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July 25, 1986

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VICE PL 'DENT
NUCLEAR

BEC0 86-108

Dr. Thomas E. Murley
Regional Administrator
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

License No. DPR-35
Docket No. 50-293

Report of Changes, Tests, and Experiments
Performed at Pilgrim Nuclear Power Station

Dear Sir:

In accordance with 10CFR50.59(b), Boston Edison hereby submits a report of the changes, tests and experiments performed at Pilgrim Nuclear Power Station for the period of January 22, 1985 through January 21, 1986.

The attachment contains a brief description and reference to the safety evaluations for these changes and tests which did not:

- increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety;
- create a possibility for an accident or malfunction of a different type than any evaluated previously in the FSAR; or
- reduce the margin of safety as defined in the basis for any technical specification.

We trust that this will be acceptable. However, should you have any questions or concerns, please do not hesitate to contact us.

Very truly yours,

J. Edward Howard

Attachments: 1) Plant Changes
2) Plant Tests and Temporary Procedures

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Attachment 1

PLANT DESIGN CHANGES (PDC)

The following PDC's and referenced safety evaluations were reviewed and approved by the Operations Review Committee (ORC). These changes did not involve an unreviewed safety question as defined in 10 CFR 50.59(a) or a change in Technical Specifications, with the exception of PDC's 82-10, 83-11, 83-15, 83-37, 83-57, and 83-62. These listed changes required amendments to the Technical Specifications.

PDC 77-09

Off-Line Liquid Radiation Monitoring

This PDC provided for the modification of the Radwaste Liquid Effluent Off-Line Radiation Monitor, with the installation of a 5 gpm booster pump, to achieve a workable monitor system.

Ref. FSAR Section - 10.5

Safety Evaluation No. 621

PDC 79-36

Coating of Condenser Components

This PDC provided for the coating of condenser waterboxes, crossover pipes and butterfly valves; repairing the condenser tube sheet coating, and adding a cathodic protection system to the waterboxes.

Ref. FSAR Section - None

Safety Evaluation No. 1615

PDC 81-17

Recirculation M.G. Set D.C. Control Modification

This PDC provided for a modification to improve the reliability of the DC control system for the recirculation MG set lube oil pumps.

Ref. FSAR Sections - None

Safety Evaluation No. 1126

PDC 81-39-02

Strengthen Support of MSIV Conduit

This PDC provided for the rewelding of the support to conduit X-175, to upgrade to "Q" requirements. This conduit feeds solenoid valve SV203-3A, which controls blowdown from the main steam ADS valve.

Ref. FSAR Sections - None

Safety Evaluation No. 1631

PDC 81-53-RB-8 Modification of Block Walls

This PDC provided for the modification of block walls to resist design loads pursuant to NRC I&E Bulletin 80-11, which requires strengthening of block walls.

Ref. FSAR Section 12.2, Appendix C

Safety Evaluation No. 1289

PDC 81-53-TE-1 Modification of Block Walls

This PDC provided for anchorage modifications to masonry wall 226.1, pursuant to NRC I&E Bulletin 80-11, which requires strengthening of block walls.

Ref. FSAR Section 12.2, Appendix C, Appendix O

Safety Evaluation No. 1658

PDC 82-04 Removal of Nuisance Annunciators Associated with the Condensate Storage System

This PDC provided for the removal of annunciators and recorder associated with the condensate storage tank inlet header radiation monitor.

Ref. FSAR - Section 7.12

Safety Evaluation No. 1471

PDC 82-06 Install Cable and Conduit for Turbine Bearing Temperature Monitoring

This PDC provided for the installation of cable and conduit so that the turbine bearing metal temperature monitoring system can be completed.

Ref. FSAR Section - None

Safety Evaluation No. 1374

PDC 82-10 Scram Discharge Volume Modification

This PDC provided for the modification of the existing scram discharge system including headers, vent and drain piping, instrument volume and level instrumentation. This PDC also included a change to Technical Specifications.

Ref. FSAR Sections 3.4, 7.2, 7.7;

Safety Evaluation No. 1452, 1509, 1664, 1744, 1765

- PDC 82-12 Replace Turbine Vibration Recorder
- This PDC provided for the replacement of the turbine vibration recorder located on Panel C-2.
- Ref. FSAR Section - None
- Safety Evaluation No. 1424
- PDC 82-13 Upgrade Fire Doors/Dampers in Various Station Fire Areas
- This PDC provided for the installation of a fire door, fire dampers and closure springs and blade locks in fire dampers to meet the commitments of Branch Technical Position 9.5-1.
- Ref. FSAR Section - None
- Safety Evaluation No. 1423, 1756, 1766
- PDC 82-14 Enlarge Radwaste Sample Lines
- This PDC provided for the enlargement of radwaste sample lines from 3/8" O.D. to 1/2" O.D., to enable the demineralizer resin in the sample to flow more easily through the tubing.
- Ref. FSAR Sections 9.2 and 10.14
- Safety Evaluation No. 1500
- PDC 82-20A Expansion of the Sanitary System for The New Administration/Service Building
- This PDC provided for changes to the existing sanitary disposal facilities to accommodate the addition of a new administration/service building. This requires the addition of a lift station, septic tank, and associated piping.
- Ref. FSAR Section - None
- Safety Evaluation No. 1453
- PDC 82-20B Site Preparation Electrical Work for New Administration/Service Building
- This PDC provided for disconnecting and removing the 480V suppliers, plant intercommunication stations and some yard lighting fixtures from the Fabrication Shop area. It also provides electrical service for the relocated facilities in the Butler Bldg. and vicinity.
- Ref. FSAR Section - None
- Safety Evaluation No. 1454

PDC 82-30

Replacement of Pressure Switches

This PDC provided for the removal of existing Mercoid switches at the Reactor Feedpump suction line, and installation of Static-O-Ring models in their place.

Ref. FSAR Section - None

Safety Evaluation No. 1502

PDC 83-02

Install Teletector Probe Holes in Fuel Pool Demineralizer Room Blockwall

This PDC provided for the installation of three 2 1/2" diameter pipe sleeves in the north wall of the Fuel Pool Demineralizer Room.

Ref. FSAR Section - None

Safety Evaluation No. 1592

PDC 83-06

Overpressure Protection - Nitrogen Makeup System

This PDC provided for a modification to the Nitrogen Makeup Supply system by the addition of a pressure relief valve and piston check valve to limit pressure to a maximum of 125 psig.

Ref. FSAR Section 5.4

Safety Evaluation No. 1533

PDC 83-11

Replacement of GEMAC Transmitters

This PDC provided for the replacement of GEMAC transmitters with Rosemount transmitters, to improve the accuracy and stability of surveillance instrumentation. This PDC also included a change to Technical Specifications.

Ref. FSAR Sections 7.4, 7.8, 7.10, 8.9, 12 and Appendix C

Safety Evaluation No. 1547

PDC 83-13

Strengthen Fuel Pool Heat Exchanger Support Structure

This PDC provided for structural bracing of the fuel pool heat exchanger structural support which will upgrade the support to Class 1 seismic requirements.

Ref. FSAR Sections 12.2 and Appendix C

Safety Evaluation No. 1536

- PDC 83-14 Disconnect T-312 A&B Acid & Caustic Lines
- This PDC provided for disconnecting the 1" acid and caustic lines going to the Chemical Waste Receiver Tanks.
- Ref. FSAR Sections 10.10, and 9.2
- Safety Evaluation No. 1506
- PDC 83-15 Installation of a Halon 1301 Fire Extinguishing System in the Cable Spreading Room
- This PDC provided for the installation of a Halon 1301 fire extinguishing system in the Cable Spreading Room. The system is seismically supported, and the cylinder stored in Switchgear Room B. This PDC also included a change in the Technical Specifications.
- Ref. FSAR Section 10.8
- Safety Evaluation Nos. 1539, 1575, 1610, 1645, 1646
- PDC 83-16 Condensate Pump Replacement
- This PDC provided for the replacement of condensate pumps P101A, B, C, and the addition of ultrasonic type flow sensors to each condensate pump discharge line for indication and recording of flow.
- Ref. FSAR Section 11.8
- Safety Evaluation No. 1587, 1652
- PDC 83-18 Recirculation Nozzle Blockout Replacement
- This PDC provided for the replacement of the existing N1A recirculation nozzle blockout installation with a new blockout consisting of all plain site fabricated concrete masonry units.
- Ref. FSAR Appendix C
- Safety Evaluation No. 1546
- PDC 83-19B Addition, Replacement and Modification of Safety System Pipe Supports
- This PDC provided for the modification of pipe supports to prevent overstress at the torus penetration nozzles during LOCA conditions.
- Ref. FSAR Section 12, Appendices A and C
- Safety Evaluation No. 1574

- PDC 83-19C Modification of SRV Piping Supports
This PDC provided for the modification of SRV discharge piping supports to prevent the torus shell from being overstressed.
Ref. FSAR Sections 5, 12, and Appendices A, C and L
Safety Evaluation No. 1543, 1687
- PDC 83-19G Upgrade of Wetwell Vacuum Breaker
This PDC provided for replacement of the pallet, hinges, hinge shaft, gasket and hardware on the Torus Vacuum Breaker Valves.
Ref. FSAR Section 5.2 and Appendix A
Safety Evaluation No. 1670
- PDC 83-19H Replacement of Core Spray and RHR Suction Spray Strainers
This PDC provided for the replacement of two core spray and four RHR suction strainers.
Ref. FSAR Section - None
Safety Evaluation No. 1669
- PDC 83-20 Replacement of Control Room Strip Chart Recorders
This PDC provided for the replacement of malfunctioning control room strip chart recorders on main panels C-2, C-8, and C-921, for more reliable indication and monitoring of temperature, conductivity, and expansion parameters from several non-safety related systems.
Ref. FSAR Sections 4.3, 4.8, 4.9, 7.4, 7.8, 7.9, 7.11
Safety Evaluation No. 1542
- PDC 83-21A Installation of Gai-Tronics Communications System
This PDC provided for relocation of existing paging equipment and installation of new equipment in the new Administration Service Building.
Ref. FSAR Section - None
Safety Evaluation No. 1633

- PDC 83-22 Modification to Standby Gas Treatment System Power Supply
- This PDC provided for a modification to the Standby Gas Treatment system power supply to improve the reliability of terminations and decrease the maintenance problems encountered when changing components.
- Ref. FSAR Section 5.3
- Safety Evaluation No. 1560
- PDC 83-24 Replacement of Nitrogen Purge Vaporizer and Associated Control Systems
- This PDC provided for the replacement of the Nitrogen Purge Vaporizer, associated valves and controllers, to eliminate operating problems with the existing vaporizer.
- Ref. FSAR Figure 5.4-1
- Safety Evaluation No. 1573
- PDC 83-25 Replacement of Purge and Vent Isolation Valves
- This PDC provided for the replacement of Containment Drywell and Suppression Chamber purge isolation valves, and Suppression Chamber and Drywell Vent Isolation Valves and adjacent piping.
- Ref. FSAR Section 5.2 and 12
- Safety Evaluation No. 1563
- PDC 83-27 Feedwater Heater Replacement
- This PDC provided for the replacement of low pressure Feedwater Heater E-102B and its level control instrumentation. It also included replacement of the extraction steam expansion bellows on the 4th point extraction lines, Train A and B.
- Ref. FSAR Section 11.8
- Safety Evaluation No. 1593
- PDC 83-28 Replacement of Turbine Exhaust Stop Check Valve
- This PDC provided for the replacement of HPCI turbine exhaust valve 2301-74 with a new stop check valve, and HPCI pump discharge valve 2301-7 with a new swing check valve.
- Ref. FSAR Sections 6.4, 7.3, 7.4, and 5.2
- Safety Evaluation No. 1564

PDC 83-29

Replacement of RCIC Valves

This PDC provided for the replacement of RCIC turbine exhaust valve 1301-64 with a new stop check valve and replacement of RCIC pump discharge valve 1301-50 with a new swing check valve.

Ref. FSAR Section 4.7, 7.3, and 5.2

Safety Evaluation No. 1565

PDC 83-33

Modification to Reactor Building Floor

This PDC provided for the modification of structural floor framing at the 117' level of the Reactor Building to add to the floor strength of the building.

Ref. FSAR Section 12.2 and Appendix C

Safety Evaluation No. 1553

PDC 83-35

Replacement of Valves in the Main Steam Sealing System

This PDC provided for the replacement of steam supply valve MOV-S-1, and bypass valve MOV-S-2 to the turbine; and replacement of steam supply valve S-1-3 to the deaerating sparger.

Ref. FSAR Section 11.5

Safety Evaluation No. 1577

PDC 83-37

Reload Six

This PDC provided for the addition of fresh fuel to the reactor core to supply reactivity for the Cycle 7 operation of the reactor. This PDC also included a change to Technical Specifications.

Ref. FSAR Sections 3, 4, 6, 7, and 14

Safety Evaluation No. 1556, 1594, 1595

PDC 83-38

Replace Prefilter Discharge in AOG Drain Valves

This PDC provided for the replacement of the prefilter discharge and the addition of four charcoal vault line drain valves in the Augmented Offgas System.

Ref. FSAR Section 9.4

Safety Evaluation No. 1603, 1730

PDC 83-39

Valve Betterment Program

This PDC provided for the replacement of the condenser mechanical vacuum pump inlet butterfly valve S-8-1, and the vacuum water separator outlet valve AO-3712.

Ref. FSAR Section 11.4

Safety Evaluation No. 1581

PDC 83-45

Control Rod Drive Modification

This PDC provided for the installation of equalizing valves between the cooling water header and the exhaust water header, flush ports at low points of exhaust water header piping, and a flushing water supply header to the exhaust water.

Ref. FSAR Section 3.4

Safety Evaluation No. 1591

PDC 83-46

Improvement of CRD Suction

This PDC provided for the replacement of a 40 lb. spring with a 100 lb. spring in relief valve PSV 3582 to improve control rod drive suction.

Ref. FSAR Section - None

Safety Evaluation No. 1597

PDC 83-48

Refurbishment of Main Steam Isolation Valve

This PDC provided for the refurbishment of the eight Main Steam Isolation Valves with large diameter stems, and other changes to improve performance.

Ref. FSAR Section - None

Safety Evaluation No. 1584

PDC 83-54

Reactor Pressure Boundary Leak Detection System

This PDC provided for the replacement of the defective Panel C-19, "Reactor Pressure Boundary Leak Detection System" with two new permanently mounted Panels C-19A and C-19B.

Ref. FSAR Section 4.10

Safety Evaluation No. 1809, 1668

PDC 83-55

Change of Recorder Alarm Setpoint

This PDC provided for the changing of the Feedwater Level Recorder LR/FR640-26 from +44 inches to +32 inches.

Ref. FSAR Figure 7.8-2

Safety Evaluation No. 1612

PDC 83-56

Replacement of Strip Chart Recorders

This PDC provided for the changeout of three strip chart recorders at level 23' in the Reactor Building. These units monitor temperature of drywell and torus atmosphere, and moisture content in the drywell and torus atmospheres.

Ref. FSAR Figures 5.2-16 and 5.4-1

Safety Evaluation No. 1611

PDC 83-57

Recalibration of Instruments

This PDC provided for the recalibration of instruments to allow PNPS to operate under power/flow conditions in the Extended Load Limit Analysis Region. This PDC also included a change to Technical Specifications.

Ref. FSAR Table 7.5-4 and Figure 3.7-5

Safety Evaluation No. 1621

PDC 83-62

Replacement Piping for IGSCC

PDC 83-62A

Jet Pump Beam Replacement

PDC 83-62B

RHR and Core Spray Check Valve Bypass Removal

These PDC packages (and 84-56) cover the piping replacement and other related IGSCC counter measures which includes replacing Recirculation, RHR, Core Spray and Reactor Water Clean Up Piping; Nozzle Repair Program; Containment Liner Repair Program; Vessel and Piping Insulation; Decontamination and system testing other related modifications.

Primary Safety Evaluation 1764

Supplemental Safety Evaluations 1617, 1669, 1705, NOD 84-4, 1713, 1723, 1746, 1750

FSAR Sections - Various System Specific

- PDC 84-02 Replacement of Protective Sleeves - Level Switches
- This PDC provided for the replacement of protective sleeves for level switches 29-LS-3825 and 29-LS-3826 in the Salt Service Water System.
- Ref. FSAR Section - None
- Safety Evaluation No. 1624
- PDC 84-04 Modification of Grapple Hook
- This PDC provided for the addition of a stop block and modification of the grapple hook to prevent partial engagement of a control rod. This will reduce the probability of a control rod drop incident.
- Ref. FSAR Sections - None
- Safety Evaluation No. 1620
- PDC 84-07 Modify Ventilation System - Radiochemistry Laboratory
- This PDC provided for the installation of air conditioning units in the Water Chemistry and Radiochemistry Count Rooms.
- Ref. FSAR Section - None
- Safety Evaluation No. 1629
- PDC 84-11A MSIV Limit Switch Replacement
- This PDC provided for the replacement of existing MSIV limit switches and terminal blocks with qualified limit switch connector assemblies to meet environmental qualification.
- Ref. FSAR Section 4.6
- Safety Evaluation No. 1679
- PDC 84-11B Replace Limit Switches
- This PDC provided for the replacement of limit switch assemblies 2S220-44A/B connectors, rebuilding of SV220-44 limit switch and the removal of the terminal block in J-216 and its replacement with Raychem splices.
- Ref. FSAR Sections - None
- Safety Evaluation No. 1717

PDC 84-12A

Replacement of Instrument Cases

This PDC provided for the replacement of existing ITT-Barton Model 278 instrument cases with ITT- Barton Model 288A instrument cases.

Ref. FSAR Section 4.5

Safety Evaluation No. 1715

PDC 84-13A

Replacement of Yarway Switch Components

This PDC provided for the replacement of mercury switches with snap action micro-switches and Buna N O-rings with EPR O-rings for the Yarway Reactor Level Indicator switches.

Ref. FSAR Section 7.8

Safety Evaluation No. 1690

PDC 84-14A

Replacement of Solenoid Valves for HVAC and SGT Systems to Meet Environmental Qualification

This PDC provided for the replacement of existing ASCO pilot solenoid valves with functionally equivalent qualified models.

Ref. FSAR Section 10.9

Safety Evaluation No. 1788

PDC 84-16A

Replacement of Motor Operated Valves

This PDC provided for the replacement of five Limatorque MOV's, replacement of the motor on one Limatorque MOV and installation of T-drains on two Limatorque MOV's.

Ref. FSAR Sections 7.4 and 8.9

Safety Evaluation No. 1703, 1758

PDC 84-16B

Replacement of Motors

This PDC provided for the replacement of motors for actuators MO-3, 5, 6 and 10 of the HPCI system.

Ref. FSAR Sections 6.4 and 6.5

Safety Evaluation No. 1772

PDC 84-16C

Replacement of Actuators and Motors

This PDC provided for the replacement of the actuator for MO1001-47 and the motors for the actuators of MO1001-43A and MO1001-60 to establish required environmental qualification.

Ref. FSAR Section 7.4

Safety Evaluation No. 1704

PDC 84-16F

Replacement of Motors M.O. Actuators

This PDC provided for the replacement of motors for motor-operated actuators M.O. 1301-17, 25, 26, 49, 60 and 62 of the RCIC system.

Ref. FSAR Section 4.7

Safety Evaluation No. 1773

PDC 84-16G

Replacement of HPCI and RHR Motor Operator Motors

This PDC provided for the replacement of motor operator and motor operator motors on various HPCI and RHR valves to establish environmental qualification.

Ref. FSAR Sections 5.2, 6.4, 6.6, 7.3 and 7.4

Safety Evaluation No. 1757

PDC 84-16I

Replacement of Limitorque Motorized Valve Operators

This PDC provided for the replacement of four Limitorque motorized valve operators on core spray containment isolation/injection valves to establish environmental qualification.

Ref. FSAR Sections 5.2, 6.4, and 7.4

Safety Evaluation No. 1813

PDC 84-19A

Upgrade Instrumentation Racks

This PDC provided for the replacement of instrument rack existing terminal block, wires and wire terminals with environmentally qualified terminal blocks, wires and wire terminals.

Ref. FSAR Section 7.1

Safety Evaluation No. 1701

PDC 84-21

Replacement of Transformers

This PDC provided for the removal and replacement of five PCB-filled load center (non-Q) transformers with dry-type transformers.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-21A

Replacement of Transformer

This PDC provided for the removal and replacement of PCB-filled, load center (non-Q) transformer X23 with a dry-type transformer.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-21B

Replacement of Transformer

This PDC provided for the removal and replacement of PCB-filled load center (non-Q) transformer X24 with a dry-type transformer.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-21C

Replacement of Transformer

This PDC provided for the removal and replacement of PCB-filled load center (non-Q) transformer X25 with a dry-type transformer.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-21D

Replacement of Transformer

This PDC provided for the removal and replacement of PCB-filled, load center (non-Q) transformer X27 with a dry-type transformer.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-21E

Replacement of Transformer

This PDC provided for the removal and replacement of PCB-filled, load center (non-Q) transformer X28 with a dry-type transformer.

Ref. FSAR Sections 8.2 and 8.4

Safety Evaluation No. 1686

PDC 84-26

Replacement of Circulating Water Pump Casing

This PDC provided for the replacement of the circulating water pump casings with epoxy-coated casings made of austenitic stainless steel to improve integrity and reliability of the casings.

Ref. FSAR Section 11.6

Safety Evaluation No. 1641

PDC 84-28

Replacement of Feedwater Heater

This PDC provided for the replacement of low pressure feedwater heater E-102A and its level control instrumentation.

Ref. FSAR Section 11.8

Safety Evaluation No. 1642

PDC 84-32

Installation of Temperature Control Valve

This PDC provided for the installation of a temperature control valve, isolation valve and temperature controller for Recirculation Pump M-G set lube oil coolers, E-211, A and B.

Ref. FSAR Section 4.3 and Figure 10.5-1

Safety Evaluation No. 1700

PDC 84-34

Installation of Maintenance Isolation Valves

This PDC provided for the installation of maintenance isolation valves on the upstream and downstream sides of the recycle line strainer.

Ref. FSAR Figure 11.7-1

Safety Evaluation No. 1674

PDC 84-35

Replace Sparger Supports - Condenser

This PDC provided for the removal of an existing damaged recirculation and makeup sparger support, and the fabrication and installation of a new sparger support design.

Ref. FSAR Appendix C

Safety Evaluation No. 1671

PDC 84-39

Relocation of Reactor Water Sample Element

This PDC provided for the relocation of the Reactor Water Sample Element to the discharge side of the Recirculation Pumps, the removal and disposal of existing root valves and tubing, and the capping of a 3/4" stub at the existing tie-in location.

Ref. FSAR Figures 4.9 and 10.14

Safety Evaluation No. 1673

PDC 84-42

Replacement of Ground Detectors

This PDC provided for the replacement of ground detectors and undervoltage relays in DC panels D10, D16 and D17.

Ref. FSAR Section 8.6

Safety Evaluation No. 1654

PDC 84-45

Radiological Information Management System

This PDC provided for the installation of a Radiological Information Management System consisting of MV-4000, MV-8000 computer rooms and a records area room in the Administration Building.

Ref. FSAR Section - None

Safety Evaluation No. 1725

PDC 84-49

Change Pilot Discs - Target Rock Valves

This PDC provided for the changing of Stellite 6B pilot discs in the Target Rock Safety Relief Valves to Stellite 21 pilot discs.

Ref. FSAR Section 4.4

Safety Evaluation No. 1691

PDC 84-52

Modification of SGTS Sprinkler Deluge Valve

This PDC provided for the drilling, tapping and the plugging of the cover of the deluge valves, and the addition of a tee upstream of the solenoid in the pilot line, to facilitate air bleed-off.

Ref. FSAR Section - None

Safety Evaluation No. 1714

PDC 84-53

Modification of Junction Boxes

This PDC provided for the replacement of terminal blocks, wire and wire terminations, with equivalent equipment qualified for harsh environment exposure.

Ref. FSAR Section - Various System Specific

Safety Evaluation No. 1702

PDC 84-56

Drywell Restoration

This PDC provided for the replacement or recirculation of reactor vessel insulation, electrical, ventilation and ductwork modifications, and structural and control systems modifications inside the drywell. (See also PDC 83-62.)

Ref. FSAR Sections 5.2, 9.2, 10.13, 4.2, 7.12

Safety Evaluation Nos. 1732 thru 1737

PDC 84-61

Replacement of Valve

This PDC provided for the replacement of motor-operated valve MO-1201-78, located on a 4" line between the filter demineralizer and the main condenser hotwell.

Ref. FSAR Section 4.9

Safety Evaluation No. 1707

PDC 84-63

Replacement of Cable

This PDC provided for the replacement of a number of special cables within containment to establish environmental qualification required by 10CFR50.49.

Ref. FSAR Section - Various System Specific

Safety Evaluation No. 1716

PDC 84-72

Repair of Bleeder Trip Valves

This PDC provided for repairing the Bleeder Trip Valves by replacing the rock shafts and reworking the bearings and tail links.

Ref. FSAR Sections - None

Safety Evaluation No. 1741

PDC 84-74

Repair of HPCI Overspeed Governor

This PDC provided for the installation of a new tappet assembly, piston, cotter pin, and gasket in the existing HPCI overspeed governor to provide greater reliability and reduce maintenance.

Ref. FSAR Section - None

Safety Evaluation No. 1751

PDC 85-08

Install Shielding - SGTS

This PDC provided for the installation of lead shielding to reduce radiation levels at various components of the SGTS to meet equipment qualification levels.

Ref. FSAR Sections 5.3 and 7.18

Safety Evaluation No. 1848

PDC 85-10

Addition of Flood Barrier to Protect Electrical Equipment

This PDC provided for the installation of a flood barrier to protect the electrical components associated with valve MO-1001-47 from high water levels resulting from a feedwater line break in the main steam tunnel.

Ref. FSAR Section 12 and Appendix O

Safety Evaluation No. 1816, 1878

PDC 85-29

Replacement of Control Switch

This PDC provided for the replacement of a Square-D control switch and box with an Electroschwitch Series 20K switch, NEMA-4 box, and change of control station mounting structure for the RBCCW control valves to the HPCI ECCS unit coolers.

Ref. FSAR Section 10.18

Safety Evaluation No. 1871

PDC 85-39

Main Turbine Generator Auxiliary Oil Line Repair

This PDC provided for the repositioning of the relief valve from its present penetration in the control oil header to the inlet piping from the control oil header secondary speed relay.

Ref. FSAR Section - None

Safety Evaluation No. 1838

PDC 85-67

Installation of Thermal Barriers

This PDC provided for the installation of thermal barriers around Yarway Level Indicating switches LIS263-57A, 57B, 58A and 58B, and modification of the lower isolation valve handle.

Ref. FSAR Section - None

Safety Evaluation No. 1893

ATTACHMENT 2

PLANT TESTS AND TEMPORARY PROCEDURES (TP)

The following tests and Temporary Procedures (TP) did not involve an unreviewed safety question as defined in 10CFR50.59(a) or a change to a Technical Specification, with the exception of TP-85-30 which required a change to Technical Specifications.

- TP-83-50 To provide detailed instructions to station personnel for the conduct of an air blow, pressure test, and functional test on AO-4356, 3"-267 valve, 1"-73 test valve and 1"-73 drain valve and a LLRT on the 3"-267 valve and AO-4356 replaced by PDC 83-40 and PDC 83-40A.
- TP-84-61 To provide detailed instructions to station personnel for the conduct of pre-operational testing required following the replacement of pressure switches PS-3447, PS-3457 and PS-3467 in the Feedwater System by PDC 82-30.
- TP-84-97 The purpose of this procedure is to functionally check relays A44X, A44Y, A7011A, A7017A that were temporarily removed for modification work. This procedure will confirm their operability. The format of this procedure is to verify the functional check of the individual relay and then to test the scheme for integral operability.
- TP-84-106 The purpose of this procedure is to verify the proper functioning of the new RPS power supply relaying and associated breakers.
- TP-84-202 To provide detailed instructions to station personnel for the conduct of post-construction and preoperational tests required on the drywell-torus vacuum breaker upgraded under PDC 83-19G.
- TP-84-264 The purpose of this procedure is to calibrate the eleven new Westronics recorders installed under PDC 84-66.
- TP-84-274 This procedure will determine the overall operating conditions of various motor operated valves at PNPS. Should any changes be made to the operator as a result of information obtained from this testing, the final condition of the operator will likewise be verified using this procedure.
- TP-84-309 The purpose of this procedure is to provide operational test data calculations to demonstrate the operability of both Salt Service Water System loops.
- TP-85-01 To provide detailed instructions to station personnel for the conduct of testing of drywell-torus pressure boundary by use of compressed air.
- TP-85-11 The purpose of this procedure is to preclude egress of resins from the PNPS Process Building to the environment. For ALARA purposes, cleaning will be performed simultaneously with inspection. To judge performance of maintenance efforts, quantification and results will be reported and forwarded to the Chief Technical Engineer.

- TP-85-12 The purpose of this test is to demonstrate the proper operation of the A&C Automatic Blowdown solenoid valves from the main control room panel C903.
- TP-85-13 To provide the information necessary for qualified personnel to perform a Functional and Calibration Test of the Main Steam Line High Flow Sensors.
- TP-85-19 The purpose of this procedure is to provide instruction for performing a two week performance optimization program for the H₂O₂ Analyzer System (Panel C-172, C-173, C-174, and C-175).
- TP-85-21 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading of pressure switches PS-2368A, PS-2368B and PS-2360-1 per PDC 85-03.
- TP-85-22 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading, of junction box J720 per PDC 84-53.
- TP-85-26 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading of motors of VAC-204A, B, C and D to meet environmental qualification.
- TP-85-27 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading of motor operators 1301-25 and 1301-26.
- TP-85-30 This test was performed to determine the effect hydrogen injection into the reactor coolant would have on N-16 radiation levels. This test also required a change to Technical Specifications.
- TP-85-31 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading of pressure switches PS-1001-600A&B, PS-1001-601A&B, and DPT-1001-604A&B per PDC 84-17.
- TP-85-34 To provide detailed instruction to station personnel for the conduct of preoperational testing after upgrading of motor operators 1001-28A and B and 1001-29A and B.
- TP-85-38 To provide detailed instructions to station personnel for the conduct of preoperational testing of replacement solenoid valves SVL 61, SVL 82, and SVL 83, on the HVAC and SGT systems.
- TP-85-40 This procedure provides a checklist for the visual examination of plant components to identify leakage in piping and nozzles.
- TP-85-52 To provide detailed instructions to station personnel for the conduct of preoperational testing after upgrading of motor operators 1001-7A, 1001-7V, 1001-7C and 1001-7D.

- TP-85-62 The purpose of this test is to demonstrate the HPCI pump operability and flow rate at 1000 psig.
- TP-85-75 To provide detailed instructions to station personnel to gather data before upgrading of motors of VAC-204A, B, C, and D to meet environmental qualification.
- TP-85-114 The purpose of this procedure is to provide a checklist for station personnel for the movement of fuel in the spent fuel pool.
- TP-85-129 The purpose of this procedure to provide control of visual inspection of limitorque motor operator components.
- TP-85-274 This procedure will determine the overall operating conditions of various motor operated valves at PNPS. Should any changes be made to the operator as a result of information obtained from this testing, the final condition of the operator will likewise be verified using this procedure.
- TP-85-
MMG-1 To provide detailed instructions to station personnel for the conduct of preoperational testing required on the components installed on the Radiological Information Management System modification.

NRC CORRESPONDENCE REVIEW SHEET

Ltr. # _____

Date Required: 7/31/86²²

Ref. # _____

Subject: Report of Changes, Tests, and Experiments (10CFR 50:59(b))

Commitment Closed-Out/Addressed:

References, if any:

Initiated By: GG Whitney

Safety Evaluation #: NA

COMMENTS
 (Please initial comments)

(✓)	Date Sent for Review	Title	Initials	Date	*Commitment Made (✓)	
NA		c.o.o. Sr. VP Nuclear				
**		VP Nuc. Oper.				
✓		VP Nuc. Eng. & QA	<i>YAT</i>	7/17/86		
✓	7/15/86	NEDM	<i>RUF</i>	7/21/86		Subject to incorp of Pat Doady's comments
✓	7/15/86	NOM				no comment per letter 7/21 MTR
✓	7/9/86	RA+P GL	<i>JOK</i>	7/16/86		OK per comments resolved.
✓		RA+P Eng.	<i>GL</i>	7/8/86		
✓		RA+P Engr	<i>WGC</i>	7/8/86	No.	Proved.
		S&SA GL	<i>JR MREB</i>	7/21/86		
		S&SA Engr.	<i>PJD</i>	7/21/86		Comments on Attachments Pages 1, 9, 15, AND 16

*See back for Commitment Description

ORC Review & Approval: NA
 Meeting No. _____ Date _____

NSRAC Review: NA
 Meeting No. _____ Date _____

made corrections
 pg 1, 9
 add'l PDC's
 83-40A, 84-29
 and 84-43 not
 incorporated -
 reported 1985!

Exhibit 2 (front of form)

**Revision

NRC CORRESPONDENCE REVIEW SHEET

Ltr. # _____

Date Required: 7/31/86²²

Ref. # _____

Subject: Report of Changes, Tests, and Experiments (10CFR 50.59(b))

Commitment Closed-Out/Addressed: _____

References, if any: _____

Initiated By: GGWh. Tracy

Safety Evaluation #: NA

COMMENTS
 (Please initial comments)

(✓)	Date Sent for Review	Title	Initials	Date	*Commitment Made (✓)	
		Sr. VP Nuclear				
		VP Nuc. Oper.				
		VP Nuc. Eng. & QA				
		NEDM				
✓		NOM				
		RA&P GL				
		RA&P Eng.	<u>gaw</u>	<u>7/8/86</u>		
		RA&P Engr	<u>WGC</u>	<u>7/8/86</u>	<u>No.</u>	<u>Proofed.</u>
		S&SA GL	<u>W/B for REC</u>	<u>7/17/86</u>	<u>NO (connects to drift)</u>	RECOMMEND REFERENCE: FSAR SECTIONS ONLY, DI DETAIL TABLE, FIGURE, & SUBSECTION #6.

*See back for Commitment Description

ORC Review & Approval: NA
 Meeting No. _____ Date _____

NSRAC Review: NA
 Meeting No. _____ Date _____

**Revision

Exhibit 2 (front of form)

Executive Summary

10CFR50.59 (Title 10, Part 50, Section 50.59 of the Code of Federal Regulations) requires the licensee of a nuclear utilization facility to make an annual report of changes, tests, and experiments made at the facility that did not require prior approval by the NRC.

The attached report is the compilation of the changes made at PNPS for the year 1985. A brief description of the changes and reference to their safety evaluations approved by the ORC (Operations Review Committee) is listed.

Some changes were started in prior years and were determined to have been completed during 1985. This accounts for some plant design changes (PDC's) that have "old" numbers, i.e.: 77, 79, 81, etc.