UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

July 25, 2003

Harold B. Ray, Executive Vice President
San Onofre, Units 2 and 3
Southern California Edison Co.
P.O. Box 128, Mail Stop D-3-F
San Clemente, California 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION - NRC INTEGRATED INSPECTION REPORT 50-361/03-03; 50-362/03-03

Dear Mr. Ray:

On June 28, 2003, the NRC completed an inspection at your San Onofre Nuclear Generating Station, Units 2 and 3, facility. The enclosed report documents the inspection findings which were discussed on July 2, 2003, with Mr. D. Nunn and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. In addition, the NRC identified two issues that were evaluated under the risk Significance Determination Process as having very low safety significance (Green). The NRC has also determined that violations are associated with these issues. These violations are being treated as noncited violations (NCVs), consistent with Section VI.A of the Enforcement Policy. These NCVs are described in the subject inspection report. If you contest the violation or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the San Onofre Nuclear Generating Station, Units 2 and 3, facility.

Since the terrorist attacks on September 11, 2001, NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures," and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by order. Phase 1 of TI 2515/148 was completed at all commercial power nuclear power plants during Calender Year 2002 and the remaining inspection activities for San Onofre have been completed. The NRC will continue to monitor overall safeguards and security controls at San Onofre.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if any, will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of 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).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Kriss M. Kennedy, Chief
Project Branch C
Division of Reactor Projects

Dockets: 50-361
50-362
Licenses: NPF-10
NPF-15

Enclosure:
NRC Inspection Report
50-361/03-03; 50-362/03-03
w/attachment: Supplemental Information

cc w/enclosure:
Chairman, Board of Supervisors
County of San Diego
1600 Pacific Highway, Room 335
San Diego, California 92101

Gary L. Nolff
Power Projects/Contracts Manager
Riverside Public Utilities
2911 Adams Street
Riverside, California 92504

Eileen M. Teichert, Esq.
Supervising Deputy City Attorney
City of Riverside
3900 Main Street
Riverside, California 92522

Joseph J. Wambold, Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

David Spath, Chief
Division of Drinking Water and
Environmental Management
California Department of Health Services
P.O. Box 942732
Sacramento, California 94234-7320

Michael R. Olson
San Onofre Liaison
San Diego Gas & Electric Company
P.O. Box 1831
San Diego, California 92112-4150

Ed Bailey, Radiation Control Program Director
Radiologic Health Branch
California Department of Health Services
P.O. Box 942732 (MS 178)
Sacramento, California 94234-7320

Mayor
City of San Clemente
100 Avenida Presidio
San Clemente, California 92672

James D. Boyd, Commissioner
California Energy Commission
1516 Ninth Street (MS 34)
Sacramento, California 95814

Douglas K. Porter, Esq.
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Dwight E. Nunn, Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

Dr. Raymond Waldo
Southern California Edison Company
San Onofre Nuclear Generating Station
P. O. Box 128
San Clemente, California 92674-0128

A. Edward Scherer
Southern California Edison
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

Technical Services Branch Chief
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

Electronic distribution by RIV:
Acting Regional Administrator **(TPG)**
DRP Director **(ATH)**
Acting DRS Director **(ATG)**
Senior Resident Inspector **(CCO1)**
Branch Chief, DRP/C **(KMK)**
Senior Project Engineer, DRP/C **(WCW)**
Staff Chief, DRP/TSS **(PHH)**
RITS Coordinator **(NBH)**
Regional State Liaison Officer (**WAM**)
Mel Fields **(MBF1)**
SONGS Site Secretary **(SFN1)**

ADAMS: ■ Yes ☐ No Initials: __kmk____
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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets:	50-361 50-362
Licenses:	NPF-10, NPF-15
Report:	50-361/03-03 and 50-362/03-03
Licensee:	Southern California Edison Co. (SCE)
Facility:	San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS)
Location:	5000 S. Pacific Coast Hwy. San Clemente, California
Dates:	March 30 through June 28, 2003
Inspectors:	C. C. Osterholtz, Senior Resident Inspector, Reactor Projects Branch C M. A. Sitek, Resident Inspector, Reactor Projects Branch C G. A. Pick, Senior Physical Security Inspector P. A. Goldberg, Senior Reactor Inspector, Division of Reactor Safety P. J. Elkmann, Emergency Preparedness Inspector N. L. Salgado, Senior Resident Inspector, Reactor Projects Branch D
Approved By:	Kriss M. Kennedy, Chief, Project Branch C Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000361/2003003, 05000362/2003003, 03/30 - 06/28/2003; San Onofre Nuclear Generating Station, Units 2 & 3; Integrated Resident and Regional Report; Maintenance Risk Assessments and Emergent Work; changes to Emergency Plan; and Emergency Action Levels.

The report covered a 3-month period of inspection by resident inspectors and regional inspectors. Two Green noncited violations and one Severity Level IV violation were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, “Significance Determination Process.” Findings for which the Significance Determination Process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, “Reactor Oversight Process,” Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, because the licensee implemented inadequate corrective actions to address several instances where incorrect oil was used in safety-related equipment. The inadequate corrective actions resulted in the introduction of incorrect bearing lubricating oil in Auxiliary Feedwater Pump 2P504 during an oil change.

  The inspectors determined that the finding had a credible impact on the mitigating systems cornerstone because it resulted in an unnecessary extension of the unavailability of Auxiliary Feedwater Pump 2P504. The issue was determined to be more than minor because, if left uncorrected, the availability and reliability of a portion of the auxiliary feedwater system could be compromised in that excessive pump bearing temperatures could have been reached. Furthermore, the inadequate corrective actions could increase the likelihood of incorrect oil being introduced in safety-related equipment. The finding was determined to have very low safety significance because Auxiliary Feedwater Pump 2P504 was restored to operable status within its Technical Specification allowed outage time (Section 1R13).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, because the licensee failed to implement adequate corrective actions following the identification of a leaking check valve in the Unit 3 low pressure safety injection system in May 2001, which resulted in the unnecessary pressurization of the Unit 3 low pressure safety injection header and challenged its associated relief valve.

  The inspectors determined that the issue had a credible impact on the mitigating systems cornerstone because it resulted in the unnecessary pressurization of the

Unit 3 low pressure safety injection header and the cycling of its associated relief valve. The issue was determined to be more than minor because, if left uncorrected, it would become a more significant safety concern in that the licensee would continue to unknowingly pressurize the low pressure safety injection header and challenge its associated relief valve. As a result, the reliability of the relief valve and hence the low pressure safety injection header could be compromised. The finding was determined to have very low safety significance because the relief valve maintained the low pressure safety injection header pressure below the American Society of Mechanical Engineers code pressure limit and the safety function of the low pressure safety injection header was maintained (Section 1R13).

Cornerstone: Emergency Preparedness

- Severity Level IV. Between March 3 and April 25, 2003, the licensee implemented a change to Emergency Action Level C3 which constituted a decrease in effectiveness of the emergency plan because two conditions which would previously have resulted in site area emergency classification would not be classified by the revised emergency action level. Implementation without prior NRC approval of changes to the emergency plan which constitute reduction in the effectiveness of the plan was a noncited violation of 10 CFR 50.54(q).

  The finding was evaluated using NUREG-1600, “General Statement of Policy and Procedure for NRC Enforcement Actions,” Section IV, because licensee reductions in the effectiveness of its emergency plan impact the regulatory process. The finding had greater than minor significance because deletion of conditions indicative of a site area emergency has the potential to impact safety. The finding was determined to be a noncited Severity Level IV violation because the emergency action level change constituted a failure to implement an emergency planning standard and did not constitute a failure to meet an emergency planning standard as defined by 10 CFR 50.47(b). This finding has been entered into the licensee’s corrective action program as Action Request 030400514 (Section 1EP4).

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Status

Unit 2 began the inspection period at approximately 100 percent power. On June 21, 2003, a reactor shutdown to Mode 4 was initiated to replace a faulty reed switch position transmitter on Control Element Assembly (CEA) 33. The reed switch position transmitter was successfully replaced and a reactor startup was initiated on June 23, 2003. Unit 2 reached approximately 100 percent power on June 24, 2003, and remained there throughout the rest of the inspection period.

Unit 3 was maintained at approximately 100 percent power throughout the inspection period.

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

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors reviewed the design features and procedures for protecting Units 2 and 3 mitigating systems from the adverse effects of high winds and flooding.

The inspection consisted of reviewing Procedure S023-13-8, "Severe Weather," Revision 3. The inspectors also interviewed licensee personnel and directly observed systems and plant conditions. In addition, the inspectors walked down areas around Units 2 and 3 to determine the potential hazard associated with wind-generated missiles.

The inspectors also reviewed the following two components to ensure that their safety functions were adequately protected against high winds and flooding:

- Condensate Storage Tanks
- Auxiliary Feedwater Pumps

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial System Walkdowns. The inspectors performed two partial walkdowns during this inspection period. On April 7, 2003, the inspectors walked down the Unit 3 High Pressure Safety Injection (HPSI) system Train A and swing pump alignments while preplanned routine maintenance activities were being performed on HPSI Train B Pump 3P019. On June 24, 2003, the inspectors walked down the Unit 3 motor-driven auxiliary feedwater (AFW) pump trains while preplanned routine maintenance activities were being performed on Unit 3 Turbine-Driven AFW Pump 3MP140. These walkdowns were performed to evaluate the operability of the selected trains or systems when the redundant train or system was inoperable or out of service. The inspectors checked for correct valve and power alignments by comparing positions of valves, switches, and electrical power breakers to the procedures listed below as well as applicable chapters of the Updated Final Safety Analysis Report:

- Operating Instruction SO23-3-2.7, "Safety Injection System Operation," Revision 19
- Piping and Instrumentation Diagram 40112ASO3, "Safety Injection System No. 1204," Revision 35
- Operating Instruction SO23-2-4, "Auxiliary Feedwater System Operation," Revision 19
- Piping and Instrumentation Diagram 40160ASO3, "Unit 3 Auxiliary Feedwater System," Revision 27
- Piping and Instrumentation Diagram 40150DSO3, "Condensate Pump System (Tanks)," Revision 26

Complete System Walkdown. The inspectors conducted a detailed review of the alignment and condition of the Unit 2 AFW system. The inspectors used the licensee procedures and other documents listed below to verify proper system alignment:

- Operating Instruction SO23-2-4, "Auxiliary Feedwater System Operation," Revision 19
- Piping and Instrumentation Diagram 40160A, "Unit 2 Auxiliary Feedwater System," Revision 31
- Piping and Instrumentation Diagram 40150D, "Condensate Pump System (Tanks)," Revision 35
- Piping and Instrumentation Diagram 40160B, "Unit 2 Auxiliary Feedwater Steam Supply System," Revision 17

The inspectors also verified electrical power requirements, labeling, hangers and support installation, and associated support systems status. Operating pumps were examined to ensure that the vibration was not excessive, pump leakoff was not excessive, bearings were not hot to the touch, and the pumps were properly ventilated. The walkdown also included evaluation of system piping and supports against the following considerations:

- Piping and pipe supports did not show evidence of water hammer
- Snubbers did not appear to be leaking hydraulic fluid
- Component foundations were not degraded

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors performed routine fire inspection tours, and reviewed relevant records, for the following six plant areas important to reactor safety:

- AFW pump room (Unit 2)
- AFW pump room (Unit 3)
- Train A primary switchgear room (Unit 2)
- Train B primary switchgear room (Unit 2)
- Secondary switchgear room (Unit 3)
- Technical Support Center

The inspectors observed the material condition of plant fire protection equipment, the control of transient combustibles, and the operational status of barriers. The inspectors compared in-plant observations with the commitments in portions of the Updated Fire Hazards Analysis Report.

b. Findings

No findings of significance were identified.

1R07 Biennial Heat Sink Performance (71111.07B)

.1 Performance of Testing, Maintenance, and Inspection Activities

a. Inspection Scope

The inspectors reviewed the licensee's test and cleaning methodology for the shutdown cooling heat exchanger, the control room emergency air cleanup system heat exchangers, emergency core cooling system pump room coolers, and the engineered safety features switchgear room coolers. In addition, the inspectors reviewed test data for the heat exchangers and design and vendor-supplied information to ensure that the heat exchangers were performing within design bases. The inspectors also reviewed the heat exchanger inspection and test results. The inspectors verified proper extrapolation of test conditions to design conditions, appropriate use of test instrumentation, and appropriate accounting for instrument inaccuracies. Additionally, the inspectors verified that the licensee appropriately trended these inspection and test results, assessed the causes of the trends, and took necessary actions for any step changes in these trends. The inspectors reviewed the methods and results of heat exchanger inspection and cleaning and verified that the methods used to inspect and clean were consistent with industry standards and that as-found results were appropriately dispositioned such that the final conditions were acceptable.

b. Findings

No findings of significance were identified.

.2 Verification of Conditions and Operations Consistent with Design Bases

a. Inspection Scope

For the selected heat exchangers, the inspectors verified that the licensee-established heat sink and heat exchanger condition, operation, and test criteria were consistent with the design assumptions. Specifically, the inspectors reviewed the applicable calculations to ensure that the thermal performance test acceptance criteria for the heat exchangers were being applied consistently throughout the calculations. The inspectors also verified that the appropriate acceptance values for fouling and tube plugging for the diesel generator jacket water heat exchangers remained consistent with the values used in the design-basis calculations. In addition, the inspectors verified that the parameters measured during the thermal performance tests for the diesel generator jacket water heat exchangers were consistent with those assumed in the design bases.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors verified that the licensee had entered significant heat exchanger/heat sink performance problems into the corrective action program.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

The inspectors reviewed two licensed operator requalification training activities, including the licensed operators' performance and the evaluators' critique. The inspectors compared performance in the simulator on April 9 and June 16, 2003, with performance observed in the control room during this inspection period.

The focus of the inspection was on high-risk operator actions, operator activities associated with the emergency plan, and previous lessons-learned items. These items were evaluated to ensure that operator performance was consistent with protection of the reactor core during postulated accidents.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

.1 Potter & Brumfield Motor Driven Relay Replacement

a. Inspection Scope

The inspectors reviewed the licensee's plan for replacement of safety-related Potter & Brumfield motor-driven relays after the licensee discovered that the relays may be susceptible to an age-related failure mechanism in which thermal growth of internal components could cause mechanical binding and ultimate relay failure when combined with age-related degradation of relay springs. The inspectors reviewed the licensee's schedule for relay replacement to verify that it was risk informed. The inspectors also reviewed Action Requests (ARs) 020801305 and 961001095, Potter & Brumfield Part 21 Notification dated January 13, 1993, and the licensee's risk evaluation associated with the increased failure probability of motor-driven relays. The inspectors also discussed relay forensic testing and replacement schedule with Engineering personnel.

b. Findings

No findings of significance were identified.

.2 Saltwater Cooling Check Valve Performance

a. Inspection Scope

The inspectors verified that the licensee appropriately addressed the declining performance of saltwater cooling system seal water check valves. The licensee had experienced recent test failures of the check valves as a result of mechanical component degradation and piping debris in the service water lines. The inspectors reviewed ARs 020100712, 030400156, and 030201157 and discussed the maintenance plan for inspection, repair, and modification of the seal water check valves and piping with Engineering and Maintenance personnel.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

.1 Incorrect Lubricating Oil Used in AFW Pump 2P504

a. Inspection Scope

The inspectors reviewed emergent work associated with elevated temperature on the outboard bearing of AFW Pump 2P504 following oil replacement.

b. Findings

Introduction. The licensee implemented inadequate corrective actions to address several instances in which incorrect oil was used in safety-related equipment. The inadequate corrective actions resulted in the introduction of incorrect bearing lubricating oil in AFW Pump 2P504 during an oil change. This finding was determined to be a noncited violation with very low safety significance (Green).

Description. On March 28, 2003, the licensee performed a postmaintenance test on AFW Pump 2P504 following replacement of the pump packing and bearing oil. During the postmaintenance test following the oil change, the pump's outboard and inboard bearing temperatures exceeded their normal values of approximately 180°F and 130°F, respectively. The pump was manually secured when the outboard bearing temperature exceeded 190°F with no sign of stabilizing. The pump vendor's recommended maximum operating temperature was approximately 205°F. The test was performed four additional times using different methods to measure the bearing's temperature. All four tests yielded the same result of elevated outboard bearing temperature with no sign of stabilization. The pump was manually secured each time before bearing temperatures exceeded 196°F. The licensee changed the bearing oil before the final test and the bearing temperatures returned to their normal values. The licensee analyzed the oil that was replaced and determined that the incorrect oil was added to the pump during the initial oil change. The introduction of the wrong oil extended the pump's unavailability by 48 hours.

The licensee traced the source of the oil used for the oil change to a one-gallon can labeled as containing Mobil SHC 624. The licensee analyzed the oil in the one-gallon can and determined that it was actually Mobil SHC 626, which has a factor of 2 higher viscosity than Mobil SHC 624. The correct oil was added to the pump and a subsequent postmaintenance test revealed that the bearing temperatures returned to their normal values. The pump was returned to operable status after 56 hours, but prior to exceeding its Technical Specification allowed outage time of 72 hours.

The inspectors reviewed an apparent cause evaluation (ACE) that the licensee completed in September 2002, which was documented in AR 010900606. The ACE was initiated to evaluate 11 instances in which contaminated or incorrect lubricants were found in both safety- and nonsafety-related equipment from July 1999 to October 2001 and to determine if there were common causes for these errors. One of the common causes identified in the ACE was that small containers of oil were improperly labeled with an oil type different than that actually in the container. One of the corrective actions the licensee took to address this issue included disposing of all small oil containers more than 2 years old. In addition, the licensee developed a desktop procedure for the lube oil locker that included steps for decanting oil from 55 gallon containers to smaller 1- and 5-gallon containers. The desktop procedure also included steps to ensure that containers were properly labeled. The licensee's corrective actions developed in response to the ACE were not adequate to prevent the use of the incorrect oil in AFW Pump 2P504 on March 28, 2003. While the licensee is conducting its cause evaluation, an interim corrective action has been implemented to require a second check to verify that the correct oil has been decanted into a properly labeled container.

Analysis. The inspectors evaluated the significance of the finding using the Significance Determination Process. The inspectors determined that the finding had a credible impact on the mitigating systems cornerstone because it resulted in an unnecessary extension of the unavailability of AFW Pump 2P504. The issue was determined to be more than minor because, if left uncorrected, the availability and reliability of a portion of the AFW system could be compromised in that excessive pump bearing temperatures could have been reached. Furthermore, the inadequate corrective actions could increase the likelihood of incorrect oil being used in other safety-related equipment. The finding was determined to have very low safety significance (Green) because AFW Pump 2P504 was restored to operable status within its Technical Specification allowed outage time.

Enforcement. The regulations in 10 CFR Part 50, Appendix B, Criterion XVI, state, in part, that in the case of significant conditions adverse to quality, measures are to be taken to assure that the cause of the condition is determined and corrective actions taken to preclude repetition. Contrary to this criterion, the licensee did not implement adequate corrective actions in September 2002 to preclude the use of the incorrect oil in AFW Pump 2P504 during an oil change on March 28, 2003. This violation of 10 CFR Part 50 is being treated as a noncited violation (NCV 361/2003003-001) consistent with Section VI.A of the Enforcement Policy. This violation was entered into the licensee's corrective action program as AR 030301792.

.2 Pressurization of the Unit 3 Low Pressure Safety Injection (LPSI) Header

a. Inspection Scope

The inspectors reviewed emergent work associated with leaking check valves in the Unit 3 LPSI system.

b. Findings

Introduction. The inspectors determined that the licensee failed to implement adequate corrective actions following the identification of a leaking check valve in the Unit 3 LPSI system in May 2001, which resulted in the unnecessary pressurization of the Unit 3 LPSI header and challenged its associated relief valve. This finding was determined to be a noncited violation with a very low safety significance (Green).

Description. On April 8, 2003, the licensee implemented a procedure to conduct a surveillance test on check Valve 3MU040 which is the Safety Injection Tank 3T008 outlet valve. In order to perform the test, the licensee ran HPSI Pump 3P019 to apply approximately 1500 psig of water pressure to the downstream side of Valve 3MU040. The surveillance test required the licensee to monitor Safety Injection Tank 3T008 level and pressure for one hour. During the evolution, a licensee engineer not involved in the operations test was monitoring one of the licensee's electronic parameter display systems and noticed that the LPSI header pressure was cycling between approximately 640 and 660 psig. The engineer informed Operations personnel and the surveillance was immediately secured. The pressurization of the LPSI header was determined to be the result of leakage by the seats of the LPSI header to Loop 1A Isolation Valves 3MU072 and 3HV9322, which allowed the LPSI header to fill and pressurize with water from the HPSI system. Valve 3MU072 is a check valve that serves as a reactor coolant system pressure isolation valve with a Technical Specification leak rate limit of 4 gpm. The actual leak rate of the valve was approximately 30 gallons per day. Valve 3HV9322 is both a containment isolation valve and a safety injection valve with its operability determined solely by its response time to open following a safety injection actuation signal. Check Valve 3MU072 was eventually reseated on April 9, 2003, and the leakage stopped.

During the overpressurization event, Pressure Relief Valve 3PSV9318 on the LPSI header lifted several times over a period of approximately 30 minutes before the engineer noticed the cycling of LPSI header pressure. The relief valve served to maintain the pressure in the LPSI header at approximately 650 psig in the event that the header was overpressurized. The relief valve's setpoint is 615 psig, which is also the rating of the LPSI header pipe. Section III of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code allows for the operating pressure of Code Class II piping to exceed design pressure by 10 percent during operation of relief valves. The maximum pressure that was reached during the evolution was 666 psig, which is below the ASME code maximum of 676.5 psig.

The inspectors reviewed AR 010501502, which documented a similar event that occurred in May 2001. At that time, the licensee was trying to seat Check Valve 3MU072 and inadvertently pressurized the LPSI header to the point where Relief Valve 3PSV9318 was cycling to maintain the LPSI header pressure at approximately 650 psig. The licensee determined that Check Valve 3MU072 was degraded (but operable) and decided to schedule it for maintenance during the Unit 3 Cycle 12 refueling outage in January 2003. However, the valve was not replaced during the outage and no other corrective actions were taken to monitor LPSI header pressure during evolutions in which known overpressurizations could occur.

Pressurization of the LPSI header also occurred on April 6, 2003. During an evolution to backseat Check Valve 3MU018 in the HPSI system, the LPSI header pressurized to 340 psig, at which time the licensee recognized the condition and stopped the evolution. The inadequate corrective actions implemented following the May 2001 and April 6, 2003, evolutions resulted in the pressurization of the LPSI header a third time to the point where its associated relief valve was challenged and cycled several times.

Analysis. The inspectors evaluated the significance of the finding using the Significance Determination Process. The inspectors determined that the issue had a credible impact on the mitigating systems cornerstone because it resulted in the unnecessary pressurization of the Unit 3 LPSI header and the cycling of its associated relief valve. The issue was determined to be more than minor because, if left uncorrected, it would become a more significant safety concern in that the licensee would continue to unknowingly pressurize the LPSI header and challenge its associated relief valve. As a result, the reliability of the relief valve and hence the LPSI header could be compromised. The finding was determined to have very low safety significance because the relief valve maintained the LPSI header pressure below the ASME code pressure limit and the safety function of the LPSI header was maintained.

Enforcement. The regulations in 10 CFR Part 50, Appendix B, Criterion XVI, state, in part, that, in the case of significant conditions adverse to quality, measures are to be taken to assure that the cause of the condition is determined and corrective actions taken to preclude repetition. Contrary to this criterion, the licensee failed to implement adequate corrective actions in May 2001 to preclude the pressurization of the Unit 3 LPSI header and subsequent cycling of its associated relief valve on April 8, 2003. This violation of 10 CFR Part 50 was determined to be a noncited violation (NCV 05000362/2003003-002) consistent with Section VI.A of the Enforcement Policy. This violation was entered into the licensee's corrective action program as AR 030400450.

.3 Quarterly Review of Maintenance Risk Assessments and Emergent Work

a. Inspection Scope

The inspectors verified the accuracy and completeness of risk assessment documents and that the licensee's maintenance risk assessment program was being appropriately implemented. The inspectors also ensured that plant personnel were aware of the licensee established risk category for maintenance activities, according to the risk assessment results and licensee program procedures.

The inspectors also reviewed selected emergent work items to ensure that overall plant risk was being properly managed and that appropriate corrective actions were being properly implemented.

The inspectors reviewed the effectiveness of risk assessment and risk management for the following three activities:

- Unit 3 CEA 49 failure to move during surveillance testing (AR 030400708)
- Unit 2 reed switch position transmitter replacement for CEA 33 (AR 030401421)
- Unit 3 increase in quench tank in-leakage (AR 030201804)

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Evolutions (71111.14)

a. Inspection Scope

The inspectors observed operator response to nonroutine events during the inspection period. In addition to direct observation of operator performance, the inspectors reviewed procedural requirements, operator logs, and plant computer data to verify that the response was in accordance with procedures and consistent with training. The following operator response was observed:

- Operator response to an unexpected loss of a Unit 3 second point feedwater heater on May 14, 2003. The inspectors also reviewed AR 030500745.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed selected operability evaluations to evaluate technical adequacy and to verify that equipment operability was justified. The inspectors considered the impact of compensatory measures for each condition being evaluated and referenced the Updated Final Safety Analysis Report and Technical Specifications. The inspectors also discussed the evaluations with licensee personnel.

The inspectors reviewed six operability evaluations and cause assessments documented in the following ARs:

- ARs 030301589, 030301719, 030301760, and 030301792: Unit 2 Train B motor-driven AFW pump water in bearing oil and use of wrong oil in bearing
- AR 030400450: Unit 3 safety injection system operability during header isolation check valve leakage
- AR 030201912: Unit 3 Emergency Diesel Generator 3G002 air start receiver leak
- AR 030600950: Unit 2 Train A AFW system leaking valves in discharge piping allowing backleakage from main feedwater
- AR 030101173: Unit 2 pressurizer safety valve accelerometer operability following discovery of inoperable accelerometers in Unit 3
- AR 030401421: Unit 2 CEA 33 operability with degraded reed switch position transmitter

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

Cumulative Effects. The inspectors reviewed seven operator workaround items to evaluate their cumulative effects on the reliability, availability, and potential for misoperation of a system, and on the ability of operators to respond in a correct and timely manner to plant transients and accidents. The inspection included a review of the licensee’s criteria and processes used for identifying and tracking deficiencies as operator workarounds. The review also focused on the length of time the identified workarounds had been in existence and the efforts initiated to resolve them.

Individual Effects. The inspectors reviewed the following operator workaround to determine if the functional capability of the system or human reliability in responding to an initiating event was effected by the workaround. The inspectors evaluated the effect that the operator workaround had on the operator’s ability to implement abnormal or emergency operating procedures.

- Manual bypass of one channel of the core protection calculator and the CEA calculator should CEA 33 be required to restore axial shape index with a degraded reed switch position transformer

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

On June 19, 2003, the inspectors observed a modification to the Units 2 and 3 main turbines that installed an additional DC-powered main lube oil pump in the main lube oil coastdown system. The purpose of the modification was to increase system redundancy. The inspectors discussed the modification with cognizant Engineering and Maintenance personnel.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed and/or reviewed postmaintenance testing for the following eight activities to verify that the test procedures and activities adequately demonstrated system operability:

- Unit 2 containment sump to Train A Emergency Core Cooling Suction Header Valve 2HV9303 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on April 15, 2003

- Unit 2 Refueling Water Storage Tank Train A Outlet Valve 2HV9300 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on April 15, 2003

- Unit 2 shutdown cooling heat exchanger to Train A Containment Spray Header Valve 2HV9367 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on April 15, 2003

- Unit 2 component cooling water return from Containment Cooler 2ME400 Valve 2HV6369 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on April 29, 2003

- Unit 2 component cooling water supply to Containment Cooler 2ME402 Valve 2HV6372 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on April 30, 2003

- Unit 2 High Pressure Safety Injection Loop A Isolation Valve 2HV9324 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on May 12, 2003

- Unit 2 AFW discharge to Steam Generator Train A Valve 2HV4713 linestarter postmaintenance test inspection per Procedure SO123-I-9.13, “480 VAC Linestarter Inspection, Coil, and Power Contact Replacement,” Revision 3, performed on June 10, 2003

- Unit 2 Turbine-Driven AFW Pump P140 postmaintenance test per Procedure SO23-II-11.172, “Auxiliary Feedwater Pump (Terry) Turbine Governor Calibration,” Revision 1, performed on May 21, 2003. The inspectors also reviewed AR 030501202, Maintenance Order MO 02011761000, and Design Basis Document DBD-SO23-780, “Auxiliary Feedwater System,” Revision 6, as part of this inspection.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed and/or reviewed performance and documentation for the following four surveillance tests to verify that the structures, systems, and components were capable of performing their intended safety functions and to assess their operational readiness:

- Unit 3 Train B Engineered Safety Feature (ESF) Subgroup Relay Test per Procedure SO23-3-3.43.10, “ESF Subgroup Relay K-110B Semiannual Test,” Revision 8, performed on April 7, 2003

- Unit 3 HPSI Pump 3P019 surveillance test per Procedure SO23-3-3.60.1, “High Pressure Safety Injection Pump and Valve Testing,” Revision 3, performed on April 7, 2003

- Unit 3 Component Cooling Water Pump 3P026 surveillance test per Procedure SO23-3-3.60.3, “Component Cooling Water and Seismic Makeup Pump Test,” Revision 3, performed on April 10, 2003

- Unit 2 CEA position indication verification per Surveillance Procedure SO23-3-3.25, Attachment 6, “CEA Position Verification,” Revision 22, performed on April 28, 2003

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the following temporary plant modification to verify that the safety functions of safety systems were not affected:

- Temporary Facility Modification per AR 020602025-1, “CEDM Fan S21501ME404A Isolation and Removal from Service”

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspector performed an in-office review of emergency plan implementing Procedure SO123-VIII-1, “Recognition and Classification of Emergencies,” Revision 18. Revision 18 was compared with its previous revision; NUREG-0654, Revision 1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” Appendix 1; and 10 CFR 50.54(q), to determine if the revision decreased the effectiveness of the emergency plan.

b. Findings

Introduction. The inspector determined that the licensee implemented a change to Emergency Action Level C3, “Core Degradation or Overheating,” which constituted a decrease in effectiveness of the emergency plan. The licensee changed Emergency Action Level C3 so that two conditions which previously resulted in a site area emergency classification no longer resulted in an emergency classification. This finding was determined to be a noncited, Severity Level IV violation.

Description. The licensee implemented changes to emergency plan implementing Procedure SO123-VIII-1, “Recognition and Classification of Emergencies,” on March 3, 2003. As part of this revision the licensee revised indicators for Emergency Action Level C3, “Core Degradation or Overheating,” which identified a degraded reactor core condition with possible loss of coolable geometry. The previous emergency action level contained three independent indicators, any one of which resulted in a site area emergency classification: (1) inadequate core cooling indicated by safety function status concurrent with measured reactor coolant activity greater than or equal to 300 µCi/g dose equivalent I^{131}, (2) high range containment accident radiation monitor indication above designated values, or (3) measured radiation exposure rates exterior to containment above designated values. The revised emergency action level resulted in classification only when inadequate core cooling was indicated by safety function status along with any one of the following concurrent conditions: (1) reactor coolant activity greater than or equal to 300 µCi/g dose equivalent I^{131}, (2) high range containment accident radiation monitor indications above designated values, or (3) measured radiation exposure rates exterior to containment above designated values. The revised emergency action level required both indication of inadequate core cooling and one other indicator, whereas the previous emergency action level did not require these indicators be concurrent. The inspector determined that neither the high range containment accident radiation monitor nor measured exposure rates exterior to containment resulted in any emergency classification according to the revised emergency action level.

Analysis. Implementation of an emergency action level change which decreased the effectiveness of the emergency plan was a performance deficiency. The finding was associated with a violation of NRC requirements. The finding had a credible impact on the Emergency Preparedness cornerstone because it represented a decrease in effectiveness of the licensee’s emergency plan associated with a risk-significant activity (classification). The finding was considered to be more than minor because: (1) deletion of conditions indicative of a site area emergency has the potential to impact safety, and (2) implementation of changes which decrease the effectiveness of the emergency plan without prior NRC approval has an impact on regulatory processes. In accordance with Manual Chapter 0609, Appendix B, §2.2(e) and §4.4, the inspector evaluated the significance of the finding using NUREG-1600, “General Statement of Policy and Procedure for NRC Enforcement Actions (Enforcement Policy),” Section IV, “Significance of Violations.” The finding was determined to be a Severity Level IV violation according to NUREG-1600 Supplement VIII, “Emergency Preparedness,” because the emergency action level change constituted a failure to implement an emergency planning standard, the affected emergency action level was not used during an actual emergency, and the change did not constitute a failure to meet an emergency planning standard as defined by 10 CFR 50.47(b).

Enforcement. Licensee implementation without prior NRC approval of an emergency action level change which constitutes a decrease in effectiveness of the emergency plan is a violation of 10 CFR 50.54q, which states, in part, “The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to this part.” This violation of 10 CFR Part 50 is being treated as a noncited Severity Level IV violation (NCV 05000361; 362/2003003-003) consistent with Section VI.A of the Enforcement Policy. This issue has been entered into the licensee’s corrective action program as AR 030400514.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed the following emergency preparedness drills to evaluate the drill conduct and the adequacy of the licensee’s performance critique. The inspectors observed three site-wide drills from the simulator, Technical Support Center, Operations Support Center, and the Emergency Operating Facility on the following dates:

- May 29, 2003
- June 4, 2003 (simulator and EOF only)
- June 11, 2003

b. Findings

No findings of significance were identified.

Cornerstone: Physical Protection (PP)

3PP4 Security Plan Changes (71130.4)

a. Inspection Scope

The inspector conducted an inoffice review of the following Physical Security Plan, Contingency Plan, and Training and Qualification Plan changes to determine if they decreased the effectiveness of the respective plan and to determine if requirements of 10 CFR 50.54 (p) were met:

- Physical Security Plan, Revision 68, dated October 30, 2000, that documented corrections to the table that described protected area barriers

- Physical Security Plan, Revision 69, dated November 22, 2000, documented changes that resulted from a revision to the target analysis, which revised the location and designation for armed responders

- Physical Security Plan, Revision 70, dated December 4, 2000, that documented changes resulting from upgrades to the intrusion detection system and the security boundary

- Physical Security Plan, Revision 71, dated February 23, 2001, that documented editorial changes to correct terminology following completion of the physical changes at the facility

- Physical Security Plan, Revision 72, dated May 3, 2001, which documented changes that occurred when the protected area was moved from around Unit 1. This change also introduced the nonsafeguards information contained in the Unit 1 Consolidated Defueled Physical Protection Plan.

- Physical Security Plan, Revision 73, dated October 1, 2001, which documented changes that occurred by deletion of the guard towers

- Physical Security Plan, Revision 74, dated February 19, 2002, that documented editorial changes and clarifications and modified the requirements to verify military employment history

- Physical Security Plan, Revision 75, dated July 31, 2002, that documented changes to response post designations, assigned weapons, and minor administrative changes

- Safeguards Contingency Plan, Revision 25, dated November 22, 2000, that documented the change in munitions used by security officers

- Safeguards Contingency Plan, Revision 26, dated January 11, 2001, that eliminated some procedure references as a result of a procedure upgrade project and described editorial corrections

- Safeguards Contingency Plan, Revision 27, dated May 3, 2001, that documented changes which occurred as a result of removing the protected area from around Unit 1. This change also introduced the nonsafeguards information contained in the Unit 1 Consolidated Defueled Physical Protection Plan.

- Safeguards Contingency Plan, Revision 28, dated October 1, 2001, which documented changes that occurred by deletion of the guard towers

- Safeguards Contingency Plan, Revision 29, dated July 31, 2002, that documented editorial changes and reflected a change in the type of handgun being utilized by security officers

- Training and Qualification Plan, Revision 23, dated November 22, 2000, that documented the change in munitions used by security officers

- Training and Qualification Plan, Revision 24, dated May 3, 2001, that documented changes which occurred as a result of removing the protected area from around Unit 1. This change also introduced the nonsafeguards information contained in the Unit 1 Consolidated Defueled Physical Protection Plan.

- Training and Qualification Plan, Revision 25, dated October 1, 2001, which documented changes that occurred by deletion of the guard towers

- Unit 1 Consolidated Defueled Physical Protection Plan, Revision 0, dated May 1, 2001, that established the security requirements for the Unit 1 facility

- Unit 1 Consolidated Defueled Physical Protection Plan, Revision 1, dated January 3, 2002, that documented changes related to establishing a vehicle controlled area

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors verified the accuracy of data reported by the licensee for the following three performance indicators to ensure that the performance indicator color was correct for both Units 2 and 3:

Reactor Safety Cornerstone

- IE3 Unplanned Power Changes per 7000 Critical Hours
- MS1 Emergency AC Power System Unavailability
- MS2 High Pressure Injection System Unavailability

The inspectors reviewed the performance indicator data for the last three quarters of 2002 and the first quarter of 2003. The inspectors reviewed NEI 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 2, and licensee operating logs. The inspectors discussed the status of the performance indicators and compilation of data with engineering personnel.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Annual Sample Review

a. Inspection Scope

The inspectors selected AR 030301263 for detailed review. The AR documented the formation of a pinhole leak at the discharge elbow of Saltwater Cooling Pump 2P307. The AR was reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the AR against the requirements of the licensee's corrective action procedure as delineated in Procedure SO123-XV-50, "Corrective Action Process," Revision 4.

b. Findings

No finding of significance were identified.

.2 Quarterly Review of Corrective Action Documents

a. Inspection Scope

The inspectors reviewed a selection of ARs written during this period to determine if the licensee was entering conditions adverse to quality into the corrective action program at an appropriate threshold, to determine if the condition reports were appropriately categorized and dispositioned in accordance with the licensee's procedures, and, in the case of conditions significantly adverse to quality, to determine if the licensee's root cause determination and extent of condition evaluation were accurate and of sufficient depth to prevent recurrence of the condition.

b. Findings

No findings of significance were identified.

.3 Cross-References to Problem Identification and Resolution Findings Documented Elsewhere

Section 1R13 describes a finding where incorrect lubricating oil was used in an AFW pump. Prior to this incident, corrective actions had been implemented to address similar instances of the wrong oil being used in safety-related equipment. The corrective actions that were implemented were inadequate to prevent recurrence of the introduction of the wrong oil into safety-related equipment.

Section 1R13 describes a finding in which the Unit 3 LPSI system header was inadvertently pressurized and its associated relief valve challenged. The same event occurred 2 years earlier and no corrective actions were implemented to prevent recurrence.

4OA3 Event Followup (71153)

.1 (Closed) Licensee Event Report (LER) 362/2002-004-00: emergency room cooler for component cooling water pump considered inoperable

The LER was reviewed by the inspectors and no findings of significance were identified.

4OA5 Other

(Discussed) Unresolved Item 361; 362/2002013-001: protection of both alarm stations

This item remains open pending completion of corrective actions by the licensee. On May 21, 2003, the Office of Nuclear Security and Incident Response issued a letter to the licensee that advised them that their protective strategy implemented to address protection of both alarm stations did not meet the intent of the Order. Consequently, the licensee had 30 days to describe its timetable and actions to come into compliance with the Order. In addition, the licensee had to maintain compensatory measures until the deficiency was corrected.

4OA6 Meetings, including Exit

Exit Meeting Summary

The emergency preparedness inspector presented inspection results to Mr. M. Hug, Supervisor, Site Emergency Planning, and other members of licensee management by telephone on April 24, 2003.

The engineering inspector presented inspection results to Mr. D. Nunn, Vice President Engineering and Technical Services, and other members of licensee management and staff on May 16, 2003.

The security inspector conducted a telephonic exit with Mr. M. McBrearty, Licensing Engineer, on May 27, 2003.

On July 2, 2003, the resident inspectors presented the inspection results to Mr. J. Wambold, Vice President, Nuclear Generation, and others.

During all meetings, licensee management acknowledged the inspection findings. Proprietary information reviewed by inspectors during this inspection was left with the licensee at the end of the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

R. Allen, Supervisor, Reliability Engineering
C. Anderson, Manager, Site Emergency Preparedness
D. Axline, Licensing Engineer
D. Brieg, Manager, Maintenance Engineering
G. Cook, Supervisor, Compliance
M. Cooper, Manager, Plant Operations
J. Fee, Assistant Station Manager
K. Flynn, Supervisor, System Engineering
M. Goettel, Manager, Business Planning and Financial Services
M. Hug, Supervisor, Site Emergency Planning
M. Love, Manager, Maintenance
J. Madigan, Manager, Health Physics
C. McAndrews, Manager, Nuclear Oversight and Assessment
D. Nunn, Vice President, Engineering and Technical Services
N. Quigley, Manager, Mechanical/Nuclear Maintenance Engineering
A. Scherer, Manager, Nuclear Regulatory Affairs
P. Schofield, Supervisor, Mechanical Engineering
M. Short, Manager, Systems Engineering
T. Vogt, Manager, Operations
R. Waldo, Station Manager
J. Wambold, Vice President, Nuclear Generation
T. Yackle, Manager, Design Engineering

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

05000361/2003003-001	NCV	Incorrect lubricating oil used in AFW Pump 2P504 (Section 1R13)
05000362/2003003-002	NCV	Pressurization of the Unit 3 LPSI header (Section 1R13)
05000361;362/2003003-003	NCV	Change to Emergency Action Level C3 resulted in a decrease in effectiveness of the emergency plan in violation of 10 CFR 50.54(q) (Section 1EP4)

Closed

362/2002-004-00	LER	Emergency room cooler for component cooling water pump considered inoperable (Section 4OA3)

Discussed

05000361; 362/2003013-001	URI	Protection of both alarm stations (Section 4OA5)

LIST OF DOCUMENTS REVIEWED

Section 1R07: Biennial Heat Sink Performance (71111.07B)

Calculations

M-0073-041, “Auxiliary Control Area, Elevation 30 feet Control Room Complex Heat Load and Equipment Sizing Calculation, Normal and Emergency,” Revision 8, CCN 22

M-0027-028, “CCW Flow Rate to the Shut Down Cooling Heat Exchangers,” Revision 0

S-PEC-16, “Shutdown Cooling Heat Exchangers,” dated October 15, 1970

M-0073-041, “Aux. Building Ctrl Area El. 30 feet, Heat Load & Equip. Sizing Normal & Emergency,” Revision 8

M-0075-052, “Units 2 & 3 Trains A and B Emergency Room Cooler Capacity Verification,” Revision 0

Action Requests

000900506	000500257	000500704	001002156	001002218	001102003
010101874	011200501	020400444	020400461	000501060	020400445
020400446	020401480	020401481	020401482	011201038	011100866
020900518	020400388	000701003	000801285	010300419	010300419

Drawings

SO23-410-6-E87-0, “Shop Drawing Sheet Number Coil Housing 41366-0,” June 14, 1977

Procedures

DBD-SO23-740, “Safety Injection, Containment Spray, and Shutdown Cooling Systems,” Revision 7

SO23-V-3.26, “Shutdown Cooling Heat Exchanger Testing,” Revision 3

SO23-SPE-62, “Emergency Chilled Water System Train B Flow Verification,” dated April 8, 2002

SO23-SPE-63, “Emergency Chilled Water System Train A Flow Verification,” dated April 24, 2002

Maintenance Orders

01022345000	00020650000	00020547000	99051953000
02080957000	97071469000	01031736000	01101244000
99121259000	00010466001	00021133000	00021132000
00021216000	00021146000	00021238000	97080906000
97071470000	01060360000	00111131000	00060916000
99120951000	00090518000	99090781000	

Miscellaneous

SO23-V-3.26, Test of the shutdown cooling heat exchanger, Unit 2, dated May 21, 2002

SO23-V-3.26, Test of the shutdown cooling heat exchanger, Unit 2, dated January 3, 2001

Memo to File, dated May 14, 2003, “Evaluation of higher-than-design chilled water flow to air handling unit coils"

Section 1EP4: Emergency Acton Level and Emergency Plan Changes (71114.04)

Procedures

SO123-VIII-1 “Recognition and Classification of Emergencies,” Revision 17

SO123-VIII-1 “Recognition and Classification of Emergencies,” Revision 18

LIST OF ACRONYMS

ACE	apparent cause evaluation
AR	action request
ASME	American Society of Mechanical Engineers
AFW	auxiliary feedwater pump
CEA	control element assembly
CFR	*Code of Federal Regulations*
ESF	engineered safety feature
HPSI	high pressure safety injection
LER	Licensee Event Report
LPSI	low pressure safety injection
NCV	noncited violation
URI	unresolved item