



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET SW SUITE 23T85  
ATLANTA, GEORGIA 30303-8931**

October 27, 2000

Florida Power and Light Company  
ATTN: Mr. T. F. Plunkett  
President - Nuclear Division  
P. O. Box 14000  
Juno Beach, FL 33408-0420

**SUBJECT: ST. LUCIE NUCLEAR PLANT - NRC INSPECTION REPORT  
50-335/00-06 AND 50-398/00-06**

Dear Mr. Plunkett:

On September 30, 2000, the NRC completed an inspection at your St. Lucie 1 & 2 reactor facilities. The enclosed report documents the inspection findings which were discussed on October 5, 2000, with Mr. R. Kundalkar and other members of your staff.

The 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. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the NRC identified an issue of very low safety significance (Green). The issue was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the St. Lucie 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).

Sincerely,

*/RA/*

Leonard D. Wert, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Docket Nos. 50-335, 50-389  
License Nos. DPR-67, NPF-16

Enclosure: Inspection Report 50-335/00-06, 50-389/00-06  
w/attached NRC's Revised Reactor Oversight Process

cc w/encl:  
Rajiv S. Kundalkar  
Plant Vice President  
Florida Power & Light Company  
Electronic Mail Distribution

R. G. West  
Plant General Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

E. J. Weinkam  
Licensing Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

John Gianfrancesco, Manager  
Administrative Support & Special Projects  
Florida Power & Light Company  
Electronic Mail Distribution

Mark Dryden  
Administrative Support & Special Projects  
Florida Power & Light Company  
Electronic Mail Distribution

J. A. Stall  
Vice President - Nuclear Engineering  
Florida Power & Light Company  
P. O. Box 14000  
Juno Beach, FL 33408-0420

M. S. Ross, Attorney

Florida Power & Light Company  
Electronic Mail Distribution

William A. Passetti  
Bureau of Radiation Control  
Department of Health  
Electronic Mail Distribution

Joe Myers, Director  
Division of Emergency Preparedness  
Department of Community Affairs  
Electronic Mail Distribution

J. Kammel  
Radiological Emergency  
Planning Administrator  
Department of Public Safety  
Electronic Mail Distribution

Douglas Anderson  
County Administrator  
St. Lucie County  
2300 Virginia Avenue  
Ft. Pierce, FL 34982

Distribution w/encl:  
K. Jabbour, NRR  
S. Sanders, NRR  
PUBLIC

OFFICE	Ril:DRP	Ril:DRP	Ril:DRP	Ril:DRP	Ril:DRS		
SIGNATURE	SNinh	TRoss	DLanyi	GWarnick	GKuzo		
NAME	SNinh	TRoss	DLanyi	GWarnick	GKuzo		
DATE	10/18/2000	10/24/2000	10/20/2000	10/23/2000	10/18/2000		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-335, 50-389  
License Nos: DPR-67, NPF-16

Report No: 50-335/00-06, 50-389/00-06

Licensee: Florida Power & Light Company (FPL)

Facility: St. Lucie Nuclear Plant, Units 1 & 2

Location: 6351 South Ocean Drive  
Jensen Beach, FL 34957

Dates: July 2 - September 30, 2000

Inspectors: T. Ross, Senior Resident Inspector  
D. Lanyi, Resident Inspector  
G. Warnick, Resident Inspector  
G. Kuzo, Senior Radiation Specialist (Sections 2OS1-2OS3)  
C. Sochor, Radiation Specialist (In Training)

Approved by: L. Wert, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Enclosure

## SUMMARY OF FINDINGS

IR 05000335-00-06, IR 05000389-00-06 on 07/02-09/30/2000, Florida Power & Light, St. Lucie Nuclear Plant, Units 1 & 2. Finding identified in other activities (event follow-up).

The inspection was conducted by the resident inspectors and a regional senior radiation specialist. The inspection identified one green issue which was a non-cited violation. The significance of the issue is indicated by the color (green, white, yellow, red) and was determined by the Significance Determination Process (see Attachment; NRC's Revised Reactor Oversight Process).

### **Cornerstone: Mitigating Systems**

- Green. A Non-Cited Violation of Technical Specifications was identified because the methodology used to conduct surveillance testing of the trisodium phosphate in containment was not as prescribed by Technical Specification 4.5.2.e.4.

The issue was determined to be of very low safety significance based on the subsequent successful performance of a surveillance test. Additionally, the methodology used previously was not significantly different, from a technical perspective, than the method specified in the Technical Specifications. (Section 4OA3.1)

## Report Details

### Summary of Plant Status:

Unit 1 remained at full power during the entire report period, except for two short duration unplanned power reductions. On August 15 through 16, power was reduced to 89 percent due to the intrusion of excessive quantities of red algae at the intake structure. On September 14, power was reduced to about 95% due to a dropped control element assembly which was promptly recovered.

Unit 2 also remained at full power during the entire report period, except for two short unplanned power reductions. On July 12, power was reduced to 95% to address spurious cyclings of the 2B main turbine intercept valve. On August 16 and 17, power was reduced to approximately 56 percent due to excessive algae at the intake.

### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity (Reactor - R), Emergency Preparedness (EP)

#### 1R01 Adverse Weather Protection

##### a. Inspection Scope

In preparation for the onset of Hurricane Debbie, the inspectors verified that the licensee was taking actions in accordance with administrative procedure AP-0005753, Severe Weather Preparations. This verification included physical walkdowns of the licensee's property and discussions with the appropriate licensee supervision. Additionally, the inspectors verified that the licensee was identifying severe weather problems that could affect mitigating systems or their support systems and documenting these problems in their corrective action program.

##### b. Findings

No findings of significance were identified.

#### 1R04 Equipment Alignment

##### .1 Partial Equipment Alignment

##### a. Inspection Scope

The inspectors conducted partial alignment verifications of the safety related systems listed below to evaluate the operability of the redundant train or backup system while the other train was inoperable or out of service. The verifications included reviews of plant lineup procedures, operating procedures, and piping and instrumentation drawings which were compared with observed equipment alignments to identify any discrepancies which could affect operability of the redundant train or backup system. The inspectors also verified that equipment alignment problems were identified, placed into the corrective action program, and dispositioned adequately.

- 2A Emergency Diesel Generator (EDG)

- 1A Component Cooling Water (CCW) system
- 1B Low Pressure Safety Injection (LPSI) system

b. Findings

No findings of significance were identified.

.2 Complete Equipment Walkdown

a. Inspection Scope

The inspectors completed a detailed alignment verification of the Unit 1 High Pressure Safety Injection (HPSI) Systems. This verification included a review of Operating Procedures OP-1-0410020, HPSI/LPSI-Normal Operation and OP-1-0410050, HPSI/LPSI-Periodic Test, applicable plant drawings, outstanding modifications, work orders, operator work arounds, Temporary System Alignments, Condition Reports, and Plant Manager Action Items. The inspectors verified the following:

- All valves were properly aligned
- There was no leakage that could affect operability
- Electrical power was available as required
- Major system components were properly labeled, lubricated, and cooled
- Hangers and supports were correctly installed and functional

The inspector also verified that the licensee was identifying and documenting equipment alignment problems at an appropriate threshold in the corrective action program.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted tours of the areas listed below that are important to reactor safety and referenced in AP-1800022, Fire Protection Plan, to evaluate conditions related to control of transient combustibles and ignition sources; the material condition, operational status, and operational lineup of fire protection systems, equipment and features; and fire barriers used to prevent damage from propagation of potential fires.

- Unit 1 A and B Vital Switchgear rooms
- Unit 1 Cable Spreading room
- Unit 2 Heating and Ventilation room
- Unit 1 Safeguards room (i.e., HPSI, LPSI, and Containment Spray systems)
- Unit 2 EDG building
- Unit 2 CCW systems
- Unit 1 Electrical and Mechanical Penetration rooms
- Unit 2A Fire Zone (2A Battery, 2A Switchgear, and 2A Electrical Penetration Rooms)

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

The inspectors observed and assessed simulator training for actions taken during a loss of turbine control oil volume, a loss of offsite power, and a main steam line break inside containment. The inspectors assessed the following items:

- Clarity and formality of communication
- Ability to take timely action to safely control the unit
- Prioritization, interpretation, and verification of alarms
- Correct use and implementation of procedures, specifically use of Annunciator Response Procedures and Emergency Operating Procedures (e.g., EOP-01, Standard Post Trip Actions, and EOP-05, Excess Steam Demand)
- Control board operation and manipulation, including high-risk operator actions
- Oversight and direction provided by the shift supervisor, including ability to identify and implement appropriate technical specification actions such as reporting and emergency plan actions and notifications
- Effectiveness of the post training critique

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors selected a sample of identified equipment performance problems from the systems listed below and assessed the effectiveness of licensee efforts in accordance with ADM-17.08, Implementation of 10 CFR 50.65, The Maintenance Rule. Reviews focused on maintenance rule scoping in accordance with 10 CFR 50.65 and characterization of failed systems or components. Additionally, the risk significance classifications, the (a)(2) classifications, and the appropriateness of performance criteria for systems or components classified as (a)(2) or goals and corrective actions for those classified as (a)(1) were also reviewed. Furthermore, the inspectors verified that equipment problems were being identified at the appropriate level, entered into the corrective action program and being dispositioned appropriately.

- Unit 2 Auxiliary Feedwater (AFW) system
- 2A CCW heat exchanger
- Unit 2 Nuclear Instrumentation system
- Units 1 and 2 120 volt vital AC distribution system
- Unit 1 4160 volt vital AC distribution system
- Units 1 and 2 Radiation Monitoring systems
- Unit 2 risk significant heating and ventilation systems



b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed and witnessed the following emergent maintenance activities to evaluate the effectiveness of licensee scheduling and management of online risk, and control over actual work. The inspectors also verified that appropriate contingencies were taken to reduce risk and minimize unavailability, and that emergent work activities were properly planned per ADM-10.03, Work Week Management. The inspectors also confirmed that problems with maintenance risk assessments and emergent work were identified and appropriately resolved as part of the corrective action program.

- 2B EDG failed voltage regulator
- 2A AFW system check valve failure
- 1A CCW system outage (i.e., Critical Maintenance Management)
- Unit 2 Digital Data Processing System power drift

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions and Events

a. Inspection Scope

On August 16, the inspectors observed Operations personnel performance during an unplanned power reduction on Unit 2 due to excessive red algae in the intake canal. The inspectors witnessed all of the control room actions taken during the event. This included the pre-evolution briefing, reactivity and secondary power manipulations, and alignment of equipment to maintain the plant in a safe and reliable condition. The inspectors also discussed expected consequences and possible contingencies with some of the operators and their supervision. The inspectors verified that problems associated with this incident were appropriately identified and addressed in the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluationsa. Inspection Scope

The inspectors reviewed the following operability evaluations to ensure that operability was properly justified and the structure, system, or component remained available, such that no unrecognized increase in risk occurred. Review of the Updated Final Safety Analysis Report (UFSAF) and condition report (CR) dispositions were performed to assess the technical adequacy of these evaluations.

- CR 00-1256 Unit 1 lighting power LP-126 powered from non-essential source
- CR 00-1239 Unit 2 containment foreign material
- CR 00-1537 Unit 1 Large Break Loss of Coolant accident model was non-conservative
- CR 00-1640 1B Emergency Diesel Generator Air Start System check valve leakage

b. Findings

No findings of significance were identified.

1R16 Operator Workaroundsa. Inspection Scope

The inspectors performed a semi-annual evaluation of the licensee's Operator Workaround (OWA) program. This included reviewing Operations Policy OPS-510, Operator Workarounds, evaluating all outstanding operator workarounds (about 10), and re-examining each individual work around with the applicable unit's Assistant Nuclear Plant Supervisors. The inspector also attended a quarterly meeting of the OWA team responsible for periodically reviewing individual OWA status and repair priority, and assessing overall risk.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testinga. Inspection Scope

The inspectors reviewed post-maintenance test (PMT) procedures and witnessed testing activities for selected risk significant mitigating systems to determine the following: (1) Effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) Testing was adequate for the maintenance performed; (3) Acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents; (4) Test instrumentation had current calibrations, range and accuracy consistent with the application; (5) Tests were performed as written with applicable prerequisites satisfied; (6) Jumpers installed or leads lifted were properly controlled; (7) Test equipment was removed following testing; and, (8) Equipment was returned to service as required to

perform its safety function. The inspectors also verified that selected problems associated with PMTs were identified and appropriately resolved as part of the corrective action program. The following PMTs, listed by work order (WO) or condition report (CR), were witnessed and/or reviewed :

- WO 30007386 Retest of 1B AFW pump throttle valve following a torque switch inspection
- WO 30013621 Retest of the 1A fire pump following breaker replacement
- CR 00-1309 Retest of the 2B EDG following diode replacement
- WO 29018870 Post Maintenance Test following the 1B CCW heat exchanger outage
- WO 30012799 Retest following a slow start of the 1A EDG
- WO 30014935 Retest of 1B charging pump thermal relief
- WO 30013940 Retest of 1B1 Safety Injection Tank Level Switch, LS-3332
- WO 30017273 Retest of the 1B EDG Air Start System check valve

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed and witnessed the conduct of surveillance testing in accordance with operating procedures (OP), instrumentation and control procedures (ICP), and chemistry operating procedures (COP). Inspectors also reviewed applicable test data to assess whether they met Technical Specifications (TS), UFSAR, and licensee procedure requirements. Furthermore, the inspectors verified that the testing effectively demonstrated that the affected systems were operationally ready and capable of performing their intended safety functions.

- 2-COP-07.07 Analysis of Trisodium Phosphate (TSP) for pH and Volume Requirements (reviewed, not witnessed)
- OP 2-2200050B 2B EDG Periodic (monthly) Test
- ICP 1-0700052 Unit 1 AFW Actuation System Actuation Relay Test
- OP 2-0700050 2A AFW Periodic Test (Inservice Test)
- OP 1-2200050B 1B EDG Periodic (semi-annual) Test
- OP 1-2200050A 1A EDG Periodic (monthly) Test
- OP 1-0700050 1B AFW Periodic Test (Inservice Test)

b. Findings

A Non-Cited Violation was identified by the inspectors regarding the methodology of 2-COP-07.07 (See section 40A3.1 for details).

### 1R23 Temporary Plant Modifications

#### a. Inspection Scope

The inspectors reviewed temporary system alteration TSA# 1-00-003. Due to excessive red algae in the intake canal and its adverse effects upon the Turbine Cooling Water and the Component Cooling Water systems, the licensee implemented a temporary modification to connect the fire water system to the Unit 1 screen wash system. The inspectors evaluated the temporary modification and associated 10 CFR 50.59 screening against the system design basis documentation, and verified that the modification did not adversely affect the fire system operability or availability. Additionally, the inspectors verified that the installation was consistent with applicable modification documents and was conducted with adequate configuration control.

#### b. Findings

No findings of significance were identified.

### 1EP6 Drill Evaluation

#### a. Inspection Scope

On September 20, the inspectors witnessed an emergency preparedness drill conducted by the site emergency response organization. Inspectors observed licensee activities in the main control room (simulator) to assess whether emergency level classification, and notification activities were in accordance with emergency plan implementing procedures. Additionally, the inspectors evaluated the adequacy of the post drill critiques conducted in the simulator.

#### b. Findings

No findings of significance were identified.

## **2. RADIATION SAFETY**

Cornerstone: Occupational Radiation Safety (OS)

### 2OS2 "As Low As Reasonably Achievable" Program Planning and Controls

#### a. Inspection Scope

Site-specific trends in collective exposures and source-term data were reviewed and discussed. The licensee's program for estimating and tracking department and job-specific dose expenditures was reviewed. The effectiveness of engineering controls and supervisory oversight in reducing occupational dose during the Unit 2 Refueling Outage (RFO) 12 completed during the Spring of 2000 were evaluated. Licensee "As Low As Reasonably Achievable" Program planning activities; estimated and actual dose expenditures; post-job evaluations; and lessons learned for the following selected RFO 12 high dose-rate and high person-rem exposure activities were reviewed and discussed:

- Radiation Work Permit (RWP) 00-3002, Remove, Install Lower Duct Work, Reactor Cavity Static Lines Install Remove Dance Floor, Revision (Rev.) 1
- RWP 00-3006, Install\Remove Stud Tensioners, Detension, Tension Studs, Install Stud Hole Plugs, and Alignment Pins, Rev. 0
- RWP 00-3309; Numanco: Decon, Shielding and Rad Waste Removal in All Areas of Reactor Containment Building, Rev. 0
- RWP 00-3310, 2A & 2B Steam Generators. Install, Operate, Remove Sludge Lance Equipment. Perform Sludge Lance Operations, Rev. 0
- RWP 00-3418, Install and Remove Freeze Seals and Support Work, Rev. 0
- RWP 00-3424, Install, Operate, and Remove Genesis Equipment in Steam Generators, Perform Eddy Current Testing and Tube Plugging Operation, Rev. 1

The reported collective doses for the current year-to-date and the above U2 RFO 12 tasks were compared to the original dose estimates. Results of the comparisons were evaluated using the Significance Determination Process (SDP).

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation

a. Inspection Scope

Operability and availability of Area Radiation Monitor (ARM) and portable radiation instruments were evaluated. Implementation of respiratory protection program activities for operations and health physics staff potentially required to use self-contained breathing apparatus (SCBA) equipment was evaluated. Within the inspected program areas, potential concerns and licensee actions documented in condition reports issued since January 1, 2000 were reviewed and discussed.

The inspectors observed ARM equipment installation and material condition; verified local, remote, and control room indicator readouts; reviewed current calibration records; and confirmed selected system warning and alarm set-points. Calibration and set point data were evaluated against applicable sections of the UFSAR, TS, NUREG 0737 Action Item II.F.1, and the Offsite Dose Calculation Manual for the following ARM equipment :

- Unit 1 (U1) Drumming Room, ARM 26-19, Drumming Room
- U1 Containment High Range Monitor, ARM 26-58, 59
- U1 Containment Isolation System, ARM 26-04
- U1 Fuel Handling Area, ARM 26-37
- Unit 2 (U2), Containment High Radiation Monitor, 26-40, 41
- U2 Spent Fuel Pool Monitor, 26-08

In addition, electronic and source calibration activities for the Unit 2 Purification Filter ARM 26-20 were observed on July 13, 2000.

Availability and operability of portable radiation monitoring instruments for use in high radiation and neutron fields were evaluated. Instrument calibration data were reviewed

for selected portable radiation monitoring instruments including neutron detector, model PNR-4; ion chambers, models RO2 and RO20; and detectors, model 6112.

SCBA availability was reviewed and evaluated. The inspectors directly observed SCBA charging station facilities and equipment, and verified availability of equipment and replacement bottles within established storage locations. Records of supplied-air quality, equipment operability checks, and maintenance/refurbishment activities were reviewed. Licensee processes for moving replacement SCBA bottles to and from the control room and operations support center during emergency conditions were evaluated. Training, fit testing, and medical qualifications for 10 on-shift operations and health physics staff were reviewed. Program guidance and implementation were reviewed against 10 CFR Part 20 requirements and licensee procedures. The following procedures were reviewed and discussed:

- Health Physics Procedure (HPP) 62, Inspection and Maintenance of Respiratory Protection Equipment, Rev 2
- HPP-61, Use of Respiratory Protective Equipment, Rev 8
- Protective Services Guideline Number PSG-012, SCBA Containment Style Fill Station, Rev. 0

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**

4OA1 Performance Indicator Verification

.1 Mitigating Systems Cornerstone

a. Inspection Scope

The inspectors verified the accuracy of the performance indicators for the residual heat removal system, safety system functional failures, and emergency AC which were reported to the NRC. The inspectors reviewed data applicable to four quarters of operation beginning with the third quarter of 1999 and ending the second quarter of 2000. The inspectors reviewed Operations logs, Condition Reports, Work Orders, and Maintenance Rule records to ensure the data reported was complete and accurate.

b. Findings

No findings of significance were identified.

.2 Barrier Cornerstone

a. Inspection Scope

The inspectors verified the accuracy of the performance indicators for reactor coolant system (RCS) activity which were reported to the NRC. The inspectors reviewed data applicable to four quarters of operation beginning with the third quarter of 1999 and ending the second quarter of 2000. The inspectors reviewed Operations logs, Chemistry Reports, and Condition Reports to ensure the data reported was complete and accurate. Additionally, the inspectors observed the licensee draw and analyze an RCS sample in accordance with established requirements.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

.1 (Closed) LER 50-389/00-003: Trisodium Phosphate (TSP) Surveillance Methodology Differed From Technical Specification (TS) Requirements.

Technical Specifications 4.5.2.e.4 required the licensee to collect and analyze the TSP, stored within containment, in a prescribed manner every 18 months. This LER reported that differences existed between surveillance procedure 2-COP-07.07, Analysis of Unit 2 Trisodium Phosphate for pH and Volume Requirements, and the requirements of TS 4.5.2.e.4. This surveillance test had been performed using the incorrect methodology since Unit 2 was originally licensed.

Once the discrepancies were identified, the licensee initiated CR 00-1115 and subsequently revised 2-COP-07.07 to conform with TS 4.5.2.e.4. Chemists then sampled and analyzed an additional sample of TSP according to the revised procedure. Compliance with TS was restored on July 8. The inspectors reviewed the licensee's revised procedure and examined the test results. Although the differences between 2-COP-07.07 and TS 4.5.2.e.4 constituted a non-compliance with TS, the licensee's analysis supported their determination that the previous methodology satisfied the intent of the TS Bases. Consequently, public health and safety was not adversely impacted. The inspectors concluded this event was of very low safety significance based on the successful performance of TS 4.5.2.e.4 on July 8, and that the two methodologies were not significantly different from a technical perspective. The issue was characterized as "Green" by the SDP.

Because the violation is of very low safety significance and has been entered into the licensee's corrective action program (CR 00-1115), this finding is considered a Non-Cited Violation (NCV) in accordance with Section VI.A.1 of the NRC Enforcement Policy. The finding is identified as NCV 50-389/00-06-01, Failure to Perform TSP Surveillance Testing According to TS 4.5.2.e.4.

.2 (Closed) LER 50-389/00-004: As Found Cycle 11 Pressurizer Safety Valve Setpoints Outside Technical Specification Limits.

This Licensee Event Report (LER) reported that two of the three pressurizer safety valves exceeded their TS setpoints after removal from the plant during the Unit 2 Cycle 12 refueling outage. Technical Specification 3.4.2.1 required that the pressurizer safety valves lift at 2500 psia plus or minus one percent. As determined through testing by an offsite vendor, two of the valves lifted at greater than one percent above the setpoint, one lifted was greater than three percent above the nameplate setpressure. The American Society of Mechanical Engineering code required the licensee to perform a cause determination and to implement corrective action when a tested pressurizer safety relief valve exceeded the nameplate setpressure by greater than three percent. The inspector reviewed the licensee's cause determination and safety implications and concluded that the licensee's findings as stated in the LER were reasonable. As part of their longterm corrective actions, the licensee has submitted a license amendment application to increase the allowed setpoint tolerance for both pressurizer and main steam safety valves. Based on the circumstances described above, including the time of discovery and the licensee's actions, no violations of regulatory requirements were identified. LER is closed.

#### 4OA5 Other

##### (Closed) Temporary Instruction (TI) 2515/144 Performance Indicator Data Collecting and Reporting Process Review

###### a. Inspection Scope

The inspector reviewed the licensee's performance indicator data collection and reporting processes to determine whether their processes were consistent with the guidance contained in the Nuclear Energy Institute's (NEI) guideline, NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 0. Indicator definitions, data reporting elements, calculational methods, term definitions, and clarifying notes used by the licensee as specified in procedure ADM-25.02, NRC Performance Indicators, were verified by the inspectors to be consistent with NEI 99-02. This TI is closed.

###### b. Findings

No findings of significance were identified.



## 4OA6 Meetings

### Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on October 5, 2000. The licensee acknowledged the findings presented.

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

### **PARTIAL LIST OF PERSONS CONTACTED**

#### Licensee

G. Bird, Protection Services Manager  
W. Bladow, Maintenance Manager  
D. Calabrese, EP Supervisor  
R. De La Espriella, Site Quality Manager  
B. Dunn, Site Engineering Manager  
W. Guldmond, Operations Manager  
R. Kundalkar, Site Vice President  
A. Scales, Acting Operations Supervisor  
W. Lindsey, Training Manager  
E. Weinkam, Licensing Manager  
R. West, Plant General Manager  
C. Wood, Work Control Manager

Other licensee employees contacted included office, operations, engineering, maintenance, chemistry/radiation, and corporate personnel.

#### NRC

L. Wert, Chief Reactor Projects Branch

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened and Closed

NCV 50-389/00-06-01                      Failure to Perform TSP Surveillance Testing According to TS 4.5.2.e.4 (Section 4OA3.1).

#### Closed

LER 50-389/00-003                      Trisodium Phosphate Surveillance Methodology Differed From Technical Specification Requirements (Section 4OA3.1).

LER 50-389/00-004:                      As Found Cycle 11 Pressurizer Safety Valve Setpoints Outside Technical Specification Limits (Section 4OA3.2).

TI 2515/144                                  Performance Indicator Data Collecting and Reporting Process Review (Section 4OA5).

## **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:

<b>Reactor Safety</b>	<b>Radiation Safety</b>	<b>Safeguards</b>
<ul style="list-style-type: none"> <li>● Initiating Events</li> <li>● Mitigating Systems</li> <li>● Barrier Integrity</li> <li>● Emergency Preparedness</li> </ul>	<ul style="list-style-type: none"> <li>● Occupational</li> <li>● Public</li> </ul>	<ul style="list-style-type: none"> <li>● Physical Protection</li> </ul>

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, and 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. And 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>.