



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

Report No.: 50-424/88-37

Licensee: Georgia Power Company  
P.O. Box 4545  
Atlanta, GA 30302

Docket No.: 50-424

License No.: NPF-68

Facility Name: Vogtle 1

Inspection Conducted: August 3 - September 6, 1988

Inspectors: *C.A. Patterson* 9/20/88  
O. F. Rogge, Senior Resident Inspector Date Signed  
*C.A. Patterson* 9/20/88  
C. A. Patterson, Project Engineer Date Signed

Accompanied by: R. F. Aiello, Resident Inspector

Approved By: *M.V. Sinkule* 9/22/88  
M. V. Sinkule, Section Chief Date Signed  
Division of Reactor Projects

SUMMARY

Scope: This routine, unannounced inspection entailed resident inspection in the following areas: plant operations, radiological controls, maintenance, surveillance, fire protection, security, and quality programs and administrative controls affecting quality. A review of the plant differences training program was conducted.

Results: Two violations were identified in which no notice was issued. One in the area of maintenance - failure to maintain seismic qualification of the Hydrogen Monitor. One in the area of surveillance - failure to establish an adequate procedure for battery surveillance.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*G. Bockhold, Jr., General Manager Nuclear Operations
- \*R. M. Bellamy, Plant Manager
- T. V. Greene, Plant Support Manager
- J. E. Swartzwelder, Nuclear Safety & Compliance Manager
- W. F. Kitchens, Manager Operations
- \*W. N. Marsh, Deputy Operations Manager
- M. A. G. Liffis, Maintenance Superintendent
- C. C. Echert, Manager Chemistry and Health Physics
- A. L. Mosbaugh, Assistant Plant Support Manager
- F. R. Timmons, Nuclear Security Manager
- \*R. E. Lide, Engineering Support Supervisor
- G. A. McCarley, ISEG Supervisor
- E. M. Dannemiller, Technical Assistant to General Manager
- G. R. Frederick, Quality Assurance Site Manager - Operations
- W. E. Mundy, Quality Assurance Audit Supervisor
- R. M. Odom, Plant Engineering Supervisor
- \*K. Pointer, Regulatory Specialist
- \*S. F. Goff, Regulatory Specialist

Other licensee employees contacted included craftsmen, technicians, supervision, engineers, operation, maintenance, chemistry, QC inspectors, and office personnel.

#### \*Attended Exit Interview

### 2. Operational Safety Verification - (71707)

The plant began this inspection period in Power Operation (Mode 1) near 100% power. The security wall which separated Unit 1 and 2 control rooms was removed to form a common control room. The wall removal and HVAC activities were observed to ensure that no excessive noise or other distraction occurred.

#### a. Control Room Activities

Control Room tours and observations were performed to verify that facility operations were being safely conducted within regulatory requirements. These inspections consisted of one or more of the following attributes as appropriate at the time of the inspection.

- Proper Control Room staffing
- Control Room access and operator behavior
- Adherence to approved procedures for activities in progress

- Adherence to TS LCO
- Observance of instruments and recorder traces of safety related and important to safety systems for abnormalities
- Review of annunciators alarmed and action in progress to correct
- Control Board walkdowns
- Safety parameter display and the plant safety monitoring system operability status
- Discussions and interviews with the On-Shift Operations Supervisor, Shift Supervisor, Reactor Operators, and the Shift Technical Advisor (when stationed) to determine the plant status, plans and to assess operator knowledge
- Review of the operator logs, unit log and shift turnover sheets

No violations or deviations were identified.

b. Facility Activities

Facility tours and observations were performed to assess the effectiveness of the administrative controls established by direct observation of plant activities, interviews and discussions with licensee personnel, independent verification of safety systems status and LCOs, licensee meetings and facility records. During these inspections the following objectives are achieved:

- (1) Safety System Status - Confirmation of system operability was obtained by verification that flowpath valve alignment, control and power supply alignments, component conditions, and support systems for the accessible portions of the ESF trains were proper. The inaccessible portions are confirmed as availability permits.
- (2) Plant Housekeeping Conditions - Storage of material and components and cleanliness conditions of various areas throughout the facility were observed to determine whether safety and/or fire hazards existed.
- (3) Fire Protection - Fire protection activities, staffing and equipment were observed to verify that fire brigade staffing was appropriate and that fire alarms, extinguishing equipment, actuating controls, fire fighting equipment, emergency equipment, and fire barriers were operable.
- (4) Radiation Protection (71709) - Radiation protection activities, staffing and equipment were observed to verify proper program implementation. The inspection included review of the plant program effectiveness. Radiation work permits and personnel compliance were reviewed during the daily plant tours. RCAs were observed to verify proper identification and implementation.

- (5) Security (71881) - Security controls were observed to verify that security barriers were intact, guard forces were on duty, and access to the Protected Area was controlled in accordance with the facility security plan. Personnel were observed to verify proper display of badges and that personnel requiring escort were properly escorted. Personnel within Vital Areas were observed to ensure proper authorization for the area. Equipment operability or proper compensatory activities were verified on a periodic basis.
- (6) Surveillance (61726)(61700) - Surveillance tests were observed to verify that approved procedures were being used; qualified personnel were conducting the tests; tests were adequate to verify equipment operability; calibrated equipment was utilized; and TS requirements were followed. The inspectors observed portions of the following surveillances and reviewed completed data against acceptance criteria:

<u>Surveillance No.</u>	<u>Title</u>
14220, Rev. 3	Weekly Cycling Of High Pressure Turbine Stop Valves, Low Pressure Turbine Stop and Intercept Valves For Turbine Overspeed Protection System Test
14225, Rev. 5	System Valve Inservice Test Operations Weekly Surveillance Log
14405, Rev. 3	Boron Injection Flow Path Verification During Operation
14460, Rev. 8	ECCS Flow Path Verification
14552, Rev. 2	NSCW Flow Path Verification
14546, Rev. 4	Monthly & Quarterly Pump Operability Test Turbine Driven Auxiliary Feedwater Pump Operability Test
14607, Rev. 0	SI Solid State Protection System Slave Relay (K618) Train "B" Test
14640, Rev. 0	AFW Solid State Protection System Slave Relay (K640) Train "A" Test
14701, Rev. 6	Reactor Trip Breakers UV And Shunt Trip Test

<u>Surveillance No.</u> (cont'd)	<u>Title</u>
14810, Rev. 6	Monthly & Quarterly TDAFW Control Valve Inservice Test
14825, Rev. 8	Quarterly Train "A" Containment Spray
14905, Rev. 18	Reactor Coolant System Leakage Calculation (Inventory Balance)
14980, Rev. 12T	Monthly Train "B" Diesel Generator Operability Test And Day Tank Water Test
24534, Rev. 5	Containment Emergency Sump Level Lap L0764 Channel Calibration
24589, Rev. 4	18 Month Reactor Coolant Temperature (TC) Wide Range Loop T-413B Channel Calibration
24802, Rev. 3	Monthly Steam Pressure Loop (Protective Ch 4) Loop P-516 Analog Channel Operability Test
54715, Rev. 2	Reactor Trip System P-4 Interlock Test

While observing surveillance No. 54715, the inspector noted that the licensee attempted to run the reactor trip system P-4 interlock test concurrent with surveillance 14701, Rev. 6 (RTBs UV & Shunt Trip Test). When the mode selector switch on the output relays test panel at the Solid State Protection System output cabinet was placed in the test position, the P-4 voltage meter indicated "0" volts. It was expected to indicate 43 volts. This appeared to be an indication problem only. The On-Shift Operations Supervisor and System Engineer elected to take the most prudent course of action which was to continue with surveillance 14701 to demonstrate RTB A operability and back out of surveillance 54715. As a result, it was discovered that the voltage indication (for P-4) returned to normal when the output test relays panel mode selector switch was placed back in the normal position. It was concluded that both surveillances 54715 and 14701 cannot be performed simultaneously.

During the performance of procedure 14607, the inspector noted that when the SI or UV test output switches (6A & 6C) on step 5.11f was pushed, the test UV light, which should not have illuminated, did in fact, illuminate. The test was subsequently repeated two additional times. The third attempt to perform the

test was completed satisfactorily. The licensee issued a work order to investigate the problem. Attempts to reproduce the observation on Unit 2 equipment and reperform the surveillance could not reproduce the problem. The licensee plans to have the system engineer present at the next scheduled surveillance.

- (7) Maintenance Activities (62703) - The inspector observed maintenance activities to verify that correct equipment clearances were in effect; work requests and fire prevention work permits, as required, were issued and being followed; quality control personnel were available for inspection activities as required; retesting and return of systems to service was prompt and correct; TS requirements were being followed. MWO backlog was reviewed. Maintenance was observed and MWO packages were reviewed for the following maintenance activities:

<u>MWO No.</u>	<u>Work Description</u>
18803877	Turbine Driven Auxiliary Pump Discharge Pressure Loop Channel Calibration
18805565	Broach Pen Seal #1-11-1033-1 To Allow Cable Pull MA00-5-650 In The Control Room

No violations or deviations were identified.

3. Review of Licensee Reports (90712)(90713)(92700)

a. In-Office Review of Periodic and Special Reports

This inspection consisted of reviewing the below listed reports to determine whether the information reported by the licensee was technically adequate and consistent with the inspector knowledge of the material contained within the report. Selected material within the report was questioned randomly to verify accuracy and to provide a reasonable assurance that other NRC personnel have an appropriate document for their activities.

Monthly Operating Report - The report dated August 12, 1988 was reviewed. The inspector had no comments.

b. Licensee Event Reports and Deficiency Cards

LERs and DCs were reviewed for potential generic impact, to detect trends, and to determine whether corrective actions appeared appropriate. Events which were reported pursuant to 10 CFR 50.72, were reviewed as they occurred to determine if the technical

specifications and other regulatory requirements were satisfied. In-office review of LERs may result in further followup to verify that the stated corrective actions have been completed, or to identify violations in addition to those described in the LER. Each LER is reviewed for enforcement action in accordance with 10 CFR Part 2, Appendix C. Review of DCs was performed to maintain a realtime status of deficiencies, determine regulatory compliance, follow the licensee corrective actions, and assist as a basis for closure of the LER when reviewed. Due to the numerous DCs processed only those DCs which result in enforcement action or further inspector followup with the licensee at the end of the inspection are listed below. The LERs and DCs denoted with an asterisk indicates that reactive inspection occurred at the time of the event prior to receipt of the written report.

(1) Deficiency Card reviews:

DC 1-88-1804 on July 15, the Engineering Support Supervisor informed the inspector of a potential problem with the Containment Sump pH following a design basis LOCA. During the preoperational testing of Unit 1, the sodium hydroxide educator flow on train B containment spray was higher than the allowable range. Westinghouse previously evaluated that this was acceptable. During preoperational testing of Unit 2, both train A and B educators were found higher than allowable. During the review by Westinghouse for Unit 2, it was determined that Unit 1 analyses contained possible errors. The higher flow rate causes excess sodium hydroxide to enter the spray flow into containment. The excess sodium hydroxide yields a pH 11.7 which exceeds the 10.5 upper limit on spray pH. This evaluation assumes that only the B train would be operable. In the long term (sump recirculation) the pH would end in range. Environmental qualification of electrical equipment included testing at the 10.7 pH level. On the basis that chemical attack was not the primary source of failure, Westinghouse informed them that the higher pH was acceptable. A search of key components and instrumentation in the containment which could be adversely affected by the more extreme post accident environment found the impact on the core damage frequency to be negligible. The primary reason is that most of the components would be utilized in detecting the accident before the containment spray system would be actuated. Even when assuming 100% failure of these components, required mitigating actions (e.g., switchover to recirculation mode and switchover from hot leg to cold leg recirculation) would take place and the primary indicators for these actions are not susceptible to the environment in containment. It is planned to increase the RWST boron concentration 2400 - 2600 ppm during the approaching refueling outage. As part of the change to the FSAR reflecting the increased boron concentration, Section 6.2.2 is being revised to reflect a design basis spray injection pH of 11.0. This is consistent with current FSAR Section 6.5.2. With the increased

RWST boron concentration range and assuming that the NaOH concentration in the Spray Addition Tank is at the upper TS limit of 32 weight percent, the maximum spray pH is 10.7. This value is within the revised licensing basis.

DC 1-88-2261 on August 9, the licensee identified that during the review of a licensing document change requests, a licensee condition had been violated. Licensee condition 2.C.3 requires that any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.57 shall be reported in accordance with 50.59(b) within one month of such change. Following discovery, the licensee complied with the initial reporting requirements of licensing condition 2.H and will followup with a written report. On September 2, the licensee further determined that this issue was not reportable and retracted notification.

(2) The following LERs were reviewed and are ready for closure pending verification that the licensee's stated corrective actions have been completed.

(a) \*50-424/88-20, Rev. 0 "Inadequate Breaker Leads To Condition Prohibited By Technical Specification." On June 29, 1988, it was determined that ten containment penetrations may not have adequate overload protection, as required by Regulatory Guide 1.63. The redundant protection was not provided because in each of the ten penetration circuits one of the two breakers used was magnetic-only, which did not provide adequate overload protection for the penetration. The other breaker provided was a thermal-magnetic and provided adequate overload protection for the penetration. Since the magnetic-only breakers did not provide the redundant overload protection the requirements of TS 3.8.4.1 for operability was not satisfied. When it was determined that redundant overload protection may not have been adequate over the entire range, the identified containment penetrations were declared inoperable and the requirements of TS 3.8.4.1 were satisfied, while the breakers were being replaced. Prior to the operation of Vogtle Unit 1, a construction test was performed for each breaker to verify its tripping function. All tests were performed satisfactorily and the breakers declared operable. This event occurred because the magnetic-only circuit breakers failed the field test and could not be set to provide the redundant thermal protection and allow the Motor Operator to start on motor



in-rush currents. The magnetic-only breakers were replaced with thermal-magnetic breakers. There may be further corrective actions taken, which will be discussed in the supplemental report scheduled to be completed by September 1988.

(3) The following LERs were reviewed and closed.

- (a) 50-424/87-73, Rev. 0 "Containment Ventilation Isolation Due To Sensing Tube Failure And Software Design" 50-424/87-68, Rev. 0 "Control Room Isolation Due To Faulty Sensing Tube Software Design." 50-424/87-65, Rev. 0 "Containment Ventilation Isolation Due To Actuation Failure And Software Design" 50-424/87-58, Revs. 0, 1 "False Signal From Radiation Monitor Leads To Control Room Isolation". These four LERs describe events which occurred from detector spiking. The inspector reviewed documentation of training. The inspector has no further questions regarding these events.
- (b) 50-424/87-76, Rev. 0 "Personnel Error Causes Loss Of Monitor Operability Resulting In Technical Specification Violation." On November 26, 1987, plant personnel were performing TS surveillance testing on the Train A containment hydrogen monitor. Instrument panel 1-1513-P5-HMA had been unbolted in order to reach test points behind the panel. Upon completion of the testing, the panel was shut and only 1 of the 4 panel bolts was reinstalled. On December 27, 1987, plant personnel were again performing surveillance testing when they discovered that three panel bolts were not installed. Upon completion of the testing, they replaced the missing bolts and informed the control room of the situation. The cause of this event was personnel error, in that, Procedure 00352-C, "Control Of In-Process Material", was not adequately adhered to during the November 26, 1987, surveillance testing. Corrective action included briefing appropriate personnel on control and temporary storage of materials during in-process work. The inspector reviewed memos from maintenance and engineering stating that the corrective action regarding Procedure 00352-C were complete. This item represents a violation of NRC requirements which meets the criteria for non citation. In order to track this item, the following is identified.

LIV 50-424/88-37-01 "Failure To Maintain The Seismic Qualification And Operability Of The "A" Train Hydrogen Monitor Per TS 3.3.3.6 - LER 87-76."

- (c) 50-424/87-40, Rev. 0 "Containment Ventilation Isolation Due To Personnel Error." On June 22, 1987, a containment ventilation isolation occurred on a signal from containment ventilation radiation monitor IRE-2565C. Plant personnel were modifying the wiring configuration for the radiation monitor actuation block mechanism. The CVI occurred after lifting a wire on terminal TB1-3, which powered, the blocking relay. This allowed the alarm relays, which had power, to initiate a CVI signal. The CVI was caused by personnel failing to perform adequate review of clearances prior to making equipment modifications. Engineering and maintenance personnel were counseled concerning the cause of this incident and were provided guidance to avoid repetition. The inspector reviewed the briefing notes which document that engineering and maintenance personnel was counseled.
- (d) 50-424/88-12, Rev. 0 "Inadequate Administrative Controls Lead To Missed Surveillances." On April 13, the licensee discovered that the weekly operations surveillance had not been completed. This event occurred when operations indicated that the previous surveillance had been unsatisfactory. The surveillance tracking coordinator issued the surveillance for retest. Operations personnel then failed to recognize the error. Since the administrative procedures will not issue a routine task until the retest is complete the next weekly due date plus grace period expired before detection. The root cause of the event was that operations personnel were not clear on how to properly indicate on the task completion sheet that the surveillance was satisfactory when the acceptance criteria may not be met for a certain item. An example of this is when the technical specifications require several methods of compliance but not all methods. This item was reviewed in NRC Report 50-424/88-20. The inspector reviewed memos which document training given regarding this issue. Procedure 404-C, Rev 9 step 4.5.3.2 was reviewed.
- (e) \*50-424/88-21, Rev. 0 "Inadequate Procedure Leads To Inadequately Performed Surveillance Test." On July 12, a meeting was held to discuss possible changes to the TS resistance values of the 125 volt DC battery system. During this meeting, it was realized that the plant procedure for performing this surveillance was inadequate because terminal connection resistance measurements were not called out for test. Therefore, the TS Surveillance performed was inadequate. The Shift Supervisor was notified and terminal connection resistance measurements were taken and found to be within the TS requirement. The

cause of this event was an inadequate procedure. Plant procedure 28910-C, "Class 1E 18 Month Battery Inspection And Maintenance Check", did not include the requirement to perform terminal connection resistance measurements. The procedure has been revised to include the performance of these resistance measurements. The procedure was reviewed. This item represents a violation of NRC requirements which meets the criteria for non citation. In order to track this item, the following is identified.

LIV 50-424/88-37-02 "Failure To Establish An Adequate Procedure Required By TS 6.7.1a For The 18 Month Battery Surveillance - LER 88-21."

- (f) \*50-424/88-22, Rev. 0 "Failed Potential Transformer Leads To Turbine/Reactor Trip." On July 14, a generator/turbine/reactor trip occurred as a result of an overexcitation condition on the generator field. Review of the plant fault recorder tracings revealed that the generator trip was initiated by an overexcitation condition of the generator field, which was sensed by the Volts/Hertz relay. Analysis of this event has led to the conclusion that the defective PT caused the primary fuse to blow. The ensuing transient caused a malfunction in the generator voltage regulator synchronizing circuit which in turn caused an increased in excitation voltage. This increased excitation was sensed by the Volts/Hertz relay which subsequently initiated the generator/turning/reactor trip. Corrective actions include readjustment and testing of the GENERREX systems during the Fall 1988 refueling outage, system malfunctions are being evaluated for possible additional corrective actions to improve reliability and to decrease sensitivity to transients, the failed PT will be analyzed for the cause of its failure, and improved test methods to detect this type of PT failure will be evaluated. The inspector has no further questions.
- (g) \*50-424/88-24 "Failed Connector On Transmission Line Disconnect Leads To Reactor Trip." On July 30, a reactor trip occurred on Unit 1 with the plant at approximately 100% of rated thermal power. The reactor trip was initiated by a turbine trip, which resulted from a generator trip. The generator trip was initiated by protective relays due to a fault on the phase "A" section of the disconnect switch of the Main Transformer output. There was a failure of a terminal pad where the 230 kv transmission line connects to the disconnect switch. Evidence indicated that a crack occurred in the pad which led to arcing and overheating causing the blowout of the connector. Several corrective actions were taken which

include the following. The failed and damaged parts were replaced. An infrared scan was performed on other connection be replaced with a new type during the refueling period. The inspector has no further questions.

4. Followup on Previous Inspection Items - (92701)

(Closed) CDR 50-424/86-97 "Westinghouse Reactor Protection System - P10 Function." The issue reported by letter dated April 8, 1988, was reviewed in detail. This issue concerns the function of the permissive during operation with one or more of the power range neutron flux measurement channels inoperable or removed from service. Currently, the TS allow an instrumentation channel to remain inoperable provided that the associated trip bistables are placed in the tripped condition. In the case of a power range neutron flux channel, the current practice would be to place the bistables associated with the NIS trips (Power Range High Neutron Flux Trip, Positive and Negative Flux Rate Trips) and the P-10 permissive function in the tripped condition by removing power to the channel. This would affect the coincidence logic of the NIS trips and P-10 permissive in such a way as to require only one additional channel in the trip condition to generate a protective system actuation or the P-10 permissive state to be enabled. However, for the case where neutron flux is above the P-10 setpoint, if the inoperable channel is placed in the tripped status while the plant is at power (the appropriate action) and the power level is later reduced below the P-10 setpoint, the protection system functions of the Power Range High Neutron Flux Trip - Low setpoint, Intermediate Range High Neutron Flux Trip and source range neutron flux detector voltage will be disabled if one assumes a single failure of a P-10 setpoint bistable from one of the three remaining operable power range neutron flux measurement channels. With the single failure of a bistable and a tripped channel bistable already existing, the P-10 permissive would not correctly change state due to the fact that the two out of four logic for blocking these functions would remain in effect. The P-10 permissive, which is comprised of a 2 out of 4 coincidence logic of the four power range neutron flux channels, has two functions. The first function of the permissive is to enable a manual block or the above mentioned functions during power escalations when at least two of the four power range neutron flux channels reach a value to greater than the value corresponding to the P-10 setpoint (typically 10% nuclear power). The second function of the permissive is to provide an automatic reinstatement of the above functions when power level is reduced below the setpoint. Therefore, the previously referred to protection function would not be enabled when the power drops below the P-10 setpoint. To resolve this issue procedural provisions have been incorporated into operations procedure 12004-C, Power Operation. These caution, verifications, and procedure steps were reviewed and determined to be adequate by the inspector.

5. Offsite Review Committee (40701)

This inspection was conducted to determine if the functions of offsite reviews are being performed in accordance with regulatory requirements of technical specification 6.4.2. Technical specification 6.4.2 specifies that the Safety Review Board shall function to provide independent review and audit of activities in the areas of nuclear power plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, instrumentation and control, radiological safety, mechanical and electrical engineering, quality assurance practices. The Safety Review Board is organized as one board for all GPC Nuclear power plants. The board is composed of a minimum of five persons.

Additional information is contained in FSAR Section 13.4.3. The inspector attended meeting number 311 on August 24, discussed with board members how the board conducts business and reviewed past meeting minutes of the board and subcommittees. The inspector concluded that the board was conducting business as required by the TSs. The inspector noted that the open issues of the board has been reduced from 83 to 0 during the past year.

No violations or deviations were identified.

6. Management Meetings - (30702)

On September 1, 1988, an onsite meeting was held to discuss licensee performance since January. Areas of discussion included operational performance, LER trends, health physics, chemistry, technical support, training programs, maintenance, security and refueling.

7. Vogtle Plant Differences Training Inspection - (92706)

To ensure that the facility's plant differences training program is satisfactorily administered, Operator Examiners from the Region II office during two separate weeks of training attended the facility training course, observed a sampling of the facility administered plant walk-through examinations and reviewed a sampling of the associated two hour written examinations.

Three plant walk-through examinations were observed on July 13, 1988. The content of these examinations adequately sampled the operator's knowledge with respect to the plant differences identified by the facility in their May 19, 1988 submittal to the NRC. However, the following concerns were noted:

- The plant walk-through examinations should sample "common equipment locations" on Unit 2. Although no generic conclusion could be drawn, two individuals had difficulty locating examples of common equipment.

- The control room phase of the plant walk-through was somewhat limited in scope. Specifically, the operators were not questioned in close proximity to the Control Room boards where they would then be required to point out and identify differences from the back of the Control Room.

On August 15 and 16, additional facility differences training was observed. It was noted that the concerns raised above had been addressed in the training program by the facility; however, some additional concerns were noted.

- The plant walk-through examination now includes a section on common equipment locations. Of four examinations observed, one candidate experienced significant difficulty in expeditiously locating the equipment specified by the examiner. Two others had some difficulty in locating selected equipment. All four candidates were passed by the facility examiners, however, upon subsequent review with their supervisor one candidate was failed and remedial action identified.
- Some concern exists with the apparent lack of remedial action when weakness are identified during the examination process. As noted above, one candidate exhibited marked weakness in locating Unit 2 equipment. However, the facility examiner did not feel that this weakness called for additional training or more time out in the plant. The Training Department indicated that remedial actions are taken when appropriate and that examination reports are reviewed for generic weaknesses. When identified, these weaknesses are upgraded through required reading, on-the-job training or at the next requalification training session. This information was not verified during this visit.
- Section 106 of NUREG 1021, Operator Licensing Examiner Standards stated "The utility also should describe the expected method of rotating personnel between units and the refamiliarization to be conducted by responsibility on a new unit is assumed." It was noted that no rotation policy had been established at the time of the inspection.
- The training program included differences training on applicable TSs. While some TSs were included in the written exam, others were not included at all due to the unavailability of draft information at the time of the classes. At the time of the inspection, no plans were in place to "catch" these differences in subsequent training.

## 8. Exit Interviews - (30703)

The inspection scope and findings were summarized on September 6, 1988 with those persons indicated in paragraph 1 above. On August 16, a special exit was conducted with training department personnel regarding the details of paragraph 7. The inspector described the areas inspected and discussed in detail the inspection results. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection. Region based NRC exit interviews were attended during the inspection period by a resident inspector. This inspection closed one CDR, and ten LERs. The items identified during this inspection were:

- a. LIV 50-424/88-37-01 "Failure To Maintain The Seismic Qualification And Operability Of The "A" Train Hydrogen Monitor Per TS 3.3.3.6 - LER 87-76." - Paragraph 3.b.(3)(b)
- b. LIV 50-424/88-37-02 "Failure To Establish An Adequate Procedure Required By TS 6.7.1a For The 18 Month Battery Surveillance - LER 88-21." - Paragraph 3.b.(3)(e)

## 9. Acronyms and Initialism

AFW	-	Auxiliary Feedwater System
CDR	-	Construction Deficiency Report
CVI	-	Containment Ventilation Isolation
DC	-	Deficiency Card
ECCS	-	Emergency Core Cooling System
ESF	-	Engineered Safety Feature
FSAR	-	Final Safety Analysis Report
HVAC	-	Heating, Ventilation and Air-Conditioning
ISEG	-	Independent Safety Evaluation Group
LCO	-	Limiting Condition for Operation
LER	-	Licensee Event Reports
LIV	-	Licensee Identified Violation
LOCA	-	Loss of Coolant Accident
MWO	-	Maintenance Work Order
NIS	-	Nuclear Service Water
PT	-	Potential Transformer
QC	-	Quality Control
RCA	-	Radiation Control Areas
RTB	-	Reactor Trip Breaker
SI	-	Safety Injection
TC	-	Thermocouple
TDAFW	-	Turbine Driven Auxiliary Feedwater
TS	-	Technical Specification
JV	-	Under Voltage