemistry department to chlorinate the service water and circulating water systems.

SAFETY EVALUATION SUMMARY:

The chlorination system serves no safety function and is not interconnected with any safety feature system. The temporary system will utilize sodium hypochlorite as the chlorinating agent. The chlorine detection system is not physically or functionally affected by this TMM. With the removal of the existing gaseous chlorine system and the temporary system installed, the potential for a substantial release of chlorine will be eliminated. The chlorine detection system is not required to protect the control room from a chlorine release from the temporary system. The temporary system tank, pumps, and associated equipment have been evaluated for potential accidental releases and environmental concerns.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
TMM 87-305

TITLE:

Temporary Mechanical Modification to install a controlled bleed off system for Decay Heat Valve DH 76 leakage.

CHANGE:

Install a system for constant bleed off of system water and nitrogen at vent valves DH 74 and DH 74A immediately upstream of valve DH 76.

REASON FOR CHANGE:

Valve DH 76 is leaking by its seat. The leakage rate is within Technical Specification requirements but causes plant operational problems by pressurizing the Decay Heat Systems.

SAFETY EVALUATION SUMMARY:

The installation of this venting system and the controlled venting of the decay heat piping to maintain normal system pressure does not have an adverse affect on plant safety or the safety of the public. The total leak rate from the Low Pressure Injection (LPI) system through this vent at normal operating pressure will not exceed Technical Specification requirements. The core flood and borated water storage tanks levels will not decrease below their low limits due to the controlled vent. These tank levels are reviewed each shift per station procedures. The continuous venting will result in a release of nitrogen to the containment atmosphere, however the amount released will not result in a significant increase in containment pressure or personnel hazard. The installation will be seismically supported and all materials are compatible with borated water chemistry.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
UCN 87-014

TITLE:

Selection of Instrument Setpoint Ranges for Safety Related Systems

CHANGE:

Revise USAR Section 7.1.2.7 wording in regards to a specific range, i.e., 50-60%, for the setting of a setpoint.

REASON FOR CHANGE:

The USAR currently states that instrument ranges were established by making the actuated setpoint settings required to operate at 50 to 60 percent of full scale. The actual intent of the USAR text was to state that the setpoint would be selected to actuate within the accurate region of the equipments design range. It is not possible to select a single range in which all instruments actuate.

SAFETY EVALUATION SUMMARY:

The change will not result in any plant modifications, but will eliminate inconsistencies between the USAR text and the field setpoints. The field setpoints selected were chosen to be consistent with the manufacturers recommendations on setting, drift, accuracy, and adjustability.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
UCN 87-046 (SE 88-0041)

TITLE:

Surveillance Program for Reactor Vessel Material Integrity

CHANGE:

Revise USAR Section 5.4.7 description of the surveillance program for reactor vessel material integrity.

REASON FOR CHANGE:

A facility change implements the installation of dosimetry in the cavity between the reactor vessel and concrete shield wall. The dosimetry will be used to determine neutron fluence outside and inside the vessel which is now analytically determined.

SAFETY EVALUATION SUMMARY:

The cavity dosimetry installation and its associated material surveillance program do not perform a safety function nor are they needed for safe shutdown of the plant. The installation will have no effect on the plant's hydraulic systems, electrical systems, or reactor system integrity.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.

SAFETY EVALUATION SUMMARY
FOR
UCN 87-047 (SE 88-042)

TITLE:

Recalculation of Hydrogen Generation Rate

CHANGE:

Revise USAR Section 6.2.5.2 and associated tables due to a recalculation of the hydrogen generation rate inside containment.

REASON FOR CHANGE:

Additional hydrogen generating material was added to the inside of the containment since the previous calculation. The recalculation was performed to show new hydrogen levels inside containment would not exceed 4 percent by volume.

SAFETY EVALUATION SUMMARY:

The Combustible Gas Control System maintains hydrogen levels less than 3 percent by accounting for sources of hydrogen within the containment. The function of the containment is to act as a barrier between fuel and the environment. A containment hydrogen concentration of four percent by volume could ignite and explode. USAR Figure 6.2-45 notes that containment hydrogen concentration could reach 3 percent in 21 days without operator action. The recalculation shows the additional hydrogen generating material decreases this period to 20.6 days which is essentially the same. The 4 percent limit would not be reached, therefore, safety is not impacted.

As summarized above, the proposed action will not increase the probability or consequence of an accident or malfunction previously evaluated in the USAR. The proposed action will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the USAR, and does not reduce any margin of safety as defined in the Technical Specifications.

Therefore, an unreviewed safety question does not exist.