UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 8, 2000

Gregory M. Rueger, Senior Vice President
and General Manager
Nuclear Power Generation Bus. Unit
Pacific Gas and Electric Company
Nuclear Power Generation, B32
77 Beale Street, 32nd Floor
P.O. Box 770000
San Francisco, California 94177

SUBJECT: DIABLO CANYON INSPECTION REPORT NO. 50-275/00-10; 50-323/00-10

Dear Mr. Rueger:

This refers to the inspection conducted from June 25 through August 12, 2000, at the Diablo Canyon Nuclear Power Plant, Units 1 and 2, facility. The enclosed report presents the results of this inspection. The results of this inspection were discussed on August 22, 2000, with David H. Oatley and members of your staff.

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

There was one green finding identified during this inspection associated with the adequacy of emergent work control. This finding was determined to involve a violation of NRC requirements. However, the violation was not cited, consistent with Section VI.A of the NRC Enforcement Policy, due to its very low safety significance and because the finding was entered into your corrective action program. If you contest this noncited violation, 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 Diablo Canyon, Units 1 and 2, facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be 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/NRC/ADAMS/index.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/

Linda Joy Smith, Chief
Project Branch E
Division of Reactor Projects

Docket Nos.: 50-275
50-323
License Nos.: DPR-80
DPR-82

Enclosure:
NRC Inspection Report No.
50-275/00-10; 50-323/00-10

cc w/enclosure:
Electronic distribution from ADAMS by RIV:
David H. Oatley, Vice President
Diablo Canyon Operations and Plant Manager
Diablo Canyon Nuclear Power Plant
P.O. Box 56
Avila Beach, California 93424

Lawrence F. Womack, Vice President, Power
Generation & Nuclear Services
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93434

Dr. Richard Ferguson
Energy Chair
Sierra Club California
1100 llth Street, Suite 311
Sacramento, California 95814

Nancy Culver
San Luis Obispo Mothers for Peace
P.O. Box 164
Pismo Beach, California 93448

Chairman
San Luis Obispo County Board of
Supervisors
Room 370
County Government Center
San Luis Obispo, California 93408

Truman Burns\Mr. Robert Kinosian
California Public Utilities Commission
505 Van Ness, Rm. 4102
San Francisco, California 94102

Robert R. Wellington, Esq.
Legal Counsel
Diablo Canyon Independent Safety Committee
857 Cass Street, Suite D
Monterey, California 93940

Ed Bailey, Radiation Program Director
Radiologic Health Branch
State Department of Health Services
P.O. Box 942732 (MS 178)
Sacramento, CA 94327-7320

Steve Hsu
Radiologic Health Branch
State Department of Health Services
P.O. Box 942732
Sacramento, California 94327-7320

Christopher J. Warner, Esq.
Pacific Gas and Electric Company
P.O. Box 7442
San Francisco, California 94120

City Editor
The Tribune
3825 South Higuera Street
P.O. Box 112
San Luis Obispo, California 93406-0112

Robert A. Laurie, Commissioner
California Energy Commission
1516 Ninth Street (MS 31)
Sacramento, CA 95814

Electronic distribution from ADAMS by RIV:
Regional Administrator **(EWM)**
DRP Director **(KEB)**
DRS Director **(ATH)**
Senior Resident Inspector **(DLP)**
Branch Chief, DRP/E **(LJS)**
Senior Project Engineer, DRP/E **(GAP)**
Branch Chief, DRP/TSS **(LAY)**
RITS Coordinator **(NBH)**

Only inspection reports to the following:
David Diec **(DTD)**
NRR Event Tracking System **(IPAS)**
DC Site Secretary **(JWG)**
Dale Thatcher **(DFT)**

DOCUMENT NAME: R:_DC\2000\DC2000-10RP-DLP.wpd

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.:	50-275 50-323
License Nos.:	DPR-80 DPR-82
Report No.:	50-275/00-10 50-323/00-10
Licensee:	Pacific Gas and Electric Company
Facility:	Diablo Canyon Nuclear Power Plant, Units 1 and 2
Location:	7 ½ miles NW of Avila Beach Avila Beach, California
Dates:	June 25 through August 12, 2000
Inspectors:	D. L. Proulx, Senior Resident Inspector D. G. Acker, Resident Inspector J. F. Melfi, Project Engineer, Region IV
Approved By:	L. J. Smith, Chief, Project Branch E Division of Reactor Projects

ATTACHMENTS:

Attachment 1: Supplemental Information

Attachment 2 NRC's Revised Reactor Oversight Process

SUMMARY OF FINDINGS

IR 05000275-00-10, IR 05000323-00-10; on 6/25-08/12/2000; Pacific Gas and Electric. Co.; Diablo Canyon Nuclear Power Plant; Units 1 & 2. Resident Report; Maintenance Risk Assessment and Emergent Work Evaluation.

The inspection was conducted by resident inspectors and a regional project engineer. This inspection identified one green finding that was a noncited violation. The significance of findings is indicated by the color (green, white, yellow, or red) and was determined by the significance determination process.

Cornerstone: Mitigating Systems

- Green. Personnel failed to follow maintenance procedures on two occasions in working on the wrong component or wrong unit. These errors resulted in the control room ventilation system and the main annunciator systems being inadvertently unavailable for time periods less than the Technical Specification allowed outage times. These errors were two examples of a violation of Technical Specification 5.4.1.a. This violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy. Several similar occurrences were noted in which personnel performed work on the wrong trains or wrong unit, indicating that a continuing adverse trend existed with respect to human performance. These errors were placed in the corrective action program as Action Requests A0512713 and A0512203.

  The inspectors assessed the risk significance of these errors using the significance determination process. The inspectors determined that these issues were of very low risk significance, and thus constituted a green finding. The inspectors used the significance determination process Phase 1 screening worksheet and noted that the control room ventilation was considered a support system for the unavailability of the solid state protection system. However, only one train of the control room ventilation system was inadvertently inoperable for a time period less than the Technical Specification limiting condition for operation. The main annunciator system was inoperable for only a short time and the system is designed with redundant annunciation that was available. Thus, these items screened to green (Section 1R13.2).

Report Details

Summary of Plant Status

Diablo Canyon, Units 1 and 2, began this inspection period at 100 percent power and continued to operate at that level until the end of the inspection period.

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

1R04 Equipment Alignments (71111.04Q)

Partial System Walkdowns

a. Inspection Scope

The inspectors performed a partial system walkdown of Diesel Engine Generators 1-1 and 1-3 on June 13 - 15, when Diesel Engine Generator 1-2 was unavailable for planned maintenance. The inspectors checked the valve lineups for the air start and fuel systems.

The inspectors performed a partial system walkdown of Auxiliary Feedwater Pump 1-2 on August 9 when Auxiliary Feedwater Pump 1-1 was unavailable for planned maintenance. The inspectors used Procedures OP D-1:I, "Auxiliary Feedwater System - Make Available," Revision 21A, and OP D-1:II, "Auxiliary Feedwater System - Alignment Verification for Plant Startup," Revision 24, to ensure system operability. The inspectors verified valve and breaker positions and ensured that the components were in good material condition for this operable train.

The inspectors performed a partial system walkdown of Diesel Engine Generators 1-2 and 1-3 on July 5 - 7 when diesel engine Generator 1-1 was unavailable for 3 days for planned maintenance. The inspectors checked the valve lineups for the air start and fuel systems. In addition, the inspectors checked availability of offsite sources and transmission lines.

b. Issues and Findings

There were no findings identified during the inspection.

1R05 Fire Protection (71111.05)

Monthly Routine Inspection

b. Inspection Scope

The inspectors performed fire protection walkdowns to assess the material condition of plant fire protection equipment and proper control of transient combustibles. Specific risk significant areas inspected included the switchgear areas of the auxiliary building,

the radiologically controlled area of the auxiliary building, and the diesel engine generator rooms.

c. Issues and Findings

There were no findings identified during the inspection.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the Final Safety Analysis Report Update to identify areas that could be affected by internal flooding. The inspectors walked down the auxiliary feedwater pump rooms in both units and the component cooling water/auxiliary saltwater heat exchanger room in both units. The inspectors walked down these safety-related areas to check the integrity of watertight doors and penetrations and to verify that drains were unblocked.

b. Issues and Findings

There were no findings identified during the inspection.

1R11 Operator Requalification (71111.11)

a. Inspection Scope

On June 27, 2000, the inspectors observed operator performance during simulator scenarios for requalification. The scenarios included a failure of normal charging flow, a fast ramp-down, and a load rejection. The inspectors used Procedures OP AP-1, "Excessive Reactor Coolant System Leakage," Revision 12; OP AP-2, "Full Load Rejection," Revision 12; OP AP-5, "Malfunction of Protection or Control Channel," Revision 16; OP AP-17, "Loss of Charging," Revision 21B; OP AP-25, "Rapid Load Reduction,' Revision 4; and E-0, "Reactor Trip or Safety Injection," Revision 24, as guidance. The inspectors also attended the licensee critique of operator performance.

b. Issues and Findings

There were no findings identified during the inspection.

1R12 Maintenance Rule Implementation (71111.12)

Routine Reviews

a. Inspection Scope

The inspectors reviewed the licensee's maintenance rule implementation for several equipment performance problems, including:

- Bus G first level undervoltage relay failure, Action Request (AR) A0504841

- Bus F first level undervoltage relay failure, AR A0503801
- Unit Control Room Compressor CP-35 not Running, AR A0510776

b. Issues and Findings

There were no findings identified during the inspection.

1R13 Maintenance Risk Assessment and Emergent Work Control (71111.13)

.1 Risk Assessments

a. Inspection Scope

Throughout the inspection period, the inspectors reviewed daily and weekly work schedules to determine when risk significant activities were scheduled. The inspectors reviewed selected activities regarding risk evaluations and overall plant configuration control. The activities reviewed were associated with: (1) centrifugal charging Pump 2-1 and control room ventilation system Bus H concurrent outage; and (2) an Auxiliary Feedwater Pump 1-1 outage.

b. Issues and Findings

There were no findings identified during the inspection.

.2 Emergent Work

a. Inspection Scope

The inspectors evaluated the emergent work associated with AR A0512203 and Quality Evaluation Q0012198, which discussed an event in which the control room emergency ventilation systems was inadvertently rendered inoperable because of work on the wrong component. In addition, the inspectors evaluated the emergent work associated with AR A0512713 in which technicians replaced a main annunciator card on the wrong unit.

b. Issues and Findings

On July 29, 2000, the licensee scheduled corrective maintenance of Unit 2 Fan CR-38, the cooling fans that cooled the control room air conditioning condensers using Work Order C0168387. Because of the low ambient temperatures, this fan was not necessary to maintain operability of the control room emergency ventilation system, and operators entered this item into the Technical Specification tracking system as “information only.”

On July 31, operators removed the appropriate components from service and properly cleared the equipment. However, the mechanic, not familiar with the control room ventilation system labeling or the auxiliary building 140 foot layout, commenced work on Fan S-38, the supply fan for the control ventilation system, because of the similarity of

the nomenclature of the two components (CR-38 versus S-38). Later, a second mechanic arrived at the work site and assisted in the work on the fan without personally verifying that the correct component was being worked. The fan was disassembled, which rendered the control room ventilation system inoperable.

At the beginning of the next shift, following the fan disassembly, an electrician arrived at the worksite to determinate the motor leads of Fan CR-38 and replace the motor. The electrician noted that the mechanics were working on a fan on the control room ventilation system and, without self-verification, proceeded to determinate the motor leads for Fan S-38. The electrician removed the motor; upon removal, the electrician noted that the replacement motor was significantly smaller than the motor removed from the plant. Following consultation with the supervisor, the electrician realized that the motor for Fan S-38 was removed instead of the motor for CR-38. The licensee initiated AR A0512203 to enter this item into the corrective action program.

Following identification of this error, the licensee removed the clearance tags for the originally planned work on Fan CR-38 and cleared Fan S-38 to return the motor and fan to service. This work was performed under emergent Work Order C0168400. The licensee reassembled and tested Fan S-38 on August 2. The total amount of time that Fan S-38 was inadvertently unavailable (and thus, one train of control room ventilation) was approximately 40 hours, less than the Technical Specification 3.7.10 allowed outage time of 7 days.

Technical Specification 5.4.1.a states that procedures shall be established, implemented, and maintained for those procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 9, recommends procedures for performing maintenance. Work Order CO168387 “CR-38 Overcurrent Trip,” required in step 3 that the user disassemble and remove the motor for Fan CR-38. Contrary to this requirement, maintenance personnel disassembled the fan and removed the motor for Fan S-38. The failure to implement this maintenance procedure is one example of a violation of Technical Specification 5.4.1.a. This violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy. This item was placed in the corrective action program as AR A0512203 (275; 323/00010-01, Example 1).

Licensee management noted that an adverse trend existed with respect to personnel performing work on the wrong equipment or wrong unit. Since the beginning of the year 2000, seven other action requests had been initiated to address similar failures. Because of this adverse trend in human performance, the maintenance manager ordered a maintenance “stand-down” on August 4 to discuss the human performance issues at the site and clearly communicate management expectations regarding self- and peer-verification.

Following these management discussions, maintenance personnel resumed routine plant work. However, on August 10, during performance of Work Order M0022041 (Replace Unit 2 Main Annunciator Card), the work was performed on the Unit 1 main annunciator system. The system engineer, accompanying the technicians, walked to the Unit 1 panels after the pre-evolution briefing to replace the Unit 2 main annunciator card. The technicians followed the system engineer into the Unit 1 panel area,

assuming that the system engineer had the lead for the task. The technicians subsequently did not perform self- or peer-verification that the proper component was being worked and, therefore, pulled a Unit 1 main annunciator card in error. Operators immediately recognized the condition because of an alarm in the control room. Operators stopped the task and the technicians later restored the system.

Technical Specification 5.4.1.a states that procedures shall be established, implemented, and maintained for those procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 9, recommends procedures for performing maintenance. Work Order M0022041 "Replace Defective Unit 2 Main Annunciator Card," partially implemented this requirement and required that the user remove and replace the Unit 2 main annunciator card. Contrary to this requirement, maintenance personnel removed a main annunciator card for Unit 1. The failure to implement this maintenance procedure is a second example of a violation of Technical Specification 5.4.1.a. This violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy. This item was placed in the corrective action program as AR A0512713 (275; 323/00010-01, Example 2).

The inspectors assessed the risk significance of these findings using the significance determination process. The inspectors determined that these findings were of very low risk significance and thus constituted a green finding. The inspectors used the significance determination process Phase 1 screening worksheet and noted that the control room ventilation was considered a support system for the unavailability of the solid state protection system. However, only one train of the control room ventilation system was inadvertently inoperable for a time period less than the Technical Specification limiting condition for operation. The main annunciator system was inoperable for only a short time and the system is designed with redundant annunciation that was available. Thus these findings screened to green.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following operability evaluations and supporting documents:

- AR A0512715, Unit 2 Low Component Cooling Water Header Flow
- AR A0512323, Gas Vented from Emergency Core Cooling System
- AR A0508898, Power Operated Relief Valve PCV-474 Seat Leakage

b. Issues and Findings

There were no findings identified during the inspection.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors evaluated the cumulative effect of operator workarounds to assess if the licensee adequately managed these items. The inspectors reviewed the licensee's operator workaround and operator burden logs to determine if plant operators would reasonably be able to perform their postaccident duties, given the existing equipment deficiencies.

b. Issues and Findings

There were no findings identified during the inspection.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed and evaluated the following postmaintenance test procedures to determine if the test adequately demonstrated that the equipment was capable of performing its safety functions:

- STP M-9A, "Routine Surveillance Test of Unit 1 Diesel Generators," following seismic upgrades and component changes on July 7, 2000
- STP P-CCP-21, "Routine Surveillance Test of Centrifugal Charging Pump 2-1," Revision 11, on July 18
- STP-P-AFW-11, "Routine Surveillance Test of Turbine-Driven Auxiliary Feedwater Pump 1-1," Revision 11, on August 9

Issues and Findings

There were no findings identified during the inspection.

1R22 Surveillance Testing (71111.22)

.1 Routine Observations

a. Inspection Scope

The inspectors observed all or part of the following surveillance and inservice test procedures:

- Surveillance Test Procedure STP P-23A, "Acceleration Timing of Safety-Related Pumps Actuated by SSPS Train A," Revision 10 [Containment Spray], July 7, 2000

- Surveillance Test Procedure STP M-26, “ASW System Flow Monitoring,” Revision 23, for Component Cooling Water Heat Exchanger 1-1 on July 10

- Surveillance Test Procedure STP P-ASW-12, “Routine Surveillance Test of Auxiliary Saltwater Pump 1-2,” Revision 11, on July 10

b. Issues and Findings

There were no findings identified during the inspection.

.2 (Closed) Licensee Event Report (LER) 50-275/1998-10-00: Technical Specification 3.3.2 Table 3.3-4 allowable values not met because of setpoint drift.

This LER discusses several occurrences in which the second level undervoltage relays setpoints (SLUR) were found slightly out of tolerance (0.6 percent) because of setpoint drift. The licensee determined that the SLUR design requirements were more restrictive than necessary and did not leave adequate margin for normal drift. The design requirements were corrected. The inspectors determined that this issue was of minor safety significance and not subject to formal enforcement action.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed Unit 2 Jumper Log Entry 00-17, “Wide Range Pressure Input to the Subcooling Margin Monitor.” This jumper provided wide-range reactor coolant system pressure to the subcooling margin monitor while the normal channel was removed for maintenance. The inspectors reviewed the 10 CFR 50.59 screening, verified that the applicable drawings were annotated, and observed that the necessary tags were in place. This temporary alteration was performed in accordance with Procedure CF4.ID7, “Temporary Modifications - Plant Jumpers and Measuring and Test Equipment,” Revision 7B.

b. Issues and Findings

There were no findings identified during this inspection.

1EP1 Drill Evaluation (71114.06)

a. Inspection Scope

The licensee conducted an emergency preparedness drill on July 14, 2000. The licensee identified that the results of this drill would be included in the Drill/Exercise Performance and Emergency Response Organization Performance Indicators. The inspectors observed drill performance with priority on classifications and protective action recommendations. The inspectors observed the drill critique. The inspectors compared their observations with those presented by the licensee during the critique. The inspectors used Nuclear Energy Institute (NEI) guidance, NEI 99-02, “Regulatory Assessment Performance Indicator Verification,” Revision 0, to evaluate the drill.

b. Issues and Findings

There were no findings identified during the inspection.

4. OTHER ACTIVITIES

4OA2 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed the following performance indicators for the period from the first quarter of 1999 through the second quarter of 2000 to assess the accuracy and completeness of the indicator. The inspectors used NEI 99-02, "Regulatory Assessment Performance Indicator Verification," Revision 0, as guidance for this inspection.

- Residual heat removal system availability
- Auxiliary feedwater system availability
- Diesel engine generator availability
- Unplanned power changes per 7000 Critical Hours

b. Issues and Findings

Background

Sections 9.2.2 and 9.2.7 of the Final Safety Analysis Report Update discussed the normal and accident operation of the auxiliary saltwater (ASW) and component cooling water (CCW) systems. Diablo Canyon normally operated with the ASW and CCW system trains cross-tied. Either ASW pump could supply cooling to either CCW heat exchanger, and any of the three CCW pumps could supply either of the two residual heat removal heat exchangers. Section 9.2.2 of the Final Safety Analysis Report Update stated that immediately after an accident ASW and CCW trains are cross-tied, but should be split into a train specific alignment for long-term recirculation mode cooling, at the discretion of the Technical Support Center. Thus, either residual heat removal heat exchanger or pump would have cooling available postaccident with one ASW or CCW pump available.

Performance Indicator Reporting

The inspectors reviewed the licensees performance indicator data for the residual heat removal system. The inspectors noted that the licensee tracked the unavailability of the residual heat removal trains using the Technical Specification Limiting Condition for Operation tracking sheets and completed surveillance test documentation. The licensee accurately calculated the unavailable hours of the individual residual heat removal pumps with this data.

However, the inspectors questioned this methodology of deriving the residual heat removal function unavailability. The inspectors noted that NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0, Page 33, "Support System

Unavailability." stated that, if a support system causes a train to become unavailable, the hours the support system was unavailable must be counted against the monitored system. This section of NEI 99-02 also provided examples as to the application of this policy. The inspectors noted that the CCW and ASW systems provided the heat sink for the residual heat removal function. Therefore, the inspectors concluded that the licensee should consider one train of residual heat removal unavailable when either a train of CCW or ASW was unavailable and report additional unavailable hours for the residual heat removal system.

The licensee did not agree with the inspectors' reasoning. The licensee stated that they need not count any unavailability time of the residual heat removal function when an ASW pump, CCW pump, or CCW heat exchanger is inoperable. Because the licensee normally operated with both the CCW and ASW system trains cross-tied, and could cool either residual heat removal train, the licensee believed that both trains of residual heat removal were available when a train of ASW or CCW was inoperable.

The inspectors reviewed NEI 99-02, Revision 0, and had the following concerns regarding the licensee's methodology for reporting performance indicator data with respect to the residual heat removal function:

- Section 2.2 of NEI 99-02, Revision 0, page 33, line 30, specified limitations on the source of cooling water and states, in part, that "unavailable hours must be reported when both trains of a monitored system are being cooled by water provided by a single cooling water pump." The inspector considered that the intent of the residual heat removal performance indicator is to monitor the availability of the residual heat removal function and not just pump availability. Therefore, whether or not they cross-tied their systems, Diablo Canyon would only have two complete trains of the residual heat removal function with two residual heat removal pumps, two residual heat removal heat exchangers, three CCW pumps, two CCW heat exchangers, and two ASW pumps available. Otherwise, a single failure would cause a total loss of function.

- Section 2.2 of NEI 99-02, Revision 0, page 30, line 35 and page 31, line 9, indicated that, in order to credit an installed spare and not incur unavailability hours, the system must be capable of meeting the design bases requirements with one train in maintenance and a single failure of another train. This statement, although it does not directly apply, implies that, in order to incur no unavailability hours for support system unavailability, the plant must withstand a single failure in the proposed condition. Therefore, with one ASW pump inoperable, the licensee could not meet single failure criterion [without reliance on the other unit]; thus, one train of the residual heat removal function should be considered unavailable, despite the operable ASW pump's ability to cool either CCW heat exchanger.

- A draft "frequently asked question" response for another facility addressed a similar concern. The licensee referenced in this frequently asked question operated with their service water and CCW systems cross-tied during the shutdown cooling mode of residual heat removal. However, the licensee, in this other case, did not count any unavailability hours for residual heat removal when

only a single service water system train was available. The draft NRC response to this question indicated that this was not an appropriate interpretation of the NEI guidance, and unavailability hours of the CCW and service water systems should be added to the monitored system's unavailability.

Based on the recommendations quoted in NEI 99-02 and the NRC draft response to the referenced question, the inspectors concluded that the licensee should consider one train of residual heat removal unavailable when either a train of CCW or ASW was unavailable, and report additional unavailable hours for the residual heat removal system, because when either a CCW or ASW pump/heat exchanger was unavailable, there were not two complete trains of the residual heat removal function. The inspectors submitted a feedback form to the NRC's Office of Nuclear Reactor Regulation to obtain the correct interpretation of reporting this performance indicator. Until a response to this question is received, this is an unresolved item (URI 275; 323/00010-02).

With respect to the performance indicators associated with diesel engine generator availability, auxiliary feedwater system availability, and unplanned power changes, no findings were identified during this inspection.

4OA5 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to David H. Oatley and other members of licensee management at the conclusion of these inspections on August 22, 2000. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. R. Becker, Manager, Operations Services
W. G. Crockett, Manager, Nuclear Quality Services
S. C. Ketelsen, Supervisor, Regulatory Services
D. B. Miklush, Manager, Engineering Services
P. T. Nugent, Acting Director, Regulatory Services
D. H. Oatley, Vice President and Plant Manager
R. A. Waltos, Manager, Maintenance Services

NRC

D. L. Proulx, Senior Resident Inspector
D. G. Acker, Resident Inspector

ITEMS OPENED AND CLOSED

Opened

275; 323/00010-02	URI	Questionable interpretation of residual heat removal performance indicator (Section 4AO2)

Previous Items Closed

275/1998-10-00	LER	Technical Specification 3.3.2 Table 3.3-4 allowable values not met due to setpoint drift (Section 1R22.2)

Opened and Closed

275; 323/00010-01	NCV	Work on wrong equipment resulted in failure to follow procedures (Section 1R13.2)

LIST OF ACRONYMS USED

AR	Action Request
ASW	auxiliary saltwater
CCW	component cooling water
CFR	Code of Federal Regulations
LER	Licensee Event Report
NEI	Nuclear Energy Institute
NCV	Noncited Violation
NRC	Nuclear Regulatory Commission
STP	Surveillance Test Procedure
URI	Unresolved Item

ATTACHMENT 2

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety
- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

Radiation Safety
- Occupational
- Public

Safeguards
- Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the significance determination process, and assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, or RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.