UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-269/90-17, 50-270/90-17, 50-287/90-17

Licensee: Duke Power Company
422 South Church Street
Charlotte, N.C. 28242

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

Facility Name: Oconee Nuclear Station

Inspection Conducted: May 20 - June 16, 1990

Inspectors: _____ 6-26-90
P. H. Skinner, Senior Resident Inspector Date Signed

_____ 6-26-90
L. D. Wert, Resident Inspector Date Signed

_____ 6-26-90
B. B. Desai, Resident Inspector Date Signed

Approved by: _____ 6-26-90
M. B. Shymlock, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

Scope: This routine, announced inspection involved inspection on-site in the areas of operations, surveillance testing, maintenance activities, an unmonitored discharge from the Unit 1 vent, and plant startup from refueling.

Results: One apparent violation was identified involving the Penetration Room Ventilation System. The inspectors identified that the system would be inoperable under certain accident conditions (paragraph 5). It was also noted during this review that the licensee's response to Generic Letter (GL) 88 - 14, Instrument Air Supply System Problems Affecting Safety Related Equipment, was inadequate (paragraph 5).

A violation was cited for failure to follow procedures involving calibration and testing of the Reactor Protection System (paragraph 3.b).

Three Non-cited Violations (NCV) were identified:

- Violation of Technical Specifications regarding radioactive effluent monitoring (paragraph 6).

- Inoperability of the Safe Shutdown Facility Makeup System due to a mispositioned valve (paragraph 8).

- Violation of Technical Specifications associated with Upper Surge Tank minimum level requirements (paragraph 2.b).

A weakness was noted in the control of scaffolding over safety-related equipment (paragraph 4.b).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

B. Barron, Station Manager
D. Couch, Keowee Hydrostation Manager
*T. Curtis, Compliance Manager
J. Davis, Technical Services Superintendent
D. Deatherage, Operations Support Manager
*B. Dolan, Design Engineering Manager, Oconee Site Office
*W. Foster, Maintenance Superintendent
*T. Glenn, Engineering Supervisor
D. Hubbard, Performance Engineer
E. LeGette, Compliance Engineer
*C. Little, Instrument and Electrical Manager
*H. Lowery, Chairman, Oconee Safety Review Group
B. Millsap, Maintenance Engineer
*D. Powell, Station Services Superintendent
*G. Rothenberger, Integrated Scheduling Superintendent
*R. Sweigart, Operations Superintendent

Other licensee employees contacted included technicians, operators, mechanics, security force members, and staff engineers.

NRC Resident Inspectors:

*P. Skinner
*L. Wert
*B. Desai

*Attended exit interview.

2. Plant Operations (71707)(71710)

a. The inspectors reviewed plant operations throughout the reporting period to verify conformance with regulatory requirements, Technical Specifications (TS), and administrative controls. Control room logs, shift turnover records, temporary modification log and equipment removal and restoration records were reviewed routinely. Discussions were conducted with plant operations, maintenance, chemistry, health physics, instrument and electrical (I&E), and performance personnel.

Activities within the control rooms were monitored on an almost daily basis. Inspections were conducted on day and on night shifts during weekdays and on weekends. Some inspections were made during shift change in order to evaluate shift turnover performance. Actions observed were conducted as required by the licensee's Administrative Procedures. The complement of licensed personnel on each shift inspected met or exceeded the requirements of TS. Operators were

responsive to plant annunciator alarms and were cognizant of plant conditions.

During this report period, the inspectors reviewed the licensee's posting of Notices to workers required by 10 CFR 19.11. Several minor discrepancies were noted concerning a security violation issued on December 21, 1989. The licensee promptly corrected the deficiencies.

Plant tours were taken throughout the reporting period on a routine basis. The areas toured included the following:

Turbine Building
Auxiliary Building
CCW Intake Structure
Independent Spent Fuel Storage Facility
Units 1, 2, and 3 Electrical Equipment Rooms
Units 1, 2, and 3 Cable Spreading Rooms
Units 1, 2, and 3 Penetration Rooms
Unit 1 Containment
Station Yard Zone within the Protected Area
Standby Shutdown Facility
Units 1, 2, and 3 Spent Fuel Pool Rooms
Keowee Hydro Station

During the plant tours, ongoing activities, housekeeping, security, equipment status, and radiation control practices were observed.

During this report period, the inspector walked down the Penetration Room Ventilation (PRV) System in accordance with the requirements of Inspection Procedure 71710: Engineered Safety Feature System Walkdown. Paragraph 5 contains further details of the results of this inspection. Additionally the inspectors completed detailed walkdowns of safety-related portions of the following systems/locations:

Unit 1 Reactor Building Spray System
Unit 1 High Pressure Injection Pump Rooms
Unit 1 Emergency Feedwater System
Unit 1/2 Low Pressure Service Water
Unit 1 East Penetration Room

Minor discrepancies noted were communicated to the licensee. Paragraph 7 contains details of the East Penetration Room Walkdown.

- Unit 1 entered this reporting period in a refueling outage. On June 5, the unit was taken critical, and on June 6, the generator was closed onto the grid and power escalation commenced.

- Units 2 and 3 operated at 100 percent power for the duration of the report period.

b. Upper Surge Tank Low Level During Hot Shutdown Operations On Unit 1

On June 4, 1990, at approximately 9:15 a.m., the Control Room Operator (CRO) observed a rapid increase in Condensate Storage Tank (CST) level and an associated decrease in Upper Surge Tank (UST) level. The level in the UST was noted to be 5.85 feet which was below the TS 3.4.4 lower limit of 6 feet. Secondary makeup was immediately commenced to increase level to above TS requirements. The level was returned to greater than 6 feet at approximately 9:50 a.m.

Investigation into this problem by the inspectors and licensee personnel identified that the condensate and feedwater systems were in a "condensate cleanup" mode. This recirculates water from the hotwell, through the condensate system, and back to the hotwell. Unit 1 at this time was also transferring water from the Unit 1 CST to the Unit 3 CST. Upon completion of the transfer to Unit 3, the transfer pump was secured. At the same time, a reduction in steam supply to one of the secondary system heaters occurred. These actions appear to have caused the rapid level changes. The level in the UST reached a low level indication of approximately 4 feet. The licensee is continuing the investigation of this problem and will submit an LER in accordance with 10 CFR 50.73(a)(2)(i)(B).

TS 3.4.4 requires a minimum of 6 feet of water to be available in the UST. Following this occurrence, this TS was discussed in detail. The TS is unclear as to what applicable plant conditions must be in effect for this requirement. The licensee is reviewing the adequacy of this TS and will consider submittal of a revision to clarify the applicable plant conditions.

The failure to maintain UST levels greater than 6 feet as required by TS 3.4.4 is being identified as non-cited violation (NCV), 50-269/90-17-03: Failure to Maintain Level In UST Above 6 Feet. This licensee-identified violation is not being cited because criteria specified in Section V.G.1 of the NRC Enforcement Policy were satisfied.

One violation was identified.

3. Surveillance Testing (61726)

a. Surveillance tests were reviewed by the inspectors to verify procedural and performance adequacy. The completed tests reviewed were examined for necessary test prerequisites, instructions, acceptance criteria, technical content, authorization to begin work, data collection, independent verification where required, handling of deficiencies noted, and review of completed work. The tests

witnessed, in whole or in part, were inspected to determine that approved procedures were available, test equipment was calibrated, prerequisites were met, tests were conducted according to procedure, test results were acceptable, and systems restoration was completed.

The following surveillances were reviewed and witnessed in whole or in part:

PT/0/A/0610/06	100KV Power Supply From Lee Steam Station
OP/1/A/1106/06	Turbine Driven Emergency Feedwater Pump Overspeed Testing
PT/1/A/0600/12	Turbine Driven Emergency Feedwater Pump Performance Test
PT/3/A/0600/12	Turbine Driven Emergency Feedwater Pump Performance Test
IP/0/A/0330/003A	Control Rod Drive Drop Time Test
PT/1/A/0150/15D	Intersystem LOCA Leak Test
PT/1/A/0261/07	Emergency CCW System Flow Test
PT/1/A/251/19	Main Steam Block Valve Leakage
PT/3/A/0203/06	Low Pressure Injection System Performance Test
TT/1/A/0711/13	Unit 1 Cycle 13 Zero Power Physics Test (ZPPT)
PT/0/A/0290/002	Main Steam Stop Valve Closure Time

b. Reactor Protection System Instrumentation Problems Unit 2

On June 4, 1990, Reactor Protection System (RPS) channel C for Unit 2 tripped due to a signal from the flux/flow - imbalance circuitry. An investigation by operations personnel indicated that the flux/flow - imbalance was within the TS required criteria and that the signal was due to a spurious actuation of the instrumentation. The signal had returned to normal indications and the channel was reset. A work request (WR) was written for I&E personnel to troubleshoot the channel as necessary. I&E technicians performed checks of the channel later on June 4 but did not identify any faults. On June 5, recorders were connected to various inputs to the channel to provide additional data for further analysis.

On June 6, a WR was generated by I&E Engineering requesting that RPS channel A loop 'B' flow transmitter be calibrated since flow deviations had increased slowly since unit startup. On June 11, I&E technicians commenced a calibration on RPS channel A flow instrument in accordance with Instrument Procedure (IP)/2/A/305/1I dated October 2, 1989. This calibration requires an entry into containment to connect a test device to the sensing element and to introduce test signals at the device while recording results at the RPS instrumentation cabinet. This action was performed in accordance with step

10.8.7 of IP/2/A/305/1I, and data was taken as required. The data taken was not within the tolerance specified by the procedure. The supervisor in charge of the test was confused due to the abnormal readings obtained and felt that the test equipment was in error. He stopped the procedure in progress, disconnected the test gear, and after review of the existing parameters and discussion with the unit supervisor, he concluded the channel was operable and placed it back in service.

Following this work on channel A, I&E personnel commenced a calibration RPS channel C since the I&E engineer had identified from the instruments installed on June 5 that the flow channel was operating on the low side. Using the same equipment that was used on channel A, RPS channel C was calibrated in accordance with IP/2/A/305/1K dated September 22, 1989. The I&E supervisor then went back to the procedure used for channel A and re-evaluated the results, discussed this evaluation with an I&E Engineer and then declared the channel out of service.

The inspector reviewed the WRs involved in these calibrations. The review identified that during the calibration of channel A, I&E technicians did not follow the required steps in procedure IP/2/A/305/1I. After completion of step 11.8.7, which was performed and resulted in out of tolerance readings, the next step is to perform individual component calibration as appropriate until the error is found and corrected. Since this step was not performed, an RPS channel was placed in operation although the calibration indicated the channel was not functioning properly. This resulted in a violation of TS 3.5.1.1 in that the minimum channels operable (Table 3.5.1-1) for RPS flow imbalance instruments was not met. Channel A had been declared operable in error, and Channel C was removed for calibration purposes. Station Directive 3.1.2, Activities Affecting Station Operation, dated April 27, 1990, section 4.1, identifies that some items are clearly inoperable upon initial discovery and provides as an example a device failing to meet quantitative acceptance criteria such as a calibration. TS 6.4.1 requires the plant to be operated in accordance with approved procedures. The failure to follow procedure IP/2/A/305/1I is identified as violation 50-270/90-17-02: Failure to Follow Procedures Resulting in Violation of TS 3.5.1.1.

One violation was identified.

4. Maintenance Activities (62703)

a. Maintenance activities were observed and/or reviewed during the reporting period to verify that work was performed by qualified personnel and that approved procedures in use adequately described work that was not within the skill of the trade. Activities,

procedures, and work requests were examined to verify proper authorization to begin work, provisions for fire, cleanliness, and exposure control, proper return of equipment to service, and that limiting conditions for operation were met.

The following maintenance was reviewed and witnessed in whole or in part:

O/MP/3009/14	RBCU Fusible Patches Preventive Maintenance Inspection and Functional Test
WR 50868J	1C-391 Repairs
WR 57113D	Preventive Maintenance on Main Steam Emergency Feedwater Turbine
WR 98722C	Installation of OE-3049, Increase '3C' LPI Pump Recirculation Loop Flow Orifice

b. Concerns Regarding Use of Scaffolds Above Safety-Related Components

On June 6, 1990, the inspector observed a large multi-level scaffold erected over the Unit 3 Turbine Driven Emergency Feedwater Pump. A tag on the scaffold indicated it may have been in place as early as April 17, 1990. It was built to enable repairs to be conducted on a plant heating system valve. The scaffold was not tied off to prevent falling or movement into safety-related equipment. The licensee subsequently identified that the work had been completed and removed the scaffold.

Since several other examples of scaffolding concerns had been noted during this inspection period (see paragraph 7), the inspectors discussed control of scaffolding with maintenance engineering personnel. From these discussions (along with the examples noted above), the inspector concluded that the installation of scaffolding near safety-related equipment is not formally controlled at Oconee. Apparently, in most cases, scaffolding erected over or near safety-related equipment is inspected by a coordinator in the maintenance engineering department, but since the program is informal, numerous scaffolds are erected without this coordinator's knowledge. The bulk of the problems appear to be caused by a failure to promptly remove scaffolding once the task is completed. The inspectors noted that significant improvements have been made recently in the quality of scaffolding construction and attention to details concerning safety on and near scaffolding.

Station and maintenance management acknowledged that the controls on scaffolding could be more rigid. The inspectors were informed that a task force has been established to develop some basic guidance and criteria to be utilized to ensure scaffolding erected over safety-related equipment will not hazard the operability of that equipment. The inspectors will continue to closely follow the licensee's actions in this area.

No violations or deviations were identified.

5. Penetration Room Ventilation System Inoperable Under Certain Conditions Due To Inadequate Design (71710)(71707)

On June 12, 1990, while in the process of performing a detailed walkdown of the Reactor Building Penetration Room Ventilation (PRV) System, the inspectors identified an apparent design error which could render the system inoperable under specific circumstances. The PRV system is designed to minimize the levels of radioactive materials released to the environment due to post-accident Reactor Building (RB) leakage. The system functions by pulling RB leakage (maintains negative pressure in penetration rooms after an accident) into the two penetration rooms and passing it through a pair of filter trains. Each train consists of a particulate prefilter, an absolute (HEPA) filter, and a charcoal filter in series. A fan downstream of each filter train discharges the filtered air through a common discharge line to the unit vent for release to atmosphere. The filter trains and fans are redundant; only one fan and one filter train is required to accomplish the system's safety function. The fans are actuated on an Engineered Safeguards (ES) signal (Channels 5 and 6, high RB pressure). The fan discharge valves PR-15 and PR-19 automatically open when the fans start.

In addition to local gages which display differential pressure across the different filter assemblies, there is a remote display (located just outside the room that contains the PRV system) of air flow at the discharge of each filter train. Adjacent to each of these flow gages is a manual loader to permit control of the system flow control valves, 1PR-13 and 1PR-17 (filter discharge valves). In the control room (CR), PRV fan and fan discharge valve status indications are available. Penetration Room pressure and excessive or insufficient vacuum annunciators are also available in the CR.

TS 3.15.1 requires that two trains of the PRV system shall be operable at all times when containment integrity is required or the reactor shall be shutdown within 12 hours. (A 7-day limiting condition for operation is permitted if only one train is inoperable provided that all active components of the other train have been demonstrated to be operable.)

The principle discrepancy noted during the walkdown inspection was that the flow control valves, PR-13 and PR-17, appeared to be designed to fail shut on a loss of instrument air (IA) pressure to their controllers. IA is a non-safety non-seismic system at Oconee. Additional related concerns noted by the inspectors during followup investigation include:

- There is not a readily available means to override or manually position the valves open if they were required and air pressure was not available to their operators.

- The operation of these valves (or the PRV system) is not addressed in Abnormal Procedure AP/1,2,3/1700/22: Loss of Instrument Air.

- Table 6.5-2 of the FSAR; Single Failure Analysis for the PRV system states that on a loss of IA to the remote loaders, PR-13 and PR-17 fail open.

- The licensee's response to GL-88-14: Instrument Air System Problems Affecting Safety Related Equipment, did not address valves PR-13 and PR-17. The inspectors concluded that portions of this response may not be complete to ensure that all air-operated safety-related components will perform as expected in accordance with all design-basis events including a loss of the normal instrument air system.

- The inspectors noted a report indicating that a study completed by the licensee's DE group had identified that these valves would fail shut on a loss of IA resulting in a loss of the PRV system. Apparently the significance of this data was overlooked.

The inspectors discussed their concerns regarding the failure position of PR-13 and PR-17 on a loss of air pressure with the PRV system accountable engineer and the Operations Support group. After review by DE, at 5:00 p.m., on June 13, 1990, the license declared the PRV system inoperable for a LOCA scenario with a loss of IA to the valves. At 5:45 p.m., the licensee reported this issue in accordance with 10 CFR 50.72 (b)(1)(ii)(B). The licensee exited the 12-hour LCO on each unit after a Temporary Station Modification (TSM) was installed which blocked PR-13 open (such as it would not fail shut on a loss of air pressure), and the system was tested. The 7 day LCO on the remaining train was subsequently exited after PR-17 was blocked open on each unit. Incorporating design basis requirements into the design and operation of safety systems is essential to ensuring those systems will be able to perform their intended function when called upon and is required by Criterion III of 10 CFR Part 50, Appendix B. This design inadequacy is an apparent violation and is identified as violation 50-269,270,287/90-17-01: Penetration Room Ventilation System Inoperable Under Certain Conditions Due to Design Deficiencies.

One apparent violation was identified.

6. Unmonitored Discharge From Unit Vent

At about 10:00 p.m., on May 18, 1990, the licensee identified that the portable sampler being used for Particulate and Iodine activity sampling had been removed from service for a 12-hour period. The portable sampler was being used since the regular monitors were being modified.

Review of this event identified that the Unit 1 installed Particulate and Iodine samplers (RIA 43 and 44) were being replaced during the outage in progress. In preparation for the Nuclear Station Modification (NSM) being implemented, a portable sampler was connected to the piping associated with the installed units as allowed by TS 3.5.5.2(c) since the electrical portion of the system had been disconnected. The portable sampler was connected into the sample piping of the monitor. Since the sample piping was to be modified, an alternate portable sample system had been staged in the area of the first portable sampler, except it could not be connected to take a sample until a new connection to the stack had been installed.

Due to a communication problem, the alternate portable sampler sample lines were connected at the pump, and the pump was started for sampling purposes. The sample lines to the vent stack had not been connected. This was identified by the Technical Engineer responsible for the NSM. He immediately notified Radiation Protection (RP) personnel. RP started the portable sampler which was still connected to the system and obtained the required sample. The licensee reviewed all discharges into the vent system and determined no abnormal activity had been exhausted to the system in the previous 12 hours. A report will be submitted to the NRC in accordance with 10 CFR 50.73(a)(2)(B).

TS 3.5.5.2(c) allows the continuation of effluent releases when the normal monitoring instrumentation is unavailable provided auxiliary sampling equipment is used for continuous sample collection. This failure to provide for continuous sample collection is identified as non-cited violation (NCV) 50-269/90-17-04: Failure to Provide for Continuous Sampling of the Unit Ventilation Effluent.

This licensee identified violation is not being cited because criteria specified in Section V.G.1 of the NRC Enforcement Policy were satisfied.

The actions taken by the licensee are considered to be acceptable for this incident. Subsequent review during the modifications to Units 2 and 3 will be performed by the inspectors to further assess the adequacy of the licensee's corrective actions.

7. Plant Startup From Refueling (71711) (Unit 1)

On June 1, 1990, following a 41-day, EOC-12, refueling outage, Unit 1 exceeded 200 degrees F. Hot shutdown conditions were reached on June 3, 1990. The inspectors witnessed portions of PT/0/A/0290/002, Main Steam Stop Valve Closure Time Test, and IP/0/A/0330/3A, Control Rod Drive Trip Test. The test results were within the acceptance criteria of these procedures. The inspectors witnessed in part TT/1/A/0711/13, Unit 1 Cycle 13 Zero Power Physics Test, which commenced on June 5, 1990. The measured

total worth of rod group 5, 6, and 7 was determined to be 10.6 percent greater than the predicted worth. Since the acceptance criteria is plus/minus 10 percent of predicted, the worth of rod group 4 had to be measured. The total worth of rod groups 4, 5, 6, and 7 was within the acceptance criteria.

In addition, on June 4, 1990, the inspectors toured the Unit 1 East Penetration Room. Unit 1 was in hot shutdown conditions, proceeding with reactor startup. Among the significant discrepancies noted were the following items:

- Several examples of scaffolding (not being utilized for work in progress) over safety-related equipment were identified. One scaffold was against the air operator on valve 1FDW-315, Emergency Feedwater flow control valve.

- Several examples of unsealed or unprotected safety-related cabling terminal box connections including a missing junction box cover were identified.

- Several examples of poor cable connections (metal sheathing not properly attached) involving safety-related power operated valves were identified.

- Two High Pressure Injection system vent or drain valve pipe caps were found not installed, and two minor packing leaks were identified.

The discrepancies were discussed with station management. Corrective actions were initiated immediately. The scaffolding which was not being utilized was removed from the Penetration Room or moved away from safety-related equipment. Work Requests were initiated to correct the cabling and junction box discrepancies, the packing leaks, and several other discrepancies. By June 6, the licensee informed the inspectors that all of the cabling discrepancies had been corrected, work was initiated to build a terminal box cover, and Work Requests written on other discrepancies not yet fully resolved. Followup discussions on scaffolding issues are described in paragraph 4.b of this report.

When attempts were made to synchronize the generator to the grid on June 6, the turbine control valves did not respond as expected. Apparently, a small stator coolant leak was wetting some electrical contacts in the EHC cabinet. This caused a stator coolant runback circuitry relay to stick which prevented the turbine speed from increasing. Following repairs, the generator was placed on line at 8:26 p.m. Power was gradually escalated and was held at 93 percent due to problems with the 1D2 heater drain pump motor. The unit reached power approximately 98 percent and operated at that level for the remainder of the report period.

No violations or deviations were identified.

8. Valve SSF-1HP-405 Found Open (71707)

On June 6, 1990, at approximately 8:00 p.m., a non-licensed operator (NLO) making rounds in the Safe Shutdown Facility (SSF) discovered that valve SSF-1HP-405 was open. This valve is utilized for testing and is located on the discharge side of the SSF Makeup Pump in a recirculation line. The valve should be normally shut so the the makeup pump discharges into the Reactor Coolant Pump (RCP) seal injection lines for reactor coolant system (RCS) inventory makeup.

The SSF is a separate bunkered installation designed to provide an alternate secure means for attaining and maintaining hot shutdown conditions on all three Oconee units. It was intended for incidents of sabotage, fires, and some flooding scenarios. The SSF systems are manually actuated and are to be utilized only if the installed normal and emergency systems are inoperable. The primary makeup portion of the SSF is designed to maintain the RCS filled to sufficient pressurizer level to assure natural circulation and core cooling.

Following the postulated SSF event, once the decision has been made to utilize the SSF, operators will start the SSF diesel generator and shut SSF controlled RB isolation valves. Next, the breakers for the SSF makeup pump and makeup system valves are closed, and the makeup pump is started. The procedure (OP/O/A/1600/11:SSF Emergency Operating Procedure) does not require closing in of the breaker associated with SSF-1HP-405 since the valve is supposed to be maintained shut and is only utilized for testing purposes. Valve SSF-1HP-417 is a separate recirculation line to permit reduced RCS makeup flowrate once pressurizer level is recovered and stable.

The mispositioned SSF-1HP-405 was discovered through a routine Unit 1 SSF Control Room panel alarm test. The NLO noted that the annunciator for the "RC Makeup Containment Not Isolated" alarm would not light, replaced the light bulb, and found the alarm locked in. With the assistance of other operators and supervisors it was determined that the alarm was caused by SSF-1HP-405 being left open. Subsequently, the valve was closed and the breaker reopened. Additional information was gained through followup investigation by the licensee and the inspectors;

- Apparently there was some problem with the SSF CR annunicator. The alarm condition had not been noted despite several other NLO rounds being completed. After SSF-1HP-405 was shut, it was noted the alarm would again not test. A Work Request was initiated to repair the alarm circuit.

- SSF-1HP-405 had been left open after a test of the Unit 1 SSF RC makeup pump manual override circuitry had been completed late in the refueling outage. This test was completed by I&E utilizing IP/O/A/0100/001, Troubleshooting and Corrective Maintenance, and an

accompanying checklist of instructions. The procedure was not adequate to control the work process and ensure the system was restarted after testing.

- Unit 3 had completed the same test during its most recent outage utilizing IP/3/A/0370/004, SSF Unit 3 Makeup Pump Manual Override Circuitry Test, (a specific procedure to address this test). However, the inspectors noted that this procedure incorrectly required SSF-1HP-405 to be left open at the end of the test. Additionally the inspectors noted statements in the safety evaluation for this procedure which were incorrect.

- Apparently these incorrect/inadequate procedures have not been a problem with earlier tests because additional procedures were performed after this test which shut SSF-1HP-405 prior to unit startup.

- Due to the location of the SSF makeup flow detector, the mispositioned valve would be hard to detect. Since its breaker is not required to be shut, no SSF CR indication is available. If the valve breaker was shut an interlock with the pump would cause the valve to automatically shut.

- SSF-1HP-405 is a containment isolation valve but the actions required by TS 3.6.3c were already met since there are additional valves in the system which were deenergized and shut.

- The inspectors noted that NUREG/CR-5006, PRA Applications Program for Inspection at Oconee Unit 3, specifically discusses a failure to shut SSF-1HP-405 after testing as a condition which could lead to failure of the SSF HPI system.

The licensee submitted a set of proposed TS addressing the SSF which have not yet been approved by the staff. Proposed TS 3.18.3 requires the SSF RCS Makeup System to be operable for each unit at or above 250 degrees F. SSF-1HP-405 being open significantly affected the ability of the Unit 1 SSF Makeup Pump to accomplish its intended function.

The SSF makeup system is required to be operable in order for the Oconee units to achieve and maintain hot shutdown conditions in certain postulated met. This issue will be addressed as NCV 50-269/90-17-05: SSF Makeup Pump Inoperable Due to Mispositioned Valve. This licensee-identified violation is not being cited because criteria specified in Section V.G.1 of the NRC Enforcement Policy were satisfied.

9. Exit Interview (30703)

The inspection scope and findings were summarized on June 18, 1990, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection.

Item Number	Description and Reference
VIO 269,270,287/90-17-01	Penetration Room Ventilation System Inoperable Under Certain Conditions Due to Design Deficiencies (paragraph 5)
VIO 270/90-17-02	Failure to Follow Procedures Resulting in Violation of TS 3.5.1.1 (paragraph 3.b)
NCV 269/90-17-03	Failure to Maintain Level in UST Above 6 Feet (paragraph 2.b)
NCV 269/90-17-04	Failure to Provide for Continuous Sampling of the Unit Ventilation Effluent (paragraph 6)
NCV 269/90-17-05	SSF Makeup Pump Inoperable Due to Mispositioned Valve (paragraph 8)