



ATOMIC POWER COMPANY •

EDISON DRIVE  
AUGUSTA, MAINE 04336  
(207) 623-3521

July 18, 1985  
MN-85-138

GDW-85-204

Region I  
United States Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Attention: Dr. Thomas E. Murley, Regional Administrator

References: (a) License No. DPR-36 (Docket No. 50-309)  
(b) MYAPCo. to USNRC Letter dated 06/12/85 (MN-85-116)

Subject: Microfiche of the Annual Report of Facility Changes and Relief and  
Safety Valve Failures and Challenges

Gentlemen:

Enclosed please find a master microfiche of our submittal noted in  
Reference (b).

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY

G. D. Whittier, Manager  
Nuclear Engineering & Licensing

GDW/plb

Enclosure:

cc: Mr. Edward J. Butcher, Jr.  
Mr. Cornelius F. Holden

8509030497 850718  
PDR ADOCK 05000309  
R PDR

Fiche  
To: Paul  
Jones

11 E 24



MAINE YANKEE ATOMIC POWER COMPANY •

EDISON DRIVE  
AUGUSTA, MAINE 04330  
(207) 623-3521

June 12, 1985  
MN-85-116

GDW-85-173

Region I  
United States Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Attention: Dr. Thomas E. Murley, Regional Administrator

References: (a) License No. DPR-36 (Docket No. 50-309)

Subject: Annual Report of Facility Changes and Relief and Safety Valve  
Failures and Challenges

Gentlemen:

In accordance with 10 CFR 50.59, attached please find a report containing a brief description of the facility changes completed at the Maine Yankee Atomic Power Company plant during 1984. In lieu of 39 copies required by 10 CFR 50.59, a master microfiche of this submittal will be provided under separate cover.

There were no relief and safety valve failures or challenges during 1984.

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY

G. D. Whittier, Manager  
Nuclear Engineering & Licensing

GDW/bjp

Attachments: Annual Report of Facility Changes (91 Pages)

cc: Mr. James R. Miller  
Mr. Cornelius F. Holden  
Mr. James Taylor, Director, I & E Washington

## INDEX TO DESIGN PACKAGES COMPLETED IN 1984

PA 26-81	Reroute EV-1 and 2 Relief Lines to Primary Vent Stack
PA 27-82	Auxiliary Steam From Crossunder Header
PA 38-82	C-4A, B, & C Aftercooler Drain Modification
PA 3-83	Refurbishment of Refueling Machine
PA 4-83	Circulating water Stainless Steel Shertap Piping Replacement with PVC Piping
PA 11-83	Containment Purge Exhaust Room Radiation Shield Door
PA 14-83	Hydrogen Purity Instrumentation Replacement
PA 18-83	SFP Deep Bed Filter Timer
PA 22-83	Staff Building Undervoltage Trip
PA 23-83	Uninterruptable Power Supply to FEMCO
PA 25-83	Reactor Trip/Turbine Trip Redundancy
PA 27-83	Independent Operation of Containment Sump Pumps
PA 28-83	NNS Instrumentation Multiplexer
PA 30-83	Alarm for TCB-9 or RPS Panel
PA 33-83	Separation of Well Water and Domestic Water Systems
PDCR 11-82	Replacement of Containment Electrical Penetration E-2 and E-11
PDCR 15-82	Replacement of Safaety Related Limitorque Motors
PDCR 22-82	Manual Operator for MS-T-163
PDCR 4-83	Emergency MCC Feeder Remote Indicator Lights
PDCR 5-83	Limitorque Motor Splice Upgrade
PDCR 6-83	Modification of Housing Interlocks - HPSI, LPSI, and Containment Spray Pumps
PDCR 7-83	Personnel Airlock O-Ring Retention Modification
EDCR 79-36	Ground Detection System for DC and Vital AC Busses
EDCR 80-50	Grid Undervoltage Protection
EDCP 81-11	Mitigation of Harsh Environment

-2-

EDCR 81-18	Replacement of Safety Related Terminal Blocks
EDCR 82-31	Debris Screens for Containment Air Supply and Purge Exhaust Lines
EDCR 83-09	Appendix R Modifications
EDCR 83-18	Feedwater Spring Cans
EDCR 83-20	Pressurizer Safety Relief Valve Piping Modification
EDCR 83-22	72-02 Support Modifications
EDCR 83-24	Capability of Main Steam Piping to Hold water
EDCR 83-28	Condensate Surge Tank System
EDCR 83-29	Auxiliary Feedwater System Modifications
EDCR 83-32	Inadequate Core Cooling Monitoring System
EDCR 83-500	Isophase Bus Upgrade
EDCR 83-501	Containment Hi Range Rad Monitor Cable Swap
EDCR 83-503	Elimination of "ISH" Interlock
EDCR 83-509	Main Steam Non-Return Valves Vacuum Assist System
EDCR 83-512	Motor Driven Feed Pump Recirculation System
EDCR 83-513	Main Turbine/P-2C Trip Interlock Bypass
EDCR 83-514	ICI Cable Upgrade
EDCR 83-515	AFW Seismic Upgrade
EDCR 83-517	Condensate Overboard Discharge Line Check Valve
EDCR 83-518	Steam Generator Chem Feed Line Penetration Isolation
EDCR 83-519	Feedwater Pipe Arrangement Modification
EDCR 83-520	Removal of AFW-1 Internals
EDCR 83-527	MSR Tube Bundle Replacement
EDCR 83-529	Modification to Reactor Vessel Closure Head Lift Rig
EDCR 83-530	Waste Oil Pump - Trip on High Tank Level
EDCR 83-531	Auto Close of FW-M-336 on P-2C Trip



-7-

EDCR 83-533	Addition of an Air Supply Station Near Containment Personnel Hatch
EDCR 83-534	Traveling Water Screen Corrosion/Degradation Improvements
EDCR 84-02	Qualified Level Transmitters for Containment Sump Indication
EDCR 84-04	Performance Instrumentation Upgrade
EDCR 84-06	Reroute Scavenging Vent to First Point Heaters
EDCR 84-08	Modification to Steam Generator Primary Manway Gasket Retainer Plates
EDCR 84-09	Loss of 115KV Voltage Alarm
EDCR 84-10	P-2C Low Suction Pressure Trip Time Delay
EDCR 84-13	Containment Personnel Hatch Improvements
EDCR 84-14	Charging System Flow Restrictor for LTOP Concerns
EDCR 84-15	Steam Generator Wet Lay-up Recirculation System Taps
EDCR 84-16	Main and Auxiliary Feedwater and Main Steam Isolation Bypass Annunciation
EDCR 84-19	Steam Dump Controller Output Test Feature
EDCR 84-20	Main Steam Quality Measurement
EDCR 84-21	Condensate/FW/CW Instrumentation Upgrade
EDCR 84-23	PORV Block Valve Motor Operator Replacement
EDCR 84-24	Replace Temperature Switches on C-5A & B
EDCR 84-26	First Point Heater Vent Repairs
EDCR 84-27	H.P. Turbine Moisture Pre-Separation
EDCR 84-28	Jib Crane Mounting Reactor Containment El. 46'
EDCR 84-30	S/G Separator Can Replacement
EDCR 84-31	Addition of Locking Device to Polar Crane
EDCR 84-32	Loose Parts/Thermal Shield Monitoring System Upgrade
EDCR 84-36	Steam Generator Secondary Handhole Cover Thermowell
EDCR 84-38	Check Valve Installation in Water Treatment Line
EDCR 84-39	S/G Secondary Handhole RTD's

MAINE YANKEE ATOMIC POWER COMPANY

-44-

EDCR 84-40 Replacement of MWAR Watt Transducer in Sect "A" MCS  
 EDCR 84-41 MMS Multiplexer RTD Inputs  
 EDCR 84-43 Screen Wash Pump Strainer Replacement  
 EDCR 84-47 Oil Retention Curb for P-2C  
 EDCR 84-50 Computer Cable for TSC and EDF  
 EDCR 84-54 VAX/VMS Terminal Cable Runs  
 EDCR 81-47 Reactor Vessel Head Temp Monitor  
 EDCR 83-31 LTOP Variable Setpoint  
 EDCR 84-11 H.F. Containment Parameters Relocation  
 EDCR 84-12 H.F. Wide Range Log Recorder Replacement

PA 28-81

## Route EV-1 and 2 Relief Lines to Primary Vent Stack

PA 28-81 installed a cross-connect line, connecting the relief lines from the evaporators, EV-1 and EV-2, with the line leading from the Blowdown Tank, TK-18, to the Primary Vent Stack. The normal discharge from the evaporator relief valves, should an overpressurization condition occur, is to TK-18. The new cross-connect line provides an alternate flowpath so that the Blowdown Tank can be isolated for maintenance or inspections and any discharge from the evaporators during this period will be directed to the Vent Stack. This design change was implemented to ensure proper safety for those personnel performing tank maintenance.

The system modified is non-nuclear safety class. This modification does not alter the function of the evaporator relief line nor does it alter the function or operability of any other existing plant system. Additionally, this plant alteration does not create an unreviewed safety question as defined by 10 CFR 50.59.

EA 27-82

## Auxiliary Steam from Crossheader Header

EA 27-82 involved the addition of a new auxiliary steam supply line from the 42" relief valve line for MSR's A & B to the existing auxiliary steam header. The newly installed 8 inch line incorporates a new pressure control valve which is controlled through split ranging with the existing auxiliary steam supply valve to allow HP turbine exhaust steam to supply all plant auxiliary steam demands above approximately 85-98% plant power level. This modification was installed to increase plant output by approximately 1250 KW (assuming auxiliary steam flow of 60,000 lbm/Hr. and high pressure turbine efficiency of 81%).

All components of this design change are classified as non-nuclear safety class. This alteration does not involve any unreviewed safety question as defined by 10 CFR 50.59.

PA 38-82

C-1A, B, and C Aftercooler Drain Modification

PA 38-82 removed the solenoid operated drain valves from the service and instrument air compressor aftercoolers and replaced them with ball float traps and level gauges. This change was to allow slow steady draining of the system with minimal air loss and to allow visual verification of condensate level.

This change was to a system which is non-nuclear safety class. This alteration does not constitute an unreviewed safety question as defined by 10 CFR 50.59.

RA 3-47

### Refurbishment of Refueling Machine

The refueling machine was refurbished in order to improve its reliability and speed of operation during refueling.

Mechanical improvements were made to facilitate maintenance, improve decontamination of hoist assembly shim plates, added a viewing window, a new electronic based control console, general refurbishment of the structure, new removable TV camera system, and state-of-the-art motor drives. This alteration does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PA 4-81

Circulating Water Stainless Steel Amertap Piping  
Replacement with PVC Piping

This alteration involved replacing the existing schedule 10 stainless steel piping on the circulating water Amertap System with PVC piping. The change was necessitated by corrosion of the stainless piping.

The circulating water Amertap System is non-nuclear safety class. The replacement of the piping did not affect the operation of any other plant system. Therefore, this alteration does not involve an unreviewed safety question as defined by 10 CFR 50.59.



PA 11-83

## Containment Purge Exhaust Room Radiation Shield Door

Previously the auxiliary feed pump and containment purge exhaust rooms were interconnected by an open passageway. Since the containment atmosphere essentially extends into the purge room through the ventilation duct work up to the location of the first isolation valves, VP-A-3 and 4, radiation levels in this area following an accident could make the pump room inaccessible. However, the pump room must remain accessible as various post accident valving operations are performed from this area, i.e., aligning RCS hot leg injection, hydrogen recombing, and containment purge/hydrogen control systems.

PA-11-83 installed a sliding radiation shield door to isolate the auxiliary feed pump room from the containment purge exhaust room following an accident to ensure that the habitability of this area is maintained.

This plant alteration does not adversely affect existing plant systems or components. The shield door was installed solely to provide radiation protection for personnel in the unlikely event of a major accident. Since the door is large in size and is located in an area near existing safety class equipment, the door was seismically mounted to ensure that a failure does not occur, which could damage vital station components. This alteration does not constitute an unreviewed safety question as defined in 10 CFR 50.59.

PA 14-63

### Hydrogen Purity Instrumentation Replacement

PA-20-51 replaced the obsolete, mechanical hydrogen purity meter for the main generator with a state-of-the-art electronic system. This enhanced maintainability and reliability as well as improving operation.

The generator hydrogen monitoring system is non-nuclear safety class. The ability to monitor generator fill gas was enhanced, no other plant systems were affected. Therefore, this change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PA 15-43

SFR Deep Bed Filter Timer

4-18-83 installed a time totalizing meter on the safety class deep bed filter (FL-80, 81, 82). This timer keeps a running total of filter usage time to facilitate maintenance.

The timer is non-nuclear safety class. Nothing was mounted on seismic portions of the filter. No control function is provided by the timer. Therefore, this change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

MA-22-1

### Staff Building Undervoltage Trip

This change automatically trips the staff building feeder breaker when bus 3 undervoltage occurs. The breaker will be reclosed after the voltage has been restored. This eliminates unnecessary loads when voltage is low. This plant alteration does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PA 23-83

Uninterruptable Power Supply to PEMCO

PA 23-83 changed the power supply for the plant paging system to a more reliable supply to assure continued operation and availability. By changing to a different battery-backed inverter power supply, previously encountered power interruptions due to bus switching during outages will be eliminated. This alteration does not involve an unreviewed safety question as defined by 10 CFR 50.59.

MAINE YANKEE ATOMIC POWER COMPANY

PA 25-83

Reactor Trip/Turbine Trip Redundancy

A-20-83 improved the reliability of turbine trip in the event of a reactor trip. This change provides for a separate and independent means of tripping the main turbine on CEDM bus undervoltage. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PA 27-83

Independent Operation of Containment Sump Pumps, P-13 A & B

PA 27-83 provided for an upgrade to the controllers of the containment sump pumps, P-13A & B. It is now possible for control room operators to run either or both sump pumps as desired. The low level pump auto-stop function remains intact, as does the manual override of the low level pump cutout. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.



MA 20-33

## NNS Instrumentation Signal Multiplexer

MA 20-33 installed a remotely operated signal selector in containment with its control unit in the control room. This allows one of sixty-four input signals to be selected for monitoring, using only one cable and electrical penetration. It is not to be used for control signals nor for safety class instrumentation. It is not to be used for continuously monitored NNS instrumentation, nor for any signal important to plant operation or safety.

The multiplexer is non-nuclear safety class and is mounted away from any safety class equipment. This alteration does not involve an unreviewed safety question as defined in 10 CFR 50.59.

PA 30-83

Alarm for TCB-9 on RPS Panel

An audible alarm has been added to the RPS monitoring panel to indicate the opening of TCB-9 (tie breaker for MC-1A & B). This alarm should make the operators aware that the two motor-generator sets could be operating in a non-synchronous mode. This change improves the monitoring capability for important electrical equipment. It does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PA 13-83

Separation of Well Water and Domestic Water Systems

PA 13-83 separated the well water and domestic water systems. As a result, each system is now totally dedicated to serving a specific plant site water requirement. The domestic water supplies flushes, showers, wash basins and the well water supplies all the potable water fixtures.

Both of the water systems affected by this PA are non-nuclear safety class. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PCR 11-82

Replacement of Containment Electrical Penetration E-2 & E-11

Penetrations for the control element drive mechanism fans were replaced since parts are no longer available for the previously installed penetrations. The new penetrations are equivalent replacement of an existing component. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PUR 15-82

Replacement of Safety Related Limitorque Motors

This design change involved the motor replacement of six safety related Limitorque motor operators. The six motors were replaced with radiation exposure-qualified direct replacements as part of Maine Yankee's commitment to environmental qualification of safety related electrical equipment per I&E Bulletin 79-01B.

This modification did not involve an unreviewed safety question as defined by 10 CFR 50.59.

PCR 22-82

Manual Operator for MS-T-163

PCR 22-82 added a side mounted handwheel to MS-T-163 to provide manual operating capability. MS-T-163 is a CIS/SIAS, air operated isolation valve to the turbine driven auxiliary feedwater pump (TDAFP). During a total station blackout, MS-T-163 will remain open for an estimated four hours (until the air accumulator loses pressure). With the manual handwheel the valve can be opened and steam can be fed to the TDAFP, should the need arise. Steam pressure for the TDAFP can be regulated by the handwheel on MS-P-168 located down stream from MS-T-163.

The handwheel will normally be in the neutral position and locked. Thus the normal function of the valve will not be altered. This change does not involve an unreviewed safety question as per 10 CFR 50.59.

PDCR 4-83

Emergency MCC Feeder Remote Indicator Lights

PDCR 4-83 installed four red and green indicator light pairs on the electric control board. These lights indicate the positions of the feeder breakers from busses 7 and 8 to MCC's 7A, 7B, 8A, 8B. This provides useful indication of MCC readiness status in the control room.

This change does involve a safety class system. Safety class parts were utilized and seismic acceptability of component mounting has been assured. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.



FOUR 1-43

Limitorque Motor Splice Upgrade

Motor splices to some Limitorque operators were replaced with environmentally qualified splices. This change is a direct replacement of existing equipment with functionally equivalent but environmentally qualified equipment. This alteration does not involve an unreviewed safety question as defined by 10 CFR 50.59.

## PDCR 6-83

Modification of Housing Interlocks - HPSI, LPSI and  
Containment Spray Pumps

Under PDCR 6-83 the housing interlock for the high pressure safety injection (HPSI), low pressure safety injection (LPSI), and containment spray pump (CSP) have been modified to allow the use of a ground truck in an inoperable pump cubicle without disabling its respective spare pump. Relocating and replacing the interlock switch allows the spare pump to operate if the A or B pump cubicle has a ground truck and the elevating mechanism is racked up. This PDCR improves the reliability of the HPSI, LPSI, and containment spray pump power supplies and, therefore, does not involve an unreviewed safety question as defined by 10 CFR 50.59.

PDR 7-83

### Personnel Airlock O-Ring Retention Modification

This modification involved the addition of 3/32" filler wire on the outer edge of the o-ring grooves on the inner and outer doors of the personnel airlock. The wire will hold the o-rings in place more firmly and thus reduce maintenance.

This change increased the reliability and reduced the maintenance on the personnel air lock. The airlock is a Safety Class 2 containment isolation boundary. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 79-36

Ground Detection System for DC and Vital AC Busses

A high impedance ground detection system was installed under EDCR 79-36 in the NNS DC bus. The system will be activated and evaluated before a similar system is installed in the safety class busses. This does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDR 80-50

### Grid Undervoltage Protection

This change upgraded the undervoltage protection for 4160 volt safeguard busses. The system will alarm on low voltage. Coincident with SIAS, the bus will be supplied by the emergency diesels. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

## EDCR 81-11

## Mitigation of Harsh Environment

IEEE Bulletin No. 79-018 requires that a high energy line break (HELB) outside containment must not result in an environment capable of causing failure of safety class electrical equipment.

EDCR 81-11 modified three high energy piping systems. The modification provides automatic isolation of the auxiliary steam, blowdown, and letdown systems when a high ambient temperature is sensed by the Air Temperature Monitoring System (ATMS). The ATMS observes the ambient temperature at various plant locations and initiates a trip signal to close isolation valves following a HELB, thereby, ensuring the harsh environment is short term and operability of vital electrical equipment is not compromised.

The modifications performed on the letdown and blowdown systems are safety class 1 and 2, respectively, and the auxiliary steam system changes are non-nuclear safety class. This change improves the reliability of both safety related and non-safety related systems. This change does not create an unreviewed safety question as defined by 10 CFR 50.59.

EDR 81-18

### Replacement of Safety Related Terminal Blocks

I.E. Bulletin 79-018, "Environmental Qualification of Class 1E Equipment", requires that all equipment in safety related systems subject to harsh environments be qualified to that environment. The safety-related terminal blocks inside the Reactor Containment lacked any qualification documentation and were replaced with Weidmuller-type environmentally qualified terminal blocks. This modification does not present an unreviewed safety question as defined in 10 CFR 50.59.



EDCR 81-47

Reactor Vessel Head Temperature Monitor

EDCR 81-47 installed a conax dual RTD in a thermowell on the Reactor Head. Cabling was added to connect the RTD through containment penetrations and landed on terminal blocks in the Main Control Board. The cables, connectors and dual RTD are all Class 1E. Future EDCRs will utilize this modification to provide the actual indications for R.V. Head Temperature on the Main Control Board. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

## EDCR 82-31

## Debris Screens for Containment Air Supply and Purge Exhaust Lines

EDCR 82-31 installed debris screens in the containment purge supply and exhaust piping systems to prevent the remote possibility of debris being blown into the purge lines during a LOCA event. This debris could prevent the isolation valves from fully closing and consequently failing to seal the Containment Building should on-line purge be in progress coincident with a Loss of Coolant Accident.

This design change is safety class 2 as the purge supply debris screen is attached to the containment pressure boundary. The operation of the purge supply and exhaust system is not affected by the change. This EDCR does not constitute an unreviewed safety question as defined in 10 CFR 50.59.

EOCR 83-16A, B, & C

Appendix R Modifications

This design change consisted of modifications to meet Maine Yankee's commitment to the requirements of 10 CFR 50 Appendix R. These modifications included the following:

1. The installation of an alternate shutdown power supply consisting of a 230 KV diesel generator, a 480V motor control center, and 125V DC station battery and battery charger, and a 2KVA inverter.
2. The installation of an alternate shutdown panel to replace the existing steam generator emergency panel in the Auxiliary Feedwater Pump Room.
3. The installation of all necessary process instrumentation to develop the necessary parameters for the Alternate Shutdown Panel.
4. The installation of all necessary alternate pump and valve control circuits to allow control from the Alternate Shutdown Panel.
5. The installation of all necessary fire barrier material to separate normal and alternate shutdown system.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 83-18

Feedwater Spring Cans

EDCR 83-18 involved the replacement and/or resetting of six spring cans on the three feedwater lines in the main steam valve house. The supports affected by this design change are located within the Safety Class 2 boundaries on the feedwater lines. The modification to the six supports was performed to ensure that the supports will serve their intended function without jeopardizing the piping system. Therefore, this design change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

MAINE YANKEE ATOMIC POWER COMPANY

EX-67-02

Pressurizer Safety Relief Valve Piping Modification

The SRV's and their inlet piping are Safety Class 1. The modification modified flow characteristics which improved stability and thus improved reliability of the SRV's. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

This modification involved minimizing the length of the SRV inlet piping.

EDR 87-12

79-02 Support Modification

EDR 87-12 involved the modification of several supports on several different safety class systems. These modifications are a result of analysis performed using criteria of IE Bulletin 79-02, "Baseplate Flexibility Using Concrete Expansion Anchors".

This design change ensures that the modified supports are capable of performing their intended function. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EXER 84-24

## Capability of Main Steam Piping to Hold Water

Cold shutdown capability for Appendix R considerations necessitates flowing water from the steam generators to the condenser via the main steam piping. This design change modified three supports on the main steam piping and two supports on the atmospheric steam dump line in order for the main steam lines to adequately support static water loading. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

## EDCR 83-28

## Condensate Surge Tank System

EDCR 83-28 added a Condensate Surge Tank, TW-122, to serve as surge volume for the secondary plant condensate makeup and spill system. This function was performed by the DWSF but Technical Specification revisions require that the DWSF be isolated from NNS systems during plant power operation. The exclusive function of the DWSF, during plant power operation, will be to provide storage capacity for the safety class emergency feedwater system.

EDCR 83-28 includes a 120,000 gallon stainless steel tank with concrete foundation (located outdoors), 10" condensate piping to connect to existing secondary condensate makeup header, steam injection for tank heating, tank level monitors, high/low level alarms, temperature monitor, and required heat tracing. The new equipment is NNS but the tank is seismically designed to protect nearby safety class pumps.

This modification improves the safety design of the plant. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.



SLUR 83-13

### Emergency Feedwater System Modifications

This design change modified the Emergency Feedwater system by adding an additional isolation valve in each feed line. The new valves automatically close when a low pressure condition in the valve-associated steam generator is sensed. The associated Emergency Feedwater control valve also isolates on the same low pressure signal. The two valve isolation guards against a single active failure during S/G depressurization caused by a main steam line break. The valves will automatically reopen upon restoration of S/G pressure.

The modifications performed are safety class 3. This design change enhances nuclear plant safety and does not constitute an unreviewed safety question as defined in 10 CFR 50.59.

EELR 83-31

## LTOP variable setpoint

EELR 83-31 replaced PT-103 and PT-103-1 Pressurizer Pressure channels (NNS) with two 0-2500 psig pressure transmitters PT-103 and PT-105, as part of a program to address Low Temperature Overpressurization Protection (LTOP) questions. The signals from these transmitters were each connected to their respective controller. The controller setpoint and process indication are compared in order to actuate the PORVs if the process is above the setpoint. The LTOP system is armed in the variable pressure setpoint relief position under administrative control. The two trains, each having a controller, process indication and separate digital setpoint indication, provide two independent trains to preclude electrical failure from interrupting the correct actuation. Power for each train is from independent power sources. Alarms are retained for the purpose of ensuring the proper arming and disarming of the LTOP system.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 83-32

Inadequate Core Cooling Monitoring System

Three new saturation monitors were installed. They provide indication of the margin to saturation at three places in the Reactor Coolant System (RCS) - the core, the reactor vessel head, and the S/G tube region (RCS side). This EDCR does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-500

Isophase Bus Upgrade

Under EDCR 83-500 the isophase bus system bolted grounding straps were replaced by welded laminated expandable shunts. This change reduces yearly maintenance and does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-501

Attachment #1 Range Rad Monitor Cable Penetration Swap

EDCR 83-501 moved the high range radiation monitor cables from triaxial penetrations, to coaxial penetrations, which are correct for the cable type. This change improves the reliability of instruments important in the unlikely event of a serious accident. Safety class, environmentally qualified parts were used. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

MAINE YANKEE ATOMIC POWER COMPANY

EDCR 83-505

Elimination of "IS-" Interlock

EDCR 83-505 permanently eliminated an interlock in the Control Element Drive Control System which had been temporarily de-activated since 1980. This allows a four step variability in shutdown rod group position to slow guide tube wear.

The CEDCS is non-nuclear safety class. Technical specifications allow the change, and four years experience assured its functionality. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDR 87-509

Main Steam Non Return Valves Vacuum Assist System

This change involved adding a line from the main condenser to the top of each main steam non return valve. The vacuum from the condenser holds the non return valves open during low steam flow conditions. This reduces "fluttering" of the valves and also allows the main steam system to be used for decay heat removal.

This change does not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDR 83-512

## Motor Driven Feed Pump Recirculation System

EDR 83-512 increased the recirculation flow capabilities for both motor driven main feed pumps (P-2A & B). The original recirculation systems did not provide adequate pump flow during recirculation operation. Previous measurements of pump pressure pulsations have indicated that P-2A & B experienced cavitation during operation in the recirculation mode. This cavitating flow condition has contributed to severe pump impeller eye damage and high pump vibrations. Increasing the recirculation flow capability to 4000 gpm will reduce pump internal recirculation and inlet vane cavitation, and provide the capability to operate for increased periods of time on recirculation without risking severe pump damage.

This change does not constitute an unreviewed safety question as defined in 10 CFR 50.59.



EDCR 83-017

Main Turbine/P-20 Trip Interlock Bypass

This EDCR installed a key lock bypass switch on the main control board. The switch may be used to defeat the coincidence trip functions between the main turbine and the turbine driven feedpump, P-20. An annunciator has been installed to alarm the bypass function. This change allows plant startup on the turbine driven feedpump when the main turbine is tripped. The coincidence trip circuits between the main turbine and P-20 are bypassed under administrative control with the key lock switch. This alteration does not constitute an unreviewed safety question as defined by 10 CFR 50.59.

EOCA 83-814

ICI Cable Upgrade

EOCA 83-814 installed new, qualified cable sets for seven core locations, in which new detectors with qualified core exit thermocouples were installed. This ensures that cables for these core locations inside the containment will remain operable in the unlikely event of a LOCA. This change affects a safety class 1E system. However, this is an upgrade of the environmental qualification of the components with no functional change. This change does not involve an unrevealed safety question as defined by 10 CFR 50.59.

EFW 83-515

EFW Seismic Upgrade

The design change involved the modification of existing supports and addition of new supports to the electric Emergency Feedwater pumps recirculation lines and other EFW piping.

Also, a new check valve was added to the steam-driven AFW pump recirculation line. The check valve will serve as the seismic pressure boundary between the seismic electric-driven EFW pump recirculation piping and the non-seismic turbine-driven AFW pump piping.

The AFW system operation was not affected by this change. This change does not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDR 83-517

### Condensate Overboard Discharge Line Check Valves

This change involved the installation of a 6" check valve in the condensate overboard line which ties into the service water discharge header. This eliminates the possibility of introducing seawater, and hence, chlorides into the condenser if an isolation valve is inadvertently left open.

The condensate system is non-nuclear safety class. This change did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EUR 83-318

# Steam Generator Chemical Feedline Penetration Isolation

This design change involved the cutting and capping of 3 small bore pipes on both sides of a containment penetration. Since the lines were no longer utilized, this design change provided for a means of permanently modifying the penetration such that annual ISI penetration testing is not required. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-519

## Feedwater Pipe Arrangement Modification

EDCR 83-519 replaced sections of the main feedwater piping and steam generator inlet nozzle thermal sleeves. The S/G nozzle thermal sleeves were replaced as they were slightly deformed during the 1983 water hammer event and the piping was replaced as a precautionary measure. The feedwater pipe configuration was changed in order to minimize the number of welded joints in the horizontal pipe sections adjacent to the S/G inlet nozzles, which previously experienced thermal stress cracking.

This modification is safety class 2. The new pipe configuration does not adversely affect the operation of the feedwater system. This EDCR does not present an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 83-520

## Removal of AFW-1 Internals

The DWST provides condensate storage for the suction supply to the auxiliary feed pumps and AFW-1 is a gate valve which isolates the DWST from the suction header feeding the auxiliary feed pumps. Single failure of this valve in the closed position would prevent operation of the auxiliary feed system during an emergency. Therefore, EDCR 83-520, essentially eliminates AFW-1 by removing the valve internals (disc) and handwheel thus modifying the auxiliary feed system to satisfy single failure criteria.

This modification improves the safety design of the plant. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-527

### MSR Tube Bundle Replacement

This change involved the replacement of the existing MSR tube bundles with optimized tube bundles and the addition of perforated plates in the inlet side of the chevron banks in the MSRs B and D. These modifications result in increased reliability and efficiency.

The MSRs are in a non-nuclear safety class system. This change did not involve an unreviewed safety question as defined in 10 CFR 50.59.



## EDCR 53-529

## Modification to Reactor Vessel Closure Head Lift Rig

EDCR 53-529 replaced the heavy lift linkage components that are utilized to attach the reactor vessel closure head lift rig to the containment polar crane. The replacement components were upgraded to comply with Section 3.2 of ANSI 14.6 - 1978, "American National Standard for Special Lifting Devices for Shipping Containers Weighing 10,000 Pounds (4,500 kg) or More for Nuclear Materials", as outlined in NUREG-612, "Control of Heavy Loads at Nuclear Power Plants".

The reactor vessel closure head lifting rig is not a safety related structure. The replacement components were designed, fabricated, and installed in accordance with ANSI 14.6 - 1978, which encompasses and/or exceeds the design criteria and installation requirements of Maine Yankee's safety class structures. The replacement components were designed with a larger factor of safety than the original design. This change does not involve an unresolved safety question as defined by 10 CFR 50.59.

EDCR 83-530

Waste Oil Pump - Trip on High Tank Level

EDCR 83-530 installed a float switch on the waste oil storage tank. This switch prevents the pump from pumping oil into a full tank, causing overflow.

The waste oil tank, pump and new level switch are non-nuclear safety class. This change safeguards against accidental tank overflow. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-531

Auto Close of Fw-M-336 on P-2C Trip

EDCR 83-531 wired contacts of relay 83-FC-1303 into the Fw-M-336 (P-2C Discharge Valve) control circuit. The relay energizes on P-2C trip and in this application closes the discharge valve. This prevents P-2C from being driven backward by pressure from P-2A, B, if its discharge check valve fails.

This change and all associated equipment are non-nuclear safety class. This design prevents potential equipment damage. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 83-533

Addition of an Air Supply Station Near  
Containment Personnel Hatch

This modification involved the addition of a service air hose station near the personnel air lock. A new run of 1" piping was tied into the existing air line running overhead.

This change affected a non-nuclear safety class system and did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDR 33-534

## Traveling Water Screen Corrosion Degradation Improvements

EDR 33-534 included several modifications which were aimed at reducing the level of periodic maintenance required for the four traveling water screens which serve to remove debris from the plant intake cooling water. A new elastomeric urethane coating material was selected to replace the historically ineffective bitumastic coating. Also, an impressed current cathodic protection system was added to all four intake bays to protect areas which were left uncoated or subjected to coating damage/wear. In addition, a spare screen unit adapted for universal drive configuration was purchased to establish quick change out capability and allow more flexible and less costly routine maintenance programs for the screen units.

All aspects of this design change were classified as non nuclear safety related, and thus the alterations outlined above do not involve any unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-02

Qualified Level Transmitter for Containment Sump Indication

The level transmitters in the containment sump have been replaced by environmentally qualified transmitters. They have a range of 0-10 feet and indicate in the control room. An existing system was upgraded to assure operability under post accident conditions. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDR 84-04

Performance Instrumentation Upgrade

Additional instrumentation has been added locally on the Moisture Separator Reheaters to monitor their performance. The information available from this new instrumentation, coupled with our existing instrumentation for the MSR System will enable a calculation of the following, based on actual data for each MSR:

1. Shell side inlet conditions including pressure, flow and quality.
2. Chevron pressure drop and moisture carryover.
3. Shell side tube bundle pressure drop.
4. Shell outlet conditions including flow, pressure and temperature.
5. Reheater heat transfer to shell side fluid.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.39.

EDCR 84-06

Reroute Scavenging Vent to First Point Feedwater Heaters

Changes under EDCR 84-06 allow the drains from the MSR Scavenging Steam Vent Condensor to be automatically routed to either the MSR shell (inlet) or to the first point heaters. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.



EDCR 84-08

## Modification to Steam Generator Primary Manway Nozzles

EDCR 84-08 instituted the use of a modified steam generator primary manway gasket retainer plate. The new plates allow gasket installation separately from the primary manway covers. They provide easier and more accurate positioning of the primary manway gaskets.

The gasket retainer plates are non-nuclear safety class. The tapped holes for the plate's positioning cap screws were located in the primary manway flange, which is safety class 1. The modified components continued to comply with the appropriate design criteria. Thus, this modification does not increase the probability of an accident, equipment malfunction, or the occurrence of an accident not previously evaluated. Therefore, this change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-09

Loss of 115 KV Voltage Alarm

EDCR 84-09 upgraded the alarm functions associated with the loss of 115 KV offsite power supply. This change installed an audible alarm in addition to the visible Panalarm which annunciates after a ten second time delay to minimize nuisance alarms. The control room personnel are alerted by this alarm function to loss of reserve station power under all operating conditions, including problems with transformer X-14 when in the standby mode. This change does not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-10

P-2C Low Suction Pressure Trip Time Delay

EDCR 84-10 modified the method of initiation of a P-2C low suction pressure trip. The pressure switch was removed, and a new Sigma Meter-Relay inserted in an existing instrument loop. Relay alarm points (2) drive an annunciator and a time delay relay. The relay trips P-2C if pressure stays low for  $15 \pm 2$  seconds.

This equipment is non-nuclear safety class. The change provides new indication and prevents nuisance trips. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-11

Human Factors Containment Parameters Relocation

EDCR 84-11 relocated several instruments located on the Main Control Board that measure containment pressure, sump water level, hydrogen concentration and High Range radiation to another location in the safeguards section dealing with containment isolation. This was done to logically group instruments of similar functionality to increase the efficiency and effectiveness of their use. The functions of each individual meter or instrument did not change, only the location. These instruments are Class 1E for post accident monitoring. They were relocated while retaining all of Class 1E characteristics such as channel separation, seismic mounting, etc.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-12

Human Factors Wide Range Log Recorder Replacement

EDCR 84-12 replaced a wide Range Log Power Recorder with a computer driven CRT Trend. The recorder will be retained in another location until the CRT trend can be programmed and any problems worked out in order to satisfy Human Factors criteria. Long term historical data trending in hard copy will be resolved before completion of the recorder removal. The new CRT will provide improved monitoring capabilities by eliminating the Human Engineering Deficiencies in the chart recorder and not creating any new ones. The inputs necessary to drive the CRT are generated by the plant process computer. This isolation feature retains the necessary class 1E to NNS separation.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-13

Containment Personnel Hatch Improvements

This design change involved several mechanical changes to the containment personnel hatch in order to improve the hatch's overall reliability. The changes are as follows:

1. Installed new wear rings, with additional screws, on the inner door locking ring.
2. Increased the quantity of grease fittings on both locking rings.
3. Replaced the wedges on both doors and locking rings.
4. Replaced the hinges (both doors) with an updated version of the hinge.
5. Installed new adjustable locking pin holders.
6. Installed a system to provide the capability of testing between the o-rings of the inner door from outside of containment. This system is similar to the one installed for the outer door.

The operation of the personnel hatch was not affected by this design change. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-14

Charging System Flow Restrictor for LTDP Concerns

This change involved the installation of a multi-stage flow restricting orifice in the chemical and volume control system line. This orifice reduces the effects of low temperature overpressure transients when the RCS pressure is less than 400 psig by restricting the high pressure safety injection flow to 200 gallons per minute or less. At RCS pressures below 400 psig the flow restrictor is valved in and the HPSI valves are locked out.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-15

## Steam Generator Wet Lay-Up Recirculation System Taps

In order to provide a more efficient method of controlling steam generator water chemistry during wet lay-up, a recirculation system has been designed for each steam generator. This design change provided the pipe taps and root valves that will be used to connect the recirculation system to the recirculation loops. The taps were installed on the main steam lines and the blowdown lines. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.



EDCR 84-16

Main and Auxiliary Feedwater and Main Steam Isolation  
Bypass Annunciation

This design change involved a change to the main and auxiliary feedwater regulator valves steam generator low pressure trip circuitry that provided an alarm directly from the control switch whenever any switch is in the bypass position. This modified the old arrangement which required a bypass alarm from an auxiliary relay. This design change also provides a bypass alarm whenever one of the excess flow check valve control switches are left in the "OPEN" position which also bypasses a low steam generator pressure trip. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDR 84-19

Steam Dump Controller Output Test Feature

EDR 84-19 installs an on-line test feature to the steam dump control circuitry. This new test capability permits verification of the availability of the steam dump signal from the steam dump controllers. This change improves the reliability of the steam dump controller circuitry. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDR 14-00

## Main Steam Quality Measurement

Isokinetic steam sampling nozzles have been added to each of three main steam lines to be used to obtain samples of main steam for testing purposes. These nozzles are located inside the containment building, upstream of the main steam non-return valves. As such, this installation was designed, installed and tested to nuclear safety class II requirements. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EPA 84-21

## Condensate/Fw/Cw Instrumentation Upgrade

This design change provided for the installation of additional instrumentation to more effectively monitor the performance of the circulating water and condensate systems.

The modifications consisted of the following installations:

1. Pitot tube taps in the circulating water inlet lines and DP transmitters across the circulating water pumps to allow for accurate measurement of circulating water flow rates.
2. Circulating water discharge line thermocouples and conductivity probes to allow for accurate determination of discharge water temperatures and water levels in the discharge lines.
3. Parallel plate pressure devices in the condensers to provide for more representative turbine backpressure indication.
4. Thermowells on condensate pumps discharge to be used to measure condensate pump discharge temperature.
5. DP cells downstream of the condensate header (connected to existing orifice plates) to be used to measure flow rate.

This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

ENC 84-23

PRV Block Valve Motor Operator Replacement

This design change involved the replacement of the existing PRV block valve motor operators with identical safety class 1E environmentally qualified replacements. This change was part of Maine Yankee's environmental qualification program in response to I&E Bulletin 79-018. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-24

Replace Temperature Switches C-5A & B

EDCR 84-24 replaced mechanical temperature switches in the containment air compressor alarm circuits with RTD's and indicating controllers. This provided new indication, eased calibration and slowed setpoint drift. The compressors and alarms are non-nuclear safety class. New indication is provided to ease fault diagnosis. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDR 34-28

### First Point Heater Vent Repairs

The original carbon steel vent piping from of the shell side of the first point feedwater heaters was replaced with a stainless steel material to eliminate erosion and leakage problems. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

CHG 84-17

8. Turbine Moisture Pre-Separation

This change involved the addition of a system that drains off collectable moisture from the high pressure turbine outlet nozzles and pipes it into the heater drain system. This was accomplished by installing skimmers in each of the four turbine outlets and piping liquid water to the heater drain tank. Moisture removal improves the efficiency of the plant and reduces the erosion in the crossunder piping.

This change affects non-nuclear safety class system, and does not involve an unreviewed safety question as defined in 10 CFR 50.59.



EDCR 84-28

Jib Crane Mounting Reactor Containment Elevation 46'

EDCR 84-28 provided for the installation of a jib crane on the structural steel that supports the storage platform above steam generator number three. The EDCR also provided for a positive anchorage for the cavity seal ring and auxiliary bridges stored on the platforms. The jib crane is rated for three tons.

The frame to which the crane was mounted is safety class structural steel. The structural steel frame was reanalyzed to include the effect of the design crane load, and modified as appropriate to ensure continued compliance with the plant's safety class structural steel criteria. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-30

S/G Separator Can Replacement

EDCR 84-30 involved replacement of 94 of 98 moisture separator cans with new high capacity cans. To allow greater accessibility to the center region of the steam generator, four original cans extending from the manway to the center region remained. Due to the possibility of overloading, these original cans were orificed. As a result of the height increase associated with the new cans, new dryer drain lines with relocated bends were installed.

These modifications did not affect the pressure boundary of the steam generators and as such were assigned only a Q.A. related classification. This design change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-31

Addition of Locking Device to Polar Crane

EDCR 84-31 installed a locking mechanism on the hook of the polar crane to prevent the rotation of the crane hook on its thrust bearing. The modification involved only the immediate components about the crane hook. The modifications had no effect on the strength of the structural components. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

RIIR 84-02

Loose Parts/Thermal Shield Monitoring System Upgrade

Five new continuous monitoring channels have been installed in this system which increases the system sensitivity and monitoring capability. The upper head system consists of three magnetically mounted accelerometers while the lower head system consists of two accelerometers attached to the incore instrumentation guide tubes. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-39

Steam Generator Secondary Handhole Cover Thermowell

This design change provided for the installation of a RTD thermowell in each of two steam generator secondary handhole covers on steam generator E-1A. These thermowells will be used in conjunction with the RTD's installed under EDCR 84-39 to measure the temperature of the downcomer water in S/G E-1A. This information will be used to calculate the steam generator recirculation ratio.

Since these thermowells are installed in the secondary side boundary of the steam generator, they were designed, installed and tested to nuclear safety class II requirements. This modification did not involve an unreviewed safety question as defined in 10 CFR 50.59.

EDCR 84-38

## Check Valve Installation in Water Treatment Line

Technical Specifications require that the DWST be isolated from NNS systems during power operation and that the DWST contain a minimum of 100,000 gallons. In order to allow addition of makeup water to the DWST during power operation and, at the same time, preserve the safety class boundary, EDCR 84-38 adds two check valves in the condensate makeup line at the safety class boundary thus providing a seismic boundary and satisfying single failure criteria. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-39

37G Secondary Handhole RTDs

EDCR 84-39 installed resistance temperature detectors (RTDs) to monitor secondary side temperature in Steam Generator No. 1. These RTDs were installed in thermowells in the secondary handhole covers described under EDCR 84-36. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EEER 84-00

Replacement of MVAR watt Transducer in Sect "A" MCB

This transducer replacement replaced an existing non-linear unit with a linear one. Its output feeds the computer and logs the power output of the plant to the computer. This EDCP does not involve an unreviewed safety question as defined by 10 CFR 50.59.



EDCR 84-41

## MS Multiplexer RTD Inputs

Temperature transmitters were installed in the containment and connected to three inputs of the signal multiplexer installed under PA 28-83. This allows three 100 ohm Platinum RTDs to be monitored in the control room. Initially, RTDs were installed in the steam generator secondary handholds for use in calculating the steam generator recirculation ratio. These transmitters may be used for other RTDs in the future. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-43

Screen Wash Pump Strainer Replacement

EDCR 84-41 replaced the original "Y" type strainer located in the suction line of each screen wash pump with a basket type duplex strainer. This new installation allows strainer basket removal and cleaning without interrupting the operation of the screen wash pumps.

This design change modifies a non-nuclear safety class system. The reliability and availability of the system will be enhanced by this modification. This EDCR does not create an unreviewed safety question as defined in 10 CFR 50.59.

EPR 84-17

## Oil Retention Curb for P-2C

An oil retention berm was constructed around the steam driven feedpump (P-2C). The oil reservoir on P-2C holds a substantial amount of oil. The function of this berm is to prevent spreading of oil, should the reservoir rupture, thus preventing damage by the oil, the spread of fire, or the inadvertent overboard discharge of oil. This change is to a non-nuclear safety system. This change does not constitute an unreviewed safety question as defined by 10 CFR 50.59.

EOER 84-50

Computer Cable for TSC and EOF

Cables were installed from the main computer to the Technical Support Center and Emergency Operating Facility. This change provides the capability for these facilities to monitor actual plant conditions during drills or in the unlikely event of an actual accident. This change does not involve an unreviewed safety question as defined by 10 CFR 50.59.

EDCR 84-54

DCR VMS Terminal Cable Runs

Under EDCR 84-54 cabling was provided to several locations within the plant and the Staff Building from the simulator computer room. This cabling provides access to the Digital Equipment Corporation VAX computer which is used to store data for maintenance and operations purposes. This cable permits accessing the VAX computer system from terminals throughout the plant. This change does not involve an unreviewed safety question as defined in 10 CFR 50.59.