



Duquesne Light

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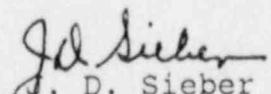
U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 2
Docket No. 50-412, License No. NPF-73
1987 Report of Facility Changes, Tests and Experiments

Gentlemen:

This letter forwards the 1987 Annual Report of Facility Changes, Tests and Experiments, in accordance with 10 CFR 50.59. The report covers the period May 28, 1987 through October 31, 1987 to coincide with the first annual FSAR update. A brief description of each facility and procedure change is provided along with a summary of the safety evaluation for each change.

Very truly yours,


J. D. Sieber
Vice President, Nuclear

cc: Mr. J. Beall, Sr. Resident Inspector
Mr. W. T. Russell, NRC Region I Administrator
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TITLE: SAP 35 - Reactor Trip Reduction and Reliability Improvement Program

SUMMARY: This site administrative procedure intent change only describes methodology that the ISEG and other plant personnel use for tracking and evaluating plant trips. This change does not transgress any ISEG concept described in the FSAR (Section 13.4.4) or Technical Specifications (6.2.3). Thus no unreviewed safety question is involved.

TITLE: SAP 14 - Work Activity Surveillance Program

SUMMARY: This procedure provides the administrative program for supervisory observation and evaluation of work activities at Beaver Valley Power Station.

Changes were made to update position titles and to make the procedure applicable to both Unit 1 and Unit 2. The procedure change will:

- 1) continue to provide an administrative program for surveillance of work activities,
- 2) not reduce the margin of safety as defined in the basis of any Technical Specification, and
- 3) only affect the FSAR in that the procedure title in FSAR Table 13.5-1 will be changed from: "Station Surveillance Program" to "Work Activity Surveillance Program". Thus no unreviewed safety question is involved.

TITLE: SAP 36 - Temporary Modification

SUMMARY: This procedure provides control of equipment temporary modifications, and meets the objectives of FSAR Section 13.5.26 for temporary modification control by maintaining reactor and personnel safety, and preventing unauthorized temporary modifications. In addition, Technical Specification basis require OSC review of temporary modifications affecting nuclear safety. Thus no unreviewed safety question is involved.

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TITLE: SOV-2.24C.01 - Automatic Steam Generator Water Level Control Test - TCN #5

SUMMARY: This change allowed verification of performance of the feedwater bypass flow control valves at "approximately" 10% power instead of "less than" 10% power as stated in FSAR paragraph 14.2.12.33.1. The change did not affect the description or accident analysis in the FSAR. Only paragraph 14.2.12.33.1 was affected. No Technical Specifications were involved. This change merely allowed the licensee to verify performance of the bypass valves at a power level which past experience dictated, would provide the best control of steam generator level at low power levels.

TITLE: PO-2.30.01/EM 79011 - Revise Minimum SWS Flow To Safeguards Area Cooling Coils And Subsequent Maximum Expected Temperature In Safeguard Area After A DBA

SUMMARY: PO-2.30.01 identified low SWS flow to the safeguards area cooling coils; instead of 300 gpm, only 200 (+5) gpm was experienced. Analysis has shown that 200 gpm would cause an increase in the maximum expected temperature in areas after a DBA from 120°F to 121°F. Analysis has also shown that environmental qualification of components in the area will not be affected by the increased temperature. Environmental qualification of components is not addressed in Technical Specifications. Based on the above information the change does not involve an unreviewed safety question.

TITLE: PO-2.30.01/EM 79014 - Re-evaluate SWS Flow To Charging Pump Lube Oil Coolers

SUMMARY: PO-2.30.01 identified low SWS flow to charging pump lube oil coolers; instead of 40 gpm, only 35 gpm was experienced. Analysis has shown that the decreased flow will not affect the operability of the charging pumps. Unit 1 experience has shown that reduced flow does not significantly affect bearing/lube oil temperature. SWS flow to charging pump lube oil coolers is not directly identified in Technical Specifications. Based on the above information, the change does not involve an unreviewed safety question.

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SAFETY EVALUATION NO: 01-1

TITLE: Addition Of Time Delay To CHS Pump Control Logic

SUMMARY: Loss of off-site power during recirculation mode will result in charging pumps experiencing a loss of suction prior to the time that RSS pumps are sequenced on. This modification will add an additional time delay to the loss of off-site power EDG start sequence for CHS pump start whenever ECCS is aligned to recirculation mode, to prevent CHS pump damage on loss of suction.

This change modifies only the loading sequence of components on the emergency diesel generators and does not reduce or impair the redundant design of the ECCS. Actual consideration of the consequences of a loss of off-site power during the recirculation phase following a LOCA event is beyond the licensing basis of Westinghouse plants, and therefore does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 02-0

TITLE: Remove Auxiliary Boiler Pressure Reducing Valve

SUMMARY: Eliminate auxiliary boiler pressure reducing valve 2SAS-PRV138 and associated 1" piping and replace with 2" piping and a 2" globe valve. This modification allows increased air pressure and flow to the fuel oil atomizing nozzles during initial startup.

The auxiliary boiler pressure reducing valve is not described in the FSAR. It is not safety-related and has no effect on any safety-related components. No credit for Auxiliary Boiler operation is taken in the accident analysis, therefore, this modification does not create any unreviewed safety question.

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SAFETY EVALUATION NO.: 04-0

TITLE: Automatic Trip of Air Conditioning Unit Upon CO₂ Discharge

SUMMARY: Air conditioning unit 2HVR-ACU221 will be automatically tripped upon discharge of CO₂ in the relay room cable vault (fire area CV-6) to prevent CO₂ leakage past the closed fire damper.

This modification will ensure that the CO₂ system will attain a 50% CO₂ concentration as recommended by NFPA-12 for cable fires. The operation of 2HVR-ACU221 during a fire event or a CO₂ discharge is not described in the FSAR. No credit is assumed in the accident analysis, therefore, this modification does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 05-0

TITLE: Addition Of Blockouts At Auxiliary Building West Wall

SUMMARY: Addition of blockouts 2WBKAB71, 2WBKAB72 and 2WBKAB73 at the west wall of el. 773'-6" in the Auxiliary Building for use of lighting, communications, security and unit heater conduits.

The blockouts are not described in the FSAR. These blockouts and sleeves were properly sealed to prevent any fire hazard or ventilation problems. This modification is in a non-seismic area to lighting, communications, security and unit heater conduit which has no safety function nor any impact on the accident analysis, therefore, it does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 06-0

TITLE: Change SLCRS Fan Lubricant From Oil To Grease

SUMMARY: Change lubrication of the pillow block bearings of Supplementary Leak Collection and Release System (SLCRS) exhaust fans from oil to grease. This will eliminate the leaking bearing lubricant and provide more convenient maintenance schedule.

SLCRS exhaust fan lubricant is not described in FSAR Section 6.5.3. The grease performs the same function as the lubricating oil and does not change the safety function of the SLCRS system, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 07-0

TITLE: Add Parallel Lube Oil Strainer On Emergency Diesel Generator

SUMMARY: A second strainer was added in parallel to the existing strainer. This allows one strainer to be isolated during diesel generator operation for disassembly and cleaning.

The diesel generator lubrication system is described in FSAR Section 9.5.7. Failure of one diesel generator is discussed in Section 3.1.1.3.4. The design of these systems provide completely separate and independent lubrication systems for each diesel generator. The proposed modification does not alter this independence. Failure of one lubricating system or one diesel generator is consistent with the accident analysis and does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 08-0

TITLE: Replace Galvanized Bolts With Galvanox Painted Welded Studs

SUMMARY: Due to unavailability of material, 3/8" galvanized bolts were replaced with 3/8" welded studs and galvanox paint.

This level of detail is not reflected in the FSAR. The replacement studs when galvanox painted will serve the same purpose and have a greater capacity than the original bolt, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 09-0

TITLE: Revise Evaluation Of Pressure Indicator

SUMMARY: Revise instrument supports, valving and tube routing to lower the elevation of 2SGC-PIS115A and B. This modification is necessary to accurately measure pressure in test tank 2SGC-TK23A and B during periods of low water level to protect pumps 2SGC-P26A and B.

Routing of tubing is not described in the FSAR Section 10.4.8. This modification will not affect the operation or function of this system but will increase the accuracy of the instrument, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 10-0

TITLE: Temporary Removal Of Hydrogen Tank Farm Fence And Gate

SUMMARY: Remove the fence and gate since the protection function will be provided by a post.

The fence and gate were not described in the FSAR, therefore, no change to the FSAR is required. This modification is to fences in the yard area and has no affect on safety-related components, systems or structures. An unreviewed safety question has not been created.

SAFETY EVALUATION NO.: 11-0

TITLE: Identification Of Floor And Wall Sleeves

SUMMARY: Reidentification of wall sleeve 2WS309N30 to 2WS309N55 due to duplicate sleeve numbers and identification of this wall sleeve for use of lighting conduits. Identification of floor sleeve 2FS458N11 for use of lighting conduits.

Wall and floor sleeves are not described in the FSAR. This modification is not safety related and has no impact on the accident analysis, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 12-0

TITLE: Provide Piping Cross-Connections Between H₂ Recombiner Trains

SUMMARY: Increase flow rate by providing piping cross connections between "A" and "B" recombiner trains to reduce piping frictional pressure losses.

The Post DBA Hydrogen Control System is described in FSAR Section 6.2.5.3. One recombiner is sufficient to maintain the hydrogen concentration in containment below 4 volume-percent. The cross-connect will not preclude one recombiner from performing its safety function as this change modifies suction piping only, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 13-0

TITLE: Delete Limit Switch Input To Loop Stop Valve Protection Circuits

SUMMARY: Remove RCS bypass valve stem mounted limit switches that provide input to control circuits in the loop stop valve protection cabinet. Jumpers will be installed to simulate valve position inputs previously provided by the limit switches.

RCS bypass valve logic allows restarting an isolated loop, however, the loop isolation valves cannot be closed as N-1 operation is prohibited by Tech Specs In Modes 1-4. Interlocks provided by the stem mounted limit switches will be maintained by the use of jumpers and administrative control of the valve position indication. Bypass valves will be de-energized and locked during normal plant operations. Based on strict administrative controls and on the limited operation of the valve, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 15-0

TITLE: Safety Cages To Decon Building Crane

SUMMARY: Add safety cages to ladders and handrail on back of Decon Building trolley.

Safety cages are not described in the FSAR. This modification does not alter any safety related equipment and does not involve an unreviewed safety question.

SAFETY EVALUATION NO.: 16-0

TITLE: Replace Levers With Handwheels

SUMMARY: Replace lever operators on seven manual (1/4 turn) valves with handwheels due to inability to obtain locking device for lever operators. Add valve position indication to local operating station. Manual valves are in steam generator clean-up system.

This level of detail (lever vs. handwheel) is not described in the FSAR. These valves are not safety related equipment, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 17-0

TITLE: Addition Of Equalizing Valves On Personnel Air Lock

SUMMARY: Install four Category II valves in the personnel air lock (PAL) equalizing valve lines, and change pipe plugs to swagelock. This modification will facilitate pressure equalization during PAL operation and will facilitate periodic testing.

This modification will not affect the containment pressure boundary, the installation is downstream of the Category I manual equalizing valves and will be seismic Category I, QA Category II. There is no affect on the operation of equipment required for safe shutdown and there is no unreviewed safety question.

SAFETY EVALUATION NO.: 18-1

TITLE: Add Pressure Control Valves

SUMMARY: Add two intermediate pressure control valves in parallel and a pressure indicating controller to main condensate system to reduce inlet pressure to pressure reducing valve 2CNM-PRV120, 122, 140 and 142.

This modification is to a non-safety related system and has no effect on any safety related components. The modification does not prevent required minimum flow and does not affect system operation, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 19-0

TITLE: Vital Area Barrier Doors

SUMMARY: Replace push plates on vital side of door with pull plates to allow user to latch door against air flow differential pressure.

Door hardware is not described in the FSAR. Modifying the push/pull plates produces no potential safety hazards and, therefore, is not an unreviewed safety question.

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SAFETY EVALUATION NO.: 20-0

TITLE: Change Comparator Cards In Steam Generator Blowdown Control Circuits

SUMMARY: Jumpers on Westinghouse comparator cards are changed to "Normally Energized" or "Normally De-energized" to ensure the associated card relays reflect the desired configuration.

This level of detail is not described in the FSAR. The modification will ensure that the system conforms to the original design - there is no change to the original design, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 21-0

TITLE: Add Electrical Supervision To Wiring Inputs For Halon System

SUMMARY: Fire and discharge alarms for the Halon system are modified to allow supervision of the wiring inputs to annunciator window A11-5D and A11-5E. These will be revised from normally open-close to alarm to normally close-open to alarm.

Requirements of FSAR Section 9.5 and Appendix 9.5A remain unchanged. This modification will allow the circuitry to alarm when the circuit is broken (inoperable alarm) and will meet requirements of NFPA 70 Article 760. This change does not involve an unreviewed safety question.

SAFETY EVALUATION NO.: 22-1

TITLE: Aerated Drains Transfer Pump Impeller

SUMMARY: Install larger diameter impellers.

This level of detail is not described in the FSAR. This modification ensures the desired flow is provided. The pumps are not safety related and have no effect on any safety related component. This change does not involve an unreviewed safety question.

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SAFETY EVALUATION NO.: 23-1

TITLE: Bypass Phase Overcurrent Trip On Diesel Generator

SUMMARY: The diesel generator protection circuit is rewired such that the phase overcurrent protection is bypassed when the generator is operating and the normal emergency bus supply breakers are open. Relay operation is alarmed in the main control room.

Phase overcurrent trip is bypassed on emergency diesel start, therefore, there is no change in the accident scenario and no unreviewed safety question.

SAFETY EVALUATION NO.: 24-2

TITLE: Additional Dampers

SUMMARY: Addition of gravity dampers and low leakage fire dampers in the SLCRS to alleviate CO₂ overpressure concerns, to maintain CO₂ concentration, and to provide warning signals in adjacent areas prior to CO₂ discharge. Increase size of pneumatic cylinders on CO₂ panels.

Addition of openings and gravity dampers and low leakage fire dampers has no impact on system operation. Damper leakage is negligible, dampers are QA Category I, Seismic Category I. The warning signal has no effect on safety related systems, and increasing the size of pneumatic cylinders is required to assure operation.

SAFETY EVALUATION NO.: 25-0

TITLE: Fire Damper and CO₂ System Changes

SUMMARY: Add backdraft damper 2HVR-DMP264 downstream of 2HVR*DMPF252, revise CO₂ alarm actuation and system activated alarm.

Addition of damper will ensure CO₂ concentration levels are maintained without over pressurizing the cable vault 1 day room. This modification will enhance the ability of the fire protection CO₂ system without changing the FSAR Section 9.5 analysis, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 27-0

TITLE: Delete Shake Space Fire Stops

SUMMARY: Delete shake space fire stops SS-FB-1V, 3V, 4H, and 5H (Fuel Building) and fire stop SS-A-2V (Auxiliary Building).

Shake space fire stops are not described in the FSAR. Subject fire stops may be deleted as the protective function in each case is performed by another existing fire stop. therefore, there is no change in the protection designed for the shake spaces and there is no unreviewed safety question.

SAFETY EVALUATION NO.: 28-0

TITLE: Revise Auxiliary Feedwater Timer Accuracy

SUMMARY: Replace 0-15 minute timer with 0-30 second timer. This timer provides a time delay start signal to auxiliary feedwater motor driven pumps if the turbine driven pump fails to start.

SUMMARY: Timer accuracy is not described in the FSAR. The replacement timer will ensure the pump logic will function as originally intended and within the tolerance desired, therefore, there is not a change to the design or function of the system and there is not an unreviewed safety question.

SAFETY EVALUATION NO.: 30-0

TITLE: CO₂ System Changes

SUMMARY: Install vapor traps in CO₂ piping and replace the discharge nozzles in System 1 Zone 4. Install vapor traps in supply piping and replace vent bleeders on System 1 Zone 5.

This level of detail is not described in the FSAR. This modification will enhance safety, by improving the turbine CO₂ system, and has no impact on safety related equipment. All changes are in the Turbine Building and do not create an unreviewed safety question.

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SAFETY EVALUATION NO.: 31-0

TITLE: Revise Temperature Controller

SUMMARY: Revise input jumper configuration of temperature controller cards 2SGC-TC111A and B.

Change ensures the system functions as originally designed and, therefore, is not an unreviewed safety question.

SAFETY EVALUATION NO.: 32-0

TITLE: Revise Printed Circuit Cards

SUMMARY: Revise jumper configuration on printed circuit cards 2CCP-TSH 100 B/C to normally de-energized position as originally specified.

Printed circuit card configuration is not described in the FSAR. This modification does not change loop control of primary component cooling heat exchanger outlet temperature and does not change FSAR evaluation in Section 9.2.2.1, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 33-0

TITLE: Recirculation Spray Pump Seals

SUMMARY: Add regulating valve and pressure gauge to the fill line to the recirculation spray pump tandem seal accumulator to prevent rupturing accumulator diaphragms.

This level of detail is not described in the FSAR. New piping and valve are supported as to not impact any QA Cat. I equipment. During operation the fill piping, regulating valve, and pressure indicator are normally isolated and, therefore, there is no change to the safety analysis and no unreviewed safety question is involved.

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SAFETY EVALUATION NO.: 34-0

TITLE: High Point Vents On Cooling Water Piping

SUMMARY: Add high point vents to service water pipes to cooling coils for Safeguards Building air conditioning units

This modification will enhance the operability of the service water system by reducing the build up of air and increasing heat removal capacity.

SAFETY EVALUATION NO.: 35-0

TITLE: Containment Sump Level Switch

SUMMARY: Replace the present single pole double throw sump level switch with two independent individual switches to allow differential between "Hi" and "Low" setpoints.

Sump pump level switch wiring is not described in the FSAR. This modification allows "Hi" and "Low" setpoints to be individually adjustable but does not affect operation of the containment sump pump. This pump performs no safety function and is not used to mitigate the consequences of an accident, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 36-0

TITLE: Condensate Polishing Filter

SUMMARY: Replace existing SEPTA filter elements for Condensate Polishing System filter demineralizer vessels with a porous metal membrane element.

This level of detail is not described in the FSAR. The new element performs the same function as the element which was replaced. The Condensate Polishing System does not have a safety function, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 37-0

TITLE: First Point Heater Bypass Valves

SUMMARY: Delete remote operator from manual valves 2FWS-V5, 6, 7, 8, 195 and 196 located in the turbine building.

Subject remote operators are not described in the FSAR. Valves can be locally operated therefore there is no change in valve function or system operation and no unreviewed safety question.

SAFETY EVALUATION NO.: 38-0

TITLE: Safety Injection Block Signal

SUMMARY: Incorporate a make-before-break transfer to prevent a loss of "block" signal for pressurizer and/or steamline safety injection.

This modification meets the requirements of paragraph 4.12 of IEEE 279-1971 and allows transfer of control between the main control board and Emergency Shutdown Panel without changing operational status of equipment and/or control function. This is consistent with the original design and accident analysis and does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 40-0

TITLE: Turbine Plant Sample System

SUMMARY: Replace 4/C cable (NKA-19) with 5 SIS wires (NKA-33).

This level of detail is not described in the FSAR. The replacement cables perform the same function as the original cables in this non-safety related system, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 42-0

TITLE: Leaking Pressurizer Safety Valves

SUMMARY: Pressurizer Safety Valves 2RCS*RV551B & C are "jacked" open in an attempt to achieve tight closure.

This situation is addressed in the plant accident analysis. Safety valves will be inoperable for less than 15 minutes which will meet technical specifications. RCS pressure dropped by 20% to perform this procedure. Constant control room communication will be maintained. No unreviewed safety question exists.

SAFETY EVALUATION NO.: 43-0

TITLE: Modify Power Supply to CO₂ System

SUMMARY: CO₂ System II Zone 7 control panel 2FPD-PNL-2-7 is powered from 125VDC panel PNL-DC2-05 located in relay room 755'6" of cable vault which is the area protected by zone 7. Change power supply to panel PNL-DC2-09 which is not in zone 7.

This level of detail for "BLACK" power is not described in the FSAR. This modification meets the intent of the fire protection program and has no effect on the system logic or control function of the CO₂ system and therefore is not an unreviewed safety question.

SAFETY EVALUATION NO.: 44-0

TITLE: Auxiliary Boiler Trip Logic

SUMMARY: Add pushbutton in parallel with pressure switches ADP (steam/oil differential pressure) and ASP (low atomizing steam pressure) to prevent boiler trip when charging from air to steam atomizing.

This level of detail is not described in the FSAR. The auxiliary boiler has no effect on accident analysis and, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 45-0

TITLE: Modify Shield Wire

SUMMARY: Modify shield of cable 2IHAMNC746 in panel PNL*2DPU(-A) to prevent alarm circuit to ground.

This level of detail is not described in the FSAR. This modification will allow the shield to perform its designated function, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 46-0

TITLE: Fire Protection Control Panel

SUMMARY: Revise wiring to prevent local trouble alarm from sounding in the presence of fire alarm and to prevent chattering of relay.

This level of detail is not described in the FSAR. This modification will improve the electrical integrity of the CO₂ system and will have no effect on safety or operation of the system as designed and therefore there is no unreviewed safety question.

SAFETY EVALUATION NO.: 47-0

TITLE: Manual Valve Remote Operators

SUMMARY: Add positive mechanical stops to Remote Operator Reach Rods to prevent over torquing.

This level of detail is not described in the FSAR. These valves and remote operators are not safety related and were not evaluated in the FSAR. This change does not involve an unreviewed safety question.

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SAFETY EVALUATION NO.: 48-0

TITLE: Revise Pipe Support

SUMMARY: Add weld between pipe support members at support
2CNM-PSR030.

This level of detail is not described in the FSAR. This modification is non-safety related, is located in the turbine building and has no effect on any safety related equipment.

SAFETY EVALUATION NO.: 49-0

TITLE: Gaseous Waste Comparator Card

SUMMARY: Revise jumper on comparator card NALZ (2GWS-PSH102) from
"Normally Energized" to "Normally Deenergized".

This level of detail is not described in the FSAR. This modification will ensure the operation of control loop for PCV116 conforms to the original design and therefore there is no unreviewed safety question.

SAFETY EVALUATION NO.: 50-0

TITLE: Vent Line Routing

SUMMARY: Revise vent line routing from 2DWS-DWC23 to an existing 4"
vent line (2PBS-004) in the turbine building.

This level of detail is not described in the FSAR. Vent line routing to a non-safety related system having no effect on any safety related system is not an unreviewed safety question.

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SAFETY EVALUATION NO.: 51-0

TITLE: Modify Turbine Trip Circuit Relay

SUMMARY: Replace relay R/RPT (Westinghouse type ARD 420S) in the emergency turbine trip circuit with a Westinghouse type ARD 880UR Relay.

This level of detail is not described in the FSAR. The new relay is functionally the same as the original relay but has a higher voltage rating. This change does not involve an unreviewed safety question.

SAFETY EVALUATION NO.: 52-0

TITLE: Steam Dump Valve Controllers

SUMMARY: Revise valve controllers to allow manual control to override priority raise signal and if in manual mode prior to priority raise signal then controllers will go to automatic mode when signal clears.

This level of detail is not described in the FSAR. This modification improves controller operation in case of a false signal, or transmitter failure and will prevent uncontrolled blowdown if there is a delay in resetting the valve. FSAR analysis Section 15.1 and 15.2 remain valid and are unaffected, therefore there is no unreviewed safety question.

SAFETY EVALUATION NO.: 53-0

TITLE: Ground Overvoltage Relay

SUMMARY: Install variable 500 ohm 100 watt resistor in parallel with the Ground Overvoltage Relay (59-202G).

This level of detail is not described in the FSAR. This modification will improve the electrical integrity of the ground overvoltage protection system by eliminating the possibility of ferroresonance. This modification will have no affect on the previous safety evaluation and is therefore not an unreviewed safety question.

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SAFETY EVALUATION NO.: 55-0

TITLE: Control Room Air Conditioning Service Water Strainer

SUMMARY: Add 20 mesh screen to existing perforated plate with 1/8" holes in strainers 2SWS*STR25 & 26.

This level of detail is not described in the FSAR. The addition of a smaller mesh strainer element will enhance the operability of the service water system and will increase the reliability and safety of the control room air conditioning. Strainer design which allows purging during operation is unaffected and, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 56-0

TITLE: CO₂ System Odorizer

SUMMARY: Relocate CO₂ System II Zone 6 odorizer (Purple Diesel Room) to 2 feet downstream of existing location on discharge header.

This level of detail is not described in the FSAR. This modification will enable the system to meet NFPA-12 design requirements. No change in design of the CO₂ system was made, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 57-0

TITLE: Safeguards Air Conditioning Units

SUMMARY: Increase air flow through the safeguards area air conditioning units from 15,000 CFM to 16,000 CFM.

The increase in fan speed will not exceed the rated horsepower of the fan motor nor adversely affect the air conditioning units. This modification is consistent with the system design and will not alter the redundancy of the Service Water System or Air Conditioning Systems and, therefore, does not create an unreviewed safety question.

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SAFETY EVALUATION NO.: 58-0

TITLE: Personnel Barriers

SUMMARY: Delete the ladder at the northside of safeguards. Add a personnel barrier on the southside ladder. Add a cover on the shake space between safeguards and RWST.

This level of detail is not described in the FSAR. This modification is to the outside of the structure and has no affect on any system and, therefore, does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 60-0

TITLE: Main Generator Blocking Diode

SUMMARY: Add a blocking diode after terminal 2 of relay 40-201 to prevent leakage from the main generator loss of field relay 40-1201.

This level of detail is not described in the FSAR. This modification will ensure the system meets the original design intent and, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 61-2

TITLE: Addition of 24 Ton CO₂ Tank

SUMMARY: Add a 24 ton CO₂ storage tank for CO₂ System II, outside the west wall of the Auxiliary Building to provide reserve CO₂ capacity as required by NFPA-12. Repipe existing 10 ton CO₂ storage tanks.

Failure of this 24 ton CO₂ storage tank has been modeled and analyzed and control room habitability will be maintained. Coincident rupture of 10 ton and 24 ton tanks is not considered credible. There is no unreviewed safety question.

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SAFETY EVALUATION NO.: 62-0

TITLE: Recirculation Spray Coolers Cleanness Level

SUMMARY: Revise the cooler cleanness level acceptance criteria to note an exception was taken to ANS^I N45.2.1 and Reg. Guide 1.37.

The maximum particle size, based on review of the Recirculation Spray System, the charging pumps, and reactor core coolant passages, was determined to be 1/8". The acceptance criteria was revised based on the acceptability of this size particle in the systems evaluated without affecting the safety function of the system components. Therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 63-2

TITLE: Temporary Replacement of Stainless Steel Valve

SUMMARY: Temporarily replace 2CHS*FCV160 chemical and volume control loop fill flow control valve with a carbon steel valve. Replacement valve will have anti-cavitation trim.

Loop fill line of 2CHS*FCV160 is normally closed, and has no normal plant operating function. Unavailability of a stainless valve to replaced the damaged valve necessitated the use of available carbon steel valve. The valve functions as a containment isolation valve, and integrity of valve and valve function for the limited time it is installed has been ensured by evaluation and by increased surveillance, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 65-0

TITLE: Flex Hose Replacement

SUMMARY: Remove flex hose and replace with hard tubing on auxiliary steam system.

Hard tubing is Category II seismically installed and is consistent with the original design basis and will meet ANS^I B31.1 and will not affect system operability.

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SAFETY EVALUATION NO.: 67-0

TITLE: Rewire Annunciator Cards

SUMMARY: Relay contacts on Westinghouse annunciator interface cards are rewired from "Normally Closed" to the "Normally Open" state at 2SGC-LYH118A.

This level of detail is not described in the FSAR. The electrical equipment associated with this circuit is QA Category II, not required for safe shutdown. The changes will allow the system to function as originally intended and, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 69-1

TITLE: Addition of Backdraft Dampers

SUMMARY: Addition of backdraft dampers, relocation and addition of CO₂ nozzles, and addition of evacuation alarm.

The backdraft dampers were purchased and installed as Q/ Category I. These dampers are normally closed, fail closed and will prevent high pressure in the control building during CO₂ actuation. CO₂ actuation as a result of a fire is not postulated coincident with an accident. CO₂ piping changes will meet NPFA requirements. The evacuation alarm has no impact on system operation.

SAFETY EVALUATION NO.: 70-0

TITLE: Revise FSAR Figure 6.2-121 to delete reference to Note 11

SUMMARY: This reference was incorporated in FSAR Amendment 18 prior to implementation of the plant change which was subsequently not implemented. Therefore, the plant remains as described in the FSAR at the time of licensing.

No unreviewed safety question exists because the 10CFR50.59 criteria as specified in paragraph 50.59(a)(1)(i) is not met, i.e. there is no change to the facility.

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SAFETY EVALUATION NO.: 71-0

TITLE: Limit Switch Contacts

SUMMARY: Reconnect limit switch contacts on 2CHS*FCV113B (FLO) and 2CHS*FCV114B (FLO) to provide "Open/Not Open" inputs to the computer.

This change will perform the same function as the original design, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 72-0

TITLE: Conduit Support

SUMMARY: Add bracing to support 36031-S located in manhole 1EMH8A.

This level of detail is not described in the FSAR. The modified support will be structurally adequate and will provide an acceptable margin of safety, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 74-0

TITLE: Ultraseal Union

SUMMARY: A Parker-Hannafin Ultraseal Union will be added between the hydrogenated drains containment valve and isolation valve provided on all valve stem leak off lines in containment.

The Ultraseal Union will prevent seal leakage, and reduce valve disassembly time thereby enhancing the ALARA concept by reducing exposure times. A mechanical joint addition will not reduce the safety of the plant and, therefore, the change does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 75-0

TITLE: Evaporator Bottoms Metering Pump Air Supply

SUMMARY: Add a supply air flow control valve in the actuator assembly of the evaporator bottoms metering pump.

This modification will ensure that proper liquid effluent amounts are mixed with dry cement, and will not effect the operation of the radwaste mixing station.

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SAFETY EVALUATION NO.: 76-0

TITLE: Revise Primary Sample System Grab Sample Tanks

SUMMARY: Retrofit existing 500cc sample cylinders with new 150cc cylinders.

Smaller cylinders will reduce the amount of radioactive material handled by chemistry personnel. This system has no safety function, and is designed as QA Category II. Changeout of the sample cylinders will not affect system operation and, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 77-0

TITLE: Fire Damper Fusible Link

SUMMARY: Replace the fusible link rated at 160°F with one rated at 212°F in fire dampers 2GSS-DMPF23A & B.

This modification is consistent with recommendations of NFPA 90A and will not affect fire barrier integrity. The modification minimizes inadvertent trips and allows dampers to operate as originally designed, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 78-0

TITLE: Reroute Condensate Drain Piping

SUMMARY: Reroute condensate drain piping from post accident sampling cubicle air conditioner.

The piping was rerouted to eliminate the need for another hole in the roof of the PAS cubicle. The system design was not modified, and the piping is non-safety related, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 79-0

TITLE: Access Doors on Air Conditioning Units

SUMMARY: Add access door and replace variable shieves with fixed shieves.

This level of detail is not described in the FSAR. Addition of doors on non-motorside of BVPS-179 air conditioning units will facilitate inspection and maintenance of bearings. Fixed shieves will improve vibration levels. The modifications will not prevent the units from performing their intended function, therefore, there is no unreviewed safety question.

SAFETY EVALUATION NO.: 81-0

TITLE: Remove Jumper

SUMMARY: Within the full length rod control logic cabinet the jumper from TB12 point 7 to TB12 point 8 is removed and conductors of cable 2ROINNC911 changed from TB12 points 8 and 9 to TB12 points 7 and 8.

This modification will eliminate a ground alarm in the Bay 4 annunciator and will allow the cable to perform its designed function.

SAFETY EVALUATION NO.: 82-0

TITLE: Logic Change - Startup Feedwater Pump

SUMMARY: Modify the startup feedwater pump 2FWS-P24 test circuit to minimize inadvertent trip during testing.

This level of detail is not described in the FSAR. The startup feedwater pump is not required for the mitigation of any accident and is automatically isolated from the steam generators following a feedwater isolation signal.

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SAFETY EVALUATION NO.: 83-0

TITLE: Bypass & Inoperable Status Lights

SUMMARY: Rewire eight bypass and inoperable status lights serving various systems.

This level of detail is not described in the FSAR. This modification will allow operation of BISI lights as originally designed and will not change the operation of the lights.

SAFETY EVALUATION NO.: 86-0

TITLE: Addition of Jumper Wire

SUMMARY: Add jumper wire (NKA-27) from terminal block to ground bus to ground cable 2IHC8NX955.

This level of detail is not described in the FSAR. This modification will allow the shield of cable 2IHC8NX955 to perform its original design function.

SAFETY EVALUATION NO.: 89-1

TITLE: Temporary Steam Generator Heat Exchanger and Demineralizer

SUMMARY: Addition of a temporary heat exchanger and demineralizer between the existing blowdown flash tank and the main condenser. Modification of associated control functions.

The portion of the system being modified is QA Category II, non-safety related, and has no safe shutdown or safety related functions. This modification will enhance the performance of the Steam Generator Blowdown System by cleanup of steam generator bottoms.

SAFETY EVALUATION NO.: 91-0

TITLE: Main Computer Wiring Change

SUMMARY: Revise wiring from knife switch to computer RK-2CMP-CINB.

This level of detail is not described in the FSAR. The main computer is not safety related. This modification allows the digital signal to perform its originally designated function.

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SAFETY EVALUATION NO.: 93-0

TITLE: Demineralized Water System Printed Circuit Cards

SUMMARY: Revise annunciator alarms from normally energized to normally deenergized.

This level of detail is not described in the FSAR. This modification does not affect a safety function but only revises how the alarm annunciates and therefore is not an unreviewed safety question.

SAFETY EVALUATION NO.: 95-0

TITLE: Replace Unit Heaters with Heat Tracing

SUMMARY: Heat tracing is used for four pipes in the south pipe trench instead of unit heaters.

Heat tracing performs the same function as the original design with no impact on system operation.

SAFETY EVALUATION NO.: 99-0

TITLE: Addition of GWS Storage Tank Relief

SUMMARY: Install relief valve in gaseous waste storage tank rupture disc relief line.

The relief valve functions as a redundant pressure relief device to the existing rupture disc. Neither the relief valve or rupture disc are safety related or affect safe operation of the plant and, therefore, the change does not create an unreviewed safety question.

SAFETY EVALUATION NO.: 102-0

TITLE: MOV Torque Limiter Plate

SUMMARY: Delete torque limiter plate which is interfering with proper torque settings as determined by MOVATS testing.

This level of detail is not described in the FSAR. The torque limiter plate is not safety related and is not required as MOVATS sets the torque switch based on stem thrust. Deletion of torque limiter plate therefore has no affect on the accident analysis.

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SAFETY EVALUATION NO.: 105-0

TITLE: Remove Duplicate Indicator

SUMMARY: Remove 2MSS-PI464B from service as it is a duplicate (i.e. not redundant) indication in the control room.

Removal of duplicate steam line pressure indication will reduce operator error of assuming indication is redundant, but will not affect any previously evaluated accident analyses.

SAFETY EVALUATION NO.: 106-0

TITLE: Seismic Conduit Support Modification

SUMMARY: Modify conduit support 5003-WTHY-S from welded to bolted for ease of periodic fan maintenance.

This level of detail is not described in the FSAR. Seismic integrity has not been compromised by using a bolted butt splice instead of a weld on the cantilever, therefore, there is no change in the function of this support.

SAFETY EVALUATION NO.: 108-0

TITLE: Reactor Head Storage Stand Cover

SUMMARY: Remove the reactor head storage stand cover which had been used to store the concrete floor slabs which have been replaced with removable grating.

This modification will eliminate unnecessary equipment handling during refueling by removing the storage stand cover which is no longer required. Removal of the cover will not affect any safety function.

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SAFETY EVALUATION NO.: 109-2

TITLE: Modify Test Light Circuit

SUMMARY: Modify the push button test light circuit for the auxiliary undervoltage relay on the 4160 volt normal bus to correct faulty operation.

This level of detail is not described in the FSAR. This modification enhances operation. FSAR Section 15.2.6 evaluates "Loss of Non-Emergency AC Power". This modification does not affect that evaluation.

SAFETY EVALUATION NO.: 110-0

TITLE: Cut Suction Line For Fuel Pool Cooling Pumps

SUMMARY: Cut the ten inch fuel pool cooling pump suction line to one inch past the pool liner to remove possible interference with fuel handling operations.

This level of detail is not described in the FSAR. This modification will be under the ASME XI program and incorporated into pipe stress calculations. The modification is QA Category I and results in a reduction of existing pipe protruding into the spent fuel pool. This does not change the probability or consequences of an accident or malfunction.

SAFETY EVALUATION NO.: 111-0

TITLE: Conduit Support

SUMMARY: Add a new support for 3/4" conduits 2GF3 and 2GF3X as required by Field Construction Procedure 420.

This level of detail is not described in the FSAR. Addition of the support will satisfy seismic requirements for this conduit and is required to meet the original design intent. This new support (35345-S) replaces the original support (2PA-13571(S)) and does not change the function which is to prevent damage to nearby components during a seismic event.

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SAFETY EVALUATION NO.: 112-0

TITLE: Thermal Relief Valves Piping

SUMMARY: Redirect discharge from relief valves 2FNC*RV101 & 102 from present location into the nearest floor drain.

This discharge line modification will be made under the ASME XI program. The lines are included in pipe stress calculations. The probability of occurrence or the consequences of an accident or malfunction remains unchanged as this modification is only an extension of existing piping.

SAFETY EVALUATION NO.: 114-0

TITLE: Steam Generator Blowdown Sample Coolers

SUMMARY: Modify steam generator blowdown sample coolers - cooling water supply was changed from primary component cooling water to chilled water to provide more cooling.

Chilled water is QA Category II, non-nuclear safety and is not required to mitigate the effects of an accident.

SAFETY EVALUATION NO.: 115-0

TITLE: Service Water Piping Modification

SUMMARY: Modify service water piping to main steam valve house cooling coils by adding flanges to allow flushing of cooling coils.

Service water system contains other flanges which have no affect on the system design from a safety consideration.

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SAFETY EVALUATION NO.: 117-0

TITLE: Add Screen Vent to Pressure Transmitter

SUMMARY: Add a screen vent to the low pressure port on emergency switchgear room ventilation pressure transmitter 2HVZ*PT22B(-W) to stabilize the differential pressure readings.

This instrument is QA Category I and seismically installed. The screen vent will enhance operation and will not affect the previous evaluation. System is designed with 100 percent redundancy.

SAFETY EVALUATION NO.: 118-1

TITLE: Gaseous Waste Compressors

SUMMARY: Add a time delay relay (AGASTAT 7012 AB) to the compressor circuit to eliminate spurious trips due to momentary voltage spikes.

Gaseous waste compressors are Category II non-safety related and not required for safe shutdown. The time delay will not affect operation of the compressors but will delay trip on low pressure signal which is not a safety function.

SAFETY EVALUATION NO.: 120-0

TITLE: Containment Sump Drain Pumps

SUMMARY: Add 1/2" diameter bypass lines to the pump casing to enhance priming capability.

Containment sump drain pumps are not safety related and are not evaluated in the FSAR, therefore, there is no unreviewed safety question.

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SAFETY EVALUATION NO.: 121-0

TITLE: 8 Hour Battery Pack Emergency Lighting

SUMMARY: Additional light fixture is added in the Auxiliary Building to resolve a test deficiency.

The additional light fixture is not safety related and does not affect the accident analysis.

SAFETY EVALUATION NO.: 122-0

TITLE: Main Control Board Indicating Components

SUMMARY: Isolate remote indication devices (ammeter, watt meters, and power factor meters) from the 4KVS*2AE Bus. Isolation is required in the event of a fire in the main control board which may cause deenergization of the bus.

The modification will ensure that, assuming a fire in the main control board, the 4160V Bus 4KVS*2AE will continue to operate, thus, the modification will enhance the present design.

SAFETY EVALUATION NO.: 123-0

TITLE: Solid Waste Disposal Control Circuitry

SUMMARY: Control circuitry modifications to correct the following: (1) Flush cycle stops prematurely, (2) Decant metering pump water valve remains open preventing exhaust valve from operating and (3) Flush valve AOV-135 opens and remains open in flush cycle.

This system is QA Category II non-nuclear safety. The modification does not change the system design or change any previous safety evaluation and has no impact on the plant accident analysis.

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SAFETY EVALUATION NO.: 124-0

TITLE: Duct Smoke Detectors

SUMMARY: Remove smoke detector 2FPM-DI14. Remove and replace smoke detector 2FPM-DI13 with a detector of the "TC 100C" type. The removed detectors are of the "TC 100D" type which will not operate acceptably at the air velocity in the duct.

This configuration performs the same function as the original configuration as the deleted detector 2FPM-DI14 is not required. The new detector is compatible with the systems air velocity and duct volume. The FSAR description of smoke detection (Section 9.1.4.1.2.1) remains unchanged.

SAFETY EVALUATION NO.: 125-0

TITLE: Additional Contact on SG Blowdown Evaporator Switch

SUMMARY: Additional contact on evaporator switch wired in parallel with existing contact to allow standby pump to auto start should running pump trip.

The evaporator bottoms pump is QA Category II not required for safe shutdown. This modification will ensure the system meets its original design intent.

SAFETY EVALUATION NO.: 126-0

TITLE: Base Adjuster Rheostat

SUMMARY: Add Base Adjuster Rheostat to Diesel Generator 2-1 excitation panel PNL*2DIGEN-1. This modification is required to provide a minimum excitation setpoint for the diesel generator excitor when the normal MCB Rheostat is switched out of the excitation circuit.

The new Rheostat performs the same function as the original when the original is switched out. The Rheostat is the same type and manufacturer as the original. There is no change in the system function when the new Rheostat is in the control circuit.

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SAFETY EVALUATION NO.: 127-0

TITLE: Relocate Resistor

SUMMARY: Relocate the 2K ohm dropping resistor of the SKDU-3 offset MHO phase distance relay to the potential circuit of the relay to allow operation during functional testing.

The components are QA Category II non-safety related. This modification facilitates functional testing of the relay without degrading the control circuit.

SAFETY EVALUATION NO.: 128-0

TITLE: Relocate Control Station

SUMMARY: Relocate the control station for 2DAS-P203C1 and C2 and for pumps 2DAS-P203C1 & C2 to enhance manual operation of the equipment should they experience a loss of automatic control.

This modification assures the ability to manually operate this equipment, however, the control stations have no safety significance and no impact on the accident analysis.

SAFETY EVALUATION NO.: 129-0

TITLE: Heat Tracing Test Panels

SUMMARY: Reterminate cables 2HTSNNX714 and 715 at the correct heat tracing heat panels.

This modification corrects cable terminations to allow test panels to function as they were originally designed.

SAFETY EVALUATION NO.: 130-0

TITLE: Thermocouple Temperature Recorder

SUMMARY: Revise location of annunciator cables terminations.

This modification corrects annunciator feature to its originally designed function.

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SAFETY EVALUATION NO.: 132-0

TITLE: Temporary RTD Installation

SUMMARY: Temporarily attach 4 RTDs to the surface of the pressurizer surge line to provide line temperature readings.

The RCS integrity is not violated as RTDs are attached to the pipe surface. The additional RTD weight on the pipe is negligible. Material compatibility is not a concern. This modification is QA Category III and had no effect on the system operation.

SAFETY EVALUATION NO.: 134-0

TITLE: Access Ladder and Handrail

SUMMARY: Install ladder and handrails to the battery room roof for access to exhaust fan 2HVT-FN271.

This modification does not affect any equipment function and, therefore, can't affect the accident analysis.

SAFETY EVALUATION NO.: 135-0

TITLE: Reduce Platform Width

SUMMARY: Reduce width of platform in Condensate Polishing Building, el. 772'-6" from 4'0" to 3'0" to prevent interference during storage procedures.

The modifications do not affect any safety related structures, systems, or components and do not impact the existing safety analysis.

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SAFETY EVALUATION NO.: 136-0

TITLE: Main Steam Safety Valve Ring Settings

SUMMARY: Revise MSSV ring settings as identified by NRC IE Information Notice 86-05 and manufacturers recommendations to increase blowdown to ensure adequate capacity for steam generator over pressure protection.

A Westinghouse evaluation has shown that there is no affect on BV-2 resulting from the increased heat removal and only one case (steam generator tube rupture) where an increase in mass release occurred. The radiological consequences for this case were analyzed and it was determined that the dosage limits defined by 10 CFR 100 were not exceeded. Specifically, the revised dosages were within the guidelines of 10 CFR 100 for preaccident iodine spike and within the concurrent iodine spike dosage limitations.

SAFETY EVALUATION NO.: 137-0

TITLE: Termination Cabinet Conductors

SUMMARY: Interchange conductors of 2RPSNNC706 and 2RPSNNC802 for the high and low flow signals from 2CHS-FT122.

This level of detail is not described in the FSAR. This modification provides the proper high or low signal to the respective annunciator which agrees with the original design criteria.

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SAFETY EVALUATION NO.: 138-0

TITLE: Main Generator Power Factor Transducer

SUMMARY: Add transducer to provide required power factor input signal for main generator analog inputs to the plant computer.

Computer inputs to the PCS, for main generator power factor and net generation, provide information on unit status and performance. The inputs from these devices, which are QA Category II, perform no safety function and do not affect the function or performance of safety related systems or components.

SAFETY EVALUATION NO.: 139-0

TITLE: Fire Damper Addition

SUMMARY: Add fire dampers 2HVJ-DMPF27 & 28 to ducts at the penetration el. 774-6" in the Health Physics Building.

This system is not safety related. The dampers function as fire barriers for the Health Physics Building as required by Pennsylvania Code. The dampers do not change a system function as they are redundant to existing dampers 2HVJ-DMPF25A & B and 26A & B.

SAFETY EVALUATION NO.: 140-0

TITLE: Air Conditioner Drain Piping

SUMMARY: Add drain piping to health physics area ventilation air conditioners to prevent water carry over into ducting.

This level of detail is not described in the FSAR. This system is non-safety related, does not perform a safety function and is not assumed to operate during the accident, therefore, there is no impact on the accident analysis.

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SAFETY EVALUATION NO.: 141-0

TITLE: Outdoor Lighting

SUMMARY: Add additional lighting at the southwest corner of the
Condensate Polishing Building.

This modification is security required and has no effect on
the accident analysis.

SAFETY EVALUATION NO.: 142-0

TITLE: SLCRS Ventilation Duct Barrier

SUMMARY: Add intruder barrier in SLCRS duct to prevent access.

This modification is security enhancement and has no effect
on system operation.

SAFETY EVALUATION NO.: 144-0

TITLE: Main Feedwater Control Valves

SUMMARY: Various modifications to the feedwater control valves based
on operating experience at BV-1.

The safety function of the feedwater control valves is to
isolate feedwater flow. These modifications will not
affect that safety function or the safety analysis.

SAFETY EVALUATION NO.: 147-0

TITLE: Auxiliary Boiler Fans and Dampers Interlocks

SUMMARY: Add interlock between damper 2ABA-MOD29, 30, and 31 and
fans 2ABA-FN-29A & B to prevent fan operation if damper is
closed. Add interlock between fan start circuit and steam
valves to allow both auxiliary boilers to fire
simultaneously.

Auxiliary boiler modifications do not affect the accident
analysis in any way.

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SAFETY EVALUATION NO.: 148-0

TITLE: Replace Pressure and Vacuum Gauges on RAD Monitors

SUMMARY: Replace existing pressure and vacuum gauges with equivalent commercially available gauges.

FSAR Section 12.3.4 description and Technical Specification 3/4.3.3 requirements are unchanged. The replacement gauges are equivalent to older installed gauges.

SAFETY EVALUATION NO.: 149-0

TITLE: Under Frequency Trip Relays

SUMMARY: Determine IPAC 752 relays and install SFR Hathaway Relays in a separate panel to perform the under frequency trip function. This replacement should ensure proper operation of the under frequency tripping scheme.

The panel and relays are non-nuclear safety, non-seismically qualified, and not assumed to operate during an accident. The design basis for the accident analysis remains unchanged.

SAFETY EVALUATION NO.: 150-0

TITLE: Replace Combustibles

SUMMARY: Replace combustible rodofam presently installed around the perimeter of ductlines 906, 955, and 985 in the safeguards building with a 3-hour rated fire seal.

This modification is consistent with the fire protection program and will not alter any fire barrier.

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SAFETY EVALUATION NO.: 151-0

TITLE: Offline Gas and Particulate Filter Monitor

SUMMARY: Add bypass line around RD-56B moving paper particulate filter to allow RD-59, Gaseous Radiation Detector, to remain in operation while RD-56B is being serviced.

Bypass is consistent with the FSAR evaluation. A grab sample will be taken during times that RD-56B is being serviced to ensure continuous monitoring, thus system operation is not changed.

SAFETY EVALUATION NO.: 154-0

TITLE: Annunciator Inputs for Deluge Water System

SUMMARY: Modify inputs to the fire protection annunciators, for the deluge system in the Main Control Room, so that an alarm will actuate for an open circuit as well as for a fire.

This modification will enhance the operation of the fire alarm system which is not safety related.

SAFETY EVALUATION NO.: 155-0

TITLE: Steam Generator Blowdown Radiation Monitor

SUMMARY: Add a throttle valve to the steam generator blowdown radiation monitor to eliminate cavitation. This flow path is used to return recycled distillate.

This monitor, 2SGC-RQI100, is QA Category II non-nuclear safety. No credit is assumed for this system in an accident. This flow path is isolated automatically when high activity levels exist in the effluent.

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SAFETY EVALUATION NO.: 156-0

TITLE: Replace Ventilation Controllers

SUMMARY: Replace T-9000 controllers with newer T-5800 controllers. Add solenoid valves and retube pneumatic piping for the pipe tunnel and fuel building ventilation systems.

Replacement controllers meet all requirements of the original controllers. The changes are to non-safety related equipment which are not necessary for accident mitigation.

SAFETY EVALUATION NO.: 157-0

TITLE: Relocate Junction Box

SUMMARY: Relocate junction box 2JB*MSSRQI101-2 to alleviate heat sink problem and enlarge equipment to enhance accessibility.

This modification will ensure equipment does not overheat and functions as originally intended.

SAFETY EVALUATION NO.: 159-0

TITLE: Three Pen Recorder

SUMMARY: Rewire three pen recorder 2RCS-YR001 reversing pen 2 input and pen 3 input.

This modification is to correct wiring, which is reversed, and will return the recorder to its originally intended design function.

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SAFETY EVALUATION NO.: 161-1

TITLE: Pipe Support Structural Steel

SUMMARY: Provide a notch on the bottom flange of a W12 X 36 structural steel beam to provide freedom of movement for a mechanical snubber.

This change will not affect the structural integrity of the beam or approach allowable stress limits.

SAFETY EVALUATION NO.: 164-0

TITLE: Control Room Air Handling and Refrigeration Units

SUMMARY: Timers which limit starting duty prevent the control room air conditioning units from restarting on a diesel loading sequence and will be bypassed on a diesel loading sequence only.

This modification will ensure the availability of the air conditioning units immediately following an accident. At all other times, the unit will start when the recycle timer has timed out.

SAFETY EVALUATION NO.: 166-0

TITLE: Plant Computer Wiring

SUMMARY: Revise wiring configuration at the plant computer to spare problem cables and use existing spare cables to provide the required signals.

Plant computer and cables are QA Category II non-nuclear safety which provides status only and does not affect equipment operation.

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SAFETY EVALUATION NO.: 167-0

TITLE: RHR Low Flow Alarm

SUMMARY: Correct current wiring of RHR low flow alarm so low flow alarm is functional only when pump is running.

This modification will correct the wiring and alarms so that they will alarm as originally designed.

SAFETY EVALUATION NO.: 169-0

TITLE: Local Flow Indication

SUMMARY: Modify 2SWC-FS107A, B and C service water low flow trip of chillers to add local indication of flow.

This modification is to QA Category II instruments which have no safety related function.

SAFETY EVALUATION NO.: 170-0

TITLE: Primary Process Racks Computer Input Cards

SUMMARY: Modify Primary Process Racks (RK*2PRI-PROC-1,2,3 & 4) by performing wire wraps on computer input cards to eliminate a mismatch with PSMS.

This modification will improve the accuracy of the PSMS. Compliance with Class 1E isolation criteria is achieved based on fault testing and accepted coil to contact relay isolation.

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SAFETY EVALUATION NO.: 171-0

TITLE: ADD Vent Panels to Main Steam Vent House (MSVH)

SUMMARY: Provide the capability to open the MSVH vent panels located near the roof; seal off SLCRS in MSVH to improve temperatures in MSVH.

Open vent panels are addressed in the FSAR. This Supplementary Leak Collection & Release System (SLCRS) modification does not change the accident analysis as the SLCRS is designed for a LOCA and no radioactive sources exist in this area.

SAFETY EVALUATION NO.: 172-0

TITLE: Unistrut Shuttle Tray Support

SUMMARY: Add a new member to increase the strength and seismic integrity of the cable tray support system. This change is required to resolve a non-conformance.

Addition of a redundant unistrut member increases the strength of the cable tray support system but does not affect the operation of safety related equipment.

SAFETY EVALUATION NO.: 173-0

TITLE: Instrument Stands

SUMMARY: Add 1/2" plate to the instrumentation stand for RCS and CCP instruments to accommodate loss of original weld length.

This weld on the instrumentation stand for 2RCS*FIS481A and 2CCP*PT107A will have no affect on the accident analysis. The system function is not affected.

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SAFETY EVALUATION NO.: 174-0

TITLE: Bypass and Inoperable Status

SUMMARY: Rewire the auxiliary feedwater control valves bypass and inoperable status indication to correct a problem with the clearing of inoperable status indication.

This modification will correct the operation so that "Operable/Inoperable" status is displayed correctly and as originally intended.

SAFETY EVALUATION NO.: 175-0

TITLE: Main Feedwater Flow Control Valves

SUMMARY: Replace 1560 lb/in spring in feedwater flow control valves with a 3600 lb/in spring to dampen oscillation.

The feedwater system is described in FSAR Section 10.4.7. The safety function of these valves is to isolate feedwater flow upon receipt of an isolation signal. This safety function is not changed by this modification. Closure time of the valves will be verified upon completion of the modification.

SAFETY EVALUATION NO.: 177-0

TITLE: PSMS Plasma Display Console

SUMMARY: Modify the PSMS plasma display console to correct RVLIS D/P reading from inches of water to PSI and to modify the logic for pressurizer and main steam safety valve position indication.

The PSMS is provided to meet the requirements of Reg. Guide 1.97 as described in FSAR Section 7.5 and 7.7.2.10. This modification enhances PSMS operation by providing a more accurate indication of conditions.

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SAFETY EVALUATION NO.: 178-0

TITLE: Delete Signal from 2GWS-FT101

SUMMARY: Delete internal wiring from 2GWS-FT101 which will delete the signal to rad monitor 2GWSRQI103 (Aerated Vent Transfer Monitor). This monitor has no automatic control functions.

This modification to QA Category III equipment is consistent with FSAR Table 11.5-1. This wiring is not functional and is not required as there is no automatic control functions associated with it.

SAFETY EVALUATION NO.: 179-0

TITLE: Condensate Polishing System Annunciators

SUMMARY: Revise Condensate Polishing System trouble annunciator on the main control board (A6-4G) which is not a multiple input window to realarm if a second alarm is actuated.

The Condensate Polishing System and the main control room annunciator system are non-safety related QA Category II and will not affect the safety function of other equipment.

SAFETY EVALUATION NO.: 180-0

TITLE: Relocate High Point Vents

SUMMARY: Relocate secondary plant component cooling water high point vent on the four generator hydrogen coolers from their present location to the 752'-6" elevation. Vent valves will be relocated in the same vent line.

These valves are manually operated during filling and draining operations but require a scaffold for the plant personnel. The new location within the same vent line will enhance manual operation without the need for scaffolding. This modification will not affect system operation in any manner.

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SAFETY EVALUATION NO.: 182-0

TITLE: Level Transmitters

SUMMARY: Revise the shield termination arrangement to ground the shields inside the junction boxes, not at the instrument.

This modification will eliminate a ground loop problem in accordance with manufacturers instructions, and will ensure that the Fluid Components Inc. level transmitters operate as originally intended.

SAFETY EVALUATION NO.: 183-0

TITLE: Steam Generator Blowdown Sample Analyzers

SUMMARY: Replace existing sodium analyzers mounted to the reactor plant sample panel with new Orion Research Model 1811LL analyzers to eliminate the problem with ammonia that is used by the existing analyzers.

The reactor plant sample system is QA Category II, non-nuclear safety. The original design philosophy of the sample system has not been changed.

SAFETY EVALUATION NO.: 184-1

TITLE: Main Steam Valve House Cooling Coil Vent and Drains

SUMMARY: Add piping and valves to the cooling coil connection for vents and drains. This modification will facilitate draining and venting.

Addition of vents and drains to the equipment will have no affect on the function or integrity of the system.

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SAFETY EVALUATION NO.: 186-0

TITLE: Chemical and Volume Control System Relief Valves

SUMMARY: Modify 2CHS*RV450A & B from a bellow design to a bellowless design in order to eliminate inadvertent bellows failure.

This modification will provide greater valve availability, will not affect the safe operation of the charging pump miniflow relief valve system and does not impact any previous analysis described in the FSAR.

SAFETY EVALUATION NO.: 187-0

TITLE: Trolley Beam and Hoist

SUMMARY: Install a trolley beam, hangers and braces to transfer lube oil purifier internal to the cleaning station.

This modification is QA Category II, non-nuclear safety, located in the Turbine Building and has no affect on the safety function of any system.

SAFETY EVALUATION NO.: 188-0

TITLE: Turbine Gland Steam Condenser Steam Trap

SUMMARY: Replace existing steam trap with one of a larger capacity to prevent the discharge of steam and condensate from the overflow line.

This modification is QA Category II, and involves a system which is not required to function during an accident.

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SAFETY EVALUATION NO.: 189-0

TITLE: Main Generator Power Factor Meter

SUMMARY: Reverse the potential transformer leads on the power factor meter terminals to ensure proper phase rotation.

This meter is QA Category III, non-nuclear safety, does not serve a safety function and has no impact on 1E or non-1E circuitry.

SAFETY EVALUATION NO.: 190-0

TITLE: Aircraft Warning Lights

SUMMARY: Modify the aircraft warning lights so that both power and control supply voltage are the same phase.

This level of detail is not provided in the FSAR. Lights have no significance to plant operation.

SAFETY EVALUATION NO.: 191-0

TITLE: Vacuum Pump Separators Loop Seal

SUMMARY: Replace containment vacuum pump separators loop seals with air traps which function better in the presence of sweep gas.

Air traps provide the same function as the loop seal at the higher pressure produced by the sweep gas. This modification is QA Category II, non-nuclear safety.

SAFETY EVALUATION NO.: 192-0

TITLE: Security Modifications to Doors RW35-1 and RW-35-2

SUMMARY: Relocate camera, card reader, door strike, camera box, wall box, etc., from door RW35-2 to door RW35-1 to facilitate personnel movement.

This modification has no affect on any safety related equipment function.

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SAFETY EVALUATION NO.: 193-0

TITLE: Addition of Pressure Indication

SUMMARY: Add recirculation spray pump discharge pressure indication to the ERFCs and the SPDS.

Transmitters associated with this pressure indication are not safety related and are not required after an accident. The transmitters are for indication only.

SAFETY EVALUATION NO.: 194-0

TITLE: FSAR Change

SUMMARY: Revise the FSAR valve numbering on Figure 6.3-1 to be consistent with Operations Manual VCNDS 11-1 and 11-3.

This modification is not a change to the facility, or a change to procedures and is therefore not an unreviewed safety question.

SAFETY EVALUATION NO.: 195-0

TITLE: Rigid Sway Strut

SUMMARY: Replace a Figure 360 rigid sway strut size 25 with a Figure 350 rigid sway strut size 25.

This change involves nearly identical components with no change to the design, function, or method of performing the function.

SAFETY EVALUATION NO.: 196-0

TITLE: Nitrogen Blanket Pressure Switches

SUMMARY: Delete steam generator nitrogen blanket low pressure alarm.

A nitrogen blanket is only used when the steam generators are in wet or dry layup and has no safety function.

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SAFETY EVALUATION NO.: 197-0

TITLE: Secondary Alarm Station Pushbutton

SUMMARY: Remove exit pushbutton installed in secondary alarm station and replace it with a card reader.

A card reader has no affect on any safety related equipment.

SAFETY EVALUATION NO.: 199-0

TITLE: Datum 9300 Time Code Translator

SUMMARY: Modify PSMS to synchronize timing between the PSMS and the plant clock.

This modification enhances operation of the units as it relates to providing a synchronous time signal between PSMS, Plant Computer System and the ERF.

SAFETY EVALUATION NO.: 204-0

TITLE: Unqualified Paint Primer

SUMMARY: Approximately 167 FT² of unqualified paint exists inside containment.

This amount of unqualified paint was evaluated with respect to possible impact on the recirculation spray system and has been determined to be acceptable.

SAFETY EVALUATION NO.: 214-1

TITLE: Air Ejector Discharge Blowers

SUMMARY: Add two blowers to the 6" discharge line of the condenser air ejector units downstream of 2ARC-RQ100, to increase the flow.

The condenser evacuation system has no safety function (FSAR Section 10.4.2.3). Radiation monitors 2ARC-RQ100 and 2GWS-RQ112 will be revised to account for the increased flow. Since the basis for the monitor setpoint and the operator response to the alarm, there is no impact.

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SAFETY EVALUATION NO.: 218-0

TITLE: Smoke Detectors

SUMMARY: Add one smoke detector in the liquid waste storage tank cubicle, Auxiliary Building, el. 710'-6".

The Fire Protection System is QA Category II non-safety related, and the modification does not impact safety-related systems.

SAFETY EVALUATION NO.: 220-0

TITLE: Structural Motor Supports

SUMMARY: Strengthen existing motor supports for the fan on 2HVC*ACU201B by replacing some members by stronger ones and by adding new members.

This modification does not affect system operability but only strengthens the fan motor support. There is no safety impact.

SAFETY EVALUATION NO.: 227-1

TITLE: Demineralized Water

SUMMARY: Add a 2" ball valve to the demineralized water system to allow isolation of the chemical feed system from the demineralized water supply header.

These systems are QA Category III, non-nuclear safety, and have no affect on the occurrence or consequence of an accident or malfunction.

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SAFETY EVALUATION NO.: 232-0

TITLE: Relocate Valve Manifold

SUMMARY: Relocate the Pressure Regulating Manifold from a high radiation area to a low level area. Add a manual shut-off valve and relief valve as recommended by the vendor.

The Waste Solidification System (WSS) is QA Category II, non-nuclear safety. Relocation and addition of a local isolation valve and relief valve improves accessibility, operability and ALARA concern.

SAFETY EVALUATION NO.: 233-1

TITLE: Area Cooling Coils - FSAR Revision

SUMMARY: The As-Installed, As-Supplied main steam and feedwater valve area cooling coils do not agree with the purchase specification. The installed coils are 8-pass not 4-pass as specified. Revise the purchase specification and the FSAR to reflect the as-built configuration.

The 8-pass coils will perform the service and provide the same function as the 4-pass coils with no affect on the safety function of the system.

SAFETY EVALUATION NO.: 234-1

TITLE: FSAR Revision

SUMMARY: Revise FSAR text and tables to be consistent with the latest revision of the control room habitability calculations.

Calculation revisions indicate that the radiological consequences as reflected in the revised FSAR, are acceptable.

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SAFETY EVALUATION NO.: 245-0

TITLE: FSAR Revision

SUMMARY: Revise FSAR Table 8.3-3 which incorrectly indicates that 2QSS*P24A and 2QSS*MOV100A, 101A and 102A operate during loss of normal power with unit trip and CIA signal, to state that these components do not operate during these conditions.

This change represents an FSAR change only; these components do not operate during an CIA signal but on a CIB signal. The plant was not changed by this modification, only the FSAR description was revised to correctly reflect the As-Built facility.

SAFETY EVALUATION NO.: 251-0

TITLE: Demineralized Water Connection

SUMMARY: Add an additional connection in the demineralized water header to supply the SGC portion of the primary water system with demineralized water.

Both demineralized water and primary water systems are QA Category II non-nuclear safety. This modification has no impact on the systems or components necessary for safe shut down.

SAFETY EVALUATION NO.: 252-0

TITLE: Add Vent to Drain Recovery Tanks

SUMMARY: Add 6" vent piping between the 2nd point heaters and the drain tanks to reduce back pressure in the drain tanks.

This system is QA Category II, non-nuclear safety. The modification does not affect any accident analysis.

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SAFETY EVALUATION NO.: 285-0

TITLE: High Integrity Container (HIC)

SUMMARY: This modification will add the capability to transfer radioactive spent resin from the spent resin holding tank to a High Integrity Container (HIC).

This system is QA Category II, non-safety related. The piping is routed within existing shield walls and is designed as outlined in FSAR Section 11.4.1. This change has no affect on the accident analysis.

SAFETY EVALUATION NO.: 286-0

TITLE: Provide an Additional Counting Room

SUMMARY: Convert room 704 of the Health Physics Facility (presently a men's room) to a rad-con counting room.

This change is architectural in nature with no QA Category I equipment in the area or impacted by the change.

SAFETY EVALUATION NO.: 287-0

TITLE: Install New Air Conditioning Unit in New Rad-Con Room

SUMMARY: Install an independent air conditioning unit and duct for the new Rad-Con counting room to ensure the room temperature can be maintained.

The new air conditioning unit is non-safety related and has no safety function. Failure of this unit will not affect safe shutdown.

SAFETY EVALUATION NO.: 289-0

TITLE: Relocate Seal Water Isolation Valves

SUMMARY: Relocate seal water isolation valves in the waste solidification system, in lines to the drumming and decant stations, to the outside of the cubicles. This will reduce operator radiation exposure. Install flowmeters in these seal water lines to monitor flow.

This system is QA Category II, non-nuclear safety. Flow meters provide more accurate monitoring and valve relocation is consistent with the ALARA concept. Neither change affects the accident analysis.

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SAFETY EVALUATION NO: 1988, 08-09

TITLE: FSAR Change, Figure 6.5-2

SUMMARY: Instrument piping configuration for 2HVS-PDIS219A & B as described on FSAR Figure 6.5-2 does not reflect the actual "as-built" configuration. Revise Figure 6.5-2 to reflect the actual instrument piping configuration.

This modification does not change the facility but represents a document change to more accurately reflect the instrument piping configuration.

SAFETY EVALUATION NO.: 1988, 08-011

TITLE: Revise FSAR Table 1.8-1, Sections 3.8 and 8.3

SUMMARY: Revise FSAR to document the "as-built" design of the excore neutron flux monitoring system electrical penetration. Penetration was designed and fabricated to class MC requirements and in accordance with the guidelines of Reg. Guide 1.63.

The FSAR change indicates that an ASME Code Data Report and Third Party (ANI) inspection were not required by the design specification. This is consistent with the position that the penetration is an extension of the containment liner which is not code stamped as discussed in FSAR Section 3.8.1.2.1.2. Therefore, this FSAR change is a clarification of the existing configuration and no change was made to the penetration form or function.

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SAFETY EVALUATION NO.: 1988, 08-12

TITLE: Revise FSAR, Section 9.4

SUMMARY: Revise FSAR, Section 9.4 to reflect the actual environmental conditions as described in the source documentation.

The revised values are representative of expected conditions and are consistent with actual temperatures as measured in the subject areas. This change is made to ensure consistency between the FSAR and the design conditions as described in engineering documents. There was no change to the facility initiated by this modification.

SAFETY EVALUATION NO.: 1988, 08-15

TITLE: FSAR Change

SUMMARY: Revise FSAR to reflect as built system configuration subsequent to flow balancing of the following systems: (1) Emergency switchgear supply and exhaust; (2) Diesel generator building primary and secondary supply fans; (3) Diesel generator normal exhaust fan; and (4) Primary intake structure supply fan.

Adjustment of flows has no affect on the safety function of this equipment. Adjusted flows are above minimum flows corresponding to the heat gain in the areas as established by calculation. Balancing is a normal evolution and does not create an unreviewed safety question.

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SAFETY EVALUATION NO.: 1988, 08-18

TITLE: Revise FSAR Figures 9.4-8 and 9.4-13

SUMMARY: Revise FSAR to reflect the "as-built", as balanced system flows for the ventilation systems in the service building and diesel generator building.

This change will ensure that the FSAR correctly references the actual system flows as documented by SM/TAB-1 RPT-18 and RPT-31A. These flows are consistent with the system design and do not change the system function.

SAFETY EVALUATION NO.: 1988, 08-21

TITLE: Revise FSAR Table 8.3-3

SUMMARY: Revise FSAR table 8.3-3 to reflect the latest revision to electrical calculation E-48.

This change reflects in the FSAR revised values which were calculated for the emergency diesel generator loading. This does not change the facility and is not an unreviewed safety question.

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TITLE: Memo DRMS Operability Requirements

SUMMARY: Prior to Unit 2 startup this evaluation of startup requirements for radiation monitors was performed because of some differences in existing documents. The memo listed all T.S. DRMS monitors and the plant status/functions when the monitor must be operable. For Unit 2 FSAR Section 14.2.12.61.2 in Test Methods, it was proposed that "Prior to core load ..." be changed to ready "Prior to initial approach to criticality ...".

No unreviewed safety question exists because no source term would exist at Unit 2 prior to criticality.

TITLE: Beaver Valley Power Station, Unit No. 2 Offsite Dose Calculation Manual, Issue 1, Rev. 1

SUMMARY: Issue 1 of the ODCM was revised (1) to provide compatibility between the two ODCMs (2) to incorporate the sharing concept for liquid waste and the elevated gaseous radwaste and, (3) to revise the effluent monitor setpoints as required by revisions to monitor efficiencies and revised percentages of site dose limits.

No unreviewed safety question exists. The revisions increase the accuracy of the ODCM in specifying the limits and methodology used for the basis of implementing procedures designed to comply with series 3.11 Technical Specification limits on dose rate and dose due to radioactive effluents. The shared apportionment of waste was specified in accordance with NUREG 0133.

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TITLE: Calculation Package ERS-WFW-87-021, Conversion Factor for
2SGC-RQ1100

SUMMARY: This calculation package documents a revised engineering
conversion factor (CPM to uCi/ml) and its basis for Unit 2
radioactive liquid effluent monitor 2SGC-RQ100. The
revision was required to incorporate updated nuclide energy
spectra data.

The DRMS vendor affirmed the need for the updated energy
spectra data and the calculations used the same methodology
as the previously approved calculation package. The
revision is in the conservative direction. No unreviewed
safety question exists.

TITLE: Calculation Package ERS-ATL-83-27, Rev. 1, Liquid Waste
Dose Factor Calculations for RCM-RP 6.5, Issue 3

SUMMARY: This calculation package documents revisions to ODCM table
1.3-1 and RCM-RP 6.5 by deriving new liquid dose factors
for Sb-124 and Sb-125. These factors are derived using
bioaccumulation factor for freshwater fish from Reg. Guide
1.109, Rev 0.

No unreviewed safety question exists. The revised dose
factors were calculated using methodology described in the
ODCM. The referenced Regulatory Guide was not available
for the original calculation package. The revision
provides more accurate data for dose determination.

TITLE: RCM, Appendix 4 Routine Radiation Surveys

SUMMARY: This procedure specifies uniform radiation survey programs
for both Units 1 & 2 and will require a change to the Unit
2 FSAR to make its survey requirements consistent with the
Unit 1 FSAR. The Unit 2 FSAR differed in that it specified
gamma surveys "weekly" while the Unit 1 FSAR specifies
surveys on an "as needed" basis.

No unreviewed safety question exists. The Unit 1
prescribed practice is in accordance with Reg. Guide 8.2
Guide for Administration Practices in Radiation Monitoring
which is referenced as "acceptance criteria" in the Unit 2
Standard Review Plan.

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TITLE: Calculation Package ERS-HHM-87-14 Unit 1/Unit 2 ODCM
Gaseous Alarm Setpoint Determination

SUMMARY: Revised gaseous effluent monitor setpoints are derived and documented. New monitor efficiencies were incorporated and new engineering conversion factors were calculated. Unit 1 and Unit 2 source terms were combined for continuous release (shared release point). Determinations for purging containment via the process vent were added.

There is no unreviewed safety question. The revisions were based on updated approved documentation and calculated in accordance with methodology described in the ODCM.

TITLE: Radiological Operations Administrative Procedure 2.201
DRMS, RM-80 Data Base Description and Control

SUMMARY: This is a new procedure which provides a description of RM-80 data base and provides guidelines for its control to prevent unauthorized data base modifications. By providing direction in maintaining data base integrity, it assures monitor operability as far as the data base is concerned.

No unreviewed safety question exists. The margin of safety is improved due to controls on the DRMS established in this procedure.

TITLE: RCM RP 6.4 Unit 2 Gaseous Waste Tank Sampling

SUMMARY: This is a new procedure written to prescribe the practices for obtaining and preparing samples for radioactivity analysis of gaseous waste decay tanks at Unit 2.

The sampling is necessary to meet the requirements of Unit 2 Technical Specification (LCO) 3-11.2.5. The procedure does not prescribe any action which would create an unreviewed safety question.

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TITLE: Station Modification 2-38-17, Jumper and Lifted Lead, 2-4 Battery

SUMMARY: A jumper was installed on the *2-4 Battery Bus to facilitate load testing the battery. The probability of occurrence or the consequences of an accident or malfunction of equipment evaluated in the FSAR or of a different type than any evaluated in the FSAR is not increased or created because one end was connected to the *2-4 Battery Bus, and the other was left free to connect to the Resistive Test Load. This jumper was only used during an approved test procedure. This jumper eliminated the vital bus transfer, bus de-energization and breaker opening that would have been required, and it was removed in the restoration steps of the test procedure; therefore, no unreviewed safety question exists.

TITLE: 2-87-14, Placing Nitrogen Trailer in Service

SUMMARY: 1. TOP was written to align Unit 2 to the nitrogen trailer instead of Unit 1. The system was modified by E&DCR D-5188. The probability of occurrence or the consequences of an accident or malfunction of equipment evaluated in the FSAR or of a different type than any evaluated in the FSAR is not increased or created because the Unit 2 nitrogen supply from the trailers increases the reliability of the Gaseous Nitrogen System on both units; therefore, no unreviewed safety question exists.

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TITLE: TOP 1/2-87-01 Testing of Control Room Emergency Supply Fans
2HVS*FN241A & 241B Subsystems

SUMMARY: This TOP was written to investigate for any abnormal occurrences when the Control Room Emergency Habitability System is activated from the Unit 1 Backup Shutdown Panel (BSP). The TOP activated and reset the Control Room Emergency Habitability System from the Unit 1 BSP without discharging the CREBAPS air tanks. The TOP de-energizes one train of CREBAPS SOV's and requires power be restored within 7 days per Technical Specification 3.7.7.1.a, an operator is posted to restore power during the TOP should an actual CIB, Control Room High Radiation or Chlorine Detection signal from either Unit 1 or Unit 2 occur. The TOP contains an Initial Condition that 2/3 Control Room Emergency Ventilation Subsystems are operable per Technical Specification 3.7.7.1. The system as described in FSAR Section 6.4 was not altered by this test and no unreviewed safety question exists.

TITLE: TOP 2-87-27, SWS Outfall Header Flush

SUMMARY: The TOP was written to increase the velocity of Service Water to plant components in an attempt to remove any restrictions in the lines to the Emergency Outfall Structure. The velocity was increased by running a Standby Service Water Pump in parallel to a normal Service Water Pump. The Service Water System alignment used in this TOP will emulate post DBA conditions; therefore, no unreviewed safety question exists.

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TITLE: TOP 2-87-34, Main Unit Air Ejector Operation

SUMMARY: The procedure was written to accommodate operation of the Main Unit Air Ejectors due to the design inadequacy of the system. The Main Unit Air Ejectors had too much backpressure causing the loop seals to blow out to the condenser thereby short cycling the off-gas back to the condenser. The procedure maintained adequate flow through the Radiation Monitor for detection and also established flow out of a system vent to the turbine building. This procedure established a backpressure of 30 inches water and prevented blowing out the loop seal on the Main Unit Air Ejector. This was a temporary condition to maintain power operations until Engineering could evaluate the system and generate a design change. The design was changed per E&DCR D-5448. The TOP did not increase or create a possibility of an accident as described in the FSAR. Air Ejector off-gas is still being monitored by Rad Monitor [2ARC-RQ100] and the margin of safety was increased due to the better availability of condenser vacuum; therefore, no unreviewed safety question exists.

TITLE: TOP 2-87-35, Temporary Blowdown Demineralizer System

SUMMARY: This procedure was developed to provide instructions for the operation of the Temporary Blowdown Demineralizer System installed per E&DCR D5329. The system is not safety related and is not required by Technical Specifications; therefore, no unreviewed safety question exists.

TITLE: TOP 2-87-44, Surge Line Temperature Stratification

SUMMARY: This procedure established a controlled outsurge from the pressurizer to permit Engineering to monitor the surge line for temperature stratification. The pressurizer pressure was maintained at normal operating pressure and level throughout the procedure. The plant will be operated within the limits of the Technical Specifications; therefore, no unreviewed safety question exists.

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TITLE: FSAR Figure 11.2-6 Capability to Transfer Gaseous Waste from Unit 1 to Unit 2

SUMMARY: FSAR Figure 11.2-6 indicates the capability to transfer gaseous waste from the Unit 1 solid waste system to the Unit 2 evaporator bottoms hold tank. Actual transfers will be from Unit 2 to Unit 1 only.

This change reflects actual system operation and does not affect intended system performance.

TITLE: FSAR Table 1.8-1, Regulatory Guide 1.140

SUMMARY: The Duquesne Light Company position on Reg Guide 1.140 will be revised to state that testing will be performed on the filtration units and carbon adsorber units initially, and after an entire or partial bank changeout, except for the containment iodine filtration system, which will only be tested initially. Also to state that laboratory testing frequency for the activated carbon will coincide with scheduled reactor shutdowns for refueling.

Only the test frequency will be changed. No physical changes are being made to the systems involved. Technical Specifications do not apply to the systems affected by the Reg Guide. Safety related systems are not involved. No unreviewed safety question is involved.

TITLE: FSAR Tables 6.4.1 & 6.5.7, Control Room and Supplementary Leak Collection and Release System Ventilation Design Parameters

SUMMARY: Table 6.4.1 and 6.5.7 will be revised to show the pressure drop and methyl iodide efficiency for the filters as determined by manufacturer's as-built test data.

The change in HEPA pressure drop does not affect the safety function of filter assemblies and does not affect Technical Specification 3/4.7.8 limit of 3" WG pressure drop. The revised methyl iodide efficiency does not affect the safety function of filter assemblies, is higher than that originally specified and is greater than that required by Technical Specifications. No unreviewed safety question is involved.

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TITLE: FSAR Figures 10.3-1, -2 and -3, Addition of Pressure Reducing Valves to Main Steam System.

SUMMARY: The Figures were revised to reflect the addition of air pressure reducing valves (2MSS-PRV-101A, B, C) to the Main Steam System to be used in conjunction with main steam isolation valve (MSIV) operation. Addition of an air regulator was required in order to maintain the required air supply pressure to the MSIV actuator at 70-80 psig.

Failure of the air regulator has been evaluated. The air regulator has been qualified to seismic Category I requirements and therefore there will be no common mode failure mechanism induced for the regulator. Since the structural failure of the regulator is not a direct result of a seismic event, the regulator need only be considered for a random single failure. The limiting random single failure of an MSIV has been addressed in the FSAR Section 15 accident analysis.

TITLE: FSAR Section 14.2.12.3.4, Control Rod Drop Time Measurement Test

SUMMARY: Test objectives described in FSAR Section 14.2.12.3.4, Control Rod Drop Time Measurement Test, will be revised to delete verification of rod drop time for no flow reactor coolant system conditions with the reactor in the hot standby condition.

The hot full flow rod drop times are measured in accordance with Technical Specifications. No-flow rod drop times while in the hot standby condition will not be measured since full flow rod drop times are slower and therefore more conservative and bounding.

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TITLE: FSAR Sections 5.4 and 15.4, BVPS-2 Isolated Loop Start-up
Recirculation Time

SUMMARY: Sections 5.4 and 15.4 will be revised to state that interlocks ensure flow from an isolated loop to the remainder of the RCS takes place through the relief line valve for a period of over 90 minutes (instead of 1 hour) before the cold leg loop stop valve is opened.

Since the change requires more mixing time before an isolated loop may be unisolated, it is more conservative and makes a boron dilution accident less likely. No unreviewed safety question is involved.