50-247 CEC INDIAN POINT 2

10CFR50.59(b) REPORT FOR JUNE 22, 1997
TO JUNE 21, 1999.

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ATTACHMENT

10 CFR 50.59(b) REPORT OF CHANGES, TESTS AND EXPERIMENTS JUNE 22, 1997 THROUGH JUNE 21, 1999

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT No. 2
Docket No. 50-247
December, 1999

9912010324

Safety Evaluation
Subject

Note: With exception of first entry that covers eleven organizational changes, all safety evaluations are in numerical order.

97-319-EV, 98-227-EV, Rev. 1, 98-259-EV, 98-303-EV, 98-327-EV, 98-342-EV, 98-350-EV, 98-399-EV, 99-059-EV, 99-067-EV, 99-104-EV
Organizational Changes
NS-2-81-172, Rev. 2
Central Control Room Habitability – Smoke Detection
NS-2-88-009, Rev. 2
Generic Replacement of Electric Heat Trace Cable for Freeze Protection
89-066-TM
R41 and R42 Suction Directed to the Vapor Containment Purge Exhaust
89-077-GM, Rev. 2
Installation or Replacement of 2" and Under Manual Valves or Replacement of Check Valves
89-183-TM
Water Supply for Wetting of Main Condenser Tube Sheets
89-199-TM
Turbine Supervisory Instrument Auxiliary Trip Defeat Switch Positioned to Defeat
89-261-MD, Rev. 2
Replacement of Heat Tracing for Radiation Monitor R-27
89-265-TM
Vapor Containment Purge Ventilation System
89-310-TM
Ecolochem Truck Make-Up to Unit 1 Condensate Storage Tank
89-325-TM
City Water Cooling for Conventional Freshwater Cooling Head Tank – Unit 1
90-032-TM
Freeze Protection Electrical Heaters for Vapor Containment Isolation Valves.
90-189-TM
Defeat of 480 Volt Bus Under Voltage during a Bus Outage
90-387-TM
Provide City Water Cooling to R-59
91-016-TM
Waste Holdup Tank Tygon Hose Level Indication
91-019-TM
Alternate Power Supplies for Battery Chargers 21, 22, 23, and 24
91-032-TM
Removal of Proteus Computer Point
91-049-TM, Rev. 1
Control Rod Drive Mechanism Fans Power Supply to Vapor Containment Duraline
91-096-TM
22 Emergency Diesel Generator Auxiliaries Alternate Power Supply
91-194-TM
Water Supply for the Wetting of Main Condenser Tube Sheets
91-226-TM
Purge/Pressurize Generator with Nitrogen/Carbon Dioxide/Air

Safety Evaluation
Subject

91-301-TM
Instrument Air and Primary Water Feed to B and C Test Rig
91-352-TM
Provide Clean Source of Demineralized Water from CT-47
91-426-TM
Alternate Power Supply for Emergency Diesel Generator Building Louvers
92-010-GM, Rev. 1
Generic Piping Alteration
92-186-TM
Alternate Cooling for Fresh Water Cooling Components from City Water
93-047-TM
Provide Backup Source Range Indication
93-092-TM
Fresh Air Source for Central Control Room Ventilation System during Maintenance
93-257-TM
Bypass of R-57 Sewage Ejector Pump Trip
93-335-GM
Generic Power Feed, Conduit, Cable Alterations
93-375-TM
Defeat of Turbine Runback
94-005-TM
Temporary Electric Space Heaters
94-116-MD
480V Load Bus DB-50 Application
94-143-MD, Rev. 5
Weld Channel System Upgrade
94-176-MM, Rev. 2
IP-15' Sewage Pit Ventilation and Buffalo Tank Retirement
94-189-TM
Oxygen Valves to Hydrogen Recombiners
94-237-MD
Chemical Systems Building/ Fuel Handling Floor/ Nuclear Services Building/ Heat/ Winterization Program
94-249-MD, Rev. 2
Replace Waste Gas Analyzer Recorder and Sequencer Assembly
94-334-EV
Temporary Operation of 21Control Rod Drive Fan without Exhaust Damper
95-001-GM
Stairways, Ladders, Platforms and Handrails
95-030-TM
Source Range High Flux Trip Block
95-031-MM
Replace Hydrogen Recombiner Valves
95-089-MD
Main Turbine Runback

Safety Evaluation
Subject

95-163-TM
Instrument Air to Station Cross Connects Inside Vapor Containment
95-164-TM
Nitrogen Supply to Reactor Coolant System
95-185-TM
MCC27 Supply to EVP21 (R41, R42, R43, R44)
95-187-TM
Clear the R-1 to R-8 Common High Radiation Monitor Alarm
95-195-SP
Main Turbine Runback on Rod Drop
95-229-TM
Temporary Primary Auxiliary Building Sump Pump
95-275-MM
Proteus Alarms for Refueling Water Storage Tank Level and Residual Heat Removal Flow
95-312-TM
Temporary Primary Auxiliary Building Sump Pump
95-328-MD, Rev. 1
Curtain Drain and Sphere Foundation Sumps
95-366-TM
Core Exit Temperature Indication
95-367-GM, Rev. 1
Fire Protection Valve Tamper Switches
95-414-TM
21 Reactor Coolant Pump "X" Vibration Probe
96-012-TM
Unmask DC Bus Trouble Alarm
96-063-MM
Extend Maintenance and Outage Building Sprinkler System
96-077-PR
Use of an Air Operated Pump to fill the Fuel Transfer Canal from the Spent Fuel Pool
96-096-MD
Install a Video Capture System in the Existing Perimeter Video System
96-118-PR
Unit 1 Spent Fuel Pool Portable Demineralizer
96-132-MM, Rev. 1
Replace Independent Electric Overspeed Protection System
96-151-EV, Rev.2
Painting Unit 1 EL. 72' Fan Room
96-165-MM
IP #2 Generator Bearings Thermocouples
96-168-MD, Rev. 1
Replace Hydrogen Recombiners,
96-179-MM
Fire Pump House Transformer Primary Protection
96-195-TM
Steam Generator Blowdown Radiation Monitor Removal from Service

Safety Evaluation
Subject

96-198-MM
Replacement of Pre-Amp in Radiation Monitor R-50
96-227-MD
Installation of Space Heater and Electrical Heat Tracing for Valve FP-815 in Primary Auxiliary Building EL 15'
96-228-MD
Replacement Service Water Pumps
96-234-GM, Rev. 3
Replacement, Modification, and Installation of Lighting
96-252-TM
Alternate Nitrogen Truck Fill to Primary Auxiliary Building
96-254-MD
Disconnect Steam and Water Analyzer Trouble Alarm
96-269-MD
Replacement of Gas Stripper Feed Pumps 21, 22, and 23
96-282-GM
Installation or Alteration of Equipment, Structures, Piping, and Hardware
96-295-MD
Relocation of Condenser Outlet Water Boxes Level Alarms
96-304-PR, Rev. 1
Sluicing Sludge from High Integrity Container
96-307-TM
Unit 2 Sump Tank Pump Bypass
96-327-PR
City Water Backup to Auxiliary Feedwater Inservice Inspection Boundary Change
97-007-MD
Unit 1 Cask Wash Pit Sump Pump Replacement
97-023-MM
Replace Diodes in Nitrogen Control Circuit with Resistors
97-029-TM
Portable Demineralizer Unit to Unit 1 Condensate Storage Tank
97-044-TM
Vapor Containment Duraline Power Supply from Weld Receptacle
97-051-TM
Blocking Strip Installation for the Source Range High Flux at Shutdown
97-060-TM, Rev. 1
Placing Stainless Steel Screen over Vapor Containment Sump Grating
97-072-TM, Rev. 1
Installation of Ferrite Beads on NIS Cables
97-090-MD, Rev. 1
Emergency Diesel Generator Undervoltage Relay (CVX) Trip Removal
97-114-TM
Clear the "Fan Room Fan Auto Trip" Alarm
97-116-MM
Primary Auxiliary Building/Vapor Containment Exhaust Balancing Damper

Safety Evaluation
Subject

97-123-TM
Emergency Diesel Generator Water Jacket Pressure Gauge
97-126-SP
Emergency Diesel Generator Jacket Water Pressure Switches Setpoint Change
97-132-MD
Fuel Storage Building Supply Fans
97-136-MM, Rev. 2
NRC Generic Letter 96-06 Thermal Overpressure Compliance Modification
97-137-TM
Pressurizer Safeties Reactor Coolant System Vent Path Foreign Material Exclusion Covers
97-140-MD, Rev. 1
Replacement of #21 and #22 Instrument Air Closed Loop Cooling Water Pump/Motor Assemblies
97-149-TM
22 Emergency Diesel Generator Governor Test Connection
97-178-MM
Installation of Isolation Valves and Test Connections for House Service Boiler Pressure Gauges
97-181-MM
Polar Crane Auxiliary Hook Overstress
97-187-EV
Steam Generator Primary Manway Covers - 4 Fasteners during Refueling or Draindown to Mid-Loop
97-192-TM
Nitrogen Purge for Hydrogen System Piping in the Primary Auxiliary Building
97-197-MM, Rev. 1
Degraded Voltage Monitor Lights
97-213-MM
IP2 - Main Turbine Thrust Bearing Seals Enhancement
97-222-TM
Purge Vent Line from Charging Pump Leakage Collection Tank
97-240-EV, Rev. 1
Heavy Loads/Circulating Water Traveling Screens Replacement
97-242-EV
Temporary Storage of Scaffolding
97-249-TM
Steam Flow Limit for House Service Boilers
97-250-TM
Isolation of Weld Channel Zones 2 and 5
97-253-MM
Post Accident Containment Vent Bunker Lid Hoisting Attachments
97-255-EV
Removal of Stainless Steel Jacketing from Reactor Coolant System Thermal Insulation
97-258-EV
Safety Injection Recirculation Flow Path Motor Operated Valve Backseat Evaluation
97-260-TM
Temporary Leakage Detection Connection

Safety Evaluation
Subject

97-261-TM
Weld Channel Pressurization System 'D2' Leakage Identification
97-262-TM
Change Stroke Time Requirements for Power Operated Atmospheric Relief Valves
97-263-TM
Isolation of Weld Channel Dome Area D2
97-264-EV
Freeze Seal for Chemical and Volume Control System Valve 293 Repair
97-265-TM
Block the Reactor Trip to the Turbine Trip Circuit to Reset the Turbine Trips
97-268-EV
Fan Cooler Unit Air Flow Switch Evaluations
97-269-EV
FSAR Clarification of Table 6.2-9
97-271-TM
Control Rod Drive Cabinets Air Conditioning Unit
97-272-TM
Vapor Containment Sump Monitor Selector Switch,
97-273-TM
Turbine Operation with Inoperable Independent Electrical Overspeed Protection System
97-277-TM
Control Rod Cabinets Air Conditioning Units
97-278-EV
Continued Plant Operation Up To and Including 100% Power with Control Rod Drive Urgent Failure Alarms
97-282-TM
Unmask "Weld Channel Zones 1-4, Low Flow 0.3, HI Flow 15 SCFM" Alarm
97-288-TM
Reroute Pressurizer Relief Tank Eductor Exhaust to the Vapor Containment Pressure Relief Valves from the Normal Vapor Containment Purge Exhaust
97-290-EV
Freeze Seal for Component Cooling Water Valve 819 A or B Repair/Replacement
97-293-TM
Modify Spare Residual Heat Removal Breaker and use it as 24 Fan Cooler Unit Breaker
97-294-TM
Relocating Wires on Reactor Coolant System Makeup Control Switch
97-297-TM
Double Contacts for Reactor Coolant Pump Test Relay
97-299-PR
Determination of the Weld Channel and Containment Penetration Pressurization System Dewpoint
97-300-TM
Contaminated Drain Tank Alternate Level Indication
97-301-EV
Resetting Mechanical Trip Lever Plate
97-302-TM
Seismic Support for Transite Ceiling in Central Control Room

Safety Evaluation
Subject

97-303-TR
Temporary Leak Repair to CD-591
97-304-MD
Upgrade Perimeter Camera System
97-305-TM
Post Maintenance Test for Solenoid Operated Valves 5452 and 5452-1
97-308-MM
Annubar and SWN-1052 Removal on Fan Coolers Service Water Outlet
97-312-MM
Double Contacts for Reactor Coolant Pump Test Relay
97-314-MM
Noise Reduction of Nuclear Instrumentation System Circuits
97-315-TM
Residual Heat Removal Discharge Gauge Replacement
97-320-TM
21 Emergency Diesel Generator Fuel Oil Differential Pressure Alarm Permissive
97-322-MM
Removal of PT 458B and Dead Weight Tester
97-326-TM
Service Water Screen Trouble Alarm
97-330-TM
Primary Water and Service Air Supplies for Chemical and Volume Control System Holdup Tank Transfer Pumps Hydro
97-331-MD
Weld Channel and Penetration Pressurization System Zones 1,2,3 and 4 Orifice Installation
97-333-TR
Temporary Repair and Lifting of Floor Plug-Primary Auxiliary Building El. 68'
97-335-PR
90 Volt DC Temporary Test on DB-50 Breakers
97-336-MM, Rev. 5
DB-50 and DB-75 Breaker Modification
97-337-EV
Freeze Seal for Condensate Valves Replacement
97-340-PR
480 Volt DB-50 Breaker Adjustment and Testing
97-344-MM, Rev.1
MST-65 Discharge Pipe Reroute
97-345-TM, Rev. 1
Blank Flange for Pressurizer Relief Tank Side of Relief Valve 855
97-349-TM
Block Open PCV-1228 Instrument Air to Containment
97-350-MM
Alternate Safe Shutdown System ASCO Transfer Switches
97-351-PR
Testing of DB-50 Circuit Breakers in the Switchgear

Safety Evaluation
Subject

97-352-TM
Normal MCC Breaker Replacement
97-354-MD, Rev. 1
Technical Support Center Halon Replacement
97-356-MM
Emergency Diesel Generator Shut Down Relay Replacement and Relocation
97-357-MM, Rev. 3
Modification to the Central Control Room Annunciators
97-363-PR
MCC Breaker Replacement Procedure
97-365-TM
Perform Service Water Test
97-366-EV
Change to Limiting Close Stroke Time for Containment Purge/Pressure Relief Valves
97-370-TM
Central Control Room Supervisory Panel Test Switches
97-373-TM
Emergency Diesel Generator Air Compressor Cycle Monitoring,
97-374-TM, Rev. 1
Test of Spare Drawer to N-31
97-376-TM
Alternate Battery Charger Power Supply at Cold Shutdown,
97-377-MD
Contactor Control Enhancement Freeze Protection Panels 21, 22, and 24
97-378-MM
Main Steam Safety Valves and Safety Valve Drain Line Modifications
97-379-PR
Emergency Operating Procedure Changes Revision 29
97-389-TM
R-49 Pressure Test
97-391-MM
480 V Switchgear Compartment 21C Modification
97-397-MM
Reactor Coolant Pump Vibration Monitor Cables and Conduits Modification
97-398-EV
Auxiliary Component Cooling Pump Function not Required to Cool Safety Injection Recirculation Pump Motor Coolers
98-001-MM
Radiation Monitoring System Upgrade Control Function (R-49)
98-002-MM
Containment Recirculation Fan Incident Air Flow Switch Relocations
98-003-TM, Rev. 1
Temporary Power Supply to 21 EHT, Dock Area
98-004-TM, Rev. 1
Temporary Power Supply to 21 LTG PNL, Dock Area

Safety Evaluation
Subject

98-006-MM, Rev. 2
Nuclear Instrumentation System Enhancement
98-007-TM
Flushing of the Magnetrol Level Columns
98-013-MM
Fire Door Closers for Central Control Room Kitchen and Locker Room
98-014-EV
Operation with Leakage through Auxiliary Feedwater System Valves
98-015-MM
Stilling Wells
98-017-EV
Cleaning and Repair of Coatings for Various Areas within the IP2 Containment
98-018-TM
Nitrogen to Power Operated Relief Valves - Valve 4107 Data Collection
98-019-TM
Alternate N2 to Power Operated Relief Valve PCV-455C, Overpressurization System Out of Service
98-020-MD
480 Volt Switchgear Room Steam Line Break Mitigation
98-021-MM, Rev. 2
Fire Water Storage Tank Heaters
98-024-TM
Linear Accelerator Temporary Feed
98-025-TM
Emergency Diesel Generator Raw Water Alternate Pressure Gauge
98-028-MD
Control Rod Drive Cabinets Air Conditioning Unit
98-029-MM
Replacement of Unit 1 Auxiliary Steam Header Pressure Transmitter and Indicator
98-032-MD
MOV 883 Control Relocation and Positive Redundant Central Control Room Indication
98-033-TM
Mechanical Blocks on Fan Cooler Unit Charcoal Dampers
98-035-EV
SOP 10.1.2, Safety Injection System Check Valve Trouble Shooting
98-037-MM
Safety Injection Reset Relay Testing Modification
98-040-TM
Residual Heat Removal Heat Exchanger, Component Cooling Water Side Relief Valve Blind Flanges, 819B
98-043-EV
Freeze Seal for Component Cooling Water Valve 819A or B, Repair/Replacement with Residual Heat Removal in Service
98-048-TM
Lighting Bus 22 and 23 Tie Breaker
98-049-TM
Lighting Bus 23 Breaker Control Power

Safety Evaluation
Subject

98-051-MM
River Water Temperature Recorder TR-6281
98-052-MM, Rev. 1
Nitrogen Supply to the Vapor Containment
98-054-TM
Conventional Closed Cooling Head Tank Fill
98-055-MM, Rev. 1
Post Accident Vent Flow Instrument Replacement and Installation of Pressure Regulator
98-058-TM
Temporary Lighting Feed from Weld Receptacle
98-063-PR
Electrical Tunnel Roof Leak Repair Procedure
98-065-TM
Nitrogen Supply for Clearing the Vapor Containment Vent Header and Gas Analyzer Sample Line from the Reactor Coolant Drain Tank
98-068-EV, Rev. 1 and SE 98-122-MD
Installation of Main Generator Over-Frequency Protection and Changes to the Reactor Coolant Pump Over-Speed Protection Design Bases
98-069-MM, Rev.1
Nitrogen Backup for PCV 1310A and 1310B
98-070-SP
Pressurizer Level Program Change
98-073-MM
Relocation of Auxiliary Steam Piping and Station from Outside 480V Switchgear Room
98-075-MM
Primary Auxiliary Building 21 and 22 Exhaust Fans - FC-6605-S and FC-6606-S
98-077-MM
Traveling Screens Splashguard
98-086-MM
Pipe Penetration Freeze Protection
98-087-EV
Freeze Seal for Safety Valve 263 Inservice Testing
98-088-EV
Freeze Seal for Safety Valve 4058 Inservice Testing
98-093-EV
Freeze Seal for CC-31-1 Closed Cooling Water System
98-104-MD, Rev. 1
Redesign Containment Spray Pump Recirculation Piping to Preclude Pump Cavitation during Low Flow Surveillance Testing
98-105-MD, Rev. 2
Upgrade of the Screen Heaters and Spray Water Pressure Switches
98-109-MM
Generator and Transformer Protective Relay Enhancements
98-110-TM, Rev. 1
Temporary Triax Cable from N-31 Detector

Safety Evaluation
Subject

98-111-MD and 98-164-EV
Removal of Part Length Control Rod Drive Mechanisms and Repair of Spare Head Penetration
98-113-MM
Auxiliary Steam Piping Seismic Upgrade
98-115-EV, Rev. 1
Loose Parts Evaluation - Residual Heat Removal Valve Parts
98-117-MM, Rev. 1
Radiant Energy Shield Removal
98-118-EV
Design Requirements for Valve Stem Packing and Bonnet Gaskets for Motor Operated Valves in the Safety Injection System
98-120-PR
Refueling Water Storage Tank Outlet Stop Valve 846 Leakage Rate Determination
98-068-EV, Rev. 1 and SE 98-122-MD
Installation of Main Generator Over-Frequency Protection and Changes to the Reactor Coolant Pump Over-Speed Protection Design Bases
98-123-MM
Replacement of Existing Mesh Screen around Recirculation Sump Instrumentation
98-125-MM
Instrument Bus and 125 VDC Panel Circuit Modification/Separation
98-126-MM
Modification of Excess Condensate Valve LCV-1129 Controls
98-128-MM
Containment Isolation Phase "A" Reset Permissive Enhancement
98-132-MM
Nuclear Instrumentation System Cables Replacement
98-134-TM
11 Fire Main Booster Pump Alternate Feed
98-137-EV, Rev. 1
Gear Change for Motor Operated Gate Valves
98-138-PR
P-MT-156: "Test of Gas Turbine 1 Auto Synchronizer Circuit"
98-148-TM
Nitrogen Supply for Clearing the Gas Analyzer Sample Line from the Pressurizer Relief Tank
98-150-MM
Reactor Trip Breakers Push-To-Test Indicating Lights Wiring Modification
98-151-TM
Reactor Head Vent Foreign Material Exclusion Screen
98-155-PR
Increase Elevation of Reactor Head Vent Line #522 at Valve 500 to Eliminate Trap
98-159-TM
21 Emergency Diesel Generator Test Connections
98-160-MD
Weld Channel Modification for Personnel Airlocks and Equipment Hatch
98-161-MM
Install Additional Emergency Diesel Starting Air Motor Lubricators

Safety Evaluation
Subject

98-111-MD and 98-164-EV
Removal of Part Length Control Rod Drive Mechanisms and Repair of Spare Head Penetration
98-167-MM
In-Line Isotopic Analyzer Modification
98-168-PR, Rev. 1
Power Operated Relief Valve Nitrogen Supply from Safety Injection Accumulators
98-171-MM
Roof Replacement IP2 Electric Penetration Tunnel
98-172-MM
New Waterproofing System for the IP2 Mechanical Penetration Tunnel
98-177-EV
Containment Heating, Cooling and Ventilation Systems
98-178-MM
Replacement of Waste Gas Oxygen Analyzer AT-1067A
98-180-PR
Gas Turbine No. 3 Electrical Overspeed Test
98-181-SP, Rev. 1
Rod Insertion Limit Recalibration and Setpoint Change
98-183-TM
Metal Impact Monitoring System Alarm Inhibit Override
98-187-PR
Fill and Drain Unit 1 Spent Fuel Pools
98-189-MM
Radiant Energy Shields for the Alternate Safe Shutdown System Cables
98-192-TM
MCC 210 Breaker in MCC 26C Compartment
98-194-PR
Test Procedure - Operating Pressure Inspection of Safety Injection Piping and Components,
98-196-EV, Rev. 1
Movement of Heavy Loads over Safety-Related Equipment in Replacing the Circulating Water Pumps at the Intake Structure
98-198-TM, Rev. 1
HCV-133 Mechanical Block
98-205-PR, Rev. 2
Unit 1 Spent Fuel Pool Hardware and Component Removal
98-206-PR
Implementation of Requirements of Facility Operating License DPR-26, Section 2.1
98-209-PR
Emergency Operating Procedures Changes Revision 30
98-213-TM
Increase Unit 1 Spent Fuel Pool Level Alarm Setpoints
98-217-MM
Reactor Coolant Pump Motor Bearing Oil Level Alarm/Indication Separation
98-219-SP
Reactor Coolant Pump Motor Upper and Lower Bearing Oil Reservoir Level Alarm Setpoint Change

Safety Evaluation
Subject

98-224-TM
Jumper to Monitor Static Inverter Functions
98-229-MM
Secondary Boiler Blowdown Purification System Piping Seismic Upgrade
98-231-MM
Fan Cooler Unit Charcoal Filter Compartment Pressure Equalization Device
98-239-TM
Remove Central Control Room Rack B-8 from Service
98-241-TM
Jumper to 21 Battery Charger
98-242-TM
Jumper to 22 Battery Charger
98-244-TM, Rev. 1
Alternate Feed to 22 Component Cooling Water Pump Motor
98-245-TM
Jumper Feed to Station Auxiliary Transformer Auxiliaries
98-247-MM
Main Generator Frequency Meter Replacement
98-250-MM
Removal of Lifting Ring on Floor Plug
98-255-MM
Service Water Intake Wall Penetration Seal
98-257-PR
TOI 254: "Gas Turbine-1 Blackout Load Testing"
98-263-PR
TOI 256: "Gas Turbine-3 Blackout Load Testing"
98-266-MD
Relocation, Removal and Upgrade of the Central Control Room Unit #1 Control Panels -- Phase A
98-269-PR
Industry Operating Experience Review Program
98-270-TM
Installation of Check Valves on Service Water Piping to the Containment Fan Coolers
98-272-TM
Service Air to Instrument Air Cross Connect in Primary Auxiliary Building
98-279-TM
Unmask '21 or 22 Inverter Trouble' Alarm in the Central Control Room
98-280-EV
High Head Safety Injection Flow Diversion Safety Evaluation
98-284-MD, Rev. 1
Containment and Recirculation Sump Environmental Qualification Upgrades and Setpoint Changes,
98-285-MD, Rev. 2
Reactor Coolant System Wide Range Pressure Transmitters PT-402 and PT-403 Modifications,
98-286-MM
Test Ports for Central Control Room Ventilation
98-290-MM
Ferrite Beads on Cables from Buchanan

Safety Evaluation
Subject

98-291-SP
Central Control Room Ventilation Booster Fan Startup and Pressure Switch Setpoint Changes
98-292-MD
Central Control Room Booster Fan Agastat Replacement and Differential Pressure Setpoint Changes
98-293-TR, Rev. 1
Residual Heat Removal Mini-Flow Line #337 Structural Clamp Temporary Repair
98-294-SP
Service Water Setpoint Modifications
98-295-PR
TOI 257: Preparation and Restoration from Repair of Residual Heat Removal Test Line
98-298-EV
Increase Steam Generator Tube Rupture Isolation Time to 45 Minutes from 30 Minutes.
98-299-TM
Unmask Central Control Room Weld Channel and Penetration Pressurization System Alarm
98-302-PR
TOI 258, Preparation, Evaluation, Repair, and Restoration of Residual Heat Removal Suction Isolation Valve 730
98-304-PR
PT-R6, Steam Generator Pressure Relief Valve Set Point Verification
98-305-TM
Adjust 'Close' Limit Switch Setting to Receive Correct Indication
98-307-EV
Use of Freeze Seal for Residual Heat Removal System Recirculation Line Piping Repair
98-308-MD
Relocation and Fabrication of New Office in Central Control Room
98-309-TM
Evaluation of Non-Functional Circulating Water Pump Vibration Probes and Removal of Probes/Wires
98-312-PR
Test for Generator and Transformer Protective Relay Enhancements
98-313-PR
PT-2M4 Revision 9, Engineered Safety Features Logic Testing - Train A
98-314-PR
PT-2M5 Revision 8, Engineered Safety Features Logic Testing - Train B
98-315-EV, Rev. 1
Continued Operation of Source Range Nuclear Instrumentation System
98-316-TM
23 Service Water Pump Stuffing Box Monitoring
98-320-TM
Reactor Coolant Pump Seal Return Flow Alarm Set Point Change
98-322-EV, Rev. 2
Throttling of Service Water Strainer Outlet Valves
98-324-TM
Service Water Strainer Outlet Valves Throttle Position Locking Device Installation
98-326-GM
Generic Safety Evaluation for Administrative Changes to the UFSAR

Safety Evaluation
Subject

98-330-TM
Monitoring Emergency Diesel Generator Engine Start Times
98-331-EV
Non-Conformance of Design of Gas Turbine Autotransformer
98-332-EV
Permanent Revision of Test Procedure PT-M21, "Emergency Diesel Generators," to Delete a "Blackout Start" Test
98-335-TM
Jumper for Main Generator Iso-Phase Bus Low Water Flow Alarms
98-339-TR
Sealant Injection Repair on High Pressure Steam Supply Bypass Stop Valve MS-1214
98-352-PR
Sentry Panel Flowmeter Verification
98-357-PR
Unit 1 Spent Fuel Pool Vacuuming
98-367-EV
Removal of Requirements for Radiation Monitor RE-101
98-369-PR
Use of Simulator for Emergency Plan Drills
98-371-TM
Install Jumper for Temporary Feed to R-57
98-372-TM
Install Jumper to Feed EPX-5 from MCC10 Circuit 9
98-377-TM
Provide Bypass around Globe Valve 1439 and Check Valve 1533 with 1533 Out of Service
98-383-TM
Technical Support Center Diesel Battery
98-384-MD
Replacement of Service Water Strainer Blowdown Valves
98-386-TM
Temporary Replacement of Main 100VDC Power Supply for Rod Control System Logic Cabinet
98-396-TM
Drain from MS-108-40 Trap to Floor Drain
98-402-PR
Emergency Diesel Generator Starting Time Acceptance
98-403-TM
Pump Down of Fuel Transfer Canal in the Fuel Storage Building to the Fuel Storage Building Sump
98-404-PR
Local Manual Control of Blended Makeup
98-406-EV
Integration of Safety Assessment and Plant Information Systems
98-411-TM
Reactor Coolant Pump Vibration Monitor Installation for Local Readout in the Electrical Penetration Area
98-422-TM
Primary Auxiliary Building Supply Fan Freeze-Stat FS-3 Defeat

Safety Evaluation
Subject

99-015-EV, Rev. 1
UFSAR Changes to Section 11.2.3, Radiation Monitoring System
99-025-TM
Transfer of Unit #1 Annulus Moat Fluid to a Temporary Holding Tanker for Later Discharge
99-026-PR
SOP 5.4.1 Revision 3 (Manual Valve Closure)
99-027-PR
P-MT-175 Revision 0 (Valve Leakage)
99-030-MM, Rev. 2
Containment Pressure Relief Valve PCV-1190/SOV-1280 Modification
99-036-TM
Installation of Temporary Facility Change for FC 159A
99-037-TM, Rev. 1
Reliable Power Supply for Turbine Stop Valves Indication
99-039-TM
Unmask Pressurizer Lo Lo Level trip alarm
99-042-EV
Safety Assessment System Computer Year 2000 Upgrade
99-048-TM
Replacement of TI-5427: 22 Emergency Diesel Generator Lube Oil Cooler Outlet Temperature Indicator
99-052-TM
Re-establishment of the Charging Pump Suction Stabilizer Vent Line to the Primary Auxiliary Building Exhaust Duct
99-054-TR
Temporary Repair of Waste Drumming Station Door
99-055-TM
Heat Lamps for Refueling Water Storage Tank Level Enclosure
99-062-TM
Allow Digital Metal Impact Monitor System to Alarm on Control Rod Movement
99-063-PR
Blowdown of Turbine First Stage Pressure Transmitter 412A
99-066-EV
Evaluation of Open Position of Central Control Room Kitchen and Locker Room Doors
99-068-EV
Digital Radiation Monitoring System Perkin Elmer Computer Year 2000 Upgrade
99-072-TM
Reroute of Existing Cable to Ensure Operability of Acoustic Monitor (FE-3107) for Pressurizer Safety Valve 466
99-074-TM
Unmask LT-934A Low Level Indication for 21Accumulator
99-084-TM
Block Auto Containment Isolation and Evacuation Alarm Function from R41/42,
99-095-TM
Installation of Temporary Air Recirculation Fans for the Central Control Room Tracer Gas In-Leakage Air Test

Safety Evaluation
Subject

99-100-TM
Proteus Computer Quadrant Power Tip Ratio Calculation Alarm Disable for Central Control Room Panel SFF Window 2-7
99-106-PR
Central Control Room Mode 2 Unfiltered In-Leakage Determination
99-110-GM
Restraints Improvements for Mechanical, Electrical and Transient Equipment.
99-117-GM
Solenoid Valve Replacement (Generic)
99-119-TM
Re-Establish City Water Storage Tank Low Level Alarm
99-122-GM
Generic Motor Operated Valve Modifications
99-124-TM
Threaded Plug for Independent Electrical Turbine Overspeed Protection System Hall Effect Probe Removal
99-125-TM
Independent Electrical Turbine Overspeed Protection System Programmable Selector Chip
99-132-TM
Install Drain Plug Downstream of SOV-7679
99-133-TM
22 Reactor Coolant System Hot Leg Temperature Input to CETMS - Remove from Scan.
99-136-TM
Turbine Supervisory Instrument Auxiliary Trip Defeat Switch.
99-138-EV
Independent Electrical Turbine Overspeed Protection System Inoperable
99-141-TM
Temporary Supply of Hypochlorite on Dock
99-145-TM
Primary Water and Instrument Air to Test Rig (for PTA43B)
99-146-SP
Central Control Room Toxic Gas Monitor Setpoint Change
99-165-PR
Reactor Trip Breaker Exchange and Functional Test Procedures for Reactor Protection System Train A and Train B
99-170-PR
Removing the Feedwater Bypass Line from Service and Returning it to Service
99-171-PR
Cross-Tying of Emergency Diesel Generator Starting Air Receivers

Note: With exception of first entry that covers eleven organizational changes, all safety evaluations are in numerical order.

Safety Evaluations 97-319-EV, 98-227-EV, Rev. 1, 98-259-EV, 98-303-EV, 98-327-EV, 98-342-EV, 98-350-EV, 98-399-EV, 99-059-EV, 99-067-EV, 99-104-EV

Organizational Changes

Eleven organizational changes were made during this period. The major changes were the creation of the positions of Senior Vice President (VP) Nuclear Operation and VP Nuclear Engineering and the creation of the Corrective Actions Group. The Nuclear Facilities Safety Committee now reports to the Sr. VP Nuclear Operations as approved by License Amendment 198. The VP Nuclear Engineering and VP Nuclear Power both report to the Sr. VP Nuclear Operations. Other organizational changes and titles were also made. No functional requirements were deleted. No unreviewed safety question was involved.

Safety Evaluation NS-2-81-172, Rev. 2

Central Control Room Habitability – Smoke Detection

This change involved the modification of the Unit 1 and 2 Area Radiation Monitoring System auxiliary relay circuit to automatically isolate the Central Control Room (CCR) upon detection of smoke in the outside air inlet ducts. Smoke detection relay contacts for Unit 1 and Unit 2 have been placed in series with radiation monitor contacts for Unit 1 and Unit 2, respectively. The relay contacts are normally closed, and open to place the CCR in isolation mode. The smoke detectors were procured Class A and installed in seismically restrained ductwork. The smoke detectors were connected to a Class 1E circuit. The change did not involve an increase to any IP2 electrical bus loading. This change did not involve an unreviewed safety question.

Safety Evaluation NS-2-88-009, Rev. 2

Generic Replacement of Electric Heat Trace Cable for Freeze Protection

Heat Trace CKT11-B was found to be open and shorted to ground. Both primary and redundant circuits were replaced under this generic modification. No unreviewed safety question was involved.

Safety Evaluation 89-066-TM (Reused safety evaluation from previous report period)

R41 and R42 Suction Directed to the Vapor Containment Purge Exhaust

This temporary modification removes the suction for radiation monitors R41 and R42 from the 22 Fan Cooler Unit (FCU) and relocates the suction to the Vapor Containment purge exhaust during cold shutdown. This assures a representative sample is provided to the monitor when the FCU is not in service. No unreviewed safety question was involved.

Safety Evaluation 89-077-GM, Rev. 2

Installation or Replacement of 2" and Under Manual Valves or Replacement of Check Valves

Manual and check valves 2 inches and smaller are being replaced, as well as new valves being installed. The new valves are functionally equivalent to those being replaced.

Newly installed components meet or exceed existing specifications, materials are compatible, and system functions are not changed. Seismic capabilities are verified as appropriate. Therefore, no unreviewed safety question is involved in connection with the modification.

Safety Evaluation 89-183-TM (Reused safety evaluation from previous report period)
Water Supply for Wetting of Main Condenser Tube Sheets
This temporary modification utilizes the high-pressure fire protection header as a source of water for wetting the main condenser tube sheets to aid in tube leak detection during plant shutdown. The hose is isolated when not in service. Flow diversion is within system design bases. No unreviewed safety question was involved.

Safety Evaluation 89-199-TM (Reused safety evaluation from previous report period)
Turbine Supervisory Instrument Auxiliary Trip Defeat Switch Positioned to Defeat
This temporary modification places the Turbine Supervisory Instrument Auxiliary Trip Defeat Switch in the defeat position to allow troubleshooting of the Main Unit Eccentricity Card. The trips that are defeated are not safety-related trips. The associated alarms are not defeated, and the Central Control Room operator is available to take necessary manual actions on receipt of an alarm signal. No unreviewed safety question was involved.

Safety Evaluation 89-261-MD, Rev. 2
Replacement of Heat Tracing for Radiation Monitor R-27
This modification replaced existing heat tracing for radiation monitor R-27 with heat tracing of an improved design. The evaluation also determined that sample lines located indoors did not require heat tracing. No unreviewed safety question was involved.

Safety Evaluation 89-265-TM (Reused safety evaluation from previous report period)
Vapor Containment Purge Ventilation System
This temporary modification defeats the interlock between the Containment Building Purge Ventilation Exhaust and Supply Fans to allow the exhaust fan to be run without the supply fan running. Containment vacuum limits were not exceeded. This mode of operation is permitted by the FSAR. No unreviewed safety question was involved.

Safety Evaluation 89-310-TM (Reused safety evaluation from previous report period)
Ecolochem Truck Make-Up to Unit 1 Condensate Storage Tank
This temporary modification connects a fire hose to hydrant 27 via a gated wye connection to a portable demineralizer truck. The outlet from the truck is routed via fire hose to the Unit 1 Condensate Storage Tank. Any hose failure would be quickly identified and isolated. The hose to the hydrant is isolated when not in service. Fire protection system flows and pressures are maintained even with a single failure. No unreviewed safety question was involved.

Safety Evaluation 89-325-TM (Reused safety evaluation from previous report period)
City Water Cooling for Conventional Freshwater Cooling Head Tank – Unit 1
This temporary modification provides cooling for the Unit 1 conventional fresh water cooling loads during a river water system outage. Hoses supply city water to the fresh water system. Check valves are installed to assure backflow to city water does not occur. No unreviewed safety question was involved.

Safety Evaluation 90-032-TM (Reused safety evaluation from previous report period)
Freeze Protection Electrical Heaters for Vapor Containment Isolation Valves.
This temporary modification provides electrical heaters under the vapor containment isolation valves for freeze protection. Electrical power is supplied from a welding receptacle. Equipment is appropriately restrained. No unreviewed safety question was involved.

Safety Evaluation 90-189-TM (Reused safety evaluation from previous report period)
Defeat of 480 Volt Bus Undervoltage during a Bus Outage
This temporary modification defeats the undervoltage relay for the associated 480 V bus while the bus is de-energized for maintenance. The Emergency Diesel Generator (EDG) for the bus in maintenance is 'off'. This allows the two EDGs feeding the line 480 V buses to remain in automatic. Maintenance is conducted with the Reactor Coolant System less than 200°F. No unreviewed safety question was involved.

Safety Evaluation 90-387-TM (Reused safety evaluation from previous report period)
Provide City Water Cooling to R-59
This temporary modification provides city water cooling to Unit 1 conventional fresh water cooling loads and R-59 during a river water system outage. Hoses supply city water to the fresh water system. Check valves are installed to assure backflow to city water does not occur. No unreviewed safety question was involved.

Safety Evaluation 91-016-TM (Reused safety evaluation from previous report period)
Waste Holdup Tank Tygon Hose Level Indication
This temporary modification provides a tygon tube level indication to allow a comparison to the normal waste holdup tank level indication. Personnel monitor the tygon tubing when it is on line and are available to isolate the tubing. No unreviewed safety question was involved.

Safety Evaluation 91-019-TM (Reused safety evaluation from previous report period)
Alternate Power Supplies for Battery Chargers 21, 22, 23, and 24
To support planned outages of 480 V busses with the plant in the cold shutdown mode; alternate temporary power sources are provided for battery chargers 21, 22, 23 and 24. There is only one bus outage and one temporary power source at a time. The source consists of a temporary cable from a fused disconnect in MCC-24 (for chargers 21 and 23) or in MCC-29 (for chargers 22 and 24). The operability of MCC-24 and MCC-29 are not affected. The DC bus configuration and function are not affected. A continuous fire watch is provided. No unreviewed safety question was involved.

Safety Evaluation 91-032-TM (Reused safety evaluation from previous report period)
Removal of Proteus Computer Point
This temporary modification removes erroneous input to the Proteus computer for rod position indication to unmask alarms. The Proteus computer is not required for plant operation. No unreviewed safety question was involved.

Safety Evaluation 91-049-TM, Rev. 1 (Reused safety evaluation from previous report period)
Control Rod Drive Mechanism Fans Power Supply to Vapor Containment Duraline
This temporary modification provides power from a Control Rod Drive Mechanism Fan power supply to a vapor containment Duraline during an outage when the fan is not required. No unreviewed safety question was involved.

Safety Evaluation 91-096-TM (Reused safety evaluation from previous report period)
22 Emergency Diesel Generator Auxiliaries Alternate Power Supply
This temporary modification provides power to the 22 Emergency Diesel Generator auxiliaries from MCC-25 during maintenance on Buses 2A and 5A during cold shutdown. The operability of MCC-25 is not affected. No unreviewed safety question was involved.

Safety Evaluation 91-194-TM (Reused safety evaluation from previous report period)
Water Supply for the Wetting of Main Condenser Tube Sheets
This temporary modification utilizes the high-pressure fire protection header as a source of water for wetting the main condenser tube sheets or condenser tube cleaning. The hose is isolated when not in service. Fire protection system flows and pressures are maintained even with a single failure. No unreviewed safety question was involved.

Safety Evaluation 91-226-TM (Reused safety evaluation from previous report period)
Purge/Pressurize Generator with Nitrogen/Carbon Dioxide/Air
This temporary modification purges hydrogen from the Generator with Nitrogen/Carbon Dioxide/Instrument Air to allow maintenance during a generator outage. Design pressure limits are observed. No unreviewed safety question was involved.

Safety Evaluation 91-301-TM (Reused safety evaluation from previous report period)
Instrument Air and Primary Water Feed to B and C Test Rig
This temporary modification provides demineralized water and instrument air services to the B and C Test Rig as needed. No unreviewed safety question was involved.

Safety Evaluation 91-352-TM (Reused safety evaluation from previous report period)
Provide Clean Source of Demineralized Water from CT-47
This temporary modification connects a hose to CT-47 to supply a source of demineralized water for post repair flushes. No unreviewed safety question was involved.

Safety Evaluation 91-426-TM (Reused safety evaluation from previous report period)
Alternate Power Supply for Emergency Diesel Generator Building Louvers
This temporary modification provides a temporary power supply for control power to the Emergency Diesel Generator Building Louver solenoids during an outage for the diesel. This allows the louvers to be controlled by building temperature. This modification is only installed during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 92-010-GM, Rev. 1
Generic Piping Alteration
This ongoing modification involves the generic replacement of piping or the modification of piping physical arrangement without changing any existing flow paths or sequences. This replacement or modification of piping includes vents, drains and test points including manual vent, drain and/or test valves. This change also includes the removal of piping that is no longer in service (retired-in-place). This change authorizes replacing piping for improved operations and/or maintenance that does not impact existing system performance or design criteria. No new failure modes are introduced. Manual vents or drains are provided with double barrier isolation. Alterations adversely affecting the fire protection program plan are not allowed under this generic modification. There is no impact on bus loading, cable routing, or environmental qualification. This change did not involve an unreviewed safety question.

Safety Evaluation 92-186-TM (Reused safety evaluation from previous report period)
Alternate Cooling for Fresh Water Cooling Components from City Water
This temporary modification provides city water cooling to Fresh Water Cooling Components during Fresh Water system outages. Hoses supply city water to the fresh water system. Component performance is maintained. No unreviewed safety question was involved.

Safety Evaluation 93-047-TM (Reused safety evaluation from previous report period)
Provide Backup Source Range Indication
This temporary modification provides backup source range indication for the contingency of a source range channel failure during core modifications. This modification was only in place during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 93-092-TM (Reused safety evaluation from previous report period)
Fresh Air Source for Central Control Room Ventilation System during Maintenance
This jumper provides a temporary fresh air intake while the Central Control Room Ventilation System is being repaired. This jumper is only implemented during Cold shutdown when containment integrity was not required. A plywood sheet is used to cover the door into the supply ventilation plenum and ventilation tubing is run from a fresh air source to openings in the plywood. This jumper does not involve an unreviewed safety question.

Safety Evaluation 93-257-TM (Reused safety evaluation from previous report period)
Bypass of R-57 Sewage Ejector Pump Trip
This temporary modification bypasses the R-57 Sewage Ejector Pump Trip while R-57 is out of service. Chemistry samples the effluent to confirm compliance with the Technical Specifications requirements during the bypass of the trip. No unreviewed safety question was involved.

Safety Evaluation 93-335-GM
Generic Power Feed, Conduit, Cable Alterations
This ongoing modification involves the generic alteration of electrical circuits for installation or deletion of power feeds that do not require a Technical Specification change and meet existing design criteria. This includes installation or deletion of the following: power feeds for lighting and offices; power feeds for emergency lighting; power feeds from existing sources to equipment; power feeds to general power outlets; and relocation of existing conduit, cable, and trays. The scope of this modification also includes the addition and deletion of associated cables, conduits, boxes, trays, switches, breakers, and fuses. Each alteration receives a design evaluation to assure the safety evaluation bases and assumptions are met. This change does not involve an unreviewed safety question.

Safety Evaluation 93-375-TM (Reused safety evaluation from previous report period)
Defeat of Turbine Runback
This temporary modification defeats the turbine runback to prevent spurious runbacks when a control rod experiences erratic indication. A Westinghouse analysis has concluded that the runback is not required for a dropped rod to remain within DNBR limits. Turbine runback is not required by the Technical Specifications. No unreviewed safety question was involved.

Safety Evaluation 94-005-TM (Reused safety evaluation from previous report period)
Temporary Electric Space Heaters
Temporary space heaters are installed throughout the plant during cold weather conditions. Heaters are seismically restrained, not installed near combustibles, powered from normal service receptacles, and located to ensure that the heat does not adversely affect component qualification or operation. No unreviewed safety question was involved.

Safety Evaluation 94-116-MD
480V Load Bus DB-50 Application
This modification improved 480V breaker operation and reliability by doubling up the DB-50 breakers slide type connectors to minimize the possibility of breaker failure when racking a breaker back into service. Breakers with lockout coils and trip bar switches have had these components disconnected and removed. The lockout interlocks have been reconnected in series with the closing coil, which maintains the capability of preventing closure of the breaker unless permitted by interlock. This modification eliminates the possibility of breaker failure due to a malfunction of trip bar switches and/or lockout coils. Safety-related breaker functions are unchanged. No new failure modes were

introduced. Seismic capabilities are maintained. No unreviewed safety question was involved.

Safety Evaluation 94-143-MD, Rev. 5
Weld Channel System Upgrade
This revision to the modification removed equipment associated with the weld channel for the equipment hatch and personnel lock no longer required for weld channel system operability. Leads were lifted for two unused pressure switches. No unreviewed safety question was involved.

Safety Evaluation 94-176-MM, Rev. 2
IP-15' Sewage Pit Ventilation and Buffalo Tank Retirement
This modification centered the sewage pit pumps over the sewage pit, retired the Buffalo Tank on El. 43' 0" in place, and installed an exhaust fan on the sewage pit vent line on EL. 88' 6". This equipment does not affect nor does it interact with any safety-related equipment. No unreviewed safety question was involved.

Safety Evaluation 94-189-TM (Reused safety evaluation from previous report period)
Oxygen Valves to Hydrogen Recombiners
This temporary modification fails closed the oxygen supply valves to the Hydrogen Recombiners. The recombiners remain operable because an external oxygen supply is not required for the safety function of the recombiners. No unreviewed safety question was involved.

Safety Evaluation 94-237-MD
Chemical Systems Building/ Fuel Handling Floor/ Nuclear Services Building/ Heat/ Winterization Program
This modification installed electric heaters in the Unit #1 Chemical Systems Building, Fuel Handling Floor and the Nuclear Services Building to replace lost capacity from the steam heating system. No new failure modes or fire hazards were introduced. Seismic capabilities were not affected and heaters were located to assure no adverse heating effects on component qualification or operation. No unreviewed safety question was involved.

Safety Evaluation 94-249-MD, Rev. 2
Replace Waste Gas Analyzer Recorder and Sequencer Assembly
This change replaced the recorders and valve sequencing assembly on the Waste Gas Analyzer Panel with a recorder and programmable logic controller. All functions remained the same and no new failure modes were created. The system has no safety-related function. This change did not involve an unreviewed safety question.

Safety Evaluation 94-334-EV
Temporary Operation of 21Control Rod Drive Fan without Exhaust Damper
This temporary modification operated the 21 Control Rod Drive Fan without its backdraft damper. The fan was started with a temporary manual damper, which was removed after fan startup. No unreviewed safety question was involved.

Safety Evaluation 95-001-GM
Stairways, Ladders, Platforms and Handrails
To improve personnel safety and access, stairways, ladders, platforms, and other fall protection equipment were added and modified. They were seismically designed and installed. There was no physical or functional effect on the operability of any system or equipment. No unreviewed safety question was involved.

Safety Evaluation 95-030-TM (Reused safety evaluation from previous report period)
Source Range High Flux Trip Block
This temporary modification blocks the train source range high flux trip above 10E-10 amps. The 21 relay is de-energized and the block is made to prevent an inadvertent reactor trip. The block is removed below 10E-10 amps when the reactor trip function is required. No unreviewed safety question was involved.

Safety Evaluation 95-031-MM
Replace Hydrogen Recombiner Valves
Obsolete hydrogen recombiner valves were replaced by valves from a different manufacturer. The valves perform as before and the valve capacity is the same. The new valves are made of stainless steel, which is compatible for the service. They are seismically qualified and installed. No unreviewed safety question was involved.

Safety Evaluation 95-089-MD
Main Turbine Runback
The turbine-generator runback on loss of one main feedwater pump was modified due to the increase in licensed maximum reactor power and other changes. A bistable was added to an existing instrument loop that measures turbine first stage pressure. The bistable replaced a pressure switch. The timers that control the runback were also readjusted. No safety-related equipment was modified. No Technical Specification was affected. No unreviewed safety question was involved.

Safety Evaluation 95-163-TM (Reused safety evaluation from previous report period)
Instrument Air to Station Cross Connects Inside Vapor Containment
A temporary hose is installed to provide Station Air to the Instrument Air Header inside the Containment during PT-R13 and B and C Valve testing. It is only used during cold shutdown. The valves and instruments connected to the Instrument Air System are not required to be operable during cold shutdown and receive equivalent air during the time this temporary hose jumper is in use. A failure of the hose would be equivalent to a loss of air event, which has been analyzed. No unreviewed safety question was involved.

Safety Evaluation 95-164-TM (Reused safety evaluation from previous report period)
Nitrogen Supply to Reactor Coolant System
This temporary modification provides a regulated additional supply of nitrogen to allow pressurization of the Reactor Coolant System. A check valve, 1808, and a relief valve, RV-1816, mitigate leakage and possible failure of the regulator. This change does not affect the operability of the system. The hose does not challenge the seismic

qualification or structural integrity of the system. No unreviewed safety question was involved.

Safety Evaluation 95-185-TM (Reused safety evaluation from previous report period)
MCC27 Supply to EVP21 (R41, R42, R43, R44)
This temporary modification provides power for radiation detectors R41, R42, R43, and R44 from MCC27 during an outage to MCC26, their normal power supply. Loads on MCC-27 were not adversely affected. This temporary modification is only applied during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 95-187-TM (Reused safety evaluation from previous report period)
Clear the R-1 to R-8 Common High Radiation Monitor Alarm
A temporary jumper was installed to clear the R-1 to R-8 area monitors High Radiation alarm. Due to a high radiation field during RCS full system decontamination, the R-8 Radiation Monitor was required to be out of service. Without this temporary modification, the out of service condition of R-8 would have masked the other radiation monitors alarms. The jumper restored the alarm function for the other monitors. No unreviewed safety question was involved.

Safety Evaluation 95-195-SP
Main Turbine Runback on Rod Drop
Setpoints were changed on the time delay relays for the Main Turbine Runback caused by a rod drop signal. The time delay relays are a backup to the turbine control oil pressure to terminate a turbine runback event. The new setpoints were selected to prevent challenges to the primary system and to prevent unit trips. Analysis has shown that plant response to a rod drop event is acceptable with and without turbine runback. No unreviewed safety question was involved.

Safety Evaluation 95-229-TM (Reused safety evaluation from previous report period)
Temporary Primary Auxiliary Building Sump Pump
Electrical bus maintenance required that both Primary Auxiliary Building sump pumps be temporarily deenergized. A temporary air-driven pump was installed to prevent the sump from overflowing. The air-driven pump was manually actuated, and an operator was in attendance whenever it was actuated. The operator would have mitigated an air supply failure or hose failure. The sump pumps provide no safety-related functions. No unreviewed safety question was involved.

Safety Evaluation 95-275-MM
Proteus Alarms for Refueling Water Storage Tank Level and Residual Heat Removal Flow
This modification provided wiring from the Proteus plant process computer to Central Control Room annunciators to alert the operator on Refueling Water Storage Tank (RWST) level, and to alert the operator of a loss of Residual Heat Removal (RHR) flow during refueling or plant shutdown. The level and loss of flow alarms are provided to enhance the operator awareness of RWST level and RHR flow. No electrical systems or

loads were altered. Existing cables with spare conductors were utilized for the modification. No unreviewed safety question was involved.

Safety Evaluation 95-312-TM (Reused safety evaluation from previous report period)
Temporary Primary Auxiliary Building Sump Pump
A flow path was provided from the Unit 1 CT-T26 Sump Tank to the Waste Collection Tank to facilitate decontaminating the Sump Tank and reducing radiation levels in the vicinity. The flow path consisted of hoses and a Sandpiper connected to valves that provided paths to the two tanks. The flow path was connected only while cleaning the Sump Tank. No safety-related function was changed. There was no unreviewed safety question.

Safety Evaluation 95-328-MD, Rev. 1
Curtain Drain and Sphere Foundation Sumps
The curtain drain and sphere foundation sump collect groundwater and rainwater from certain areas of the site. A temporary curtain drain sump has been built and equipment provided to prevent unmonitored discharge of water from these sources. Flow is directed to the secondary boiler purification system and monitored by radiation monitor R-51 before being discharged. This modification does not represent an unreviewed safety question.

Safety Evaluation 95-366-TM (Reused safety evaluation from previous report period)
Core Exit Temperature Indication
This modification restores redundant central control room indication of core exit temperature with the reactor shut down, the "bedspring" removed for refueling, and the primary system at reduced inventory. The modification consists of connecting two cables (one for each channel) between the bedspring core exit thermocouple connector and the reactor vessel head thermocouple connector. The cable and connector assemblies used are the same material as the permanently installed cables and connectors, and there are no increases in the consequences of equipment malfunctions previously evaluated. The core exit thermocouple monitoring system is a seismically installed system, and this temporary modification does not degrade the seismic capability of the system. No unreviewed safety question was involved.

Safety Evaluation 95-367-GM, Rev. 1
Fire Protection Valve Tamper Switches
Tamper switches on various Fire Protection valves were removed and replaced with tamper seals. Tamper seals and the Tamper Seal Inspection Program provide equivalent protection from valve mispositioning and meet the commitments of the Fire Protection Plan. This change did not affect the function of the valves or the function of any safety-related equipment. No unreviewed safety question was involved.

Safety Evaluation 95-414-TM (Reused safety evaluation from previous report period)
21 Reactor Coolant Pump "X" Vibration Probe
When the "X" vibration probe on Reactor Coolant Pump (RCP) 21 fails it causes the "21 RCP High Vibration" alarm to continuously annunciate. In order to unmask this alarm

and allow the operator to be alerted to a true vibration signal, the "X" probe is removed from service. This is accomplished in the central control room by placing a toggle switch to the defeat vertical position for 21 RCP. The "Y" probe remains in service to provide operators with vibration data on 21 RCP. With the "X" probe out of service, a supplemental log is maintained to monitor 21 RCP bearing temperatures and seal parameters. No unreviewed safety question was involved.

Safety Evaluation 96-012-TM (Reused safety evaluation from previous report period)
Unmask DC Bus Trouble Alarm
This jumper is installed to defeat the 22 Battery Charger failed fan flow switch in order to unmask the 22 BUS trouble alarm when one of the two redundant cooling fans is out of service. One fan provides sufficient cooling and the other fan is not used while the jumper is in place. The jumper allows immediate indication of an off normal condition of 22 DC BUS due to other functions that would have been masked. Failure of the jumper would result in re-energization of the alarm and investigation would be initiated. This jumper does not affect the safety function of the battery charger. No unreviewed safety question was involved.

Safety Evaluation 96-063-MM
Extend Maintenance and Outage Building Sprinkler System
This modification extended the fire protection sprinkler system in the maintenance and outage building to include the drumming station on EL 95' 0" where protective clothing is stored. This modification does not represent an unreviewed safety question.

Safety Evaluation 96-077-PR (Reused safety evaluation from previous report period)
Use of an Air Operated Pump to fill the Fuel Transfer Canal from the Spent Fuel Pool
This temporary modification installs an air-operated pump in the Fuel Storage Building for the purpose of filling the fuel transfer cavity from the spent fuel pool. The equipment, including the pump and its power source, are non-safety-related, but the pump interfaces with the spent fuel pool and the water within the pool. Temporary operating instructions include precautions and limitations to insure the operation of the air pump does not adversely impact the safety function of the spent fuel pool cooling system. Pool water temperature and level instrumentation would have warned the operator of an impending unsafe condition. The air pump is secured to prevent the possibility of its becoming a missile during a seismic event. Upon completion of the filling operation, the air pump and its temporary connections are removed to preclude loss of pool water due to siphon effect. The actions undertaken constitute a temporary operation that involves neither the addition of new equipment nor the deletion of existing equipment. There is no reduction in any margin of safety. No unreviewed safety question was involved.

Safety Evaluation 96-096-MD
Install a Video Capture System in the Existing Perimeter Video System
A video capture system was installed to enhance the Central Alarm Station and Secondary Alarm Station operators' capability to assess perimeter intrusion alarms via the existing perimeter video cameras. The capture system provides video playback of an

alarmed zone before, during, and after and alarm is received. In addition, the new system has capability for zooming, negative imaging, and storing and recalling alarm events while monitoring a live video inset on the screen. The equipment for the capture system is neither connected to nor located in areas that have safety-related equipment, and it is not connected to any system or equipment used to operate the plant. The equipment is powered by non-1E circuits that are backed up by the Security Diesel, and its associated cabling is not in any tray system and therefore does not impact the plant's cable separations design. No unreviewed safety question was involved.

Safety Evaluation 96-118-PR (Reused safety evaluation from previous report period)
Unit 1 Spent Fuel Pool Portable Demineralizer
A portable, skid-mounted demineralizer is temporarily used to purify the water in the Unit 1 spent fuel pool. The demineralizer is placed next to the pool, and uses minimal lengths of hose to connect to the pool. The pool water is maintained at the normal level. No system or equipment required for accident mitigation is affected. No unreviewed safety question was involved.

Safety Evaluation 96-132-MM, Rev. 1
Replace Independent Electric Overspeed Protection System
This modification replaced existing obsolete Glen Controls Independent Electric Overspeed Protection System (IEOPS) instrument system with instruments manufactured by Lovejoy Controls Company (LCC). The new LCC instrumentation system is more reliable and prevents inadvertent failure trips. It is non-class A, non-seismic, and non-1E. It has a similar 2/3-logic actuation, except that the logic relays will energize to trip. The failure of a logic relay to energize is a new failure mode, but this is acceptable because credit for the IEOPS is no longer taken in the Updated Final Safety Analysis Report. The new Lovejoy system is isolated from instrument bus and DC bus power supplies by fuses that are seismically qualified in the F9 rack. Losses of power or blown fuse conditions are brought to the attention of the central control room operator via the existing category alarm. There is no increase in consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

Safety Evaluation 96-151-EV, Rev.2
Painting Unit 1 EL. 72' Fan Room
The effects of painting the Unit 1 EL. 72' fan Room were evaluated. Surface preparation, structural integrity effects, asbestos safety requirements, lead contamination, and air monitoring were considered. The surface preparation and painting specifications were assessed. The Central Control Room (CCR) ventilation system was placed in the incident mode to limit the possibility of intake of paint fumes (ammonia) into the CCR and actuation of the Toxic Gas Alarm. This evolution did not constitute an unreviewed safety question.

Safety Evaluation 96-165-MM
IP #2 Generator Bearings Thermocouples
This modification replaced the thermocouples for generator bearings #9 and #10, wired them to a new junction box and replaced the terminals in the existing junction box. This change does not affect the operability of the system or the equipment. It improves the accuracy of the temperature reading. The newly installed thermocouples are identical and of the same material as the existing ones. Thermocouple terminals and cables are suitable for the application and have been used in the plant at various locations. This modification did not add or change electrical load on any unit 2 buses and did not impact Emergency Diesel or Station Battery loading. No unreviewed safety question was involved.

Safety Evaluation 96-168-MD, Rev. 1
Replace Hydrogen Recombiners
The modification installed the new Hydrogen Recombiners but did not make them operable. Prior to operation, a license amendment must be approved by the NRC. Therefore, the original Hydrogen Recombiners are to remain in place and operational until the proposed license amendment is approved and implemented. This installation does not represent an unreviewed safety question.

Safety Evaluation 96-179-MM
Fire Pump House Transformer Primary Protection
This modification installed a fusible disconnect switch on the primary side of the distribution transformer for the power feed to the fire pump house from Substation A. This modification was made to meet NEC requirements for primary protection for the transformer. This modification does not represent an unreviewed safety question.

Safety Evaluation 96-195-TM (Reused safety evaluation from previous report period)
Steam Generator Blowdown Radiation Monitor Removal from Service
This jumper allows Steam Generator Blowdown Radiation Monitor R-49 to be removed from service without introducing any new failure modes. The change removes the high radiation auto closure feature from the blowdown valves. Daily chemist sampling and increased operator awareness ensure the requirements of NRC IE Circular 80-18 are addressed. The change occurs inside a Control Room rack that is seismically qualified and does not alter this qualification. The jumper introduces two small copper wires whose gauge and composition are compatible with the existing installation. No new electrical loads are added. No unreviewed safety question was involved.

Safety Evaluation 96-198-MM
Replacement of Pre-Amp in Radiation Monitor R-50
This modification replaced obsolete circuit boards in Radiation Monitor R-50 with the manufacturers' replacement boards. Monitor functionality was not affected. This modification does not represent an unreviewed safety question.

Safety Evaluation 96-227-MD

Installation of Space Heater and Electrical Heat Tracing for Valve FP-815 in Primary Auxiliary Building EL 15'

The existing space heater did not adequately maintain the temperature in the alley south of the Residual Heat Removal (RHR) pumps. An electrical space heater and heat tracing for valve FP-815 and its associated piping was installed at elevation 15' in the Primary Auxiliary Building to maintain temperature in the alley south of the RHR pumps. The existing space heater was removed. The Fire Protection piping and Valve FP-815 were electrically heat traced and thermally insulated. This installation did not modify any safety-related system. The installation is seismically restrained due to its location near a safety-related component. This change did not represent an unreviewed safety question.

Safety Evaluation 96-228-MD

Replacement Service Water Pumps

This modification replaced the Service Water Pumps with pumps with upgraded materials of construction and enhanced geometry. Seal water is not required for the new pumps and has been capped off. Appropriate heat tracing has been installed. The service water pumps are functionally unchanged and this modification does not constitute an unreviewed safety question.

Safety Evaluation 96-234-GM, Rev. 3

Replacement, Modification, and Installation of Lighting

This ongoing generic modification addresses lighting enhancements throughout the plant. Normal lighting (except in the control room, the simulator control room, and security lighting), battery pack emergency lights for alternate safe shutdown and personnel safety (includes control room and simulator control room), and 125VAC and 125VDC emergency lights for loss of offsite power are included. Improvements include replacement of obsolete fixtures, upgrading with higher rated fixtures, installation of additional fixtures, and relocation to improve lighting levels and testability. No unreviewed safety question was involved.

Safety Evaluation 96-252-TM (Reused safety evaluation from previous report period)

Alternate Nitrogen Truck Fill to Primary Auxiliary Building

This temporary modification allows nitrogen charging of the nitrogen banks during the time the nuclear equipment system pressure regulator is out of service. The temporary lines are restrained, and an operator is in continuous attendance during fill operations. No unreviewed safety question was involved.

Safety Evaluation 96-254-MD

Disconnect Steam and Water Analyzer Trouble Alarm

The Central Control Room Panel alarm input entitled "Steam and Water Analyzer Trouble" was disconnected. This alarm function was to detect intrusion of river water into the Condensate System. With the change to ETA addition to the secondary plant this alarm was annunciated continuously. This annunciator has been disconnected. Other in-line instruments serve the function this alarm provided. No unreviewed safety question was involved.

Safety Evaluation 96-269-MD
Replacement of Gas Stripper Feed Pumps 21, 22, and 23
Pumps rated at 7.5 and 12.5 gpm were replaced with pumps rated at 25 gpm. The old pumps were originally used to pump the holdup tank contents into the boron recycle system (now retired), but were then used for the transfer of waste from the waste holdup tanks to the Unit 1 waste collection tanks. In the changed application, the old pumps had to be throttled, and constantly tripped during operation. The new pumps were specified to meet the existing system conditions. The installation remains seismic and the pumps maintain pressure boundary integrity. Electrical system capacity is not affected adversely, for the new pumps provide the increased flow rate with reduced horsepower rating. No unreviewed safety question was involved.

Safety Evaluation 96-282-GM
Installation or Alteration of Equipment, Structures, Piping, and Hardware
This generic modification facilitates alteration, modification, or removal of equipment, structures, piping, and hardware when: 1) there is no change in the Unit 2 or Unit 1 UFSAR or Technical Specifications, 2) changes comply with the existing design criteria, and 3) changes are non-Class "A" with no functional and/or physical interactions with safety-related items, and are not located in an area with Class A items. No unreviewed safety question was involved.

Safety Evaluation 96-295-MD
Relocation of Condenser Outlet Water Boxes Level Alarms
This modification removed the existing condenser outlet water box level alarm magnetrols and replaced them with magnetic level switches with a lower setpoint. This was necessitated by the retirement of the Variable Weir System. The lower set point eliminated a nuisance alarm. This modification does not represent an unreviewed safety question.

Safety Evaluation 96-304-PR, Rev. 1 (Reused safety evaluation from previous report period)
Sluicing Sludge from High Integrity Container
This temporary modification provides temporary connections to station water and plant air sources in accordance with procedure RW-SQ-4.007 to allow de-watering of sludge from one container to another in preparation for shipment. No unreviewed safety question was involved.

Safety Evaluation 96-307-TM (Reused safety evaluation from previous report period)
Unit 2 Sump Tank Pump Bypass
This temporary modification routes the liquid in the primary auxiliary building (PAB) sump tank to the PAB sump, bypassing the sump tank pumps. This is accomplished by installing a 2" hose downstream of valve LW-4847 and routing the hose to a floor drain in the immediate vicinity. The bypass is installed to permit cleaning of the sump pump strainers. The building sump pumps discharge to the same location as the sump tank pumps. No unreviewed safety question was involved.

Safety Evaluation 96-327-PR
City Water Backup to Auxiliary Feedwater Inservice Inspection Boundary Change
This change relocated the Inservice Inspection boundary flag on the City Water supply to the Auxiliary Feedwater (AFW) pumps downstream of CT-49 to the upstream side of the check valves CT-28, CT-25, and CT-31. This ISI boundary change is classified in accordance with Reg. Guide 1.26 and ANSI N18.2a-1975, 2.3.3.1(4)(a) in that one normally closed valve is the boundary between the Safety Class 3 portion of the AFW system and the lower Class portion of the AFW system (city water supply). The change is to the ISI program and does not alter the physical interface of the systems involved. The boundary change ensures that a failure of the portion of the AFW system that provides a backup city water supply does not result in a loss of AFW flow from the condensate storage tank to the steam generators due to a leak in the lower class line. This change does not involve an unreviewed safety question.

Safety Evaluation 97-007-MD
Unit 1 Cask Wash Pit Sump Pump Replacement
The Unit 1 Cask Wash Pit Sump Pump was replaced with an equivalent. A local "ON-OFF-AUTO" control station and float control were also provided. There are no safety-related functions for this pump. The system was restored to the original design intent. No unreviewed safety question was involved.

Safety Evaluation 97-023-MM
Replace Diodes in Nitrogen Control Circuit with Resistors
This modification makes permanent a previously installed temporary modification. Resistors were installed in place of diodes in the control circuit for the condensate storage tank nitrogen supply. Electrical spikes that interfered with operation of the Controlotron Flow Computer were minimized. There was no effect on the function of any safety-related system. No unreviewed safety question was involved.

Safety Evaluation 97-029-TM (Reused safety evaluation from previous report period)
Portable Demineralizer Unit to Unit 1 Condensate Storage Tank
A temporary supply of demineralized water to the Unit 1 Condensate Storage Tank is provided to meet the large demand for demineralized water during plant startup. The temporary supply consists of a portable skid-mounted demineralizer and hoses. Water from the fire protection system is utilized. Flow from the fire protection system is about 80 gpm, which is less than the amount that can be removed from the system without adversely affecting it. The capacity of the fire protection system is more than adequate to handle fire contingencies. No unreviewed safety question was involved.

Safety Evaluation 97-044-TM (Reused safety evaluation from previous report period)
Vapor Containment Duraline Power Supply from Weld Receptacle
A supply of 480 V power in the containment is provided through existing conduit and a welding receptacle to a Duraline power distribution center. The Duraline is permanently installed inside containment and seismically analyzed. The maximum load has been shown by analysis to not affect the 480 V bus. Protection for the 480 V system against

an electrical fault is provided by a safety-related breaker. No unreviewed safety question was involved.

Safety Evaluation 97-051-TM (Reused safety evaluation from previous report period)
Blocking Strip Installation for the Source Range High Flux at Shutdown
A temporary blocking strip is installed on a relay associated with the Source Range Channels. One of the two source range channels is removed from service in accordance with normal plant procedures. The blocking strip does not affect the operability of source range instrumentation, but does maintain the availability of (unmask) the High Flux at Shutdown alarm from the operable source range channel. No new failure modes are introduced. No unreviewed safety question was involved.

Safety Evaluation 97-060-TM, Rev. 1
Placing Stainless Steel Screen over Vapor Containment Sump Grating
This safety evaluation re-evaluated a temporary modification that had previously been made permanent. The effect of screening that had been installed to cover gaps in the vapor containment sump grating was assessed. The evaluation assumed that screens covered all grating and the screens were totally blocked by debris. The NPSH for the RHR pumps was found to be adequate. This evaluation does not constitute an unreviewed safety question.

Safety Evaluation 97-072-TM, Rev. 1 (Reused safety evaluation from previous report period)
Installation of Ferrite Beads on NIS Cables
Temporary installation of ferrite beads at various locations on the Nuclear Instrumentation System cables are made to minimize induced electrical noise in the cables. The beads do not impact instrument response times. Materials are compatible with the original installation. No new failure modes are created. No unreviewed safety question was involved.

Safety Evaluation 97-090-MD, Rev. 1
Emergency Diesel Generator Undervoltage Relay (CVX) Trip Removal
This modification enhanced the relay protection coordination of the Emergency Diesel Generator (EDG) and Residual Heat Removal (RHR) breakers by revising the RHR breaker amptector setting. In addition, the CVX Undervoltage Relay Trip was removed from the EDG breakers trip circuit. This eliminated the potential erroneous trips of the EDG breakers due to low voltage conditions during the start-up of large motors. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-114-TM (Reused safety evaluation from previous report period)
Clear the "Fan Room Fan Auto Trip" Alarm
A spider assembly is temporarily installed on relay AR2 located in the Primary Auxiliary Building (PAB) supply fan control panel to clear the "Fan Room Fan Auto Trip" Alarm during maintenance on the PAB supply fan. This assembly does not impede the proper closure of the control panel door nor does it impact any electrical systems. This unmasked other Central Control Room alarms. The spider is removed when the PAB supply fan is returned to service. No unreviewed safety question was involved.

Safety Evaluation 97-116-MM
Primary Auxiliary Building/Vapor Containment Exhaust Balancing Damper
This modification disconnected and removed louvers of the balancing dampers from the plenum for the Primary Auxiliary Building and Containment Purge Exhaust Fans, and retired in place the damper actuators and static pressure regulator. It also disconnected and capped the instrument air tubing to the actuator assemblies. The change was wholly internal to the system. Removing the dampers improved ventilation capacity and no new failure modes were introduced. The margin of safety remained the same because the ventilated air continued to be properly contained and monitored for radiation prior to release. No unreviewed safety question was involved.

Safety Evaluation 97-123-TM (Reused safety evaluation from previous report period)
Emergency Diesel Generator Water Jacket Pressure Gauge
A test pressure gauge is temporarily installed at a test connection on 22 Emergency Diesel Generator (EDG) Water Jacket to allow post maintenance testing of the EDG Water Jacket Pressure Switch. The test gauge does alter any EDG function. No unreviewed safety question was involved.

Safety Evaluation 97-126-SP
Emergency Diesel Generator Jacket Water Pressure Switches Setpoint Change
Emergency Diesel Generator (EDG) Jacket Water Pressure Switches setpoints were increased to reduce the possibility of switch hang-ups due to slow pressure decay and to improve EDG availability. This modification was done on Class 1E equipment. System design conditions were unchanged and no new failure modes were introduced. No unreviewed safety question was involved.

Safety Evaluation 97-132-MD
Fuel Storage Building Supply Fans
The Fuel Storage Building (FSB) heating and ventilating system consists of two supply fans and one exhaust fan. The system has been operated with the supply fans disabled. Calculations and operational experience have demonstrated that the supply fans are unnecessary for building heat removal and are unnecessary for maintaining the FSB at a slightly negative pressure. The modification disconnected and retired in place the power and control circuits of the supply fan motors and dampers and the dampers of the exhaust fan. The modification does not represent an unreviewed safety question.

Safety Evaluation 97-136-MM, Rev. 2
NRC Generic Letter 96-06 Thermal Overpressure Compliance Modification
This modification was implemented to assure thermal overpressure protection is provided as described in NRC Generic Letter 96-06, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions." Relief valves and insulation were added to some lines. The modification does not represent an unreviewed safety question.

Safety Evaluation 97-137-TM (Reused safety evaluation from previous report period)
Pressurizer Safeties Reactor Coolant System Vent Path Foreign Material Exclusion Covers
A wire mesh screen cover is installed on the pressurizer safety valve flange for foreign material exclusion control during safety valve removal. The analyzed vent path area is maintained. This modification is only in place during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 97-140-MD, Rev. 1
Replacement of #21 and #22 Instrument Air Closed Loop Cooling Water Pump/Motor Assemblies
The existing Goulds 21 and 22 Instrument Air Closed Loop Cooling Water Pumps were replaced with A. W. Chesterton pumps of similar design capabilities. Minor design differences were found acceptable. No unreviewed safety question was involved.

Safety Evaluation 97-149-TM (Reused safety evaluation from previous report period)
22 Emergency Diesel Generator Governor Test Connection
Temporary tubing is installed between the servomotor to the governor on the 22 Emergency Diesel Generator (EDG) to allow test data collection. The EDG is declared inoperable during the test and the Limiting Condition for Operation entered. No unreviewed safety question was involved.

Safety Evaluation 97-178-MM
Installation of Isolation Valves and Test Connections for House Service Boiler Pressure Gauges
This modification installed isolation valves and test connections for gauges on the House Boiler control panels to allow calibration of the gauges without dismantling the control panels. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-181-MM
Polar Crane Auxiliary Hook Overstress
The auxiliary hoist to the containment polar crane was modified to relieve potential overstress conditions identified by the fabricator, Whiting Corporation. Specifically, the modification consisted of stiffening the two auxiliary hoist brackets to the main hoist trolley attachment girders, which restored the full rated lifting capacity. The modification did not result in an unreviewed safety question.

Safety Evaluation 97-187-EV
Steam Generator Primary Manway Covers - 4 Fasteners during Refueling or Draindown to Mid-Loop
The Steam Generator Primary Manway Covers are closed with a gasketed connection which uses sixteen fastener sets (i.e., stud/nut/washers) to provide the means of retaining the cover in place and compressing the gasket to achieve a pressure retaining leak tight closure. An engineering evaluation determined, that with the appropriate stated controls, it is permissible to have only four fastener sets to hold each manway during the following evolutions: 1) to transfer fuel (i.e., refueling and/or fuel offloading); and 2) prior to,

during and following draindown to mid-loop operations. The implementation of this evaluation, with the appropriate stated controls, does not represent an unreviewed safety question.

Safety Evaluation 97-192-TM (Reused safety evaluation from previous report period)
Nitrogen Purge for Hydrogen System Piping in the Primary Auxiliary Building
This jumper installs a temporary tygon hose from a nitrogen supply to a vent connection on the hydrogen manifold in the Primary Auxiliary Building. This allows for purging of a portion of the hydrogen system with nitrogen to provide protection for the safe removal of a relief valve. The relief valve is bench tested and re-installed. Only sparkless tools are used and the line is tested by Chemistry prior to the start of work. This jumper did not represent an unreviewed safety question.

Safety Evaluation 97-197-MM, Rev. 1
Degraded Voltage Monitor Lights
This modification installed an indicating light in each of the four degraded voltage relay cabinets and also replaced the existing incandescent degraded voltage trip lights with neon lights. This provides positive indication of the undervoltage test switch position and undervoltage conditions and removes the requirement to remove the incandescent bulb during degraded voltage testing. This modification does not constitute an unreviewed safety question.

Safety Evaluation 97-213-MM
IP2 - Main Turbine Thrust Bearing Seals Enhancement
The seals on the main turbine thrust bearing cage and oil deflector were modified to prevent oil leakage when the turbine is on the turning gear. New babbitted seal rings were installed and an extension with seal strips was welded to the outer deflector to provide a second level of sealing capability. The new seal rings are soft and will not cause any damage to the shaft surface. The oil deflector strips are brass rings. The change was to a non-Class equipment and system. No unreviewed safety question was involved.

Safety Evaluation 97-222-TM (Reused safety evaluation from previous report period)
Purge Vent Line from Charging Pump Leakage Collection Tank
This temporary modification provides nitrogen purge gas to the charging pump leakage collection tank vent line to purge any hydrogen from the vent line prior to and during work on the vent line. No unreviewed safety question was involved.

Safety Evaluation 97-240-EV, Rev. 1
Heavy Loads/Circulating Water Traveling Screens Replacement
This safety evaluation assessed the controls for the performance of lifting of heavy loads, in the vicinity of the IP-2 Service Water dock area, for the Circulating Water traveling screen replacement. Stresses in the Service Water system resulting from lifting of anticipated loads with a mobile crane; safe load path establishment; crane equipment; use of rigging appurtenances; and safe load handling procedures were assessed. The replacement of the travelling screens did not involve an unreviewed safety question.

Safety Evaluation 97-242-EV
Temporary Storage of Scaffolding
The temporary storage of scaffolding at the 95" level of containment was evaluated. The storage was for two scaffold storage racks and two closed 55-gallon drums. The materials are restrained, are not a transient fire load, and the zinc added is within allowables. This did not constitute an unreviewed safety question.

Safety Evaluation 97-249-TM (Reused safety evaluation from previous report period)
Steam Flow Limit for House Service Boilers
This temporary modification programs the house service boiler controls to limit steam flow to 15,000 lb/hr or less. The purpose of the change is to limit the quantity of house boiler steam at the site of a postulated high-energy line break. No unreviewed safety question was involved.

Safety Evaluation 97-250-TM (Reused safety evaluation from previous report period)
Isolation of Weld Channel Zones 2 and 5
The air supply lines to weld channel floor zones B2 and B5 are isolated by closing isolation valves and jumpering pressure switches. Repair of the lines is impractical, and isolation is allowed by the Technical Specifications. No unreviewed safety question was involved.

Safety Evaluation 97-253-MM
Post Accident Containment Vent Bunker Lid Hoisting Attachments
The existing hoisting attachments on the post accident containment ventilation system bunker lid had deformed due to the geometry of rigging necessitated by existing hoisting mechanisms. The attachments were cut flush with the surface of the concrete lid and replaced by four swivel plate attachments using one-inch concrete expansion anchors. No new failure modes were identified. The new attachments are stronger than the ones they replaced. No unreviewed safety question was involved.

Safety Evaluation 97-255-EV
Removal of Stainless Steel Jacketing from Reactor Coolant System Thermal Insulation
The stainless steel jacketing from the insulation on the reactor coolant system piping and the upper portion of the steam generators was removed. The removal was limited to those locations where the calcium silicate blocks had been replaced by removable blanket insulation. There is a negligible effect on containment heat load. The jacketing does not secure the insulation. This did not constitute an unreviewed safety question.

Safety Evaluation 97-258-EV
Safety Injection Recirculation Flow Path Motor Operated Valve Backseat Evaluation
FSAR section 6.2.2.3.6 was revised to take exception to all normally open valves in the safety injection system recirculation flow path being back-seated. The associated

evaluation indicated that this did not affect offsite doses. This did not constitute an unreviewed safety question.

Safety Evaluation 97-260-TM
Temporary Leakage Detection Connection
This temporary modification installed an air compressor uncooled output to the D2 section of the Weld Channel Pressurization System (WCPS) to inject air into the isolated D2 section to allow use of heat detection equipment to identify WCPS leaks. This leak testing was conducted when the WCPS was not required and the jumper was removed prior to exceeding the 200-degree F hold point. A pressure relief was installed to ensure the system was not over pressurized. This leak detection evolution did not constitute an unreviewed safety question.

Safety Evaluation 97-261-TM
Weld Channel Pressurization System 'D2' Leakage Identification
This temporary modification installed a hydro pump to the D2 section of the Weld Channel Pressurization System (WCPS) system and pumped water from a primary water source into the isolated D2 section to allow identification of WCPS leaks. This leak testing was conducted when the WCPS was not required and the jumper was removed prior to exceeding the 200-degree F hold point. After identification of the leaks the WCPS system was blown down to remove all water from the system. Pressure was limited manually to ensure the system was not over pressurized. This leak detection evolution did not constitute an unreviewed safety question.

Safety Evaluation 97-262-TM
Change Stroke Time Requirements for Power Operated Atmospheric Relief Valves
The maximum time for full-stroke operation of the power operated atmospheric relief valves was changed from 20 to 35 seconds. The 20-second time had been arbitrarily selected during development of the Inservice Test Program. The first actual test indicated that 35 seconds was a more appropriate value. These valves are not credited in the accident analyses. This did not constitute an unreviewed safety question.

Safety Evaluation 97-263-TM
Isolation of Weld Channel Dome Area D2
The air supply line to weld channel dome area D2 was isolated by closing isolation valves and jumpering pressure switches. Repair of the line is impractical, and isolation is allowed by the Technical Specifications. No unreviewed safety question was involved.

Safety Evaluation 97-264-EV
Freeze Seal for Chemical and Volume Control System Valve 293 Repair
A freeze seal was installed on the charging pump suction line from the volume control tank to allow repair of chemical and volume control system (CVCS) valve 293 while shutdown and CVCS was not required. A temporary procedure change for control of reactor coolant system dilution was implemented while the freeze seal was in place. The freeze seal was established in accordance with approved procedures. Consequences as a result of loss of, or migration of the freeze seal have been evaluated. This activity did not

adversely affect the operation of safety-related equipment. This activity does not involve an unreviewed safety question.

Safety Evaluation 97-265-TM
Block the Reactor Trip to the Turbine Trip Circuit to Reset the Turbine Trips
This was a temporary lifting of the leads to the turbine trip circuitry from the reactor trip circuitry. This allows the turbine trip to be reset while the reactor trip breakers are open. This allowed turbine support systems to be placed in service and the turbine to be placed on the turning gear. This temporary modification was restricted to conditions when the reactor and turbine were not in service. This temporary lifting of leads did not constitute an unreviewed safety question.

Safety Evaluation 97-268-EV
Fan Cooler Unit Air Flow Switch Evaluations
The purpose of this evaluation was to ensure that no safety-related function of the fan cooler units (FCUs) is compromised as a result of non-functioning incident mode air flow switches. The normal function of the airflow switches in the Containment Cooling and Filtration System is to indicate whether the air is circulating in accordance with the design arrangement. At the onset of a Design Basis Accident with a Safety Injection signal, the air flow switches perform a monitoring function of verifying that incident mode air flow is present, i.e., the incident valves should be opened for the accident configuration and normal valves closed, by sounding a Central Control Room alarm. The operator, however, can verify by system lineup and operating condition whether the incident mode air valves are open, the normal valves are closed, and FCUs are operating without the assistance of the air flow switch alarms. The air flow switches are not environmentally qualified but the indicators for valve position, fan motor operation, and cooling water outlet flow are environmentally qualified. No credit is taken for the air switches in the accident analysis. This analysis does not constitute an unreviewed safety question.

Safety Evaluation 97-269-EV
FSAR Clarification of Table 6.2-9
This FSAR change clarified Table 6.2-9. The allocation of leakage from the safety injection pumps, the residual heat removal pumps, and their flanges was revised but the total leakage was not. This change did not constitute an unreviewed safety question.

Safety Evaluation 97-271-TM
Control Rod Drive Cabinets Air Conditioning Unit
A temporary air conditioning unit was installed in the cable spreading room to cool logic cards in the control rod drive cabinets. The logic cards provide sequencing controls for the control rod mechanisms. Safety functions of the mechanisms are unchanged. The air conditioning will reduce false alarms. No unreviewed safety question was involved.

Safety Evaluation 97-272-TM

Vapor Containment Sump Monitor Selector Switch,

This temporary modification installed a video selector switch that allowed Central Control Room personnel to view either the containment sump or the reactor cavity sump while one of the two viewing monitors was being repaired. Viewing of the sumps allows the operators to view their condition. It is a monitoring function and not a safety-related function. From a flooding perspective, the monitors are a backup to the sump level instruments. The monitors have no functional interface with any other system and no new failure modes are introduced with the selector switch. The modification did not represent an unreviewed safety question.

Safety Evaluation 97-273-TM

Turbine Operation with Inoperable Independent Electrical Overspeed Protection System

The Independent Electrical Overspeed Protection System (IEOPS) was defeated. The IEOPS is a redundant overspeed protection system for the turbine which is not credited for protection against turbine missiles. There is no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

Safety Evaluation 97-277-TM

Control Rod Cabinets Air Conditioning Units

Additional cooling was added to enhance the ventilation through the chassis containing PC boards (i.e., logic cards), located in the front section of control rod drive and shutdown cabinets, to eliminate false alarms and possible equipment failure due to elevated temperatures. The logic cards in the control rod drive cabinets control the sequencing operation of the rod banks. Should they overheat, a false alarm would occur, possibly causing a control bank lockup. However, during a DBA, the control rods will deenergize and scram independent of these logic circuits. Therefore, the modification does not impact any of the accidents described in the UFSAR. The loading from the new air conditioning units do not impact the safety-related loads. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-278-EV

Continued Plant Operation Up To and Including 100% Power with Control Rod Drive Urgent Failure Alarms

This safety evaluation is a Justification for Continued Operation (JCO) in the presence of "urgent failure alarms." Urgent failure alarms are generated by the rod control system when certain potential failures are detected with subsequent specific lockups of the system. IP2 was designed and analyzed to continue operation up-to and including full power operation with urgent failures. Reactor control can be performed by chemical shim using "constant axial offset control." The reactor can still be tripped automatically and manually despite having a control bank locked-up. Procedures are in-place for operator action should an urgent failure alarm occur in the Central Control Room. In addition to chemical shim, there are other rod-banks that can be moved to maintain a safe power distribution. The UFSAR accident analysis is unaffected by an accident

coincident with an urgent failure alarm. This JCO does not constitute an unreviewed safety question.

Safety Evaluation 97-282-TM
Unmask "Weld Channel Zones 1-4, Low Flow 0.3, HI Flow 15 SCFM" Alarm
Weld Channel and Piping Penetration System (WC&PPS) Zone 4 low flow alarm, which was reading zero SCFM, was removed by lifting and taping a lead. The low flow alarm masks the Zone 4 HI flow input and Zones 1 to 3 Low flow inputs and HI flow inputs to the Central Control Room category alarm, "Weld Channel Zones 1-4, Low Flow 0.3, HI Flow 15 SCFM". The normal function of the alarm is to provide Central Control Room operators remote indication of either low or high flow in the WC&PPS that could be indicative of compromised containment integrity. Lifting the lead restores that function. The Jumper does not affect the safety-related function of the WC&PPS, which is supplying penetrations and weld channel zones with pressurized air or backup nitrogen. The pressurized reading for Zone 4 as well as for the other Zones are still displayed on Central Control Room panel SLF. This change does not constitute an unreviewed safety question.

Safety Evaluation 97-288-TM
Reroute Pressurizer Relief Tank Eductor Exhaust to the Vapor Containment Pressure Relief Valves from the Normal Vapor Containment Purge Exhaust
Jumper 97-301, is installed during cold shutdown mini-outages, and uses a tygon hose to reroute the normal purge exhaust from the pressurizer relief tank (PRT) eductor to the containment pressure relief duct valves. The containment pressure relief duct exhausts to the Plant Vent as does the containment purge exhaust. These gases are monitored by radiation monitor R-44, which generates a containment ventilation isolation signal on high radiation that will close open valves in the purge supply and exhaust lines, and pressure relief line. The rerouted PRT venting will be discharged through the pressure relief line and the Plant Vent. The normal function of venting the PRT is not changed and containment ventilation isolation function is maintained. The use of the jumper is in keeping with the principles of ALARA. This change does not involve an unreviewed safety question.

Safety Evaluation 97-290-EV
Freeze Seal for Component Cooling Water Valve 819 A or B Repair/Replacement
This procedure implemented a piping freeze seal to allow maintenance on Component Cooling Water (CCW) valves 819 A and 819 B. The freeze seal was applied consistent with procedure PPG-C-002-A Rev.5, "Freeze Sealing of Carbon Steel Piping." The valve isolation defined by the procedure was accomplished by establishing one freeze seal downstream and one upstream of the valve. This freeze seal was established at shutdown conditions (reactor sub-critical and reactor coolant system temperature less than 350°F) when the operability of the line was not required per Technical Specification 3.3.E.1. Decay heat removal was accomplished using a Reactor Coolant Pump (RCP)(s) and steam generator(s); thus CCW for the Residual Heat Removal system was not needed. The CCW system was in service for cooling of the spent fuel pool and RCP motor bearings. The results of the evaluation indicated that in consideration of facility

design features, contingency plans, and existing operating procedures there is no impact on the safety-related equipment involved in the performance of this "Freeze Seal" application. This change did not involve an unreviewed safety question.

Safety Evaluation 97-293-TM
Modify Spare Residual Heat Removal Breaker and use it as 24 Fan Cooler Unit Breaker
This modification made wire changes to a spare Residual Heat Removal Pump Breaker to have the same wiring and settings as the 24 Fan Cooler Unit (FCU) breaker. This allowed this breaker to be used in place of the 24 FCU breaker while it was being renovated. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-294-TM
Relocating Wires on Reactor Coolant System Makeup Control Switch
This temporary modification relocated the wires for the Reactor Coolant System makeup control switch to spare contacts on the switch. The original contacts were erratic. No functional changes were made and no new failure modes created. No unreviewed safety question was involved.

Safety Evaluation 97-297-TM
Double Contacts for Reactor Coolant Pump Test Relay
This modification was the temporary wiring of spare contacts into the "Y" relay contacts for the Reactor Coolant Pump breaker closed circuit to provide a parallel path through the contacts for added reliability. The spare contacts operate in the same manner as the existing contacts, thereby providing a redundant pathway. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-299-PR
Determination of the Weld Channel and Containment Penetration Pressurization System Dewpoint
This procedure connected a flowmeter/pressure gauge assembly and dewpoint analyzer to four different Weld Channel and Containment Penetration Pressurization System (WCCPPS) test valves to sample four WCCPPS zones one at a time. The WCCPPS is not credited in the FSAR. The procedure directed that the instrumentation be isolated in the event of a seismic event. This test did not constitute an unreviewed safety question.

Safety Evaluation 97-300-TM
Contaminated Drain Tank Alternate Level Indication
This temporary modification installed tygon tubing for level indication of the contaminated drain tank during repairs to its level transmitter. The tygon tubing was only valved in when readings were being taken and an operator was in attendance. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-301-EV
Resetting Mechanical Trip Lever Plate
This task realigned the turbine generator mechanical trip lever plate at power to ensure the auto-stop oil pressure would be maintained. The plate was not properly aligned, which was allowing auto-stop oil pressure to drain off, which could lead to a turbine trip. An operator at the turbine trip-test lever was in constant communications with the Central Control Room (CCR) while mechanical turbine trips were bypassed during realignment. The turbine trip push button in the CCR was available to trip the turbine. This work did not constitute an unreviewed safety question.

Safety Evaluation 97-302-TM
Seismic Support for Transite Ceiling in Central Control Room
This modification was the temporary installation of unistrut to provide support for a transite sheet in the CCR ceiling. The installation was seismically supported and did not affect equipment in the CCR. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-303-TR
Temporary Leak Repair to CD-591
This temporary repair applied a leak repair clamp and sealant on the upstream nipple of the 22 Main Boiler Feed Pump suction vent valve. This installation was a passive device that did not impact the operation of the feedwater system. This repair did not constitute an unreviewed safety question.

Safety Evaluation 97-304-MD
Upgrade Perimeter Camera System
This modification upgraded the perimeter camera system component of the site security system. New cameras were installed, some video cable was replaced by fiber optic cable, and some cameras were relocated to eliminate sun glare and maintenance problems. This modification does not affect plant operation and commitments regarding security and safe shutdown are maintained. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-305-TM
Post Maintenance Test for Solenoid Operated Valves 5452 and 5452-1
This modification temporarily lifted leads to the level controller to the waste gas analyzer moisture collection tank and jumpered contacts for the moisture collection tank Solenoid Operated Valves (SOV) to conduct post maintenance tests to demonstrate operability of the SOVs. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-308-MM
Annubar and SWN-1052 Removal on Fan Coolers Service Water Outlet
This modification made a temporary modification permanent. An annubar in the service water system that had previously been disconnected was removed and replaced by a blank flange. The annubar was removed to resolve interference problems. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-312-MM

Double Contacts for Reactor Coolant Pump Test Relay

This modification was the permanent wiring of spare contacts into the "Y" relay contacts for the Reactor Coolant Pump breaker closed circuit to provide a parallel path through the contacts for added reliability. The spare contacts operate in the same manner as the existing contacts, thereby providing a redundant pathway. This modification made the temporary modification addressed by 97-297-TM permanent. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-314-MM

Noise Reduction of Nuclear Instrumentation System Circuits

This modification permanently installed modifications previously made to eliminate coupling induced electrical noise in the Source Range Nuclear Instrumentation. Ferrite beads have been installed on the Source Range and Intermediate Range detector cables, the Source Range detector N31 pre-amplifier box outside containment, and cables at penetration H27 inside and outside containment. The grounding strap for Source Range detector N31 has been disconnected and taped, a ½ inch braid from the Source Range detector N31 pre-amplifier outer case to the conduit outside containment has been installed, and the cables and grounding straps at the Source Range detector pre-amplifier box have been wrapped with aluminum foil. The beads do not impact instrument response times. Materials are compatible with the original installation. No new failure modes are created. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-315-TM

Residual Heat Removal Discharge Gauge Replacement

This modification was the temporary replacement of gauge PI-635 in the Residual Heat Removal system with a calibrated gauge with similar scale. The gauge is a passive component in the system and was of equivalent pressure retaining capability and the same seismic qualification as the original. This modification did not constitute an unreviewed safety question.

Safety Evaluation 97-320-TM

21 Emergency Diesel Generator Fuel Oil Differential Pressure Alarm Permissive

This temporary modification jumpered a single set of contacts in the pressure delay timer for two fuel oil differential alarms for Diesel Generator 21 while it was out of service for its six year preventive maintenance. This allowed the alarm checks for the primary and secondary fuel oil differential alarms to be completed with the diesel out of service. This temporary modification did not constitute an unreviewed safety question.

Safety Evaluation 97-322-MM

Removal of PT 458B and Dead Weight Tester

This change removed the Dead Weight Calibrator, its Pressure Transmitter (PT-458B), cabinet, and associated wiring from the Pipe Penetration Area. This indicator has not been in use for several years and is not part of any present or future equipment to be used by operations. The tubing that was connected to the indicator had previously been cut

and capped inside containment at the penetration as part of a previous modification. This change does not involve an unreviewed safety question.

Safety Evaluation 97-326-TM
Service Water Screen Trouble Alarm
A faulty pressure transmitter in the Service Water Travelling Screen 28 circuitry was causing the Service Water Screen Trouble alarm in the central control room to be continuously activated, resulting in other trouble warnings being masked. This temporary modification lifted a wire to disable the upstream pressure transmitter for the Service Water Travelling Screen 28 to defeat a high differential level signal, thereby unmasking other trouble alarms. This change did not involve an unreviewed safety question.

Safety Evaluation 97-330-TM
Primary Water and Service Air Supplies for Chemical and Volume Control System Holdup Tank Transfer Pumps Hydro
This temporary modification provided the hydrostatic rig to test the Chemical and Volume Control System Holdup Tank Transfer Pumps that had been replaced via modification. This temporary modification did not constitute an unreviewed safety question.

Safety Evaluation 97-331-MD
Weld Channel and Penetration Pressurization System Zones 1,2,3 and 4 Orifice Installation
This modification introduced controlled leakage into weld channel zones #1, 2, 3, and 4 to clear the weld channel low/high flow alarm in the Central Control Room. A low flow alarm was often activated because of little leakage and masked other alarms. Installation of an orifice, a tube plug with a bleed hole, provides controlled leakage sufficient to clear the low flow alarm. No unreviewed safety question was involved.

Safety Evaluation 97-333-TR
Temporary Repair and Lifting of Floor Plug-Primary Auxiliary Building El. 68'
This was a temporary repair of a deformed lifting ring by removal and subsequent lifting of the floor plug. Prior to the lifting of the floor plug the seal area between the floor plug and the floor was mechanically cleaned. The seal was broken under controlled conditions with limited force monitored by a dynamometer; the plug was then lifted one inch and returned to its original position. The embedded eyebolt was load tested. This repair and lifting of the floor plug did not constitute an unreviewed safety question.

Safety Evaluation 97-335-PR
90 Volt DC Temporary Test on DB-50 Breakers
This test performed a minimum voltage test at approximately 90 volts dc of each Westinghouse DB-90 breaker to verify its operability under an undervoltage condition. Each breaker was disconnected from its normal operating 125-volt dc bus supply and placed in the test position and declared inoperable. The appropriate Limiting Conditions for Operation were entered to ensure Technical Specification compliance. The two Class

A 10 amp fuses in the breaker compartment were pulled and a portable 90 volt battery rack with its own fused 10 amp disconnect switch were tied in to the breaker. The verified test voltage of 90 volts dc was supplied to the closing coil of the breaker to verify breaker closure. Following the test of each breaker, the test battery dc supply was disconnected and removed, and the normal 125-volt dc supply was reconnected to the breaker control circuit restoring the original configuration prior to declaring the breaker operable. The testing of these breakers did not involve an unreviewed safety question.

Safety Evaluation 97-336-MM, Rev. 5

DB-50 and DB-75 Breaker Modification

This modification enhanced the operation of the DB-50 and DB-75 breakers in accordance with the recommendations contained in NRC Information Notice 93-85. This modification involved the following:

DB-50 Breakers

Revised the timing of closing coil de-energization to ensure that the breaker has latched in the closed position, while maintaining acceptable breaker overtravel. Post modification testing assures that the breaker latches in before the X-relay is de-energized and that the overtravel is acceptable.

Machine the bottom of the X-relay trip lever window as required, (but not more than 100 mil) to assure that the release arm does not impart significant load to the bottom of the trip lever window.

Machine the stationary core as required to allow the breaker PAWL to latch in at less than 1/32" in overtravel while in the static mode. This is to ensure that the breaker latches in before the X-coil de-energizes when the breaker is in the dynamic mode.

For breakers which exhibit binding, remove material from the inertia latch (to allow free movement of the latch on the cross bar) and/or remove material from the frame to eliminate binding between the frame and the inertia latch.

DB-50 and DB-75 Breakers

Install a non-ferrous spacer between the stationary and movable cores of the X-relay. This is to ensure that the X-relay contacts are properly reset for actuation on a subsequent close signal and any malfunction due to residual magnetism is precluded.

DB-75 Breakers

Replace the PAWL latch spring with a new spring having different physical characteristics in order to increase tension on the PAWL latch that will improve its settling action and ensure that it latches in.

This modification does not involve an unreviewed safety question.

Safety Evaluation 97-337-EV

Freeze Seal for Condensate Valves Replacement

A freeze seal was installed on the 6" condensate line which supplies the Main Boiler Feedwater Pump Seal Injection pumps for replacement of valves CD-51, CD-51-1, CD-52, and CD-52-1. The freeze seal was established in accordance with approved procedures when the use of the line was not required. Consequences as a result of loss of, or migration of the freeze seal were evaluated. This activity did not affect the operation of safety-related equipment nor did it involve an unreviewed safety question.

Safety Evaluation 97-340-PR

480 Volt DB-50 Breaker Adjustment and Testing

This test involved removing Westinghouse DB-50 breakers from service (as permitted by Technical Specifications), transporting them to the electrical maintenance area to conduct breaker performance tests and making adjustments to optimize breaker performance. Breaker performance was enhanced by the procedure and there was no adverse impact on the breaker functions. This activity did not represent an unreviewed safety question.

Safety Evaluation 97-344-MM, Rev.1

MST-65 Discharge Pipe Reroute

This change involved the rerouting of the discharge piping for Steam Trap MST-65 to prevent water induction into the No. 22 Auxiliary Boiler Feedwater Pump (ABFP) Turbine. The function of the MST-65 steam trap station is to remove condensate that could collect downstream of PCV-1139 in order to prevent water induction into the No. 22 ABFP Turbine via its admission line. The re-routed trap discharge pipe permits condensate to drain continuously to an appropriate floor drain, thus maintaining the system function. This makes the quality of steam supply to the turbine more reliable, prevents the collection of condensate, and thereby prevents turbine damage caused by water intrusion. The new failure mode resulting from this modification (failed open Steam Trap MST-65 during ABFP operation) was evaluated for its impact on the environmental qualification of electrical equipment in the ABFP Room, and was determined to be inconsequential. This modification does not involve an unreviewed safety question.

Safety Evaluation 97-345-TM, Rev. 1

Blank Flange for Pressurizer Relief Tank Side of Relief Valve 855

A blank flange was installed on the Pressurizer Relief Tank (PRT) side of Relief Valve 855 to allow valve 855 to be removed for maintenance while maintaining pressure boundary integrity of the PRT. This temporary modification was only applicable during cold shutdown conditions with the Safety Injection system rendered inoperable. The temporary modification did not affect the safety-related function of the system because it was only valid during cold shutdown conditions. This temporary modification did not involve an unreviewed safety question.

Safety Evaluation 97-349-TM

Block Open PCV-1228 Instrument Air to Containment

This temporary modification installed a mechanical blocking device on PCV-1228 Instrument Air Supply to Vapor Containment to maintain the valve in the open position while electrical power to the valve was removed. It was necessary to remove electrical power to the valve to allow maintenance on PCV-1229 in the de-energized state. Both valves are fed by one fuse. This temporary modification was limited to cold shutdown when closure of this valve on containment isolation is not required. This temporary modification did not involve an unreviewed safety question.

Safety Evaluation 97-350-MM

Alternate Safe Shutdown System ASCO Transfer Switches

Five Alternate Safe Shutdown System ASCO transfer switches which supply power to safety-related equipment were modified to enhance the reliability and repeatability of the operating mechanism. A handle to the operating cam was installed and an opening cut in the door. The mechanism previously operated by the door handle that had recurring failures was removed. The function of the transfer switches is to transfer from Unit 2 buses to the emergency power source (Unit 1 buses) during an Appendix R event. This modification does not involve an unreviewed safety question.

Safety Evaluation 97-351-PR

Testing of DB-50 Circuit Breakers in the Switchgear

This procedure installed a temporary modification to allow testing of DB-50 and DB-75 breakers in their switchgear to obtain a current trace for comparison to test data obtained on the test stand. The equipment was declared inoperable during the test and restored to operable status after completion of the test. The test did not affect the operation of the breakers or plant equipment and did not involve an unreviewed safety question.

Safety Evaluation 97-352-TM

Normal MCC Breaker Replacement

This temporary modification installed a substitute breaker from MCC-210 into MCCs 24/24A, 27/27A, AND 29/29A respectively, to implement modifications on those breakers. This temporary modification was limited to cold shutdown when the MCCs had reduced load requirements. Administrative controls were instituted to restrict total load to each MCC and to restrict the maximum single load. (Safety Evaluation 97-363-PR addresses the procedures associated with this temporary modification.) This temporary modification did not involve an unreviewed safety question.

Safety Evaluation 97-354-MD, Rev. 1

Technical Support Center Halon Replacement

This modification removed the existing Halon fire protection system for the Computer Room (elevation 53'-0'') and the UPS Room (elevation 33'-0") and replaced it with pre-action closed head, thermally controlled sprinkler system. This modification also installed a wet pipe sprinkler system in the Central File Room, File Room and CRT Display Room on the 53'-0'' level. The existing smoke detectors were also replaced. This modification does not involve an unreviewed safety question.

Safety Evaluation 97-356-MM

Emergency Diesel Generator Shut Down Relay Replacement and Relocation

This modification replaces the existing GE series CR 122A Emergency Diesel Generator (EDG) Shut Down Time Delay Relays (TDRs) with an AGASTAT series E7022, a more reliable model. Change out of this relay allows the setpoint to be maintained more accurately; thus preventing restart after the diesel is shut down. The new TDRs are located within their respective diesel control panels in the EDG building. These new relays are seismically mounted and qualified. The EDG TDR is class 1E equipment. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-357-MM, Rev. 3

Modification to the Central Control Room Annunciators

This modification revised wiring and power distribution fuses for the following Central Control Room annunciator panels:

Group1: SA-1, SA, SC, SB-1, and SB-2
Group 2: SD, SC, and SF
Group 3: SG, SH, SJ, SK, SL, and SM
Group 4: SA and SD

The modification eliminates cross feed voltages, provides proper isolation and cable separation, makes miscellaneous window corrections, provides seismic supports as necessary, and provides independent power feeds to the panels. This modification does not represent an unreviewed safety question.

Safety Evaluation 97-363-PR

MCC Breaker Replacement Procedure

The procedures TOI 248, TOI 249, and TOI 250 provide operational guidance during the substitution of the normal 480V AC Motor Control Center (MCC) 210 breaker for the normal breakers to 480 V AC MCCs 24/24A, 27/27A, and 29/29A, respectively. Each breaker exchange activity is controlled by a jumper, which is evaluated in Safety Evaluation 97-352-TM as not involving an unreviewed safety question. The temporary MCC 210 breaker function is identical to the normal MCC supply breakers, albeit at a lower amperage setting. These procedures do not involve an unreviewed safety question.

Safety Evaluation 97-365-TM

Perform Service Water Test

This temporary modification installed a pressure gauge and a bleed off valve at the packing leakoff connection on the Service Water pumps for taking data during pump testing. Other instruments required to perform this testing were non-intrusive. This modification was installed and the testing performed while the plant is in the cold shutdown mode. The pumps were operated one at a time. This change did not represent an unreviewed safety question.

Safety Evaluation 97-366-EV

Change to Limiting Close Stroke Time for Containment Purge/Pressure Relief Valves

The limiting value of closed stroke time for the containment purge and pressure relief valves was changed in implementing procedures from two seconds to three seconds which is in conformance with current Technical Specifications. This change does not represent an unreviewed safety question.

Safety Evaluation 97-370-TM

Central Control Room Supervisory Panel Test Switches

This temporary modification installed a disconnect switch in the supply circuit between panels SC and SD and in the supply circuit between panels SF and SG to aid troubleshooting efforts. These switches were installed only during cold shut down and

were seismically restrained. This change did not represent an unreviewed safety question.

Safety Evaluation 97-373-TM
Emergency Diesel Generator Air Compressor Cycle Monitoring,
This change involved the installation of a motor logger via jumper, to the Emergency Diesel Generator (EDG) air compressor motors. A motor logger was installed on the external surface of the motor housing for the 21, 22, and 23 EDG air compressors, to record and evaluate cycle data. The motor logger is passive and non-intrusive, and does not affect operation of the air compressor. This change did not involve an unreviewed safety question.

Safety Evaluation 97-374-TM, Rev. 1
Test of Spare Drawer to N-31
This was a temporary change, at cold shutdown below 200 °F, that sought to determine if Electromagnetic Interference (EMI) and electrical noise problems in the Source Range Nuclear Instrumentation could be eliminated by disconnecting monitor N-31 from its existing drawer and reconnecting it to its spare drawer. The existing drawer is connected to station ground. Electrical noise and/or EMI appear to be generated by switching at the Buchanan substation, operation of annunciators, and various switching functions in the control room. These electrical spikes may find a pathway through the station ground to the Source Range Monitors. The spare drawer is connected to a separate ground that is isolated from the station ground. During this testing, N-31 was out of service, i.e., not operable and no work was performed on N-32. Channel N-32 retained its protective function. Only one source range channel is needed for reactor trip. This change did not affect any of the reactivity accidents described in the UFSAR. The jumper was removed prior to the reactor coolant system exceeding 200°F. This temporary change did not involve an unreviewed safety question.

Safety Evaluation 97-376-TM
Alternate Battery Charger Power Supply at Cold Shutdown,
This temporary modification was only used at cold shutdown. An alternate power supply from a spare MCC compartment was used to supply a battery charger whose normal supply MCC had been removed from service. Appropriately sized cable was routed such that vertical and horizontal separations from cable trays were maintained. The cables used were secured to prevent interaction with other equipment in the area. Appropriately sized fuses were applied to the associated spare MCC compartment. This modification was only applied to one battery charger at a time. The use of an alternate MCC supply to one battery charger does not reduce the ability to operate or control decay heat removal systems which are the only systems required at cold shutdown to prevent accidents. In the event of the loss of the MCC supplying the associated battery charger, the batteries will supply DC load until a power feed is restored to the battery charger. The modification affects none of the accidents described in the UFSAR. This temporary change did not involve an unreviewed safety question.

Safety Evaluation 97-377-MD

Contactor Control Enhancement Freeze Protection Panels 21, 22, and 24

This modification involved the replacement of existing Mercoid alarm temperature switches, alarm set point changes, and a revision to the normal operating range for the Electrical Heat Tracing (EHT) system in the freeze protection panels for the Intake Structure, the Auxiliary Boiler Feed Pump building, and Tank Farm. These changes were initiated to eliminate false EHT Contactor Failure Alarms. An EHT Contactor Failure Alarm occurs when a low temperature is experienced and the main contactor is not closed (i.e. heat tracing not energized), or a high temperature is experienced and the contactor for energizing the heat tracing is closed. The operating range was increased such that the EHT will energize sooner when temperature is decreasing, and will deenergize later when temperature is increasing. The replacement alarm temperature switches have a smaller reset differential. Piping will be protected from freezing in the same manner as before the modification. These changes do not impact any of the accidents described in the UFSAR. This modification did not involve an unreviewed safety question.

Safety Evaluation 97-378-MM

Main Steam Safety Valves and Safety Valve Drain Line Modifications

Four check valves, MS-976, MS-977, MS-978, and MS-979 were removed from the drain line headers for main steam safety valves MS-49A through D. The drain line connections to the common headers with the safety-related main steam power-operated relief valves, PCV-1134, -1135, -1136, and -1137, have been capped. Capping these drain lines does not affect the performance of the relief valves or the safety valves. The other drain line connections are routed to an existing floor drain. In addition, the drain line off the main-steam supply-line safety valve, MS-52, to the auxiliary feedwater turbine has been connected to the existing drain line connection. These changes to the drain connections did not involve an unreviewed safety question.

Safety Evaluation 97-379-PR

Emergency Operating Procedure Changes Revision 29

This revision to the Emergency Operating Procedures (EOPs) incorporated numerous changes that were validated on the Indian Point 2 simulator. This revision to the EOPs does not constitute an unreviewed safety question.

Safety Evaluation 97-389-TM

R-49 Pressure Test

This temporary modification provided a water source to the sample line of R-49 in order to perform the required post maintenance test to declare R-49 operable. Plant conditions did not allow the normal flow path through the monitor. This temporary modification did not involve an unreviewed safety question.

Safety Evaluation 97-391-MM

480 V Switchgear Compartment 21C Modification

This modification made the control circuit and alarm of the controls for MCC 28A feeder breaker of SWGR 21C similar to the control circuits of other MCC feeder breakers. The safety function of the breaker was not impacted. An alarm switch interlock was removed,

and an annunciator contact was changed. This change did not involve an unreviewed safety question.

Safety Evaluation 97-397-MM
Reactor Coolant Pump Vibration Monitor Cables and Conduits Modification
This modification upgraded cables and conduits routing and supports for the Reactor Coolant Pump vibration monitoring equipment. No functional changes or electrical circuitry changes were made. No unreviewed safety question was involved.

Safety Evaluation 97-398-EV
Auxiliary Component Cooling Pump Function not Required to Cool Safety Injection Recirculation Pump Motor Coolers
This evaluation assessed the need for the auxiliary component cooling pump function during the injection and recirculation phases of a loss of coolant accident. The Safety Injection Pump Motors are qualified to a higher temperature than would be experienced during the injection phase, and therefore the cooling pump function is not required during the injection phase. During the recirculation phase a component cooling water pump is available to provide cooling. This change did not constitute an unreviewed safety question.

Safety Evaluation 98-001-MM
Radiation Monitoring System Upgrade Control Function (R-49)
Channel R-49 which monitors the liquid blowdown samples from the secondary side of the four steam generators through a common sample line to test for presence of radiation was declassified from class A, class 1E to class A, non-class 1E. The electrical reliability of radiation monitor R-49 was improved by reconfiguring the control signal directly from the local control unit (LCU) and adding an LCU failure contact to the alarm circuit. The safety function of R-49 is unchanged. This modification does not involve an unreviewed safety question.

Safety Evaluation 98-002-MM
Containment Recirculation Fan Incident Air Flow Switch Relocations
The incident airflow switches within the carbon filter compartments of the Containment Recirculation Fan coolers were relocated. The relocation was performed to enhance the flow distribution at the flow switches. The switches provide a low air flow alarm on control room annunciator panel SL. The flow switch circuits are non-1E. The switch and conduit are seismically supported, and there are no vital cable or cable trays in the area of the relocation. The relocation involved the addition of approximately 100 feet of one-inch galvanized conduit, which had a negligible increase in zinc inventory inside containment. This change did not involve an unreviewed safety question.

Safety Evaluation 98-003-TM, Rev. 1
Temporary Power Supply to 21 EHT, Dock Area
This temporary modification provided a power supply to Service Water and Circulating Water electrical heat tracing in the Unit 2 dock area at cold shutdown while its feeder bus was removed from service for maintenance. The temporary feed was taken via a feed

from Unit 1. No accident scenarios were created and evaluated accident response was unchanged. This modification ensured the operability of the electrical heat tracing. This modification did not create an unreviewed safety question.

Safety Evaluation 98-004-TM, Rev. 1
Temporary Power Supply to 21 LTG PNL, Dock Area
This temporary modification provided a power supply to a lighting panel in the dock area at cold shutdown while its feeder bus was removed from service for maintenance. The temporary feed was taken via a feed from Unit 1. No accident scenarios were created and evaluated accident response was unchanged. The modification ensured proper lighting of various dock areas that allowed Operations and Security to maintain equipment surveillances. This modification did not create an unreviewed safety question.

Safety Evaluation 98-006-MM, Rev. 2
Nuclear Instrumentation System Enhancement
The purpose of this modification was to eliminate coupling induced electrical noise, i.e., electromagnetic interference, from the Source Range Monitors (SRMs), the Intermediate Range Monitors, and the Power Range Monitors of the Nuclear Instrumentation System (NIS). The changes include the installation of new ferrite beads on exposed NIS triax cable; new enclosures for preamplifiers, replacement of the 118 VAC SRM instrumentation power supply constant voltage transformer, and capacitor changeout. These changes were made to enhance the operation of the NIS by filtering out signal noise with no adverse impact on NIS signals or other safety-related equipment. A small additional loading was added to instrument bus 24 as a result of the modification, which was found acceptable. An unreviewed safety question was not involved.

Safety Evaluation 98-007-TM
Flushing of the Magnetrol Level Columns
This change involved the use of jumpers to provide a source of water for flushing the Magnetrol level columns for the condenser waterboxes. The jumpers were accomplished using a ¾-inch rubber hose, with a minimum pressure rating of 250 psig. The hose was routed from the Fire Protection System (connected at valve FP-800 or FP-801, as appropriate), to the condenser waterbox level columns. Any postulated hose failure would be controllable by manually closing the supply valve. The jumper had a negligible effect on the high-pressure fire header, as the flow diverted from the header (< 120 gpm) was previously analyzed and found to be acceptable. This change did not involve an unreviewed safety question.

Safety Evaluation 98-013-MM
Fire Door Closers for Central Control Room Kitchen and Locker Room
Obsolete door closers for the central control room kitchen and locker room doors were replaced. The 120/24 VAC transformer that is required for the door closer circuit is not integral to the replacement door closer, but was provided in a separate enclosure as part of this modification. The circuits electrically remained the same. The function of the door closer, to actuate when the light switch is turned off or if smoke is detected in the

respective room, was not affected. This change did not involve an unreviewed safety question.

Safety Evaluation 98-014-EV
Operation with Leakage through Auxiliary Feedwater System Valves
The Safety Evaluation evaluated the effects of observed and postulated leakage through the Auxiliary Feedwater (AFW) Control Valves for the steam driven AFW Pump. Leakage of 40 gpm through each of the 4 AFW Control Valves was found not to adversely affect the accident analyses, margin of safety or FSAR analysis conclusions. This change does not involve an unreviewed safety question.

Safety Evaluation 98-015-MM
Stilling Wells
The purpose of this modification was to strengthen and repair the seven stilling wells, which protect the intake structure screens against the loads imposed at the water surface by ice on the river and repetitive wave loading. The stilling wells are located in front of the trash racks of the intake structure, and are non-class structures that that are attached to the class A intake structure. Although stiffening of the lower bracket results in additional loads being imposed on the concrete structure, the design failure modes do not impact the intake structure. An unreviewed safety question was not involved.

Safety Evaluation 98-017-EV
Cleaning and Repair of Coatings for Various Areas within the IP2 Containment
Various coatings within the containment were removed due to conditions of peeling and cracking and replaced with approved Level I DBA tested coatings. All coatings used complied with the requirements of ANSI-N5.12 as per specification FCX-98-C-001, Rev. 0. Components/areas replaced included the polar crane, containment liner, inner and outer crane wall trenches, reactor coolant pump concrete pedestals, steam generator concrete and steel pedestals, recirculation sump and drainage trenches, isolated inner and outer crane wall degraded areas, reactor vessel cavity pit, component cooling water piping, and various electrical conduit. The normal function of the original and replacement coatings is to provide corrosion protection and a decontaminable surface meeting DBA conditions for IP2. The replacement coatings will meet the original design capability of coatings during a postulated DBA and reduce the potential for the coatings to chip or delaminate into the containment and recirculation sumps or onto their screens with subsequent interference with pumping capability. This change did not involve an unreviewed safety question.

Safety Evaluation 98-018-TM
Nitrogen to Power Operated Relief Valves - Valve 4107 Data Collection
This jumper installed equipment to facilitate the collection of data in order to evaluate valve performance. Check valves have repeatedly failed their performance tests due to excessive valve chattering during the filling of the nitrogen accumulators. This data collection will help determine the appropriate corrective action. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-019-TM
Alternate N2 to Power Operated Relief Valve PCV-455C, Overpressurization System Out of Service
This jumper provided an alternate nitrogen supply to the Power Operated Relief Valve while the Overpressurization System was out of service. This jumper was only implemented during cold shutdown. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-020-MD
480 Volt Switchgear Room Steam Line Break Mitigation
This modification installed instrumentation for automatic action (fan trip, intake damper isolation, house service boiler trip, and alarm) and provided structural components to mitigate the effects of a steam line break. This modification does not involve an unreviewed safety question.

Safety Evaluation 98-021-MM, Rev. 2
Fire Water Storage Tank Heaters
This modification replaced the obsolete temperature controllers and silicon controlled rectifiers (SCRs) used to control freeze protection for the Fire Water Storage Tank with dual output/dual setting controllers and contactors. Deletion of the SCRs eliminates a heat source in the control panel. Breaker settings in the heater control cubicle and supply breaker in substation A were revised to enhance the reliability of the heater banks. A thermocouple and a leaking thermowell were also replaced. No safety functions were modified as a result of this modification. No unreviewed safety question was involved.

Safety Evaluation 98-024-TM
Linear Accelerator Temporary Feed
Radiography was performed using a linear accelerator. This jumper provided a temporary power feed for this equipment. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-025-TM
Emergency Diesel Generator Raw Water Alternate Pressure Gauge
The Emergency Diesel Generator Raw Water local pressure gauges were not indicating. This jumper provided local temporary test gauges to provide pressure indication. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-028-MD
Control Rod Drive Cabinets Air Conditioning Unit
This modification made air conditioning units installed under a jumper (Safety Evaluation 97-277-TM) a permanent installation. The air conditioning units provide cooling to the logic cards in the Control Rod Drive Cabinets. This modification does not involve an unreviewed safety question.

Safety Evaluation 98-029-MM

Replacement of Unit 1 Auxiliary Steam Header Pressure Transmitter and Indicator

This change involved the replacement of the Unit 1 auxiliary steam header pressure transmitter and indicator. The replaced components were obsolete. The replaced pressure transmitter is mounted in a local panel in the turbine building. The pressure indicator on the Unit 1 Assessment Panel in the Central Control Room was replaced and relocated to improve readability. There is no safety-related function associated with the Unit 1 auxiliary steam system. The indication circuit is non-Class A and non-1E. The components mounted in the Unit 1 Assessment Panel are seismically supported to preclude interaction with any safety-related components. This change did not affect any safety-related or safe shutdown system or equipment. This change did not involve an unreviewed safety question.

Safety Evaluation 98-032-MD

MOV 883 Control Relocation and Positive Redundant Central Control Room Indication

MOV-883 local controls were relocated to a lower radiological dose area, the motor operator was upgraded to Environmentally Qualified (EQ) status, and an EQ external limit switch was installed to provide positive redundant position indication in the Central Control Room. This modification facilitates completion of switch over to the recirculation phase after a postulated LOCA by reducing operator radiation exposure. No functional changes were made to equipment. No unreviewed safety question was involved.

Safety Evaluation 98-033-TM

Mechanical Blocks on Fan Cooler Unit Charcoal Dampers

This change involved the use of jumpers to mechanically block the opening of each of the Containment Fan Cooler Unit charcoal adsorber inlet and outlet dampers. These jumpers protected the charcoal from paint fumes during painting in the Vapor Containment. The jumpers were implemented by placing semi-cylindrical sections of steel pipe on the dampers' actuator shafts. Jumper installation was limited to cold shutdown operation, such that the charcoal filtration portion of the Containment Ventilation System was not required operable, and the Safety Injection defeat key switches were used to prevent actuation of the fan cooler units and dampers. If the normal outlet dampers closed and the charcoal dampers attempted to open (e.g., due to loss of control air), control room alarms would have alerted the operator to enter the appropriate alarm response procedures. The work orders prescribed post-maintenance testing to verify proper damper operation upon removal of the jumpers. This change did not involve an unreviewed safety question.

Safety Evaluation 98-035-EV

SOP 10.1.2, Safety Injection System Check Valve Trouble Shooting

This new procedure conducts testing to determine if various isolation valves branching from the Safety Injection System design recirculation path leak. Valves identified as leaking are repaired in accordance with the station work order program. The procedure incorporates FSAR and Technical Specifications limitations into the procedure. Changes

in pressurizer level or other indication of leakage require the operating Safety Injection Pump to be secured. This new procedure does not constitute an unreviewed safety question.

Safety Evaluation 98-037-MM
Safety Injection Reset Relay Testing Modification
This modification rewires the Safety Injection time delay relays such that the time delay relays can be tested during the bi-monthly system test rather than just during refueling outages. The function of the time delay relay is unchanged, only the testing frequency is affected by the change. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-040-TM
Residual Heat Removal Heat Exchanger, Component Cooling Water Side Relief Valve Blind Flanges, 819B
This temporary modification installed 150# rated blind flanges on the upstream and downstream side of pressure relief valve 819B, on the Component Cooling Water (CCW) side of the 21 Residual Heat Removal (RHR) Heat Exchanger. The 819B valve was isolated via freeze seal during cold shutdown conditions to allow its removal. Isolation capability by the blind flanges was provided as a contingency measure, in order to allow 21 RHR Heat Exchanger to be returned to service in the event that 22 RHR Heat Exchanger became unavailable. Due to the common CCW inlet and discharge headers for the RHR heat exchangers, overpressure protection for 21 RHR Heat Exchanger was maintained via valve 819A. This change did not involve an unreviewed safety question.

Safety Evaluation 98-043-EV
Freeze Seal for Component Cooling Water Valve 819A or B, Repair/Replacement with Residual Heat Removal in Service
This change evaluates the use of a freeze seal plug to isolate Component Cooling Water (CCW) to Residual Heat Removal (RHR) heat exchanger #21 (22) pressure relief valve 819A (819B) for maintenance. This evaluation applies to freeze seal work in accordance with approved procedure PPG-C-002A, "Freeze Sealing of Carbon Steel Piping," to be performed when the accident mitigation functions of CCW and RHR are not required (i.e., reactor is subcritical and Reactor Coolant System temperature is less than 350 degrees Fahrenheit). The RHR heat exchangers share common CCW inlet and discharge headers. Overpressure protection will therefore continue to be provided, by the pressure relief valve that is not isolated by the freeze seal. The RHR heat exchanger whose pressure relief valve is isolated by the freeze seal will remain available for decay heat removal; it may be returned to service by manually opening the CCW discharge valve. Blind flanges are available to isolate the upstream and downstream flanges of the isolated pressure relief valve, to ensure the availability of the affected heat exchanger. Contingency measures are prescribed by PPG-C-002A to isolate the affected line in the event of a piping failure or loss of freeze seal (e.g., by the use of a clamp or plug). The potential for freeze plug migration has been considered, and determined not to pose a threat to the CCW pump or RHR heat exchanger. The freeze seal and equipment does not subject any piping or supports to additional stresses that would affect their seismic

qualification. The jumper does not impair core decay heat removal capability. This change did not involve an unreviewed safety question.

Safety Evaluation 98-048-TM
Lighting Bus 22 and 23 Tie Breaker
The removal of 23 Lighting breaker removes a "b" contact for the 22/23 bus interlock and de-energizes positive control power for the Lighting Bus 22 and 23 Tie Breaker and Lighting Bus 22 breaker. While 23 Lighting breaker was removed from its cubicle for maintenance, the 22/23 breaker interlock was restored by the installation of a jumper in place of the "b" contact, and a jumper was installed to restore positive control power. This allowed the tie breaker to be closed with the 23 breaker removed. The 22/23 bus interlock prevents the 22 and 23 Lighting buses from receiving power from two different 480V buses simultaneously. This temporary modification was installed and removed while the 23 Lighting breaker and control power fuses were removed. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-049-TM
Lighting Bus 23 Breaker Control Power
While 23 Lighting breaker was removed from its cubicle for maintenance, negative control power was restored by a temporary modification of tying two electrical wires together on a terminal block. Normally, negative control power for lighting bus 23 is powered through the 23 Lighting breaker. This temporary modification was installed and removed when the breaker was removed and the control power fuses removed. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-051-MM
River Water Temperature Recorder TR-6281
Temperature alarms for differential between inlet and discharge river temperatures and differential rate of change were removed from temperature recorder TR-6281. This non-safety-related recorder has no control functions and these alarms are not required for plant operation. No unreviewed safety question was involved.

Safety Evaluation 98-052-MM, Rev. 1
Nitrogen Supply to the Vapor Containment
This modification replaced the nitrogen supply check valves to the Safety Injection accumulator tanks, replaced the pressure regulator in the nitrogen supply line to the Vapor Containment, and installed a pressure regulator in the nitrogen supply line from the truck fill connection. Strainers were installed upstream of the pressure regulators. The pressure regulators have teflon seats that will not be exposed to detrimental radiation levels. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-054-TM
Conventional Closed Cooling Head Tank Fill
This temporary modification provided a makeup path from the condensate seal water system to the Conventional Closed Cooling Head Tank while city water to Unit 2 was out

of service. An operator was in continuous attendance during the times this path was used. This modification did not represent an unreviewed safety question.

Safety Evaluation 98-055-MM, Rev. 1
Post Accident Vent Flow Instrument Replacement and Installation of Pressure Regulator
This modification replaced obsolete flow instrumentation in the post accident vent system. The new instrumentation was functionally equivalent. An additional air regulator was installed to provide sufficient air to pressure control valves PCV-1308 and 1309 to allow them to open fully. No functional changes were made and no new failure modes were introduced. No unreviewed safety question was involved.

Safety Evaluation 98-058-TM
Temporary Lighting Feed from Weld Receptacle
A jumper was utilized to provide temporary lighting to the Primary Auxiliary Building (PAB) while the normal lighting was removed from service. The jumper used a welding receptacle as the power source to run cable to a fused disconnect switch to a temporary lighting transformer in the PAB. The Jumper was installed during cold shutdown. It had no impact on safety equipment since it is fed from a house service power supply, and the transformer was protected by the fused disconnect switch and the MCC fuse. This change did not involve an unreviewed safety question.

Safety Evaluation 98-063-PR
Electrical Tunnel Roof Leak Repair Procedure
This procedure was used to repair a non-structural crack in the roof of the electrical tunnel cable spreading room to the 68' level of the Primary Auxiliary Building and other plant areas by injecting grout from the inside of the tunnel. The repair does not affect structural integrity, nor does it affect any equipment. This repair did not constitute an unreviewed safety question.

Safety Evaluation 98-065-TM
Nitrogen Supply for Clearing the Vapor Containment Vent Header and Gas Analyzer Sample Line from the Reactor Coolant Drain Tank
This temporary modification connected a pressurized nitrogen cylinder in each of two locations in the Waste Disposal System to pressurize lines and clear blockages in the vapor containment vent header and gas analyzer sample lines from the reactor coolant drain tank. Pressures used were below piping system design pressure and the evolution was conducted during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 98-068-EV, Rev. 1 and Safety Evaluation SE 98-122-MD
Installation of Main Generator Over-Frequency Protection and Changes to the Reactor Coolant Pump Over-Speed Protection Design Bases
This modification revised the main generator over-speed protection and the design bases of the reactor coolant pump over-speed protection. Over-frequency trips were added to the turbine-generator trip relays and an inhibit was added to the circuitry for the fast transfer of 6900 V buses 1, 2, 3, and 4 from the unit auxiliary transformer to the station

auxiliary transformer on over-frequency conditions. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-069-MM, Rev.1
Nitrogen Backup for PCV 1310A and 1310B
This modification installed backup nitrogen to the instrument air supply to the Auxiliary Feedwater Pump Steam Supply valves to ensure closure is maintained following a postulated steam line break. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-070-SP
Pressurizer Level Program Change
This change revised programmed pressurizer level to reduce the potential for letdown isolation following transients. The pressurizer level programmer was recalibrated for a 5% increase in level. Procedures were revised to reflect this change and procedures for manually controlling level were also revised. FSAR accident analyses were evaluated to assure that results and conclusions for FSAR analyses remain valid and there is no reduction in margin of safety. Westinghouse analyzed loss of normal feedwater with acceptance criteria being met for the increased pressurizer level. Expected normal transient analyses were evaluated with the FSAR results remaining valid. Simulator runs determined that effects on operators were minimal. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-073-MM
Relocation of Auxiliary Steam Piping and Station from Outside 480V Switchgear Room
This modification relocated auxiliary steam piping from the vicinity of the 480V switchgear room ventilation inlet to preclude dynamic effects from postulated piping breaks impairing the integrity or operability of the 480V Switchgear Room. No unreviewed safety question was involved.

Safety Evaluation 98-075-MM
Primary Auxiliary Building 21 and 22 Exhaust Fans - FC-6605-S and FC-6606-S
This modification revised the configuration of flow switches FC-6605-S and FC-6606-S low-pressure connections to allow the switches to experience a higher differential pressure with Primary Auxiliary Building Exhaust Fans 21 and 22 both running. The existing configuration resulted in low differential pressures and Central Control Room nuisance alarms. The flow switches do not serve any control functions. No unreviewed safety question was involved.

Safety Evaluation 98-077-MM
Traveling Screens Splashguard
This modification installed splashguards between the screen gear reducer and chain housing on the service water (SW) and circulating water (CW) travelling screens. The splashguards for the SW screens were installed seismically, and the CW screens were evaluated for possible interactions with the SW system. This modification reduces the

accumulation of water in the screen chain-housing reservoir. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-086-MM
Pipe Penetration Freeze Protection
The Primary Auxiliary Building pipe chase for piping from the Refueling Water Storage Tank was sealed to prevent cold air from entering the pipe chase area that could result in pipe freezing. The sealant used is flexible and does not restrain any of the piping. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-087-EV
Freeze Seal for Safety Valve 263 Inservice Testing
A freeze seal was applied to the Chemical and Volume Control System to allow the removal of Valve 263 to conduct inservice testing on it. The freeze seal was applied during cold shutdown with pressure in the Reactor Coolant System being maintained at less than 150 psig. Plug migration or plug loss was evaluated. This repair did not constitute an unreviewed safety question.

Safety Evaluation 98-088-EV
Freeze Seal for Safety Valve 4058 Inservice Testing
A freeze seal was applied to the Chemical and Volume Control System to allow the removal of Valve 4058 to conduct inservice testing on it. The freeze seal was applied during cold shutdown with pressure in the reactor coolant system being maintained at less than 150 psig. Plug migration or plug loss was evaluated. This repair did not constitute an unreviewed safety question.

Safety Evaluation 98-093-EV
Freeze Seal for CC-31-1 Closed Cooling Water System
A freeze seal was applied to the closed cooling water system to allow repairs to 22 Main Feedwater Feed Pump pedestal cooling isolation valve. The freeze seal and repair was conducted at cold shutdown when the system was not needed. This is a non-safety-related system and cannot affect safety-related components. Plug migration was evaluated. This repair did not constitute an unreviewed safety question.

Safety Evaluation 98-104-MD, Rev. 1
Redesign Containment Spray Pump Recirculation Piping to Preclude Pump Cavitation during Low Flow Surveillance Testing
This modification replaced the retired-in-place sodium hydroxide eductor, piping and valving with a globe valve in order to allow increased containment spray pump flow during Inservice Testing flow tests. Vibration that could degrade long-term pump performance had been experienced during flow testing with low flow through the pump. A seismically restrained ultrasonic flow instrument was permanently installed to establish eductor design flow rate upon completion of performance testing. The globe valve is sealed at the throttle position during normal operation. During a DBA, the containment spray pumps are secured when the Refueling Water Storage Tank is at or below 9.24 feet of inventory and before the beginning of the recirculation phase of the accident.

Consequently, the globe valve packing does not experience recirculated containment fluids and valve stem leakage does not contribute to the offsite dose. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-105-MD, Rev. 2
Upgrade of the Screen Heaters and Spray Water Pressure Switches
This modification: (1) disconnected and removed the heaters for Circulating Water System (CWS) Screens 21 through 26; (2) relocated the CWS screen water pressure switches for Screens 21 through 26 to the top of the spray water pipe for improved reliability and installed a pressure indicator with each switch; (3) changed the setpoint for Screen 27 and 28 spray water pressure switches from 60 psig to 50 psig; (4) replaced the heaters for Service Water System (SWS) Screens 27 and 28 with new seismically installed heaters; and (5) replaced and relocated the thermostats and temperature probes. The safety function of the traveling screens is to prevent debris from the river from entering the CWS and SWS. The safety function of the electric heaters for SWS Screens 27 and 28 is to prevent ice buildup on the screen buckets during the winter. Removal of similar heating to the CWS traveling screens is acceptable because the intake water temperature for the months of December, January, February and March for the past 6 years has averaged 33°F, and the air temperature has averaged 30°F to 31°F. A design calculation shows that CWS screens when running with spray water (which is heat traced) above 32°F for a prolonged period with an outside temperature of –5°F will not experience any ice formation. In addition, if only one main circulating water pump intake was available, and that intake was 90% blocked, there would be sufficient water for the service water pumps at design conditions. Water movement alone without the need for any heaters precludes such a blockage of a CWS pump intake by ice formation. These changes have no adverse impact on the SWS or any other safety-related system or component. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-109-MM
Generator and Transformer Protective Relay Enhancements
This modification enhanced the protective relaying control circuits for control of Buchanan Switchyard breakers 7 and 9. The IP2 and Buchanan grounds were separated on one relay to eliminate a path for ground currents; a resistor in the direct trip circuit was removed as not necessary; and spare conductors are now used to replace degraded conductors between the IP2 control room and the Buchanan relay panel. The protective relaying does not have any safety functions. No unreviewed safety question was involved.

Safety Evaluation 98-110-TM, Rev. 1
Temporary Triax Cable from N-31 Detector
This temporary modification installed a Rockbestos triax cable from N-31 detector to the preamplifier using a spare port in a containment electrical penetration, during cold shutdown, to determine if the existing triax cables were damaged. This was part of an ongoing trouble-shooting effort to eliminate electromagnetic interference in the Nuclear Instrumentation System. Separation from existing cables was maintained. This temporary modification did not constitute an unreviewed safety question.

Safety Evaluation 98-111-MD and Safety Evaluation 98-164-EV

Removal of Part Length Control Rod Drive Mechanisms and Repair of Spare Head Penetration

This modification permanently removed eight part-length Control Rod Drive Mechanisms from the reactor vessel. The penetrations were left as installed spare penetrations with a threaded plug as the primary reactor coolant pressure boundary seal and a fillet weld as a secondary reactor coolant pressure boundary seal. In addition, a cap that had been installed at penetration location E5 was replaced with a plug of the same design. The part length control rods had previously been removed. No unreviewed safety question was involved.

Safety Evaluation 98-113-MM

Auxiliary Steam Piping Seismic Upgrade

This modification eliminated the concern for postulated intermediate sized pipe breaks of the house service boiler fed auxiliary steam piping adjacent to the Battery Room and outside the Central Control Room, which might affect safety-related equipment within those rooms. Seismic analysis and seismic-upgrading, between the terminal points at various locations, of this non-safety-related auxiliary steam piping were performed to qualify the piping for design seismic events. The modification installed new supports and/or replaced existing supports for the auxiliary steam piping between the terminal points. During an accident condition, the postulated breaks will only be at the terminal ends of the auxiliary steam piping, and will not affect any safety-related systems structures or components in the Battery Room or the Central Control Room. This change did not involve an unreviewed safety question.

Safety Evaluation 98-115-EV, Rev. 1

Loose Parts Evaluation - Residual Heat Removal Valve Parts

This evaluation was a Westinghouse final safety evaluation of the potential effects of two particular parts from Residual Heat Removal (RHR) system valve No. 730, and another part detected in the reactor vessel lower plenum in 1995 by the Digital Metal Impact Monitoring System. The loose parts inventory considered 2 identical parts (of the valve) to weigh about 0.25 pounds and have dimensions of 1½ x 1 x ¾ inches, and the lower plenum object to weigh less than 2 ounces. The analyses considered the potential effects of wedging and impacting. Components and systems included were the Reactor Vessel and Internals, Control Rod Drive Mechanisms, Nuclear Fuel, Steam Generators, Pressurizer, Reactor Coolant Pumps, Reactor Coolant System (RCS) Piping, RCS Instrumentation and Control, Chemical and Volume Control System, Auxiliary Coolant System, Emergency core Cooling System, Containment Spray, Reactor Vessel Head Vent, and Sampling System. The evaluation concluded that the plant components and safety systems would not be adversely affected during normal operation and accident conditions due to the presence of the postulated loose parts and therefore, this situation does not represent an unreviewed safety question.

Safety Evaluation 98-117-MM, Rev. 1

Radiant Energy Shield Removal

This modification removed the majority of the radiant energy shield from the conduit, located inside the containment crane wall, which contains cable for the Alternate Safe Shutdown System (ASSS) T/hot and T/cold instrument channels for Reactor Coolant System loops 21 and 22. These ASSS instruments have no safety-related functions. These instruments were credited for a Fire Zone 71A fire scenario. With the rework of the radiant energy shield, these instruments could no longer be credited for a postulated fire in Fire Zone 71A. However, since the normal safety-related instruments for loops 23 and 24 (located in Fire Zone 70A) can be credited for a Fire Zone 71A fire scenario, these instruments have been designated ASSS. Procedure AOI 27.1.9 was revised to reflect the equipment alignment and utilization in the event of a fire in Fire Zone 71A. There is no reduction in post-fire shutdown capability, and the change was permissible within the constraints of the Fire Protection License Condition of the Operating License.

Safety Evaluation 98-118-EV

Design Requirements for Valve Stem Packing and Bonnet Gaskets for Motor Operated Valves in the Safety Injection System

UFSAR Section 6.2.2.3.8 was revised to discuss alternate valve stem packing arrangements and bonnet gasket selections for the Safety Injection System (SIS) motor operated valves. The FSAR discussion was written prior to NRC issuance of Generic Letter 89-10, which deals with valve operability requirements. As part of these concerns, valve stem friction factors became a significant issue. In addition, the original packing material contained asbestos, and had relatively high packing to valve stem friction. A number of material configurations were investigated that eliminated asbestos, reduced valve stem friction, and showed superior performance in allowable stem leakage compared to the original design. Each of these newer packing arrangements does not create an unreviewed safety question since: (1) the selected packing arrangement was evaluated to ensure its suitability for stuffing box design, (2) the packing manufacturers data regarding valve stem leakage satisfied UFSAR Table 6.2-9, and (3) the packing manufacturers data regarding valve stem friction satisfied Generic Letter 89-10 valve operability concerns. The change out of the bonnet gaskets to a different material is justified by the fact that there are numerous materials compatible with SIS materials, which can provide an adequate bonnet seal meeting leakage requirements.

Safety Evaluation 98-120-PR

Refueling Water Storage Tank Outlet Stop Valve 846 Leakage Rate Determination

This test procedure tests the Refueling Water Storage Tank (RWST) outlet stop valve leakage, during cold shutdown, to determine leakage through the valve in order to assess post-accident dose consequences. The RWST is the suction supply for the Safety Injection, Residual Heat Removal, and Charging Pumps. With the plant in cold shutdown, this RWST flow path is not required to mitigate any events or abnormal conditions analyzed in the FSAR. If an abnormal condition had occurred during the conduct of the test, contingencies were in place to halt the test and restore the flow path. Compliance with Technical Specification 3.2.A for a boric acid injection flow path was a prerequisite for the test. A prerequisite was included to preclude reduced inventory

requirements. This leak testing evolution did not constitute an unreviewed safety question.

Safety Evaluation 98-068-EV, Rev. 1 and Safety Evaluation SE 98-122-MD
Installation of Main Generator Over-Frequency Protection and Changes to the Reactor Coolant Pump Over-Speed Protection Design Bases
This modification revised the main generator over-speed protection and the design bases of the reactor coolant pump over-speed protection. Over-frequency trips were added to the turbine-generator trip relays and an inhibit was added to the circuitry for the fast transfer of 6900 V buses 1, 2, 3, and 4 from the unit auxiliary transformer to the station auxiliary transformer on over-frequency conditions. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-123-MM
Replacement of Existing Mesh Screen around Recirculation Sump Instrumentation
This modification replaced the existing mesh screen around the recirculation sump level instrumentation LT-939 that is attached by stainless steel tie wires and welds to a structural frame around the instruments. The replacement mesh screen is attached by bolting to the structural frame. This was an enhancement due to concerns that the tie wires could become loose and migrate to the pumps. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-125-MM
Instrument Bus and 125 VDC Panel Circuit Modification/Separation
This modification rewired the feeds from the Instrument Buses and 125 VDC Panel. This enhanced the distribution of loads and increased reliability of the circuits. There were no functional changes to any circuits. An electrical load analysis was performed. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-126-MM
Modification of Excess Condensate Valve LCV-1129 Controls
This modification deleted instrumentation and controls that were required to close the excess condensate valve LCV-1129 to prevent condensate flow to the condensate storage tank coincident with a load rejection event. This control function was interlocked with the condensate emergency bypass valve FCV-1150. The control functions for FCV-1150 had previously been retired and flow paths were isolated under administrative controls. This modification retires associated equipment making administrative controls unnecessary. This removes the potential for an electrical failure to non-class components affecting a safety-related circuit. No unreviewed safety question was involved.

Safety Evaluation 98-128-MM
Containment Isolation Phase "A" Reset Permissive Enhancement
This modification wired additional contacts into the containment isolation reset circuitry from each of the containment isolation valve "close-remote" switches to ensure the "close-remote" switches are in the "close " position prior to resetting a Phase "A" containment isolation signal. This assures that no valves inadvertently open upon

containment isolation reset. Prior to this modification, administrative controls were relied upon to ensure the "close-remote" switches were in the "close" position. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-132-MM
Nuclear Instrumentation System Cables Replacement
This modification replaced the cables and installed ferrite beads for the source range monitors, the intermediate range monitors, and the power range monitors to reduce induced electrical noise. No functional changes were made to this equipment. Response times of this instrumentation are not affected. No unreviewed safety question was involved.

Safety Evaluation 98-134-TM
11 Fire Main Booster Pump Alternate Feed
11 Fire Main Booster Pump (11FMBP) receives power from a normal and alternate feed. This temporary modification jumpers the normal supply undervoltage relay which senses voltage from the normal supply in the starting circuitry for 11FMBP during the time the normal feed breaker is removed for maintenance. This assures that 11FMBP will start on the alternate feed if a low fire main pressure occurs and supports the Fire Protection Program. This procedure does not represent an unreviewed safety question.

Safety Evaluation 98-137-EV, Rev. 1
Gear Change for Motor Operated Gate Valves
As part of the GL 89-10 program, the gear ratio for containment isolation valves MOV 784 and MOV 222 have been increased. Valve 784 is located in the Component Cooling Water return line from the reactor coolant pump (RCP) motors and valve 222 in the seal water return line from the RCPs. Both valves are open when the RCPs are in operation. The required thrust and closing times have been re-calculated for maximum differential pressure and degraded voltage conditions. Changing the overall gear ratio has increased the thrust output of each motor operator. This gear ratio increase results in an increase in the valve closing stroke time from 10.2 to 21.4 seconds for MOV 784 and 10.95 to 20.4 seconds for MOV 222. The increase in valve closing times is acceptable because containment isolation will still occur prior to fuel damage under Design Basis Accident conditions. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-138-PR
P-MT-156: "Test of Gas Turbine 1 Auto Synchronizer Circuit"
P-MT-156, "Test of Gas Turbine-1 (GT-1) Auto Synchronizing Circuit" describes the precautions and limitations and procedural steps required to test the operability of GT-1 synchronizing switch. Technical Specifications require that at least one gas turbine be operable at all times to provide back up electrical power to operate plant auxiliaries. GT-1 is protected from physical damage during the conduct of the test. This procedure does not represent an unreviewed safety question.

Safety Evaluation 98-148-TM

Nitrogen Supply for Clearing the Gas Analyzer Sample Line from the Pressurizer Relief Tank

This temporary modification connected a pressurized nitrogen cylinder to the Isolation Valve Seal Water System connection between Pressurizer Relief Tank gas sample line valves 548 and 549 in order to clear blockage in the sample line. This temporary modification was only in place during cold shutdown and a relief valve was installed to limit pressure to 90 psig. This temporary modification did not constitute an unreviewed safety question.

Safety Evaluation 98-150-MM

Reactor Trip Breakers Push-To-Test Indicating Lights Wiring Modification

This modification replaced the existing push-to-test indicating lights on the reactor trip breakers with standard red and green indicating lights to remove the potential for an interaction between the control circuitry for the reactor trip breakers and reactor protection logic. No functional changes were made to the circuitry with the exception of the push-to test feature, which is not a safety function. No unreviewed safety question was involved.

Safety Evaluation 98-151-TM

Reactor Head Vent Foreign Material Exclusion Screen

This temporary modification installed a wire mesh foreign material exclusion screen on the reactor head vent opening during cold shutdown. The open area of the screen is greater than the vent pipe opening, thereby providing a discharge area greater than that of the pipe opening. This temporary modification did not constitute an unreviewed safety question.

Safety Evaluation 98-155-PR

Increase Elevation of Reactor Head Vent Line #522 at Valve 500 to Eliminate Trap

This work order raised the reactor head vent line to allow for adequate pitch in the line to allow condensate to flow down the line rather than collecting at a low point and forming a trap. The process used ensured that pipe stresses did not exceed limiting allowable stresses at any time. This change did not affect the function or operability of the head vent line. This evolution did not constitute an unreviewed safety question.

Safety Evaluation 98-159-TM

21 Emergency Diesel Generator Test Connections

This temporary modification installed an in-line pressure transducer on the hydraulic line to the governor booster servomotor and voltage pickups across the interposing relay and the field voltage relays. These installations were made to assist in troubleshooting the diesel while it was declared inoperable for failure to start and achieve 480VAC in ten seconds. The diesel configuration was returned to normal prior to declaring the diesel operable. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-160-MD

Weld Channel Modification for Personnel Airlocks and Equipment Hatch

This modification restored weld channel low-pressure indication in the Central Control Room (CCR) for the 95' and 80' personnel airlocks inside containment to agree with the FSAR. Existing pressure switches were found disconnected or incorrectly connected to indication in the CCR. No unreviewed safety question was involved.

Safety Evaluation 98-161-MM

Install Additional Emergency Diesel Starting Air Motor Lubricators

This modification installed additional starting air motor lubricators to inject lubricant directly into the air start motors for each emergency diesel generator (EDG). The existing lubricators provided insufficient lubrication due to an excessive length of pipe upstream of the starting motor. No functional changes to the EDGs were made. The new lubricators provide added assurance the diesels will start and load within safety analysis timing assumptions. No unreviewed safety question was involved.

Safety Evaluation 98-111-MD and Safety Evaluation 98-164-EV

Removal of Part Length Control Rod Drive Mechanisms and Repair of Spare Head Penetration

This modification permanently removed eight part-length Control Rod Drive Mechanisms from the reactor vessel. The penetrations were left as installed spare penetrations with a threaded plug as the primary reactor coolant pressure boundary seal and a fillet weld as a secondary reactor coolant pressure boundary seal. In addition, a cap that had been installed at penetration location E5 was replaced with a plug of the same design. The part length control rods had previously been removed. No unreviewed safety question was involved.

Safety Evaluation 98-167-MM

In-Line Isotopic Analyzer Modification

This modification refurbished and simplified the operation of the In-Line Isotopic Analyzer. Obsolete equipment was replaced. The controls equipment and data acquisition equipment were relocated to the Primary Auxiliary Building from the Nuclear Services Building. The analyzer has no safety-related functions. The post accident sampling functions were retained and equipment reliability increased. No unreviewed safety question was involved.

Safety Evaluation 98-168-PR, Rev. 1

Power Operated Relief Valve Nitrogen Supply from Safety Injection Accumulators

These procedures and temporary modification reconfigure the normal nitrogen supply to the Power Operated Relief Valves (PORVs), by aligning a Safety Injection (SI) accumulator to provide supplemental nitrogen to the PORV accumulators to assure sufficient nitrogen capacity to support the 200 PORV valve strokes committed in 4.3.4.2 of the UFSAR. This temporary modification is only applicable during plant conditions requiring the Overpressure Protection System operable. A mechanical block, via a temporary modification, is placed on a SI Accumulator vent valve to maintain it in an open position. This aligns additional nitrogen supplies to the PORV nitrogen

accumulators. The procedures provide guidance for the temporary modification and: (1) appropriate valve isolation, tagging, and restoration, (2) valve isolation capability verification, (3) check valve backleakage, (4) PORV stroke timing verification, and (5) verification that the configuration supplies nitrogen to the PORVs. This temporary modification does not constitute an unreviewed safety question.

Safety Evaluation 98-171-MM
Roof Replacement IP2 Electric Penetration Tunnel
This modification made roof repairs/ replacement on the Electric Penetration Tunnel. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-172-MM
New Waterproofing System for the IP2 Mechanical Penetration Tunnel
This modification made roof repairs/ replacement on the Mechanical Penetration Tunnel. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-177-EV
Containment Heating, Cooling and Ventilation Systems
This change revised the flow rates in the FSAR for the containment building purge exhaust and supply systems and indicates actions that may be necessary during operation of these systems. The containment isolation functions are unchanged. This change does not represent an unreviewed safety question.

Safety Evaluation 98-178-MM
Replacement of Waste Gas Oxygen Analyzer AT-1067A
This modification replaced the existing inoperable and obsolete oxygen analyzer AT-1067A located in the Waste Gas Analyzer Panel with a functionally equivalent analyzer. Electrical noise filters were added to the output of the hydrogen and oxygen analyzer output to reduce false alarms caused by noise spikes. This modification does not constitute an unreviewed safety question.

Safety Evaluation 98-180-PR
Gas Turbine No. 3 Electrical Overspeed Test
This safety evaluation assessed a new test procedure for testing Gas Turbine 3 electrical overspeed protection circuit setpoint and operation. The gas turbines are not safety-related, however the Technical specifications do require at least one gas turbine be operable to provide backup power for plant auxiliaries. The evaluation determined that the test adequately protected the gas turbine from overspeed. No unreviewed safety question was involved.

Safety Evaluation 98-181-SP, Rev. 1
Rod Insertion Limit Recalibration and Setpoint Change
The rod position E/I converters and insertion limit recorder were recalibrated to 240 steps to match the existing delta Temperature program module calibration. Rod insertion alarm setpoints were also revised. Alarms and rod position indicators are used as operator aids and are not relied upon for Technical Specification compliance. This

change does not affect Technical Specification limits. No unreviewed safety question was involved.

Safety Evaluation 98-183-TM
Metal Impact Monitoring System Alarm Inhibit Override
This temporary modification overrode the inhibit function of the metal impact monitoring system to allow this system to monitor reactor coolant pump starts during an outage of the 2A bus. The system has a monitoring function only and provides no protective functions. No unreviewed safety question was involved.

Safety Evaluation 98-187-PR
Fill and Drain Unit 1 Spent Fuel Pools
This procedure implemented the fill and drain of the Unit 1 spent fuel pools to allow removal of irradiated hardware and structural inspection of the concrete walls of the pools. A separate procedure was used to address irradiated hardware removal. The pools level was first increased to allow transfer of irradiated hardware to the Cask Load Pool. Pools were then drained to the 49' level and pool gates were re-installed. All pools, with the exception of the West Storage Pool were then pumped via an air-operated pump with a suction hose submerged in a pool with the discharge routed to the Cask Wash Pit. Discharge hose placement and visual observation following system shutdown precluded siphon effects. A watertight berm was constructed at the nearby roll up door, hose ratings were conservatively chosen, and pool levels continuously monitored. Water level in the west pool was maintained greater than 48' to provide personnel shielding. This filling and draining evolution did not constitute an unreviewed safety question.

Safety Evaluation 98-189-MM
Radiant Energy Shields for the Alternate Safe Shutdown System Cables
It was determined that certain cables inside containment, that are part of the Alternate Safe Shutdown System, required radiant energy shields to meet the requirements of 10CFR50, Appendix R, Section III.G.2. This modification installed radiant energy shields at the needed locations. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-192-TM
MCC 210 Breaker in MCC 26C Compartment
During maintenance on MCC 26C Breaker, MCC 210 Breaker was substituted in its place. The substitute breaker amptector settings and taps were verified as appropriate for the MCC 26C compartment and specific load restrictions were applied. This maintenance was conducted while the plant was in cold shutdown. This maintenance activity did not constitute an unreviewed safety question.

Safety Evaluation 98-194-PR
Test Procedure - Operating Pressure Inspection of Safety Injection Piping and Components
This new procedure conducts an operating pressure inspection on the Safety Injection and Residual Heat Removal Systems when they are out of service with the plant either below

350°F or in the defueled condition. This procedure does not represent an unreviewed safety question.

Safety Evaluation 98-196-EV, Rev. 1
Movement of Heavy Loads over Safety-Related Equipment in Replacing the Circulating Water Pumps at the Intake Structure
The Circulating Water (CW) Pumps were replaced. This was a review of the procedure that provides instructions for movement of the CW Pumps over safety-related equipment. The NRC guidance that was provided in NUREG-0612 and NRC Bulletin 96-02, as defined in Con Edison's submittals, was implemented. This procedure does not represent an unreviewed safety question.

Safety Evaluation 98-198-TM, Rev. 1
HCV-133 Mechanical Block
In order to maintain low-pressure purification in service, the low-pressure letdown control valve (HCV-133) was blocked open. This jumper was implemented during cold shutdown only, with the letdown flow control valve available and letdown flow isolation available via manual valves. Upon removal of the jumper, valve HCV-133 was tested to assure proper operation. This jumper did not represent an unreviewed safety question.

Safety Evaluation 98-205-PR, Rev. 2
Unit 1 Spent Fuel Pool Hardware and Component Removal
This procedure provides detailed instructions used in locating, cutting and characterizing irradiated and non-irradiated hardware located in the Unit 1 Spent Fuel Pools for disposal. This was done to allow for structural inspection of the pools to take place. This procedure is considered an infrequently performed evolution. This procedure does not represent an unreviewed safety question.

Safety Evaluation 98-206-PR
Implementation of Requirements of Facility Operating License DPR-26, Section 2.l
Two new procedures implement a program to reduce leakage from systems outside containment that would or could contain radioactive fluids during a serious transient or accident to as low as practical levels. These procedures do not represent an unreviewed safety question.

Safety Evaluation 98-209-PR
Emergency Operating Procedures Changes Revision 30
This Emergency Operating Procedures (EOPs) revision includes procedure changes to ensure the proper treatment of instrument uncertainty under adverse environmental conditions. This revision also included resolution of issues from the Design Basis review effort and modifications incorporated during the outage. Procedure changes have been validated. This EOP revision is not an unreviewed safety question.

Safety Evaluation 98-213-TM

Increase Unit 1 Spent Fuel Pool Level Alarm Setpoints

This temporary modification revised the Unit 1 spent fuel pool high and low level alarms during a project to dispose of components in the east storage pool. The project required the pool level to be increased. Alarms were revised to span the expected level and to provide adequate warning of a pool level transient. No unreviewed safety question was involved.

Safety Evaluation 98-217-MM

Reactor Coolant Pump Motor Bearing Oil Level Alarm/Indication Separation

This modification provided separate status indication lights in the central control room for each of the Reactor Coolant Pump (RCP) motor upper and lower bearing oil level high and low alarm functions. This aids the operators in assessing a common RCP Motor Bearing Oil Level alarm. No safety functions were modified. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-219-SP

Reactor Coolant Pump Motor Upper and Lower Bearing Oil Reservoir Level Alarm Setpoint Change

The Reactor Coolant Pump motors are equipped with upper and lower bearing oil reservoirs each monitored by high and low level alarms. This modification changed the following alarm setpoints for the upper and lower bearing oil reservoirs: 1) low level alarms for the upper and lower bearings; and 2) high level alarms for the lower bearing. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-224-TM

Jumper to Monitor Static Inverter Functions

This jumper was implemented to monitor the static inverter functions. Static inverter swaps had been happening "for no apparent reason" and the monitoring was implemented for information gathering. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-229-MM

Secondary Boiler Blowdown Purification System Piping Seismic Upgrade

The purpose of this modification is to protect the Emergency Diesel Generator EDG Building from the effects of a postulated High Energy Line Break (HELB) of the Secondary Boiler Blowdown Purification System (SBBPS). Arbitrary intermediate pipe breaks and/or leakage cracks postulated on the portions of the SBBPS steam piping that are routed through the EDG Building, were eliminated through the seismic analysis and seismic upgrading of the steam piping between the terminal points at specific anchor locations. This portion of the SBBPS steam piping is downstream of the containment isolation valve for the Steam Generator Blowdown Line, and is not designed to be functional during a seismic event. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-231-MM
Fan Cooler Unit Charcoal Filter Compartment Pressure Equalization Device
An analysis determined that, under certain in-containment transient conditions (both normal operations and accident) the differential pressure across the Fan Cooler Unit Charcoal Filter Compartment may exceed stress allowables. However, although the postulated transient stresses exceed design allowables, these stresses are less than the failure point. The modification installed pressure equalization devices. These devices restored stresses, due to postulated transients, to within design allowables. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-239-TM
Remove Central Control Room Rack B-8 from Service
The jumper provided temporary connections from Rack B-7 to Rack D-10 while bypassing Rack B-8. Rack B-8 was taken out of service to perform wire checks. This jumper was only implemented during cold shutdown. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-241-TM
Jumper to 21 Battery Charger
The jumper provided temporary power to the 21 Battery Charger (and thus to the 21 DC Bus) so that the normal power supply for the battery charger (480V Bus 5A) could be deenergized for maintenance. This jumper was only implemented during cold shutdown. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-242-TM
Jumper to 22 Battery Charger
The jumper provided temporary power to the 22 Battery Charger (and thus to the 22 DC Bus) so that the normal power supply for the battery charger (480V Bus 2A) could be deenergized for maintenance. This jumper was only implemented during cold shutdown. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-244-TM, Rev. 1
Alternate Feed to 22 Component Cooling Water Pump Motor
The jumper provided temporary power to the 22 Component Cooling Water Pump Motor so that the normal power supply for the motor (480V Bus 2A) could be deenergized for maintenance. This jumper was only implemented during cold shutdown. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-245-TM
Jumper Feed to Station Auxiliary Transformer Auxiliaries
The jumper provided temporary power to the Station Auxiliary Transformer Auxiliaries so that the normal power supply for the auxiliaries (480V Bus 5A) could be deenergized for maintenance. This jumper was only implemented during cold shutdown. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-247-MM
Main Generator Frequency Meter Replacement
This modification replaced, on the Central Control Room Panel, the old defective Main Generator Frequency Meter with a new, more accurate, frequency meter. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-250-MM
Removal of Lifting Ring on Floor Plug
A temporary repair had been implemented to remove a deformed lifting ring from an embedded lifting eyelet on a floor plug in the Primary Auxiliary Building at elevation 68'. The intention at the time was to eventually provide a new lifting ring. It was subsequently determined that a replacement ring was unnecessary since rigging equipment could be directly attached to the eyelet. Therefore, the temporary repair was rededicated as a modification. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-255-MM
Service Water Intake Wall Penetration Seal
The modification restored the watertight seal of the Service Water piping and electrical conduit in the Service Water Strainer Pit. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-257-PR
TOI 254: "Gas Turbine-1 Blackout Load Testing"
This procedure, which is only used during cold shutdown, load tests Gas Turbine-1 (GT-1) following a simulated blackout start. The procedure describes initial conditions, precautions, limitations, and restoration steps to safely perform this test. The procedure assures that GT-1, related ancillary equipment, and busses are protected from physical damage and that personnel are safe. The emergency diesel generators were available for backup and 480 V busses maintained power during the test. 480V busses 2A, 3A, and 5A were connected through their cross tie breakers. 6.9 kV busses 1, 2, and 5 were removed from service per SOP 27.1.17. GT-1 was black started in accordance with SOP 31.1.2. This procedure did not constitute an unreviewed safety question.

Safety Evaluation 98-263-PR
TOI 256: "Gas Turbine-3 Blackout Load Testing"
This procedure, which is only used during cold shutdown, load tests Gas Turbine-3 (GT-3) following a simulated blackout start. The procedure describes initial conditions, precautions, limitations, and restoration steps to safely perform this test. The procedure assures that GT-3, related ancillary equipment, and busses are protected from physical damage and that personnel are safe. All activity in the Unit 1 Spent Fuel Pool was suspended. The emergency diesel generators were available for backup and 480 V busses maintained power during the test. 480 V busses 2A, 3A, and 5A were connected through their cross tie breakers. 6.9 kV busses 1, 2, and 5 were removed from service per SOP 27.1.17. The security diesel was started and loaded prior to the initiation of the test. GT-

3 was black started in accordance with SOP 31.3.2. This procedure did not constitute an unreviewed safety question.

Safety Evaluation 98-266-MD
Relocation, Removal and Upgrade of the Central Control Room Unit #1 Control Panels -- Phase A
This modification removed equipment from the Unit 1 Central Control Room that had already been retired in place, relocated a telephone and refrigerator and installed two new emergency lockers. No safety functions are affected. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-269-PR
Industry Operating Experience Review Program
SAO-420, "Industry Operating Experience Review" was revised to satisfy biennial review requirements and to incorporate recommendations and internal commitments. This procedure change is not an unreviewed safety question.

Safety Evaluation 98-270-TM
Installation of Check Valves on Service Water Piping to the Containment Fan Coolers
This temporary modification installed check valves on service water piping vent connections to allow air to enter the piping during a test to simulate accident conditions. Testing was conducted in response to Generic Letter 96-06. Allowing air to enter piping during the time that the service water pumps shutdown and the system partially drains, reduced the possible water hammer effects of the test. The test was conducted during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 98-272-TM
Service Air to Instrument Air Cross Connect in Primary Auxiliary Building
This temporary modification cross connected the station air to the instrument air (IA) header in four locations in the Primary Auxiliary Building to maintain specific isolable sections of the IA header during a maintenance outage of the IA header. This minimized the effect on plant operations. The temporary modification was installed for a short duration during cold shutdown. Each cross connect hose had an in-line coalescing filter to preclude the introduction of foreign material into the IA system. This temporary modification was not an unreviewed safety question.

Safety Evaluation 98-279-TM
Unmask '21 or 22 Inverter Trouble' Alarm in the Central Control Room
Static inverter 21 was inoperable and created a masking alarm to common alarm "21 or 22 Inverter Trouble" in the central control room. A wire jumper was installed to clear the 21 inverter input to the alarm to allow the alarm to be functional for 22 inverter. This wire jumper was only installed during cold shutdown. No unreviewed safety question was involved.

Safety Evaluation 98-280-EV

High Head Safety Injection Flow Diversion Safety Evaluation

This evaluation assessed potential High Head Safety Injection (HHSI) flow diversion away from the reactor coolant system. The two cases considered are a safety injection occurring during the time the accumulators are being filled or while the HHSI pumps are being tested. Licensing basis criteria in FSAR chapter 14 were met. Revised peak clad temperatures were within the limits of 10CFR50 Appendix K. No unreviewed safety question was involved.

Safety Evaluation 98-284-MD, Rev. 1

Containment and Recirculation Sump Environmental Qualification Upgrades and Setpoint Changes

The modification provided more accurate and reliable indication of containment water level following a Loss of Coolant Accident or other leakage. While the level setpoints already exist, as dictated by the Technical Specifications and other guidance documents, they have been recalculated to increase accuracy. The modification does not represent an unreviewed safety question.

Safety Evaluation 98-285-MD, Rev. 2

Reactor Coolant System Wide Range Pressure Transmitters PT-402 and PT-403 Modifications

This modification replaced and relocated the Wide Range Reactor Coolant System (RCS) Pressure Transmitters from inside containment to outside containment. Capillary tubing run through a spare containment penetration provides containment pressure sensing. The new pressure transmitters provide improved Wide Range RCS Pressure Indication and the new location, under postulated accident conditions, presents a less harsh environment (when compared to the in-containment harsh environment), and thus better post-accident instrument performance. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-286-MM

Test Ports for Central Control Room Ventilation

This modification provided test ports, which comply with industry standards established by the American Conference of Governmental Industrial Hygienists, in the Central Control Room ventilation duct. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-290-MM

Ferrite Beads on Cables from Buchanan

This modification installed ferrite beads on cables in the Cable Spreading Room that originate at the Buchanan Substation and run into the Central Control Room. The ferrite beads are intended to reduce or eliminate the Electromagnetic Interference that the Buchanan cables induce on the Nuclear Instrumentation System. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-291-SP

Central Control Room Ventilation Booster Fan Startup and Pressure Switch Setpoint Changes

This modification replaced the relays on the Central Control Room booster fan and changed the pressure setpoints on the fan pressure switches. This modification was needed to prevent unnecessary cycling of the fan. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-292-MD

Central Control Room Booster Fan Agastat Replacement and Differential Pressure Setpoint Changes

This modification replaced the relays on the Central Control Room (CCR) booster fan and changed the differential pressure setpoints on the air flow switches. This modification was needed to prevent unnecessary cycling of the fan. This modification does not represent an unreviewed safety question.

Safety Evaluation 98-293-TR, Rev. 1

Residual Heat Removal Mini-Flow Line #337 Structural Clamp Temporary Repair

This temporary repair, which consisted of a pipe clamp, was designed and installed to prevent line separation and movement (i.e., provided enhanced structural integrity). This clamp was used due to the detection of three minor pinhole leaks in the line. The line has been subsequently repaired (via the modification process) by replacement of the leaking section that restored the line to its original design conditions. This temporary repair did not represent an unreviewed safety question.

Safety Evaluation 98-294-SP

Service Water Setpoint Modifications

This modification, related to a change in alarm setpoints, was implemented to provide earlier warning to the operator should the process(es) deviate from the desired value(s). The new setpoints are closer to the system operating conditions. These changes were recommended in SWOPI Audit Report No. 94-11-D, Observation No. 94-11-D-015. The changes made are: the Fan Cooler Unit Low Flow Alarm (from 1500 gpm to 1600 gpm); the Diesel Generator Service Water Low Flow Alarm (from 1000 gpm to 1200 gpm); the Reactor Coolant Pump Bearing Coolant Low Flow Alarm (from 125 gpm to 155 gpm); and the Component Cooling Water Heat Exchanger Outlet High Temperature Alarm (from 120°F to 110°F). This modification does not represent an unreviewed safety question.

Safety Evaluation 98-295-PR

TOI 257: Preparation and Restoration from Repair of Residual Heat Removal Test Line

This evaluation addressed the effects of repairing a leak in a Residual Heat Removal (RHR) System recirculation line while the unit is shutdown and the Reactor Coolant System temperature is between 200°F and 350°F. Under these conditions, the RHR System is not required to be operable and the recirculation line can be repaired. The repair does not represent an unreviewed safety question.

Safety Evaluation 98-298-EV

Increase Steam Generator Tube Rupture Isolation Time to 45 Minutes from 30 Minutes.

The time to isolate the affected steam generator has been changed from 30 to 45 minutes in the Technical Specifications bases for steam generator tube rupture. This does not result in an increase in dose and the break flow does not exceed the break flow in the IP2 licensing basis analysis. No unreviewed safety question was involved.

Safety Evaluation 98-299-TM

Unmask Central Control Room Weld Channel and Penetration Pressurization System Alarm

By use of a jumper the input from the 80' El. airlock inner door to the Central Control Room (CCR) Annunciator Alarm (Weld Channel and Penetration Pressurization System (WC&PPS) Low Pressure Condition) was temporarily removed. This was done to stop a distracting alarm in the CCR. This change only occurred while a qualified operator was manning the airlock and was capable of monitoring the WC&PPS local indication. The alarm was tested operable after the jumper was removed. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-302-PR

TOI 258, Preparation, Evaluation, Repair, and Restoration of Residual Heat Removal Suction Isolation Valve 730

This temporary operating instruction provides direction for plant and system operation to facilitate repair of V730, Residual Heat Removal suction isolation valve. The procedure establishes plant conditions between 200 and 350 degrees F consistent with the Technical Specifications and design basis and assures entry into the correct limiting conditions of operation. Containment integrity boundaries are defined. No unreviewed safety question was involved.

Safety Evaluation 98-304-PR

PT-R6, Steam Generator Pressure Relief Valve Set Point Verification

This procedure change to PT-R6 (Steam Generator Pressure Relief Valve Set Point Verification Procedure) incorporates a new test device. Since PT-R6 provides instruction on how to use the test device to verify the setpoint, the change to the procedure reflects the use of the new device. The procedure change does not represent an unreviewed safety question.

Safety Evaluation 98-305-TM

Adjust 'Close' Limit Switch Setting to Receive Correct Indication

Motor operated Residual Heat Removal (RHR) suction valve 730 isolates the RHR system from the Reactor Coolant System during normal plant operation. Valve is limit switch controlled in the open and closed position with a torque switch wired in series to provide overload protection in the closed position. On August 6, 1998, when the Central Control Room signaled the valve to go closed, an obstruction caused the valve to trip prematurely on torque. Evaluation and testing have proved that valve 730 is capable of

performing its intended function and the decision was made to open, test, and repair the valve during the next refueling outage. Since it tripped on torque, not limit, dual indication remained. Due to interlock logic with valves 885A and 888A, the jumper adjusted the closed limit switch for valve 730 to the 'OPEN' position so that the dual indication went out and the closed indication remained. This jumper does not represent an unreviewed safety question.

Safety Evaluation 98-307-EV
Use of Freeze Seal for Residual Heat Removal System Recirculation Line Piping Repair
This evaluation addressed the effects of applying a freeze seal to a Residual Heat Removal (RHR) System recirculation line while the unit is shutdown and the Reactor Coolant System temperature is between 200°F and 350°F. Under these conditions, the RHR System is not required to be operable and the recirculation line can be isolated to permit pipe repair. The evaluation does not represent an unreviewed safety question.

Safety Evaluation 98-308-MD
Relocation and Fabrication of New Office in Central Control Room
This modification installed a new Shift Watch Supervisor office in the Central Control Room, relocated the Emergency Plan Map Table and relocated various components and power feeds. No safety functions were affected. No unreviewed safety question was involved.

Safety Evaluation 98-309-TM
Evaluation of Non-Functional Circulating Water Pump Vibration Probes and Removal of Probes/Wires
The vibration probes for the Circulating Water Pumps were removed. In addition, the tachometer, which measures the pump speed, was removed. This was done based on the unreliability of the probes and with the concurrence of the pump manufacturer. The local alarm that indicates high vibration is no longer available. Vibrations are monitored under the Predictive Maintenance Program. The evaluation does not represent an unreviewed safety question.

Safety Evaluation 98-312-PR
Test for Generator and Transformer Protective Relay Enhancements
This procedure verifies the circuit modifications discussed in SE 98-109-MD that enhance the protective relaying control circuits for control of Buchanan Switchyard breakers 7 and 9. The test requires that the directional ground protection and one of two trains of pilot wire relays with phase and ground fault protection are blocked during the test. The protective relaying does not have any safety functions. No unreviewed safety question was involved.

Safety Evaluation 98-313-PR
PT-2M4 Revision 9, Engineered Safety Features Logic Testing - Train A
This revision to the test procedure PT-2M4 Revision 9, Engineered Safety Features Logic Testing - Train A incorporates the testing requirements necessary to resolve testing

deficiencies identified during the Generic Letter 96-01 investigation. No unreviewed safety question was involved.

Safety Evaluation 98-314-PR
PT-2M5 Revision 8, Engineered Safety Features Logic Testing - Train B
This revision to the test procedure PT-2M5 Revision 8, Engineered Safety Features Logic Testing - Train B incorporates the testing requirements necessary to resolve testing deficiencies identified during the Generic Letter 96-01 investigation. No unreviewed safety question was involved.

Safety Evaluation 98-315-EV, Rev. 1
Continued Operation of Source Range Nuclear Instrumentation System
The plant has been experiencing Electromagnetic Interference (EMI) with the Source Range Monitors (SRM) in the Nuclear Instrumentation System (NIS). Sources of EMI include thunderstorms, coupling induced electrical noise, switching at the substation, operation of the annunciators and various switching functions in the control room. Two different modifications were implemented to eliminate EMI from the SRM NIS. While these modifications did reduce the level of EMI on the SRM NIS, there remained intermittent spikes. The ability of the SRM NIS to perform its intended functions with these occasional spikes was established by an operability determination. However, since the goals of the two modifications were not completely achieved, an evaluation was performed to review the current SRM NIS status and the operability determination. The operability determination and the present SRM NIS configuration do not represent an unreviewed safety question.

Safety Evaluation 98-316-TM
23 Service Water Pump Stuffing Box Monitoring
In order to evaluate inadequate coolant leak-off through the stuffing box of Service Water Pump 23 a pressure gauge was installed on the stuffing box and a vent valve was installed downstream of the Air and Vacuum Valve. This installation allowed monitoring of the pressure in the stuffing box and relative amount of air in the discharge valve as it closes during pump startup. The pump was on the non-essential header during the test. No unreviewed safety question was involved.

Safety Evaluation 98-320-TM
Reactor Coolant Pump Seal Return Flow Alarm Set Point Change
The 24 reactor coolant pump seal water return low flow alarm set point was revised to 0.8 gpm from 0.91 gpm. This set point is within the operational limits defined by Westinghouse. The alarm was annunciating constantly due to low reactor coolant system pressure. The alarm has no safety function. No unreviewed safety question was involved.

Safety Evaluation 98-322-EV, Rev. 2
Throttling of Service Water Strainer Outlet Valves
In order to ensure that the service water pumps deliver adequate flow to the Fan Cooler Units and Diesel Generators, the strainer outlet valves have been permanently throttled to

225+/-25 gpm. This was found to be necessary because the new service water pumps deliver less flow than the old pumps. The strainer outlet valves had previously been operated in the full open position. No unreviewed safety question was involved.

Safety Evaluation 98-324-TM
Service Water Strainer Outlet Valves Throttle Position Locking Device Installation
Safety Evaluation 98-322-EV found acceptable the effects of throttling the service water strainer outlet valves. This evaluation found the use of temporary locking devices to be acceptable for controlling the position of the service water strainer outlet valves. No unreviewed safety question was involved.

Safety Evaluation 98-326-GM
Generic Safety Evaluation for Administrative Changes to the UFSAR
This safety evaluation was written to be applied to administrative changes to the FSAR. Administrative changes are inconsequential changes that do not affect the design, function, or method of performing the function of a structure, system, or component described in the FSAR and does not impact the licensing basis of the facility. These changes conform to the guidance of NEI-96-07. No unreviewed safety question was involved.

Safety Evaluation 98-330-TM
Monitoring Emergency Diesel Generator Engine Start Times
This temporary modification installed a strip chart recorder in each emergency diesel generator across the engine start relay coil and the generator available light contacts to more accurately monitor engine start times. The temporary modification was installed only when the diesel was in the test mode. Only one diesel was tested at a time. No unreviewed safety question was involved.

Safety Evaluation 98-331-EV
Non-Conformance of Design of Gas Turbine Autotransformer
This safety evaluation evaluated the acceptability of inoperable alarms on the gas turbine autotransformer being jumpered. Local indications for the alarms are available at the autotransformer. An operability determination has found the autotransformer operable. Alarm response procedures have been appropriately modified. No unreviewed safety question was involved.

Safety Evaluation 98-332-EV
Permanent Revision of Test Procedure PT-M21, "Emergency Diesel Generators," to Delete a "Blackout Start" Test
Procedure PT-M21 was revised to delete blackout start of the Emergency Diesel Generators on a monthly basis. Blackout start testing will be conducted once per refueling outage per a new procedure. This complies with Technical Specification and Generic Letter 96-01 requirements. No unreviewed safety question was involved.

Safety Evaluation 98-335-TM
Jumper for Main Generator Iso-Phase Bus Low Water Flow Alarms
This temporary modification disconnects the low water flow alarms at the annunciator panel for all the main generator iso-phase buses. The alarms do not clear upon resetting and evaluations indicate there is adequate flow. Bus temperatures are being monitored until a permanent modification can be implemented. This modification is not an unreviewed safety question.

Safety Evaluation 98-339-TR
Sealant Injection Repair on High Pressure Steam Supply Bypass Stop Valve MS-1214
This temporary repair injected sealant into the High Pressure Steam Supply Bypass Stop Valve MS-1214 per procedure NMS-C-010-N. No unreviewed safety question was involved.

Safety Evaluation 98-352-PR
Sentry Panel Flowmeter Verification
The test procedure made a temporary change to the sampling system to verify the accuracy and operation of the SENTRY panel flowmeters. Upon completion of the test the sampling system was returned to its as-found configuration. In addition, if needed while the test was being implemented, the sampling system could have been returned to its as-found condition in a matter of minutes. The sampling system is a non-safety system whose operation, non-operation or mal-operation will not affect the safe operation of the plant. This test procedure does not represent an unreviewed safety question.

Safety Evaluation 98-357-PR
Unit 1 Spent Fuel Pool Vacuuming
This procedure removes sediment from the unit 1 spent fuel pool by vacuuming. Appropriate safety precautions were taken. Technical Specification requirements were met. No unreviewed safety question was involved.

Safety Evaluation 98-367-EV
Removal of Requirements for Radiation Monitor RE-101
This procedure change removed RE-101 from the list of required monitors. It is based on NRC letter dated 7/5/85 that rescinded its requirement. No unreviewed safety question was involved.

Safety Evaluation 98-369-PR
Use of Simulator for Emergency Plan Drills
Procedure CA-SQ-14.234 establishes the necessary communications links in the Simulator to allow the exercising of the Emergency Plan from the Simulator, thereby removing exercise activities from the central control room (CCR). The procedure also disconnects the links after the completion of the exercise. The CCR capabilities for control of an actual emergency are not degraded. No unreviewed safety question was involved.

Safety Evaluation 98-371-TM
Install Jumper for Temporary Feed to R-57
This temporary modification established power to channel R-57 (plant sewage radiation monitor) during an outage to its normal power supply. This allows monitoring of this effluent stream without requiring grab samples. No unreviewed safety question was involved.

Safety Evaluation 98-372-TM
Install Jumper to Feed EPX-5 from MCC10 Circuit 9
This temporary modification established power to EPX-5 during an outage to its normal power supply. EPX-5 provides power to 3 effluent radiation monitors. This allows monitoring of these effluent streams without requiring grab samples. No unreviewed safety question was involved.

Safety Evaluation 98-377-TM
Provide Bypass around Globe Valve 1439 and Check Valve 1533 with 1533 Out of Service
This jumper, located in the Isolation Valve Seal Water System, provided a temporary bypass around the out of service valve to maintain a redundant configuration that is consistent with the vendor installation to the Seal Water Tank. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-383-TM
Technical Support Center Diesel Battery
This temporary modification provided startup power from temporary batteries for the Technical Support Center diesel. The diesel has no safety function. No unreviewed safety question was involved.

Safety Evaluation 98-384-MD
Replacement of Service Water Strainer Blowdown Valves
This modification replaced motor operated valves SWN-617 through SWN-622 with manual throttle valves. The manual isolation valve function was restored to the service water strainer outlet valves, locking devices removed, and the valves opened fully. The new throttling valves were set and locked via test to obtain proper service water flow to the Fan Cooler Units and Emergency Diesel Generators. This change eliminated Temporary Facility Change 98-222. This modification did not constitute an unreviewed safety question.

Safety Evaluation 98-386-TM
Temporary Replacement of Main 100VDC Power Supply for Rod Control System Logic Cabinet
This jumper provided a temporary replacement power supply while the new main power supply was being permanently installed. This jumper does not involve an unreviewed safety question.

Safety Evaluation 98-396-TM
Drain from MS-108-40 Trap to Floor Drain
This temporary modification provided a stainless steel braided hose from the outlet of drain valve MS-108-40 to a local floor drain. The hose was secured to nearby structures using tie-wraps. No unreviewed safety question was involved.

Safety Evaluation 98-402-PR
Emergency Diesel Generator Starting Time Acceptance
This change increased the acceptance criteria of the emergency diesel generators (EDG) start time from 10 to 10.5 seconds. The change does not affect any functions of the diesel. The margins of safety for the accident analyses are not decreased. No unreviewed safety question was involved.

Safety Evaluation 98-403-TM
Pump Down of Fuel Transfer Canal in the Fuel Storage Building to the Fuel Storage Building Sump
This temporary facility change pumped down the fuel transfer canal pit directly to the fuel storage building sump by means of a "sandpiper" pump and flexible hoses. The hoses were seismically restrained. Appropriate precautions were taken. No unreviewed safety question was involved.

Safety Evaluation 98-404-PR
Local Manual Control of Blended Makeup
This temporary procedure change enabled local manual control of boric acid flow to the blender during volume control tank makeup with the boric acid blender acid input flow valve, FCV-110A, inoperable. FCV-110A was failed to its open position and manual diaphragm valve 329 was throttled by an operator in direct communication with a licensed operator in the central control room. No unreviewed safety question was involved.

Safety Evaluation 98-406-EV
Integration of Safety Assessment and Plant Information Systems
The Safety Assessment System (SAS) and Plant Information (PI) System were merged to allow read only access of SAS data via desktop personal computers. There is no ability to write or alter SAS data as a result of this change. No unreviewed safety question was involved.

Safety Evaluation 98-411-TM
Reactor Coolant Pump Vibration Monitor Installation for Local Readout in the Electrical Penetration Area
This temporary modification magnetically mounted a Bently Nevada vibration transducer to the frame of each reactor coolant pump. Coax cables were run to existing containment penetrations and out to data collection and display instrumentation in the electrical penetration area. Cables were seismically restrained. No unreviewed safety question was involved.

Safety Evaluation 98-422-TM
Primary Auxiliary Building Supply Fan Freeze-Stat FS-3 Defeat
This temporary modification bypassed defective Freeze-Stat switch FS-3 in the starting permissive circuit for the primary auxiliary building supply fan. The switch requires replacement. Bypassing of the switch maintained "one out of two" logic for starting/operating the fan rather than the normal "one out of three" logic. The fan has no safety function. No unreviewed safety question was involved.

Safety Evaluation 99-015-EV, Rev. 1
UFSAR Changes to Section 11.2.3, Radiation Monitoring System
UFSAR Section 11.2.3, Radiation Monitoring System was revised to compile the present inventory of radiation monitors in Unit 1 and Unit 2. The monitors are given categorizations of "Effluent Monitors," "Process Monitors," and "Area Monitors." This change does not represent an Unreviewed Safety Question.

Safety Evaluation 99-025-TM
Transfer of Unit #1 Annulus Moat Fluid to a Temporary Holding Tanker for Later Discharge
This temporary modification installed pumps and hoses to transfer fluid from the Unit 1 annulus moat inside the Unit 1 containment through a PCB filtration skid to a tanker. The tanker had recirculation capabilities and level indication. The tank can be gravity drained to the normal release path after satisfactory chemistry results. No unreviewed safety question was involved.

Safety Evaluation 99-026-PR
SOP 5.4.1 Revision 3 (Manual Valve Closure)
A potential containment leak path was identified that could occur during containment pressure relief operations with a single failure of valve PCV-1190. A procedure change closed manual valve PCV-1110-8 during pressure relief operations to block the containment leak path from occurring. The plant entered a limiting condition for operation whenever the procedure was implemented. No unreviewed safety question was involved.

Safety Evaluation 99-027-PR
P-MT-175 Revision 0 (Valve Leakage)
A potential containment leak path was identified that could occur during containment pressure relief operations with a single failure of valve PCV-1190. A procedure change closes manual valve PCV-1110-8 during pressure relief operations to block the containment leak path from occurring. This procedure leak tested PCV-1110-8 to certify it as a containment isolation valve. No unreviewed safety question was involved.

Safety Evaluation 99-030-MM, Rev. 2
Containment Pressure Relief Valve PCV-1190/SOV-1280 Modification
A single failure of the inboard containment pressure relief valve to close following pressure relief operation concurrent with an accident would result in a vent path (via SOV-1280 vent port) from inside containment to the piping penetration area in the

Primary Auxiliary Building. This vent path is outside the design basis. This modification electrically ensures that the SOV-1280 vent port is closed following pressure relief operations. This modification does not constitute an unreviewed safety question.

Safety Evaluation 99-036-TM
Installation of Temporary Facility Change for FC 159A
This temporary modification blocked the High/Low Flow Common Alarm for Reactor Coolant Pump #1 Seal Return from FC-159A to unmask other alarms on the common annunciator. The flow was not low and was monitored on a chart recorder. No unreviewed safety question was involved.

Safety Evaluation 99-037-TM, Rev. 1
Reliable Power Supply for Turbine Stop Valves Indication
This change provided a reliable power source from the 118vac system for the turbine stop valves indicating lights and associated test valves. The existing configuration would result in loss of indication upon receipt of a safety injection signal. Fusing is seismically qualified and properly coordinated. Cable separation is maintained. No unreviewed safety question was involved.

Safety Evaluation 99-039-TM
Unmask Pressurizer Lo Lo Level trip alarm
A mechanical spider was installed in racks E7 and F8 to mechanically defeat a false alarm from LC-461B. This unmasked the 2 operable pressurizer level channels. A supplemental pressurizer level log was implemented when the Pressurizer Level Control Switch was in Defeat Loop 3. No unreviewed safety question was involved.

Safety Evaluation 99-042-EV
Safety Assessment System Computer Year 2000 Upgrade
This evaluation reviewed the Y2K upgrade to the Safety Assessment System computer that is used to meet the intent of NUREG-0696 and NUREG-0737, Attachment 1. This change does not represent an unreviewed safety question.

Safety Evaluation 99-048-TM
Replacement of TI-5427: 22 Emergency Diesel Generator Lube Oil Cooler Outlet Temperature Indicator
This modification replaced the existing vertical temperature indicator with a similar horizontal indicator that was compatible with the thermowell. This was temporary until the replacement monitor was available. No unreviewed safety question was involved.

Safety Evaluation 99-052-TM
Re-establishment of the Charging Pump Suction Stabilizer Vent Line to the Primary Auxiliary Building Exhaust Duct
The vent line from the 21 Charging Pump suction stabilizer was temporarily provided by making up a tygon hose from the outlet vent line flange downstream of SG 6293 to the exhaust ventilation ductwork in the area. Normally the vent connection is hard piped.

This temporary modification was in place during ductwork repairs. No unreviewed safety question was involved.

Safety Evaluation 99-054-TR
Temporary Repair of Waste Drumming Station Door
This temporary repair fixed the motor-operated door to the 80' Primary Auxiliary Building Waste Drumming Station so that it can be opened easily. A work order has been generated to replace the door. This change does not represent an unreviewed safety question.

Safety Evaluation 99-055-TM
Heat Lamps for Refueling Water Storage Tank Level Enclosure
The Refueling Water Storage Tank (RWST) level enclosure for LT-920 experienced thermal stratification that caused a low temperature alarm. Two heat lamps were provided for the enclosure that had no interface with the RWST. The heat was sufficient to clear the alarm but insufficient to cause deleterious effects. No unreviewed safety question was involved.

Safety Evaluation 99-062-TM
Allow Digital Metal Impact Monitor System to Alarm on Control Rod Movement
This temporary modification overrides the digital metal impact monitor system (DMIMS) inhibitor such that the DMIMS trouble alarm will annunciate in the central control room on control rod movement. This will alert the operator to possible control rod movement. No unreviewed safety question was involved.

Safety Evaluation 99-063-PR
Blowdown of Turbine First Stage Pressure Transmitter 412A
This evaluation reviewed new procedure TOI-261 that provides steps for the removal from service and restoration to service of Turbine First Stage Pressure Transmitter PT-412A. This procedure does not represent an unreviewed safety question.

Safety Evaluation 99-066-EV
Evaluation of Open Position of Central Control Room Kitchen and Locker Room Doors
The locker room and kitchen doors in the Unit 1 portion of the central control room have smoke detector actuated automatic closure mechanisms which hold the doors open when the lights are on and the smoke detectors are not alarmed. Staff Position P22 from an NRC letter dated August 31, 1978 states: "Self-closing door mechanisms should be installed on the control room kitchen and locker room doors, and the doors should be kept normally closed." The evaluation concluded the goal of slowing the spread of a fire was met. This change did not represent an unreviewed safety question.

Safety Evaluation 99-068-EV
Digital Radiation Monitoring System Perkin Elmer Computer Year 2000 Upgrade
The Digital Radiation Monitoring System Perkin Elmer Computer was upgraded to make it Year 2000 Compliant. The change does not affect radiation monitor operability

because the radiation monitoring system performance is unchanged. Only the date function and its display are affected. This change did not represent an unreviewed safety question.

Safety Evaluation 99-072-TM
Reroute of Existing Cable to Ensure Operability of Acoustic Monitor (FE-3107) for Pressurizer Safety Valve 466
This Temporary Facility Change provided a shunt for the existing cabling which was disconnected from the acoustic monitor. The cabling used for the shunt is environmentally qualified. The cabling will be restored to its original configuration by the end of the next refueling outage. This change does not represent an unreviewed safety question.

Safety Evaluation 99-074-TM
Unmask LT-934A Low Level Indication for 21Accumulator
The Accumulator 21 low level alarm on the Control Room Annunciator Panel was lit. The alarm circuit is actuated by either of two level transmitters, LT-935A or LT-934A. Accumulator 21 level was acceptable and it was determined that the problem existed with level transmitter LT-935A. This condition masked LT-934A (which is functioning correctly) from giving an accurate low-level alarm for Accumulator 21. A Work Order was implemented to determine the cause of the level transmitter failure and to correct the problem. This Temporary Facility Change lifted leads to prevent LT-935A from actuating the low-level alarm, thereby allowing LT-934A to function properly. This change did not represent an unreviewed safety question.

Safety Evaluation 99-084-TM
Block Auto Containment Isolation and Evacuation Alarm Function from R41/42,
While Radiation Monitors R41 and R42 were out of service, this Temporary Facility Change blocked the automatic and alarm functions actuated by these monitors. These automatic and alarm functions included initiation of containment isolation; cessation and/or blocking of containment purging; and actuation of the Containment Evacuation Alarm. Radiation Monitors R41 and R42 were subsequently returned to service and this Temporary Facility Change was removed. This change did not represent an unreviewed safety question.

Safety Evaluation 99-095-TM
Installation of Temporary Air Recirculation Fans for the Central Control Room Tracer Gas In-Leakage Air Test
This temporary modification installed temporary recirculation fans in the Central Control Room (CCR) on the floor and above the transite ceiling. This modification was in support of the CCR Installation of Temporary Air Recirculation Fans for the CCR Tracer Gas In-Leakage Air Test to ensure adequate air/gas mixture. Fans were appropriately restrained. No unreviewed safety question was involved.

Safety Evaluation 99-100-TM

Proteus Computer Quadrant Power Tilt Ratio Calculation Alarm Disable for Central Control Room Panel SFF Window 2-7

A Quadrant Power Tilt Ratio (QPTR) greater than the limit specified in Technical Specification 3.10.3.1 was obtained via Proteus after a calibration of Nuclear Instrumentation System and OP/OT Delta T parameters. A manual QPTR was performed and found to be satisfactory. AOIs were entered and subsequently exited after control rod positions were verified as satisfactory. Reactor Engineering confirmed that manual QPTR calculations were preferred until PC-M1 (Axial Offset) is completed for all four channels. While the alarm was illuminated the appropriate Technical Specifications for unavailable monitoring functions were entered. The QPTR calculation in Proteus was disabled to unmask the alarm window. This change did not represent an unreviewed safety question.

Safety Evaluation 99-106-PR

Central Control Room Mode 2 Unfiltered In-Leakage Determination

A new test procedure was initiated to collect data while operating the central control room ventilation in Mode 2 "Outside Air Pressurization" utilizing Tracer gas. The test data will be used to provide guidance in a future ventilation modification. Equipment is operated as designed. The operation of equipment in this configuration is described in the FSAR. Tracer gas toxicity has been evaluated. This test does not constitute an unreviewed safety question.

Safety Evaluation 99-110-GM

Restraints Improvements for Mechanical, Electrical and Transient Equipment.

This generic modification replaces degraded restraint parts and/or improves the design of piping restraints. Unnecessary restraints are removed and new supports are installed as required. This modification procedure includes the evaluation of transient materials and interim installations. This modification does not constitute an unreviewed safety question. Modification Procedure MFI-01408-88M was previously approved with Safety Evaluation NS-2-88-008 (four revisions). Modification Procedure MFI-01048-88M was revised to update the withdrawal date of the modification and to change the reference of the snubber list from Technical Specification Table 3.12-1 to Test and Performance Procedure TP-SQ11.035. There is no change of intent to the procedure. A new safety evaluation was prepared to follow the format and respond to all concerns of the latest safety evaluation procedure revision.

Safety Evaluation 99-117-GM

Solenoid Valve Replacement (Generic)

This generic modification enables the replacement of solenoid operated valves (SOVs) throughout IP2 with SOVs that are equivalent in function. The replacement SOVs meet or exceed the design requirements of the SOVs replaced. Therefore, there are no new failure modes or adverse impacts on the ability of an SOV or interfacing system to perform its function. This change did not represent an unreviewed safety question.

Safety Evaluation 99-119-TM
Re-Establish City Water Storage Tank Low Level Alarm
This temporary modification used two spare sound powered communication system wires in place of grounded/shorted wires associated with the City Water Storage Tank Low Level Alarm to re-establish the alarm function. No safety functions were affected. This modification does not represent an unreviewed safety question.

Safety Evaluation 99-122-GM
Generic Motor Operated Valve Modifications
These modifications are improvements to Motor Operated Valves to bring them into conformance with the requirements of NRC Generic Letters 89-10 and 96-05. These modifications do not constitute an unreviewed safety question.

Safety Evaluation 99-124-TM
Threaded Plug for Independent Electrical Turbine Overspeed Protection System Hall Effect Probe Removal
This temporary modification removed up to three "Hall Effect" probes from the Independent Electrical Turbine Overspeed Protection System (IEOPS) and replaced them with a threaded plug. The IEOPS was unarmed, and the removal of the probes had no effect on the system operability. This change did not constitute an unreviewed safety question.

Safety Evaluation 99-125-TM
Independent Electrical Turbine Overspeed Protection System Programmable Selector Chip
This modification replaced a programmable chip and opened connections to the Proteus computer in the Independent Electrical Turbine Overspeed Protection System (IEOPS). The IEOPS is not credited for protection from turbine overspeed. No unreviewed safety question was involved.

Safety Evaluation 99-132-TM
Install Drain Plug Downstream of SOV-7679
This temporary modification installed a drain plug downstream of the drain valve for the deluge system piping for the Primary Auxiliary Building exhaust and the Containment Purge Filters, SOV-7649. The SOV installed operated contrary to the system design and would be in the open position during a deluge. The drain plug was necessary to maintain fire protection requirements. This modification does not represent an unreviewed safety question.

Safety Evaluation 99-133-TM
22 Reactor Coolant System Hot Leg Temperature Input to CETMS - Remove from Scan
This temporary modification removed the 22RCS Hot Leg Temperature Input to the CETMS in accordance with AOI 28.22 to remove a nuisance alarm. The CETMS/ Subcooling Margin Monitor remained operable. No unreviewed safety question was involved.

Safety Evaluation 99-136-TM

Turbine Supervisory Instrument Auxiliary Trip Defeat Switch.

This temporary modification placed the Turbine Supervisory Instrument Auxiliary Trip Defeat Switch in the defeat position to allow troubleshooting of the Low Pressure Rotor Differential Expansion Circuit. The trips defeated are not safety-related trips. The associated alarms were not defeated and the Central Control Room Operator was available to take necessary manual actions on receipt of an alarm. No unreviewed safety question was involved.

Safety Evaluation 99-138-EV

Independent Electrical Turbine Overspeed Protection System Inoperable

Amendment 168 to the Facility Operating License deleted surveillance requirements and limiting conditions for operations for Independent Electrical Turbine Overspeed Protection System (IEOPS), however a description of IEOPS is included in UFSAR Appendix 14A. Due to the extended period of time the IEOPS has been inoperable it was considered a de-facto change to the FSAR. This change did not represent an unreviewed safety question.

Safety Evaluation 99-141-TM

Temporary Supply of Hypochlorite on Dock

This temporary modification provided a hose to transport 15% hypochlorite solution to the service water bay while a portion of the chlorination system was tagged out for maintenance. A secondary containment was provided for the hose and appropriate signage and protective equipment was provided. No safety functions were affected. This modification does not represent an unreviewed safety question.

Safety Evaluation 99-145-TM

Primary Water and Instrument Air to Test Rig (for PTA43B)

This temporary modification made up connections to the primary water makeup (PW) and instrument air (IA) systems to a hydrostatic test rig. The connections are only valved in when in use. Their usage did not degrade the PW and IA systems. This change did not represent an unreviewed safety question.

Safety Evaluation 99-146-SP

Central Control Room Toxic Gas Monitor Setpoint Change

The setpoint for the central control room toxic gas monitor was revised downward and the frequency was revised from quarterly to monthly to reduce the instrument drift error. The revised setpoint is based on calculations that account for inaccuracies in the instrument loops. This change did not represent an unreviewed safety question.

Safety Evaluation 99-165-PR

Reactor Trip Breaker Exchange and Functional Test Procedures for Reactor Protection System Train A and Train B

This evaluation documents the equivalence of the Reactor Trip and Bypass Breakers as modified in 1989. The evaluation demonstrates that PT-V59 and PT-V60 are composed

of existing tests previously analyzed in the FSAR and do not present an unreviewed safety question.

Safety Evaluation 99-170-PR
Removing the Feedwater Bypass Line from Service and Returning it to Service
This temporary procedure change provides guidance during normal operation for closure of Low Flow Feedwater Regulating Bypass Valve FCV-447L for 24 Steam Generator. This maintains FCV-447L in its post-accident position. This change is to facilitate the calibration of FCV-447L. This did not constitute an unreviewed safety question.

Safety Evaluation 99-171-PR
Cross-Tying of Emergency Diesel Generator Starting Air Receivers
This procedure revision allows Operations to cross-connect two Emergency Diesel Generator (EDG) Air Receivers for the purposes of responding to a low air pressure alarm. The procedure requires an operator to be stationed in the EDG building while cross tie valves are open to ensure a single failure does not incapacitate two diesels. This change does not constitute an unreviewed safety question.