

October 17, 2002

Mr. Robert M. Bellamy
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, Massachusetts 02360-5599

SUBJECT: PILGRIM NUCLEAR POWER STATION - NRC INSPECTION
REPORT 50-293/02-008

Dear Mr. Bellamy:

On September 27, 2002, the NRC completed a team inspection at the Pilgrim Nuclear Power Station. The enclosed report documents the results of that inspection which were discussed with Mr. C. Dugger, and other members of your staff, on September 27, 2002.

The inspection examined activities conducted under your license as they relate to safety system design and performance capability of the low pressure coolant injection and reactor building closed cooling water systems, and compliance with the Commission's rules and regulations. The inspection consisted of a review of selected procedures and records, examination of components and systems, observation of activities, and interviews with site personnel.

On the basis of the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Lawrence T. Doerflein, Chief
Systems Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 50-293/02-008

Attachment 1: Supplemental Information

Mr. Robert M. Bellamy

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cc w/encl: M. Krupa, Director, Nuclear Safety & Licensing
W. Riggs, Director, Nuclear Assessment Group
D. Tarantino, Nuclear Information Manager
B. Ford, Regulatory Affairs Department Manager
J. Fulton, Assistant General Counsel
R. Hallisey, Department of Public Health, Commonwealth of Massachusetts
The Honorable Therese Murray
The Honorable Vincent deMacedo
Chairman, Plymouth Board of Selectmen
Chairman, Duxbury Board of Selectmen
Chairman, Nuclear Matters Committee
Plymouth Civil Defense Director
D. O'Connor, Massachusetts Secretary of Energy Resources
J. Miller, Senior Issues Manager
Office of the Commissioner, Massachusetts Department of
Environmental Protection
Office of the Attorney General, Commonwealth of Massachusetts
Chairman, Citizens Urging Responsible Energy
S. McGrail, Director, Commonwealth of Massachusetts, SLO Designee
Electric Power Division
Commonwealth of Massachusetts, Secretary of Public Safety
R. Shadis, New England Coalition Staff

Mr. Robert M. Bellamy

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OFFICE	RI/DRS	RI/DRP	RI/DRS		
NAME	MModes	CAnderson	LDoerflein		
DATE	10/11/02	10/11/02	10/17/02	10/ /02	10/ /02

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-293

License No: DPR-35

Report No: 50-293/02-008

Licensee: Entergy Nuclear Operations, Inc.

Facility: Pilgrim Nuclear Power Station

Location: 600 Rocky Hill Road
Plymouth, MA 02360

Inspection Period: September 9 to September 27, 2002

Inspectors: M. Modes, Team Leader
T. Burns, Reactor Inspector
M. Ferdas, Reactor Inspector
F. Jaxheimer, Reactor Inspector
G. Skinner, Contractor

Approved By: Lawrence T. Doerflein, Chief
Systems Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000293/02-008; on 09/09-09/27/2002; Pilgrim Nuclear Power Station, Engineering Team Inspection Report.

The inspection was conducted by four regional based reactor inspectors and an NRC contractor. This inspection identified no significant findings. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/reactors/operating/oversight.html>

A. Inspector Identified Findings

None

B. Licensee Identified Violations

None

Report Details

1. REACTOR SAFETY (Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity)

1R21 Safety System Design and Performance Capability (IP 71111.21)

a. Inspection Scope

The NRC evaluated the residual heat removal (RHR) system in the low pressure coolant injection (LPCI) mode of operation aligned in response to a large break loss-of-coolant accident. The inspectors also reviewed systems that interface with the RHR LPCI during the event, such as the reactor building closed cooling water (RBCCW) system. The inspectors reviewed the design basis documents, Technical Specifications, Updated Final Safety Analysis Report, and design output documents associated with RHR LPCI and RBCCW. The design output documents reviewed included system calculations, piping and instrumentation drawings, and one-line diagrams. This review was performed to determine whether the system and component functional requirements during normal, abnormal, and accident conditions were being met and to ensure consistency with various design documents, design specifications, and control diagrams.

The inspectors specifically reviewed the design capability of major components of the systems including the RHR pumps, RHR heat exchangers, RHR heat exchanger bypass valves, LPCI injection valves, RHR room coolers, and RBCCW pumps. Systems that support these major components, such as the 4160V system, were also reviewed. These reviews were performed to determine if the design basis was in accordance with the licensing commitments, regulatory requirements, and design output documents.

Selected mechanical and electrical calculations and analyses were reviewed to verify the appropriate assumptions were used and that the assumptions applied to the current system and plant configuration. The inspectors verified adequate engineering methods were utilized and the technical bases supported the conclusions. The inspectors selected some design and electrical calculations and performed independent calculations to evaluate their adequacy. The inspectors also verified that recent plant modifications would not adversely affect the LPCI or RBCCW systems. The inspectors reviewed the affect of degraded voltage on the 4160V system, including the degraded voltage detection and protection scheme, to verify that adequate protection existed.

The inspectors reviewed the procedures used to operate the RHR and RBCCW systems in order to verify that procedure actions match design analysis assumptions. The types of procedures reviewed included: system operating procedures, abnormal and emergency operating procedures, alarm responses, and surveillance tests. Surveillance test acceptance criteria and component performance data were compared with design analysis limits to determine if the design margin of the system was maintained and properly monitored. The inspectors reviewed the training lesson material for operator training to ensure they appropriately describe the design limits, functions and design features of the RHR and RBCCW systems.

Several walkdowns of accessible portions of the RHR and RBCCW systems were performed to verify the physical installation of the system and to verify consistency with

design documents, calculations, assumptions, and installation specifications. During these walkdowns the inspectors examined the equipment material condition, and physical line-up of major components, including pumps, valves, piping, supports, heat exchangers, instrumentation, and breakers. The inspectors utilized walkdowns to verify that the procedures were adequate to accomplish the intended tasks and that the appropriate equipment was staged at the specified locations to assist operators in performing the appropriate manual actions when required by station procedures. The inspectors also interviewed site personnel, including licensed and non-licensed operators, system engineers, and maintenance personnel, regarding the operation and performance of the RHR and RBCCW systems.

The inspectors observed the normal system environmental conditions to verify plant conditions were bounded by the equipment qualification assumptions. Inspectors reviewed the administrative controls on shielding packages, temporary modifications, platforms and scaffolding, and equipment drains to assure physical system protection is maintained for earthquake, fire and flooding as described in design documents.

Preventive maintenance activities were reviewed to verify that maintenance was performed as scheduled using controlled procedures and that individual components and the overall system met its design basis function during the maintenance evolution. The inspectors evaluated a sample of surveillance and post maintenance test results to verify system capability. The inspectors reviewed selected reports of nondestructive examination of system components where degradation would result in an increase in risk to core damage to verify compliance with the American Society for Mechanical Engineers Boiler and Pressure Vessel Code, Section XI.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed a sample of condition reports associated with the RHR and RBCCW systems, as identified in Attachment 1, to verify the licensee was identifying issues at an appropriate threshold, entering them in the corrective action program, and taking appropriate corrective actions.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

The inspectors presented the inspection results to Mr. C. Dugger and other members of licensee management at the conclusion of the inspection on September 27, 2002.

The inspectors asked the licensee whether any materials examined during the inspection should be considered propriety. Some design basis documents were marked as proprietary by the vendor supplying the documents to the licensee. These documents were used in performing this inspection and either destroyed or returned to the licensee. The inspectors verified that the inspection report does not contain proprietary information.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. Key Points of Contact

T. McHugh, Nuclear Plant Operator (unlicensed)
P. Harizi, Senior Design Engineer
G. Choquette, RBCCW System Engineer
D. Rydman, RHR System Engineer
J. Sabina, IST Coordinator
C. Littleton, Senior Engineer PRA

b. List of Documents Reviewed

Calculations

M-1036, Rev 0, External corrosion evaluation of RBCCW pump suction header piping
M-710, Rev 0, Calculation for RBCCW and RHR heat exchanger performance testing
M-667, Rev 2, RHR System Hydraulic Analysis Using PROTO-FLO™ Version 1.02
M-770, Rev 0, RBCCW System Hydraulic Analysis
M-662, Rev 4, RHR and Core Spray Pump NPSH and Suction Pressure Drop
M-734, Rev 2, RHR and Core Spray Pump Suction Strainer Debris Head Loss NPSH Evaluation
M-664, Rev 1, Containment Heat Removal
SUDDS/RF# 97-84, Evaluation of RHR Heat Exchanger At 5600 gpm
SUDDS/RF# 97-96, Analysis of Design Basis Events for Containment Heat Removal
SUDDS/RF# 93-44, Design Basis for LOCA/ECCS
SUDDS/RF# 90-63, SAFER/GESTR Analysis
SUDDS/RF# 86-182, Review of Fire Protection Engineering Evaluation #12& Impell Calculation
IN1-215, Rev 3, Uncertainty Calculation, RHR Flow Indicators FI-1040-11A & B
PS-65, Revision 1, Station Service Study - Voltage Profiles of Safety Related Systems Down to 480V Motor Control Centers for Pilgrim Power Station Unit No. 1
PS-65A, Revision 0, Degraded Voltage
PS-69A, Revision 0, Degraded Voltage Analysis on 480V MCC Control Circuits
PS-64, Revision 0, Degraded Voltage - Cable Impedance
PS-30, Revision 0, 480 Volt Breaker Coordination /Protection
PS-123, Revision 6, Electrical Performance and Stroke Time Evaluation of Priority 1 DC MOVs
PS-128, Revision 0, Setpoint Calculation for CS & RHR Pump Auto Sequence Timers
PS-132, Revision 1, Electrical Performance and Stroke Time Evaluation of Priority 2 AC MOVs
PS-133, Revision 2, Electrical Performance and Stroke Time Evaluation of Priority 3 AC MOVs
PS-133, Revision 2, Electrical Performance and Stroke Time Evaluation of Priority 3 AC MOVs
PS-134, Revision 2, Electrical Performance and Stroke Time Evaluation of Priority 4 AC MOVs
PS-135, Revision 0, Electrical Performance and Stroke Time Evaluation of Priority 4 AC MOVs
Calculation PS-147, Revision 1, Degraded Voltage Relays - Revised Voltage Setpoint
PS-145, Revision 1, Degraded Voltage Trip Relays - Setpoint for Time Delay
PS-152, Revision 0, AC MCC Voltage for GL89-10 MOV Evaluations
PS-230, Revision 1, Timing Calculation to Power Emergency Buses During LOCA

Drawings/Isometrics

2905F 345KV Single Line Meter and Relay Diagram
M1H4-4, Sheet 1, Process Diagram Residual Heat Removal System
M1HA6, Rev 2, "As-Built" Piping Isometric Residual Heat Removal System
MI00BC27I-I, Residual Heat Removal Supply to Reactor Recirculation System Loop B
C120, Sheet 1, Typical Concrete Block Wall Details
C187, Sheet 2, Reactor Auxiliary Bay Foundation Elevations and Sections
M215, Sheets 1 through 4, P&ID Cooling Water System Reactor Building
M215, Sheet 5, Composite P&ID Cooling Water System Reactor Building
M218, Sheet 1, P&ID Fire Protection System
M241, Sheet 1, PDCR # 86-30, Markup of RHR Piping and Instrumentation Diagram
M241, Sheet 2, PDCR # 86-30, Markup of RHR Piping and Instrumentation Diagram
SK-M-86-30-001, RHR Pump P-203B,C Discharge Check Valve Bypass Modification
E1, Revision E18, Single Line Diagram Station
E7, Revision E22, Single Line Meter and Relay Diagram 4160V System
E9, Revision E52, Single Line Meter and Relay Diagram 480V System - Load Centers & Motor Control Centers B10 & B20
E10, Revision E36, Single Line Diagram 480V System - Load Centers & Motor Control Centers B10 & B20
E11, Revision E38, Single Line Diagram 480 Volt System - Motor Control Centers B13, B22, B23, B25 & B26
E12, Revision E30, Single Line Diagram 480 Volt System - Motor Control Centers B16, B19, B21 & B24
E5-200 Sheet 1, Revision E6, 4160V Switchgear Relay Settings
E5-200 Sheet 2, Revision E11, 4160V Switchgear Relay Settings
E5-200 Sheet 4, Revision E7, 4160V Switchgear Relay Settings
E5-200 Sheet 5, Revision E7, 4160V Switchgear Relay Settings
E5-200 Sheet 7, Revision E1, 4160V Switchgear Relay Settings
E5-200 Sheet 9, Revision E2, 4160V Switchgear Relay Settings
E5-200 Sheet 10, Revision E3, 4160V Switchgear Relay Settings
E11-13-2, Revision E2, Schematic Diagram 250VDC Battery Chargers D13 and D15
E11A1 Sh1, Revision E1, Outline Drawing 125V DC Battery Charger D11, D12, D14
E17 Sh. 1, Revision E13, Schematic Meter & Relay Diagram 4160V System
E18, Revision E14, Schematic Diagram Diesel Generator Load Shedding
E28, Revision E12, Schematic Diagram Typical Breaker Wiring 4160V System
E35, Revision E11, Schematic Diagram 4160V System Auxiliary Relays & Misc Schemes
E38, Revision E12, Schematic Diagram 4160 V System Breakers 152-504 & 152-604
E170, Revision E10, Schematic Diagram Salt Water Service System
E176 Sh 1, Revision E8, Schematic Diagram Reactor Building Closed Cooling Water System
E176 Sh 2, Revision E8, Schematic Diagram Reactor Building Closed Cooling Water System
E5001, Revision E7, Schematic Diagram RHR System Discharge to Radwaste Isolation Valve
E5003, Revision E12, Electrical Schematic Diagram Residual Heat Removal System Motor Operated Valves
E5005, Revision E11, Electrical Schematic Diagram Residual Heat Removal System Motor Operated Valves
E5007, Revision 7, Schematic Diagram RHR Heat Exchanger Bypass Motor Operated Valves
E5010, Revision E12, Schematic Diagram Residual Heat Removal System Motor Operated

Valves

E5012, Revision E13, Schematic Diagram RHR System Valves
E5013, Revision E6, Schematic Diagram RHR System Discharge to Radwaste Valve
E5028, Revision E0, Schematic Diagram RHR System Valve MO1001-19
E5027, Revision E0, Schematic Diagram RHR System Valves MO1001-7C & MO1001-7D
E5029, Revision 0, Schematic Diagram RHR System Valves MO1001-43C & MO1001-43D
M1K1-8, Revision E15, Functional Control Diagram Core Spray System
M1K2-4, Revision E1, Process Diagram Core Spray System
M1K3-15, Revision E24, Elementary Diagram Core Spray System
M1K4-11, Revision E16, Elementary Diagram Core Spray System
M1K5-11, Revision E13, Elementary Diagram Core Spray System
M1K6-8, Revision E11, Elementary Diagram Core Spray System
M1K7-7, Revision E10, Elementary Diagram Core Spray System
M1K16, Revision E7, Elementary Diagram Core Spray System
M1H1-7BC Sh 1, Revision E12, Functional Control Diagram Residual Heat Removal System
M1H1-7BC Sh 2, Revision E1, Functional Control Diagram Residual Heat Removal System
M1H2-6 Sh 2, Revision E10, Functional Control Diagram Residual Heat Removal System
M1H3-6, Revision E11, Functional Control Diagram Residual Heat Removal System
M1H4-4 Sh 1, Revision E7, Process Diagram Residual Heat Removal System
M1H4-4 Sh 2, Revision E7, Process Diagram Residual Heat Removal System
M1H5-1-15 Sh 1, Revision E17, Elementary Diagram Residual Heat Removal System
M1H6-9 Sh 2, Revision E19, Elementary Diagram Residual Heat Removal System
M1H7-12 Sh 3, Revision E21, Elementary Diagram Residual Heat Removal System
M1H8-10 Sh 4, Revision E20, Elementary Diagram Residual Heat Removal System
M1H9-12 Sh 5, Revision E19, Elementary Diagram Residual Heat Removal System
M1H10-10 Sh 6, Revision E16, Elementary Diagram Residual Heat Removal System
M1H11-8 Sh 7, Revision E12, Elementary Diagram Residual Heat Removal System
M1H12-8 Sh 8, Revision E16, Elementary Diagram Residual Heat Removal System
M1H13-6 Sh 9, Revision E7, Elementary Diagram Residual Heat Removal System
M1H-14-8 Sh 10, Revision E13, Elementary Diagram Residual Heat Removal System
M1H15-8 Sh 11, Revision E12, Elementary Diagram Residual Heat Removal System
M1H16-8 Sh 12, Revision E13, Elementary Diagram Residual Heat Removal System
M1H17-5 Sh 13, Revision E8, Elementary Diagram Residual Heat Removal System
M1H18-6 Sh 14, Revision E12, Elementary Diagram Residual Heat Removal System
M1H19-7 Sh 15, Revision E9, Elementary Diagram Residual Heat Removal System
M1H20-4 Sh 16, Revision E7, Elementary Diagram Residual Heat Removal System
M1H39 Sh 17, Revision E15, Elementary Diagram Residual Heat Removal System
M1H40 Sh 18, Revision E16, Elementary Diagram Residual Heat Removal System
M1H41 Sh 19, Revision E9, Elementary Diagram Residual Heat Removal System
SE155 Sh 1, Revision E39, Station Electrical Single Line Composite Diagram 4.16KV & 48 V-
AC Systems
SM-440, Revision E2, Functional Description Ventilation Systems MCC Enclosures

Condition Reports

CR-PNP-2000-01409	CR-PNP-2000-02802	CR-PNP-2000-02988
CR-PNP-2001-09145	CR-PNP-2001-00452	CR-PNP-2001-04333
CR-PNP-2001-04014	CR-PNP-2001-04094	CR-PNP-2001-09145
CR-PNP-2002-11632*	CR-PNP-2002-11261	CR-PNP-2002-09426
CR-PNP-2002-09423	CR-PNP-2002-09813	CR-PNP-2002-10207
CR-PNP-2002-10273	CR-PNP-2002-10436	
CR-PNP-2002-11612*	CR-PNP-2002-11621*	CR-PNP-2002-11635
CR-PNP-2002-11786*	CR-PNP-2002-11787*	CR-PNP-2002-11814*
CR-PNP-2002-11817*	CR-PNP-2002-11820*	CR-PNP-2002-11829*
CR-PNP-2002-11831*	CR-PNP-2002-11832*	CR-PNP-2002-11833*
CR-PNP-2001-02928	CR-PNP-2002-11734	

* Correct Actions created as a consequence of NRC inquiries during this inspection.

Examination Reports

VT-30-01001 Data Sheet, Visual examination of RBCCW component HE-30-7PS, Stanchion
 VT-30-01010 Data Sheet, Visual examination of RBCCW component H-30-1-62SA, Anchor
 UT Examination Data Sheet, RHR, HL-10-2-1E Pipe-to-Elbow
 UT Examination Data Sheet, RHR, GB-10-15-1E Tee-to-Tee
 MT Examination Data Sheet, RHR, HL-10-2-1E Pipe-to-Elbow
 MT Examination Data Sheet, RHR, GB-10-15-1E Tee-to-Tee

Maintenance Records

MR01114443, RHR "B" Injection Piping noisy
 MR02104820, Disassemble and remove check valve disk
 MR01109459, Re-coat RBCCW pump suction headers
 MR01102755, Pump suction valve 30-HO-37 not leak tight
 MR10001439, RBCCW "B" discharge valve will not remain full closed
 MR01117754, "B" RBCCW HX outlet has broken position indicator
 MR01116967, Pump has leak on mechanical seal while running
 MR01108097, RBCCW Heat exchanger inspection and repair

Procedures

1.4.59, Rev 1, Heat Stress Management
 1.5.15, Rev 9, Seismic Evaluation and Administrative Control of Scaffolding
 1.8, Rev 33, Master Surveillance Tracking Program
 2.1.16, Nuclear Power Plant Operator Tour
 2.2.5, Rev 14, 23kV Shutdown Transformer
 2.2.19, Rev 81, Residual Heat Removal
 2.2.19.5, Rev 9, RHR Modes of Operation for Transients
 2.2.25, Rev 44, Attachment 8, Fire Water Storage Tank Manual Fill
 2.4.42, Rev 20, Loss of RBCCW

5.3.3, Rev 15, Loss of All Service Water
 5.3.25, Rev 11, Primary Containment Fill
 5.3.26, Rev 13, RPV Injection During Emergencies
 3.M.3-29, Rev 17, Shutdown Transformer and 23kV Relay Calibration and Functional Test
 8.1.1.1, Rev 14, Inservice Pump and Valve Testing Program
 8.1.11.3, Rev 5, Residual Heat Removal A Loop Valve Cold Shutdown Operability
 8.1.11.4, Rev 6, Residual Heat Removal B Loop Valve Cold Shutdown Operability
 8.1.26.3, Rev 5, ASME Code Class 2 & 3 Safety Valve and Relief Valve Periodic Tests
 8.M.3-1, Rev 33, Special Test for Automatic ECCS Load Sequencing of Diesels and Shutdown Transformer with simulated LOOP and Special Shutdown Transformer Load Test
 8.5.2.2.1, Rev 24, LPCI System Loop A Pump and Valve Quarterly Operability
 8.5.3.1, Rev 35, RBCCW Pump Operability and Flow Rate Tests
 8.5.3.14, Rev 14, Salt service water flow rate operability test
 8.5.3.14.2, Rev 1, RHR heat exchanger thermal performance test
 EOP-01, Rev 7, RPV Control
 EOP-02, Rev 7, RPV Control, Failure-to-Scram
 EOP-03, Rev 6, Primary containment Control
 SAG-01, Rev 0, RPV and Primary Containment Flooding
 3.M.3-4, Revision 24, Insulation Test
 2.4.16, Revision 27, Distribution Alignment Electrical System Malfunctions
 2.4.144, Revision 24, Degraded Voltage
 8.Q.4-1, Revision 10, MCC Enclosure Maintenance

Miscellaneous

RFO 14 Scheduled component inspections for RHR and RBCCW systems
 ENN-li-102, Rev 0 Entergy Nuclear Northeast (ENN) Corrective Action Process
 SO 00-07, Rev 0, Operations Standing Order-RBCCW heat exchanger
 SUDDSRF 00-75, Rev 0, Independent Review of Operability Evaluation OE-00-016 and 022
 RBCCW Work Order Tracking Report 2001/2002 for RBCCW Pumps 202A,B,C,D,E and F
 RHR Work Order Tracking Report 2001/2002 for RHR pumps 203A,B,C and D
 PNPS System Report Card 2nd Quarter 2002 - Residual Heat Removal
 PNPS System Report Card 2nd Quarter 2002 - Reactor Building Closed Cooling Water
 Vendor Manual V-0348, Rev 6, Bingham Pumps
 Vendor Manual V-0309, Rev 38, Ingersoll-Rand Pumps
 Vendor Manual V-0367, Rev 7, GE Induction Motors
 Training Reference Text - Reactor Building Closed Cooling Water
 Training Reference Text - Residual Heat Removal System

Problem Reports

PR 01.9542.00 RHR loop "B" injection piping noisy and warm
 PR 95.9417.01 Design Basis Analysis Discrepancy For ECCS NPSH
 PR 97.3116.00 RBCCW Engineering Hydraulic Analysis Did Not Adequately Address Instrument Errors

Design Documents

SDBD-30A, Rev E0, BCCW System Design Basis Document
 SDBD-10, Rev E0, RHR System Design Basis Document
 TDBD-113, Rev E0, Topical Design Basis Document For Instrument Uncertainty
 Technical Specification 3/4.5 Core and Containment Cooling Systems
 FSAR 4.8 Residual Heat Removal System
 FSAR 6.5.2.6 Low Pressure Coolant Injection
 Specification E-536, Environmental Parameters for use in the EQ of Electric Equipment
 Specification M549-ED, Design, Procurement, Installation and QA Requirements for Thermal
 Insulation for piping located outside the Drywell
 FRNE #00-01-62, Application of Permanent Shielding to RHR piping in A RHR Valve room

Engineering Evaluations

EE 02-009, Engineering evaluation of 10CFR Part 21.21 (b), Model AK25 circuit breaker
 EE 00-022, DP across the RBCCW heat exchanger (E209A/B) above acceptance criteria
 FPPE-12, Rev, Removable Blockwall RBCCW "A" and HPCI Blowout Compartment
 ERM # 90-029, IE87-10 Water hammer

Correspondence

NEPOOL Letter dated January 27, 1996, T. J. Witowski Jr. to NPEX Transmission Operating
 Guide Recipients, Eastern REMVEC Low Voltage Guide (ERLVG)
 Boston Edison Company Letter, G. Carl Andognini to Mr. Thomas A. Ippolito (USNRC), dated
 March 28, 1980, Conference Call Review on PNPS Electrical Power Systems

c. List of Acronyms

RHR	residual heat removal
LPCI	low pressure coolant injection
RBCCW	reactor building closed cooling water