

UNITED STATES NUCLEAR REGULATORY COMMISSION

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ATLANTA, GEORGIA 30303-8931

October 24, 2003

EA 03-189

Duke Energy Corporation
ATTN: Mr. R. A. Jones
Site Vice President
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION - EXERCISE OF ENFORCEMENT

DISCRETION NRC, INTEGRATED INSPECTION REPORT 05000269/2003004,

05000270/2003004, AND 05000287/2003004

Dear Mr. Jones:

On September 27, 2003, the NRC completed an inspection at your Oconee Nuclear Station. The enclosed report documents the inspection findings which were discussed on October 2, 2003, and October 9, 2003, with you and other members of your staff.

The inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, there was one NRC-identified finding of very low safety significance (Green). This finding 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 (NCV), in accordance with Section VI.A.1 of the NRC's Enforcement Policy. While a second violation of NRC requirements was also identified in Section 4OA5.5 of this report, it has been characterized as an additional example of previously cited violation 50-269,270,287/00-07-04 due to having the same root/contributing cause. Furthermore, after consultation with the Office of Enforcement and the Regional Administrator, I have been authorized to exercise enforcement discretion in accordance with Paragraph VII.B.4 of the NRC's Enforcement Policy and refrain from issuing a Notice of Violation for this additional violation example. No additional response to violation 50-269,270,287/00-07-04 is required; however, corrective actions for this additional example is expected to be taken in conjunction with corrective actions for the previously cited violation and associated performance deficiency. Additionally, a licenseeidentified violation which was determined to be of very low safety significance is listed in Section 4OA7 of this report. If you contest any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the United States 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 Oconee facility.

DEC 2

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 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).

Sincerely,

/RA/

Victor M. McCree, Director Division of Reactor Projects

Docket Nos.: 50-269, 50-270, 50-287 License Nos.: DPR-38, DPR-47, DPR-55

Enclosure: NRC Integrated Inspection Report 05000269/2003004, 05000270/2003004, and

05000287/2003004 w/Attachments: (1) Supplemental Information; (2) OI Report 2-2003-020 Synopsis; (3) OI Report 2-2003-032 Synopsis; (4) OI Report 2-2003-032 Synopsis; (4) OI Report 2-2003-032 Synopsis; (5) OI Report 2-2003-032 Synopsis; (6) OI Report 2-2003-032 Synopsis; (7) OI Report 2-2003-032 Synopsis; (8) OI Report 2-2003-032 Synopsis; (9) OI Report 2-2003-032

033 Synopsis; and (5) OI Report 2-2003-034 Synopsis

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-269, 50-270, 50-287

License Nos: DPR-38, DPR-47, DPR-55

Report No: 50-269/2003004, 50-270/2003004, 50-287/2003004

Licensee: Duke Energy Corporation

Facility: Oconee Nuclear Station, Units 1, 2, and 3

Location: 7800 Rochester Highway

Seneca, SC 29672

Dates: June 29, 2003 - September 27, 2003

Inspectors: M. Shannon, Senior Resident Inspector

A. Hutto, Resident Inspector E. Riggs, Resident Inspector

R. Aiello, Senior Operations Engineer (Section 4OA5.6) G. Hopper, Senior Operations Engineer (Section 4OA5.6)

W. Sartor, Senior Emergency Preparedness Inspector (Sections

1EP2, 1EP3, 1EP4, 1EP5 and 4OA1)

M. Scott, Senior Reactor Inspector (Sections 1R12.2 and 4OA5.4)

Approved by: R. Haag, Chief

Reactor Projects Branch 1 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000269/2003-004, IR 05000270/2003-004, IR 05000287/2003-004; 06/29/2003-09/27/2003; Oconee Nuclear Station; Licensed Operator Requalification

The report covered a three month period of inspection by the resident inspectors and announced regional based inspections by: one senior emergency preparedness inspector; one senior reactor inspector; and two senior operations engineers. One Green non-cited violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). Findings for which the SDP 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

• <u>Green</u>: The inspectors identified a non-cited violation of Technical Specification 5.4.1(a) for failure to follow Operation Management Procedure 1-12, "Maintenance of Licensed Operator, Shift Technical Advisor, and Non-licensed Operator Qualifications," resulting in multiple reactor operators/ senior reactor operators failing to properly reactivate their licenses.

This finding is greater than minor because it affected the Mitigating System Cornerstone human performance attribute to ensure that licensed operators are available, reliable, and capable to respond to initiating events to prevent undesirable consequences. The finding was evaluated using the Operator Requalification Human Performance SDP and was determined to be of very low safety significance. Based on more than 20 percent of the reactivated operators failed to meet the requirements as defined in procedure OMP 1-12, the issue was a Green finding. (Section 4OA5.6)

B. Licensee Identified Violations

One violation of very low safety significance, which was identified by the licensee has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation is listed in Section 4OA7.

Report Details

Summary of Plant Status:

Unit 1 operated at 100 percent rated thermal power (RTP) until August 10 at which time a unit coast down commenced in advance of refueling outage EOC -21. The unit was shut down from 68 percent RTP on September 20 and remained shutdown for the rest of the inspection period.

Unit 2 operated at or near 100 percent RTP for the inspection period.

Unit 3 entered the inspection period at 15 percent RTP with the turbine off-line for balancing. The unit was returned to 100 percent RTP on June 29 and remained there for the rest of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's response to a tornado warning issued for the Oconee Nuclear Station area when a tornado was spotted near Liberty, South Carolina on July 13, 2003. Liberty is located approximately 11 miles east of the plant. The inspectors verified that operations personnel entered abnormal procedure AP/0/A/1700/006, Natural Disaster, and that there were no ongoing maintenance activities on systems that required restoration by the procedure. The inspectors also verified that all control rooms operations personnel had reviewed Enclosure 5.1, Tornado Information, as required by the AP.

b. <u>Findings</u>

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted partial equipment alignment walkdowns to evaluate the operability of selected redundant trains or backup systems while the other train or system was inoperable or out of service. The walkdowns included, as appropriate, reviews of plant procedures and other documents to determine correct system lineups, and verification of critical components to identify any discrepancies which could affect operability of the redundant train or backup system. The following systems were included in this review:

- Keowee hydro unit (KHU) 1 while the KHU 2 out of service (OOS) for maintenance on the permanent magnet generator.
- A and C low pressure service water (LPSW) pumps while the B LPSW pump was OOS for scheduled preventive maintenance (PM).
- Units 1, 2, and 3 turbine driven emergency feedwater (TDEFW) pumps during the annual standby shutdown facility (SSF) outage.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 <u>Fire Area Walkdowns</u>

a. <u>Inspection Scope</u>

The inspectors conducted tours in areas of the plant to verify that combustibles and ignition sources were properly controlled, and that fire detection and suppression capabilities were intact. The inspectors selected the areas based on a review of the licensee's safe shutdown analysis and the probabilistic risk assessment based sensitivity studies for fire related core damage sequences. Inspection of the following areas were conducted during this inspection period:

- Unit 2 cable spread room (1)
- Unit 3 east penetration room (1)
- Unit 1 cable spread room (1)
- Unit 3 high pressure injection (HPI) pump room (1)
- Unit 2 low pressure injection (LPI) pump rooms (2)
- Unit 1 equipment room (1)

b. Findings

No findings of significance were identified.

.2 Fire Drill Observation

a. Inspection Scope

The inspectors observed a fire drill conducted on July 25, 2003, to assess readiness of the licensee's capability to fight fires. The fire was simulated in the Unit 1 600 volt switchgear on the ground floor of the turbine building. The inspectors evaluated the following attributes:

- protective clothing/self contained breathing apparatus properly worn
- adequacy/appropriateness of fire extinguishing methods
- controlled access to the fire area by the fire brigade members
- adequacy of fire fighting equipment
- command and control effectiveness of the fire brigade leader
- adequate communications
- effectiveness of smoke removal gear

b. <u>Findings</u>

No findings of significance were identified.

1R06 Flood Protection

a. Inspection Scope

The inspectors reviewed the licensee's response to water intrusion into the CT-5 cable trench near the 600V load center, 3X6, at the west wall of the turbine building (PIP O-03-04464) as a result of heavy seasonal rains. This cable trench contains SSF cabling and is linked to the cable trenches that run to the SSF. The inspectors walked down the electrical cabling and load centers in the SSF to verify this water was not infiltrating safety related equipment. The inspectors also assessed the licensee's effectiveness in removing the water from the trenches. Additionally, the inspectors verified that work requests were written to restore the functionality of a sump pump associated with this cable trench and to inspect and repair the associated cable trench drains.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification

a. Inspection Scope

The inspectors observed licensed operator simulator training on July 1, 2003. The scenario involved a dropped rod, a steam generator tube rupture in the 1A steam generator and subsequent main steam line break. The inspectors also observed entry into the emergency action levels (Unusual Event and Alert). The inspectors observed crew performance in terms of: communications; ability to take timely and proper actions; prioritizing, interpreting, and verifying alarms; correct use and implementation of

procedures, including the alarm response procedures; timely control board operation and manipulation, including high-risk operator actions; and oversight and direction provided by the shift supervisor, including the ability to identify and implement appropriate Technical Specification (TS) actions.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

.1 Routine Maintenance Effectiveness Reviews

a. Inspection Scope

The inspectors reviewed the licensee's effectiveness in performing routine maintenance activities. This review included an assessment of the licensee's practices pertaining to the identification, scoping, and handling of degraded equipment conditions, as well as common cause failure evaluations. For each item selected, the inspectors performed a detailed review of the problem history and surrounding circumstances, evaluated the extent of condition reviews as required, and reviewed the generic implications of the equipment and/or work practice problem. For those systems, structures, and components (SSCs) scoped in the maintenance rule per 10 CFR 50.65, the inspectors verified that reliability and unavailability were properly monitored and that 10 CFR 50.65 (a)(1) and (a)(2) classifications were justified in light of the reviewed degraded equipment condition. The inspectors reviewed the following items:

- PIP O-03-04775, ACB-4 (KHU related relay) found tripped causing unexpected entry into TS 3.8
- PIP 0-03-05237, Water Contamination of the SSF Auxiliary Service Water (ASW) Pump Inboard Bearing Lubricating Oil

b. Findings

Introduction: On August 18, 2003, during the performance of an annual lube oil preventive maintenance (PM) of the SSF ASW pump, the licensee discovered that the lube oil in the pump inboard bearing contained approximately 50 percent water/water saturated oil. The lack of adequate corrective action for this issue was determined to be a finding and is designated to be an unresolved item (URI) pending a risk determination.

<u>Description</u>: On September 19, 2002, the SSF ASW pump seal was repacked. Subsequently, a leak developed between the packing gland and the pump casing. This leakage was directed at the inboard bearing of the pump, resulting in water leakage into the bearing's lube oil reservoir. On November 20, 2002, and again on March 18, 2003, auxiliary operators initiated work requests to correct this leakage. However, these work requests were canceled based on the assumption that the pump was exhibiting normal seal leakage. On August 18, 2003, during the annual lube oil PM of the SSF ASW

pump, the licensee discovered that the lube oil in the pump inboard bearing contained approximately 50 percent water/water saturated oil.

Analysis: The failure to correct the SSF ASW pump leakage was considered to be more than minor, in that, the leakage contaminated the lube oil of the pump's inboard bearing which affected the equipment reliability of a mitigating system (i.e., the SSF ASW pump). The finding was evaluated in an SDP Phase 1 analysis due to the degraded reliability of a mitigating system under the Reactor Safety Cornerstone. Based on the extent of the water contamination of the inboard bearing's lube oil, it was assumed that the finding represented an actual loss of safety function for the SSF ASW pump. This was based on the conclusion that the water contamination in the lube oil would adversely affect the bearing and prevent the pump from operating for its 72-hour mission time. An SDP Phase 2 analysis was performed which indicated that the significance of this finding could be greater than Green (very low safety significance); therefore, a Phase 3 analysis was required. The licensee's assessment of the water in the bearing lube oil for the SSF ASW pump concluded that the pump could have satisfied its safety function. As part of the URI review, the inspectors will further assess the bases for the licensee's conclusion and appropriately factor the results into the SDP analysis.

Enforcement: 10 CFR 50, Appendix B, Criterion XVI, requires, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. The SSF ASW pump was re-packed on September 19, 2002. Subsequently, a leak developed between the packing gland and the pump casing. This adverse condition was documented on November 20, 2002, and again on March 18, 2003, in work requests. However, contrary to 10 CFR 50 Appendix B, Criterion XVI, this condition adverse to quality was not corrected. This finding does not represent an immediate safety concern, since the contaminated oil was changed out, the affected bearing replaced, and post maintenance testing was completed as part of the licensee's immediate corrective actions. Pending determination of this finding's safety significance, it will be identified as URI 05000269,270,287/2003004-01: Water Contamination of the SSF ASW Pump Inboard Bearing Lubrication Oil. This issue is in the licensee's corrective action program as PIP O-03-05237.

.2 Periodic Evaluation

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's Maintenance Rule periodic assessment, "Maintenance Rule Periodic Assessment [Report] for Maintenance Rule Implementation - Oconee Nuclear Station, January 1, 2001 - June 30, 2002," dated December 31, 2002, while on-site the week of September 2, 2003. The report was issued to satisfy paragraph (a)(3) of 10 CFR 50.65, and covered the period as indicated for three units. The inspection was to determine the effectiveness of the assessment and that it was issued in accordance with the time requirement of the Maintenance Rule (MR). Items included in the evaluation were: balancing reliability and unavailability, (a)(1) activities, (a)(2) activities, and use of industry operating experience. To verify compliance with 10 CFR 50.65, the inspectors reviewed selected MR activities covered by the assessment period for the following maintenance rule systems: Instrument Air, 4160 Volt Electrical

Power System, Low Pressure Service Water, 600/208 Volt Safety-Related Power System, and Turbine Building Flood. Specific procedures and documents reviewed are listed Attachment 1 to this report.

During the inspection, the inspectors reviewed selected plant work order data, the site guidance implementing procedure, discussed and reviewed relevant corrective action issues (PIP), reviewed generic operations event data and probabilistic risk reports, and discussed issues with system engineers. Operational event information was evaluated by the inspectors in its use in MR functions. The inspectors selected work orders, a MR assessment, and other corrective action documents of systems recently removed from 10 CFR 50.65 a(1) status and those in a(2) status for some period to assess the justification for their status. The documents were compared to the site's MR program criteria, and the MR a(1) evaluations and rule related data bases.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluations

a. <u>Inspection Scope</u>

The inspectors evaluated, as appropriate, for the selected SSCs listed below: (1) the effectiveness of the risk assessments performed before maintenance activities were conducted; (2) the management of risk; (3) that, upon identification of an unforseen situation, necessary steps were taken to plan and control the resulting emergent work activities; and (4) that maintenance risk assessments and emergent work problems were adequately identified and resolved.

- KHU 2 emergent work with KHU 1 maintenance scheduled
- Station ASW pump OOS extended for troubleshooting with the Unit 1&2 A LPSW train OOS for maintenance
- Emergent replacement of 1A component cooling (CC) pump motor bearing while switchyard work was scheduled
- 10 CFR 50.65 (a)(4) risk assessment for the unit 1 steam generator replacement outside lift system construction adjacent to the 1B main steam line
- 3A LPI pump and 3A LPSW pump OOS for scheduled maintenance
- Rod Control Worth assessment for core offload (PIP O-03-6040)

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

Quarterly Operability Evaluations

a. <u>Inspection Scope</u>

The inspectors reviewed selected operability evaluations affecting risk significant mitigating systems, to assess, as appropriate: (1) the technical adequacy of the evaluations; (2) whether continued system operability was warranted; (3) whether other existing degraded conditions were considered; (4) if compensatory measures were involved, whether the compensatory measures were in place, would work as intended, and were appropriately controlled; and (5) where continued operability was considered unjustified, the impact on TS Limiting Condition for Operation (LCO). The inspectors reviewed the following items for operability evaluations:

- PIP O-03-4580, Unit 1 reactor building tendon anchor threads stripped
- PIP O-03-4599, Siphon seal water failed to the 2B essential vacuum siphon pump
- PIP O-03-4932, Station ASW pump high shaft temperatures
- PIP O-03-5377, Unit 1 reactor vessel head nozzle weld surface indications
- PIP O-03-5564, 2C LPI pump discolored bearing oil
- PIP O-03-5731, SSF "B" diesel jacket water leak at the left bank engine driven water pump shaft seal

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds

a. Inspection Scope

The inspectors performed a cumulative review of existing operator work-arounds to determine any change from the previous review. The review also considered the effect of the work-arounds on the operators ability to implement abnormal or emergency operating procedures. The inspectors periodically reviewed PIPs and held discussions with operators to determine if any conditions existed that should have been identified by the licensee as operator work-arounds.

b. <u>Findings</u>

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed various modification packages related to steam generator replacement to verify that the associated systems design basis, licensing basis, and performance capability would be maintained following the modifications; and that the modifications would not leave the plant in an unsafe condition. The associated 10 CFR 50.59 screenings/evaluations were also reviewed for technical accuracy and to verify license amendments were not required.

The inspectors reviewed the following modification packages during the inspection:

- ON-13086 Part 000, Replacement Steam Generators, Component Modification
- ON-13086 Part AM4, Replacement Steam Generators, OTSG Replacement

b. <u>Findings</u>

No findings of significance were identified.

1R19 Post-Maintenance Testing (PMT)

a. Inspection Scope

The inspectors reviewed PMT procedures and/or test activities, as appropriate, for selected risk significant mitigating systems to assess whether: (1) the 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 the status required to perform its safety function. The inspectors observed testing and/or reviewed the results of the following tests:

- PT/0/A/0251/010, Auxiliary Service Water Pump Test, following troubleshooting for higher than expected pump shaft temperatures (PIP O-03-04932).
- OP/0/A/1600/010, Operation of the SSF Diesel Generator, following inspection and repairs to the SSF EDG exhaust insulation damaged by fire (PIP O-03-5354).
- OSS-0210.03-00-0001, Testing of a Reactor Building Spray Pump and Motor at Elevated Ambient Temperature, to verify RBS and LPI operability following post event LPI/RBS pump room heatup.

- TT/0/A/0110/028, WC Chilled Water to LPI/RBS Pump Room AHU's, following installation of temporary modification
- PT/1/A/0600/012, Turbine Driven Emergency Feedwater Pump Test (Unit 1), following scheduled preventive maintenance activities
- PT/3/A/0600/013, 3B Motor Driven Emergency Feedwater Pump Test (Unit 3), following B train preventive maintenance activities

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. <u>Inspection Scope</u>

The inspectors conducted reviews and observations for selected licensee outage activities to ensure that: (1) the licensee considered risk in developing the outage plan; (2) the licensee adhered to the outage plan to control plant configuration based on risk; (3) that mitigation strategies were in place for losses of key safety functions; and (4) the licensee adhered to operating license and TS requirements. Between September 18, 2003, and September 27, 2003, the following activities related to the Unit 1 refueling outage were reviewed for conformance to the applicable procedure and selected activities associated with each evaluation were witnessed:

- Outage risk management plan/assessment
- Plant Cooldown
- Mode changes from mode 1 (power operation) to mode 6 (refueling)
- Shutdown decay heat removal and inventory control

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed surveillance tests and/or reviewed test data of the selected risk-significant SSCs listed below, to assess, as appropriate, whether the SSCs met TS, UFSAR, and licensee procedure requirements. In addition, the inspectors determined if the testing effectively demonstrated that the SSCs were ready and capable of performing their intended safety functions.

- TT/1/A/0170/017, HPI and LPI/RBS Pump Room Heatup
- PT/0/A/0620/016, Keowee Hydro Emergency Start Test
- PT/1/A/0251/001, Low Pressure Service Water Test
- PT/2/A/0600/013A, Motor Driven Emergency Feedwater Pump Test (2A pump)
- PT/2/A/0600/013B, Motor Driven Emergency Feedwater Pump Test (2B pump)

b. <u>Findings</u>

No findings of significance were identified.

1R23 Temporary Modifications

a. <u>Inspection Scope</u>

The inspectors reviewed documents and observed portions of the installation of selected temporary modifications. Among the documents reviewed were system design bases, the UFSAR, TS, system operability/availability evaluations, and the 10 CFR 50.59 screening. The inspectors observed, as appropriate, that the installation was consistent with the modification documents, was in accordance with the configuration control process, adequate procedures and changes were made, and post installation testing was adequate. The following items were reviewed under this inspection procedure:

- ONTM 2152, Leak Sealing Injection for 3HP-415
- TT/0/A/0110/028, WC Chilled Water to LPI/RBS Pump Room AHU's
- ONTM 2155, Install Temp Jumper on 1HP-16 Limit Switch

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Testing

a. <u>Inspection Scope</u>

The inspectors evaluated the alert and notification system design and the testing program. The system consisted of 65 sirens within the 10-mile emergency planning zone. The siren testing program consisted of low growl tests, bi-weekly silent tests, and quarterly full cycle tests.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation

a. <u>Inspection Scope</u>

The inspectors reviewed the design of the emergency response organization augmentation system and the maintenance of the licensee's capability to staff emergency response facilities within stated timeliness goals.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. <u>Inspection Scope</u>

The inspectors reviewed Revisions 2003-01 and 2003-02 to the Radiological Emergency Plan to determine whether any of the changes decreased the effectiveness of the Emergency Plan. The review was performed against the requirements of 10CFR 50.54(q).

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. <u>Inspection Scope</u>

The inspectors evaluated the efficacy of licensee programs that addressed weaknesses and deficiencies in emergency preparedness. Items reviewed included exercise and drill critique reports and the corrective actions documents and are listed in Attachment 1 to this report. There had been no actual implementations of the Emergency Plan since the last emergency preparedness program inspection.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. <u>Inspection Scope</u>

The inspectors observed and evaluated a simulator based emergency preparedness drill held on August 27, 2003. The drill scenario involved a loss of coolant accident (reactor

coolant pump seal failure) with fuel cladding failure due to debris release to the reactor coolant system. Subsequently, fission product release to the environment occurred as the reactor building equipment hatch was open at the time. The inspectors observed the scenario from the simulator control room. The inspectors assessed the licensee's ability to correctly classify the event and notify state and county authorities. For this drill, the scenario progressed to a general area emergency.

b. <u>Findings</u>

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

Emergency Preparedness Cornerstone

a. Inspection Scope

Licensee records were reviewed to determine whether the submitted PI values through the second quarter of 2003 were calculated in accordance with the guidance contained in Section 2.4 (Emergency Preparedness Cornerstone) of Nuclear Energy Institute 99-02, Revision 2, Regulatory Assessment Performance Indicator Guideline. The associated PIs are as follows:

- Emergency Response Organization (ERO) Drill/Exercise Performance
- ERO Drill Participation
- Alert and Notification System Reliability

The inspectors assessed the accuracy of the PI for ERO drill and exercise performance over the past eight quarters through review of sample drill and event records. The inspectors reviewed training records to assess the accuracy of the PI for ERO drill participation during the previous eight quarters for personnel assigned to key positions in the ERO. The inspectors assessed the accuracy of the PI for the alert and notification system reliability through review of sample records for the low growl tests, biweekly silent test, and quarterly full cycle test.

b. Findings

No findings of significance were identified.

4OA3 Event Followup

(Closed) Licensee Event Report (LER) 50-269/02-02-01: Potential for Fire to Indirectly Damage Mitigation Component

This LER documented the March 20, 2002 discovery of a potential for the spurious operation of valves LP-19 and LP-20, as a result of a postulated fire in the equipment rooms, to disable the plant specific standby shutdown facility (SSF) reactor coolant (RC)

makeup pumps. It was determined that the spurious actuation of either of these valves would drain the borated water storage tank into the reactor building (RB) through the emergency sump with a resulting water level in the RB basement that would submerge the SSF RC makeup pump. Ultimately, the SSF makeup pump was declared inoperable for a time exceeding that allowed by TS. The inspectors reviewed the LER and assessed the risk significance of the deficiency by performing a SDP phase 2 analysis. The results of the phase 2 analysis required that a phase 3 analysis be performed. This analysis was performed by an NRR risk analysis and it was determined that the deficiency had very low safety significance (Green). The enforcement aspects of this licensee identified violation are discussed in Section 4OA7. This LER is closed.

4OA5 Other Activities

.1 <u>Steam Generator Replacement (SGR) Inspection Overview</u>

This inspection report documents completion of inspections required by Inspection Procedure (IP) 50001, Steam Generator Replacement Inspection, some of which were completed in accordance with baseline inspection procedures. The table below identifies and correlates specific IP 50001 inspection requirements examined during this inspection period with the corresponding sections of this report.

IP 50001 Section	Inspection Scope	Section of This Report
02.02.a.	SG replacement engineering and technical support	1R17, 4OA5.3
02.03.e.1.	Establishment of operating conditions including defueling, RCS draindown, system isolation and safety tagging	1R20, 4OA5.2
02.03.e.2.	Implementation of radiation protection controls	4OA5.2
02.03.e.4.	Installation, use, and removal of temporary services	4OA5.2

.2 SGR Operating Conditions, Radiation Protection Controls, and Temporary Services

a. Inspection Scope

As required by IP 50001 Section 02.03.e, throughout this inspection period, the inspectors routinely inspected the following activities as they occurred:

<u>Establishment of operating conditions including defueling, RCS draindown, and system isolation.</u> The inspectors observed portions of the defueling activities and routinely verified that key safety functions were maintained through review of the licensee's daily defense in depth assessment sheets, performance of control room walkdowns, and monitoring plant parameters on the licensee's operator aid computer.

- Implementation of radiation protection controls. The inspectors performed walkdowns of the reactor building to verify that the appropriate radiation postings were displayed and that radiation protection (RP) personnel were assigned to provide RP job coverage. The inspectors also discussed contamination control plans related to the removal of the steam generators from the reactor building with the project RP coordinator.
- <u>Installation, use, and removal of temporary services directly related to steam generator replacement activities.</u> The inspectors reviewed the licensees plans (ON-13086 AL1,AL2) for temporary power to verify that the power sources utilized would not impact the operating units or safety related equipment in the event of faults occurring on the temporary power supplies.

b. Findings

No findings of significance were identified.

.3 SG Replacement Engineering and Technical Support

a. <u>Inspection Scope</u>

As required by IP 50001 Section 02.02.a., the inspectors performed the following inspections as they relate to engineering and technical support:

- Verified that selected design changes and modifications to systems, structures
 and components described in the UFSAR are reviewed in accordance with 10
 CFR 50.59. The inspectors reviewed the 50.59 evaluations associated with the
 modifications discussed in Section 1R17 of this report to verify that the licensee's
 justifications for not requiring a license amendment were technically adequate
 and complete.
- Reviewed key design aspects and modifications for the replacement steam generators. The inspectors reviewed the modification packages discussed in Section 1R17 to verify that the replacement steam generators design attributes were consistent with the existing design basis for material compatibility, performance and structural integrity. The inspectors verified that the modification packages addressed the replacement steam generators impact on accident analyses and the licensee's probabilistic risk assessment model.

b. Findings

No findings of significance were identified.

.4 (Closed) URI 50-269,270,287/2003003-01: Control Room Board Component Thermal Reliability

The licensee completed an operational review and evaluation in PIP O-03-04052 that satisfied the concerns expressed in the unresolved issue (URI 50-269, 270, 287/2003 003-01). The licensee measured temperatures in the control room panel and boards.

Using the data and existing analysis, the licensee demonstrated that the board temperature would remain at or below the most critical control component steady state maximum temperature. Using a calibrated area temperature probe, the inspector inspected the interior of the boards to establish that there were no obvious thermal pockets in the instrument arrangement and that the interior of boards was fairly homogeneous in temperature. The measured temperatures were close to the values taken during the licensee data collection. This item is considered closed.

.5 <u>Tornado Mitigation</u>

a. Inspection Scope

In parallel with NRC's review of the Oconee tornado mitigation licensing basis change request dated June 7, 2002, an in-office assessment was performed into the disposition of those tornado mitigation related deficiencies identified in NRC Inspection Report 50-269,270,287/02-07.

b. <u>Findings</u>

Introduction: One additional example of previously cited Design Control Violation 50-269,270,287/00-07-04 was identified involving a Keowee Hydroelectric Unit (KHU) auxiliary power vulnerability. However, because the criteria of Paragraph VII.B.4 of the NRC's Enforcement Policy has been satisfied, the NRC considers it appropriate to exercise discretion and refrain from issuing a Notice of Violation. Reflective of an inadequate tornado mitigation strategy, the issue associated with this additional violation example, as well as others examples of this same performance deficiency, were previously assessed in Inspection Report 50-269,270,287/02-07 and determined to be collectively of low to moderate risk significance (White).

<u>Discussion</u>: In the second quarter of 2001, Oconee Unit 1 was in the Degraded Cornerstone Column of the Action Matrix. This was based on two White inspection findings in the mitigating systems cornerstone which dealt with the licensee's tornado mitigation strategy. Associated with these White findings were two violations. One was a violation of 10 CFR 50, Appendix B, Criterion III, Design Control. It was identified as Violation 50-269,270,287/00-07-04 and involved the inadequate consideration of hydraulic requirements as design inputs for calculation OSC 3873, Hydraulic Model of High Pressure Injection System with Suction from the Fuel Pool. The other was a violation of Technical Specification 5.4, Procedures, and 10 CFR 50, Appendix B, Criterion XVI, Corrective Action. It was identified as Violation 50-269,270,287/01-03-03 and involved a failure to promptly correct tornado mitigation procedures to ensure the station auxiliary service water (ASW) pump could be aligned within 40 minutes of a design basis tornado.

During the Supplemental and Followup Inspections (Inspection Reports 50-269,270, 287/01-09 and 50-269,270,287/02-07, respectively) performed in accordance with Inspection Procedure 95002, it was determined that the two White findings were reflective of a "deficient tornado mitigation strategy." The inspections also revealed that there were a number of additional examples which reflected this same performance deficiency. As a result of subsequent NRC review, one of these additional examples

has now been recognized as being in violation of 10 CFR 50, Appendix B, Criterion III, Design Control. This example, which was addressed in Followup Inspection Report 50-269,270,287/02-07, Section 02.03B.(1), concerns the possibility that a tornado could have caused a loss of auxiliary power to the KHUs and a subsequent loss of all power to station ASW. Consequently, secondary side heat removal via ASW for all three Oconee units would be lost. As indicated in the Followup Report, appropriate actions were taken to resolve this licensee-identified KHU auxiliary power vulnerability and reflect the necessary operator actions in the revised probabilistic risk assessment (PRA) model. Subsequent review of the licensing bases indicates that the KHUs are sufficiently described as a power source for components used in tornado mitigation. Furthermore, the Updated Final Safety Analysis Report (UFSAR) establishes a reliance on this power source, such that the KHU auxiliary power supply vulnerability is considered a design control failure.

Analysis: During the Followup Inspection, the risk effects of all identified examples reflecting the common performance deficiency (i.e., inadequate tornado mitigation strategy) were collectively estimated to be of low to moderate risk significance (White). Since the overall risk significance was in the same range as the original two White findings, none of the additional examples of the root/contributing cause of the performance deficiency were independently evaluated using the significance determination process. In addition, the Followup inspection determined that the licensee's corrective actions (which included a tornado mitigation licensing basis change submittal) were appropriate to resolve Oconee's deficient tornado mitigation strategy.

<u>Enforcement</u>: 10 CFR 50, Appendix B, Criterion III, Design Control, states in part that measures shall be established to assure that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions, and that design control measures shall be applied to items such as stress, thermal, hydraulic and accident analysis. Contrary to these requirements, up until the time it was corrected in March 2002, an auxiliary power design vulnerability precluded the KHUs from being the reliable tornado mitigation power supply that was established in the licensing basis.

Since this newly recognized violation of 10 CFR 50, Appendix B, Criterion III, has the same root/contributing cause as Violation 50-269,270,287/00-07-04, it has been characterized as an additional example of Violation 50-269,270,287/00-07-04. In addition, because the criteria of Paragraph VII.B.4 of the NRC's Enforcement Policy has been satisfied, the NRC considers it appropriate to exercise discretion and refrain from issuing a Notice of Violation for this additional violation example. No additional response to Violation 50-269,270,287/00-07-04 is required. Corrective actions for this additional example is expected to be taken in conjunction with corrective actions for the previously cited violation and associated performance deficiency.

.6 (Closed) URI 05000269,270,287/2003002-02: Licensee did not reactivate reactor operator/senior reactor operator licenses in accordance with Operation Management Procedure (OMP) 1-12, "Maintenance of Licensed Operator, Shift Technical Advisor, and Non-licensed Operator Qualifications"

<u>Introduction</u>: A Green non-cited violation (NCV) was identified by the inspectors for failure to follow a procedure required by TS 5.4.1(a), resulting in multiple operators failing to properly reactivate reactor operator (RO)/senior reactor operator (SRO) licenses.

<u>Description</u>: During the biennial Requalification inspection (NRC Inspection Report 05000269,270,287/2003002) the inspectors identified that RO/SRO licenses were reactivated without following the guidance in OMP 1-12, which required a plant tour that included the Primary, Secondary, and outside SSF operator rounds on all units. OMP 1-12 implemented the regulatory requirements of 10 CFR 55.53(f) which specifies that in order to activate an operator license, a complete tour of the plant shall be completed.

The inspectors compared the information contained in ten reactivation records with vital area computer access records to verify the plant tours were performed as indicated. Several records did not indicate the dates the tours were performed or had completion dates that were outside the reactivation dates (i.e. previous quarter). Seven of the ten operators did not complete the plant tours or the tours were partially completed outside of their scheduled reactivation period.

The inspectors identified that three operators had not satisfied the requirements for the complete plant tours as part of reactivating of their operator license. One individual's "in-plant" tour record was inappropriately designated Not Applicable (N/A). Another operator failed to conduct a complete in-plant tour during his reactivation period. Security records indicated that a third operator's in-plant tour consisted of approximately seven hours at one location only (inside the SSF). Furthermore, most of the reactivated operators failed to have an RO/SRO accompaniment for the complete tour as required by OMP 1-12. The licensee initiated PIP O-03-01668 to determine the root cause and corrective measures. The significance of this finding had not been determined at the conclusion of that inspection. (See Attachments 2-5 for synopsis of subsequent OI investigations.)

Analysis: The inspectors determined that the licensee's failure to adequately ensure that licensed operators reactivated their license in accordance with procedure OMP 1-12 is a performance deficiency. The finding, which involves the mitigating systems cornerstone, is greater than minor because it is associated with human performance attributes that affect the availability, reliability, and capability of licensed operators to respond to initiating events to prevent undesirable consequences. The finding was evaluated using the Operator Requalification Human Performance SDP and was determined to be of very low safety significance. Since more than 20 percent of the reactivated operators failed to meet the requirements as defined in procedure OMP 1-12, the issue was a Green finding.

<u>Enforcement</u>: 10 CFR 55.53(f), Conditions of a License states, in part, that the licensee has completed a minimum of 40 hours of shift functions under the direction of an operator or senior operator as appropriate and in the position to which the individual will be assigned. The 40 hours must have included a complete tour of the plant and all required shift turnover procedures. To ensure 10 CFR 55.53(f) requirements are satisfied, the licensee has established Procedure OMP 1-12, "Maintenance of Licensed Operator, Shift Technical Advisor, and Non-licensed Operator Qualifications." Section

5.4.4 of OMP 1-12 stated, "The licensed operator shall complete a minimum of 48 hours in parallel with a licensed operator in the position(s) to which the operator is to be assigned per OMP 2-01, "Duties and Responsibilities for On-Shift Operations Personnel," including shift turnovers. Up to 8 hours of the 48 hours of parallel operations may be used to complete the plant familiarization and tours. The plant tours shall include observing Primary, Secondary, and outside/SSF operator rounds on all units. A complete plant tour shall be conducted with an appropriate licensed SRO or RO."

TS 5.4.1.(a) required written procedures be established, implemented and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, Administrative Procedures. OMP 1-12 is a written administrative procedure that is required by TS 5.4.1(a).

Contrary to the above, on March 28, 2003, the NRC identified that the licensee failed to properly reactivate licensed operators on February 11, 2002, in accordance with procedure OMP 1-12. Because the failure to perform the plant tour as part of reactivation is of very low safety significance and has been entered in the licensee corrective action program PIP O-03-01668. This violation TS of 5.4.1(a) is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy and is identified as NCV 05000269,270,287/2003004-02: Failure to follow a procedure required by TS 5.4.1, resulting in multiple reactor operators/ senior reactor operators failing to properly reactivate their licenses.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Ron Jones, Site Vice President, and other members of licensee management at the conclusion of the inspection on October 2, 2003, and October 9, 2003. 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

4OA7 Licensee-Identified Violation

The following finding of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a NCV.

• 10 CFR 50, Appendix B, Criterion XVI, requires that conditions adverse to quality are promptly identified and corrected. Contrary to 10 CFR 50, Appendix B, the licensee failed to promptly identify that spurious actuation of Valves LP-19 and LP-20 could disable the SSF RC makeup pump such that a fire in the cable room, equipment room, or cable shaft could defeat both trains of safe shutdown capability, including the dedicated shutdown capability. Spurious actuation of LP-19 & 20 was identified in PIP O-97-02477 as a result of an operating

experience review. Between August 13, 1997, and March 20, 2002, the licensee concentrated its corrective actions on maintaining enough inventory in the BWST to shutdown after a fire and on establishing piggyback operation following a spurious actuation of LP-19 & 20. The potential to degrade the dedicated shutdown capability was not recognized until March 20, 2002 during an engineering review of the associated procedures. PIP O-02-01357 documents the potential degradation of the SSF RC makeup pump. Under the Significance Determination Process a risk analyst from NRR performed a Phase III risk evaluation and determined that the performance deficiency was of very low safety significance (Green). The failure of the unit specific SSF RC makeup pump was selected as the surrogate for the performance deficiency. For the performance deficiency to affect the accident sequence a fire must ignite in one of a limited number of compartments, develop unsuppressed into a full compartment fire with the fire causing either motor operated valve, LP-19 or 20 to hot short opening the valve. Concurrently with these events, a reactor coolant pump seal loss of coolant accident would have to develop (which does not always happen) with the loss of the SSF RC makeup pump. These were factors reducing the finding's safety significance.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

- S. Batson, Mechanical/Civil Engineering Manager
- J. Batton, Oconee Steam Generator Engineer
- D. Baxter, Engineering Manager
- R. Brown, Emergency Preparedness Manager
- N. Constance, Operations Training Manager
- C. Curry, Maintenance Manager
- T. Curtis, Reactor & Electrical Systems Manager
- D. Covar, Training Instructor
- C. Eflin, Requalification Supervisor
- W. Foster, Safety Assurance Manager
- P. Fowler, Access Services Manager, Duke Power
- T. Gillespie, Operations Manager
- B. Hamilton, Station Manager
- B. Jones, Training Manager
- R. Jones, Site Vice President
- T. King, Security Manager
- R. Knorr, Maintenance Rule Engineer
- B. Lowrey, Steam Generator Engineer
- L. Nicholson, Regulatory Compliance Manager
- R. Repko, Superintendent of Operations
- J. Smith, Regulatory Affairs
- J. Steeley, Training Supervisor
- J. Twiggs, Manager, Radiation Protection
- G. Washburn, Nuclear Instructor
- J. Weast, Regulatory Compliance

NRC

L. Olshan, Project Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000-269,270,287/2003004- URI 01

Water Contamination of the SSF ASW Pump Inboard Bearing Lubrication Oil (Section 1R12.1)

Opened and Closed

05000269,270,287/2003004- NCV Failure to follow a procedure required by TS

02 5.4.1, resulting in multiple reactor operators/ senior reactor operators failing to properly

reactivate their licenses (Section 4OA5.6)

Previous Items Closed

50-269/02-02-01 LER Potential for Fire to Indirectly Damage

Mitigation Component (Section 4OA3)

50-269,270,287/2003003-01 URI Control Room Board Component Terminal

Reliability (Section 4OA5.4)

05000269, 270,287/2003002- URI Licensee did not reactivate RO/SRO licenses

in accordance with Operation Management Procedure (OMP) 1-12, "Maintenance of Licensed Operator, Shift Technical Advisor, and Non-licensed Operator Qualifications"

(Section 4OA5.6)

Items Discussed

None

02

LIST OF DOCUMENTS REVIEWED

(Section IR12.2)

PIPs

O-00-00747, Document OEM [4160 Volt Power System] as MR A1

O-98-01004, IA System Declared A1

O-98-05832, IA System Declared A1

O-98-04345, LPSW System is MR A(1)

O-00-00921, 600/208 V Safety Related Power System is MR a(1)

O-02-00106, Turbine Building Flood Super System is MR A1

G-00-00319, Adverse Trend in Errors Associated with MR Assessor Database

O-00-03593, IA Header Pressure Decreasing

Administrative Procedures

Nuclear System Directive 301, Requirements for the Maintenance Rule, Rev. 7 Engineering Directives Manual (EDM) 210, Engineering Responsibilities for the Maintenance Rule, Rev. 15 Miscellaneous

SAAG File NO 738, PSA Assessment of Oconee Maintenance Rule Experience Period Ending

June 2002, dated 2/11/03

Maintenance Rule Periodic Assessment [Report] for Maintenance Rule Implementation -

Oconee Nuclear Station, July 1, 1999 - December 31, 2000

Maintenance Rule Special Expert Panel Meeting Minutes, 3/03/03

Maintenance Rule Special Expert Panel Meeting Minutes, 7/07/03

Maintenance Rule Special Expert Panel Meeting Minutes, 7/15/03

LPSW Health Report, Report Period 2003T2

TBF Health Report, Report Period 2003T1

600/208 V Health Report, Report Period 2003T1

OEM Health Report, Report Period 2003T1

Plant Health Committee Action Item List, to dates of Inspection

(Section 1EP5)

Duke Power Company Emergency Planning Functional Area Assessment SA-02-21

(NPA)(EP)(ALL), dated December 2, 2002

PIP O-03-01265 Critique Drill 02-07

LIST OF ACRONYMS

ADAMS - Agency wide Documents Access and Management System

CC - Component Cooling

CFR - Code of Federal Regulations
DEC - Duke Energy Corporation
DPC - Duke Power Company

EOC - End of Cycle

ERO - Emergency Response Organization

HPI - High Pressure Injection

IR - Inspection Report

LCO - Limiting Condition for Operation

LPI - Low Pressure Injection

LPSW - Low Pressure Service Water

NCV - Non-Cited Violation

NRC - Nuclear Regulatory Commission
NRR - Nuclear Reactor Regulation

ONSM - Modification

ONS - Oconee Nuclear Station

OTSG - Once-Through Steam Generator

PI - Performance Indicator

PIP - Problem Investigation Process (report)

PT - Performance Test

PMT - Post-Maintenance Testing
RBS - Reactor Building Spray
RCS - Reactor Coolant System
RTP - Rated Thermal Power

SDP - Significance Determination Process

SG - Steam Generator

SSC - Structure, System and Component

SSF

Standby Shutdown Facility
Turbine Driven Emergency Feedwater
Technical Specification
Updated Final Safety Analysis Report
Unresolved Item TDEFW

TS

UFSAR

URI

This investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region II (RII), on April 1, 2003, to determine if a Nuclear Control Operator (NCO) at the Duke Energy Corporation Oconee Nuclear Station deliberately falsified in-plant tour records associated with an NRC license reactivation.

Based on the evidence, documentation, and testimony developed during this investigation, OI:RII did not substantiate that the NCO falsified and/or deliberately misrepresented in-plant tour records associated with an NRC license reactivation. However, the investigation did reveal that the NCO did not adhere to a strict interpretation of Operation Management Procedure 1-12, Revision 020, thus reflecting inaccurate information.

APPROVED FOR RELEASE ON 10/17/03

NOT FOR PUBLIC DISCLOSURE WITHOUT APPROVAL OF FIELD OFFICE DIRECTOR, OFFICE OF INVESTIGATIONS, REGION II

This investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations (OI), Region II (RII), on May 20, 2003, to determine if a nuclear control operator (NCO) at Duke Energy Corporation, Oconee Nuclear Station (ONS) falsified in-plant tour records associated with an NRC license reactivation.

Based on the evidence, documentation, and testimony developed during this investigation, OI:RII did not substantiate that the NCO falsified and/or deliberately misrepresented in-plant tour records associated with an NRC license reactivation. However, the investigation did reveal that the NCO did not adhere to the strict interpretation of Operation Management Procedure (OMP) 1-12, Revision 020, and a training deficiency that allowed the NCO to report inaccurate information.

APPROVED FOR RELEASE ON 10/17/2003

NOT FOR PUBLIC DISCLOSURE WITHOUT APPROVAL OF FIELD OFFICE DIRECTOR, OFFICE OF INVESTIGATIONS, REGION II

This investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region II (RII), on May 20, 2003, to determine if a Nuclear Shift Supervisor (NSS) at the Duke Energy Corporation Oconee Nuclear Station falsified in-plant tour records associated with an NRC license reactivation.

Based on the evidence, documentation and testimony developed during this investigation, OI:RII did not substantiate the allegation that the NSS falsified and/or deliberately misrepresented in-plant tour records associated with an NRC license reactivation. However, the investigation did reveal that the NSS did not adhere to a strict interpretation of Operation Management Procedure (OMP) 1-12, Revision 020, thus reflecting inaccurate information.

APPROVED FOR RELEASE ON 10/17/2003

NOT FOR PUBLIC DISCLOSURE WITHOUT APPROVAL OF
FIELD OFFICE DIRECTOR, OFFICE OF INVESTIGATIONS, REGION II

This investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations (OI), Region II (RII), on May 20, 2003, to determine if a nuclear control operator (NCO) at Duke Energy Corporation, Oconee Nuclear Station (ONS) falsified in-plant tour records associated with an NRC license reactivation.

Based on the evidence, documentation, and testimony developed during this investigation, OI:RII did not substantiate that the NCO falsified and/or deliberately misrepresented in-plant tour records associated with an NRC license reactivation. However, the investigation did reveal that the NCO did not adhere to the strict interpretation of Operation Management Procedure (OMP) 1-12, Revision 020, and a training deficiency that allowed the NCO to report inaccurate information.

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