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

October 21, 2005

Tennessee Valley Authority
ATTN: Mr. K. W. Singer
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION REPORT 05000327/2005004 AND 05000328/2005004

Dear Mr. Singer:

On September 30, 2005, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Sequoyah Nuclear Power Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection findings, which were discussed on October 7, 2005, with Mr. D. Kulisek and other members of your staff.

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

Based on the results of this inspection no findings of significance were identified. However, two licensee-identified violations which were determined to be of very low safety significance are listed in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy because of the very low safety significance of the violations and because they are entered into your corrective action program. If you contest these non-cited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Sequoyah Nuclear Power Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Stephen J. Cahill, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket No.: 50-327, 50-328
License No.: DPR-77, DPR-79

Enclosure: Inspection Report 05000327/2005004 AND 05000328/2005004
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-327, 50-328
License Nos:	DPR-77, DPR-79
Report No:	05000327/2005004 and 05000328/2005004
Licensee:	Tennessee Valley Authority (TVA)
Facility:	Sequoyah Nuclear Plant
Location:	Sequoyah Access Road Soddy-Daisy, TN 37379
Dates:	July 1, 2005 - September 30, 2005
Inspectors:	S. Freeman, Senior Resident Inspector M. Speck, Resident Inspector R. Carrion, Project Engineer (Sections 1R16, 1R23, 4OA3, 4OA7) T. Nazario, Reactor Inspector (Sections 1R02, 1R17) M. Scott, Senior Reactor Inspector (Sections 1R02, 1R17) K. VanDoorn, Senior Reactor Inspector (Sections 1R02, 1R17)
Approved by:	S. Cahill, Chief Reactor Projects Branch 6 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000327/2005004, IR 05000328/2005004; 07/01/2005 - 09/30/2005; Sequoyah Nuclear Power Plant, Units 1 & 2; resident inspector integrated report.

The report covered a three-month period of inspection by resident inspectors, one project engineer, and an announced inspection by three region-based inspectors. 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

None.

B. Licensee-Identified Violations

Two non-cited violations of very low safety significance were identified by the licensee and have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations are listed in Section 4OA7 of this report.

Enclosure

REPORT DETAILS

Summary of Plant Status:

Unit 1 began the period at or near 100% rated thermal power (RTP) and remained there for the entire inspection period

Unit 2 began the period at or near 100% RTP and also remained there for the entire inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors reviewed the licensee's completion of Procedure 0-PI-OPS-000-006.1, Summer Operations, Revision 3. The inspectors reviewed the monthly Summer Operation Checklist within this procedure and the inspectors performed walkdowns of the Diesel Generator Building and Essential Raw Cooling Water Building to confirm the ventilation operability listed in the procedure. Inspectors also compared these steps to those in Procedure 0-GO-14-7, Operator Rounds - Outside Round, Revision 10, to verify that daily ventilation fan configuration checks were consistent with the monthly checks. In addition, the inspectors reviewed a portion of Procedure 1-SI-OPS-000-002.0, Shift Log, Revision 73, to ensure that the Ultimate Heat Sink Temperature was monitored so as not to exceed Technical Specification (TS) limits. The inspectors independently verified these temperatures and trends during the inspection period.

b. Findings

No findings of significance were identified.

1R02 Evaluations of Changes, Tests, or Experiments

a. Inspection Scope

The inspectors reviewed selected samples of evaluations to confirm that the licensee had appropriately considered the conditions under which changes to the facility, Updated Final Safety Analysis Report (UFSAR), or procedures may be made, or tests conducted, without prior NRC approval. The inspectors reviewed evaluations for eight changes and additional information, such as calculations, supporting analyses, the UFSAR, and drawings to confirm that the licensee had appropriately concluded that the changes could be accomplished without obtaining a license amendment. The eight evaluations reviewed are listed in the List of Documents Reviewed.

The inspectors also reviewed samples of changes for which the licensee had determined that evaluations were not required, to confirm that the licensee's conclusions to "screen out" these changes were correct and consistent with 10CFR50.59. The 14 "screened out" changes reviewed are listed in the List of Documents Reviewed.

The inspector also reviewed Problem Evaluation Reports (PERs) and self-assessment documents to confirm that problems were identified at an appropriate threshold, were entered into the corrective action process, and appropriate corrective actions had been initiated.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial System Walkdowns. The inspectors performed a partial walkdown of the following three systems to verify the operability of redundant or diverse trains and components when safety equipment was inoperable. The inspectors attempted to identify any discrepancies that could impact the function of the system, and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, walked down control systems components and verified that selected breakers, valves, and support equipment were in the correct position to support system operation. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program. Documents reviewed are listed in the attachment.

- ERCW System while Pumps N-B and P-B and Traveling Screen D-A Were Inoperable
- Auxiliary Control Air Compressor A during Outage of the B Train Compressor
- Unit 2 Safety Injection (SI) System Train B during SI Pump 2A Testing

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted a tour of the nine areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that combustibles and ignition sources were controlled in accordance with the licensee's administrative procedures; fire detection and suppression equipment was available for

use; passive fire barriers were maintained in good material condition; and compensatory measures for out-of-service, degraded, or inoperable fire protection equipment and doors were implemented in accordance with the licensee's fire plan. Documents reviewed are listed in the attachment.

- Control Building Elevation 706 (Cable Spreading Room)
- Auxiliary Building Elevation 734 (Shutdown Board Rooms, Battery Board Rooms, and Auxiliary Control Room)
- Control Building Elevation 685 (Auxiliary Instrument Rooms)
- Control Building Elevation 669 (Mechanical Room, 250-VDC Battery, and Battery Board Rooms)
- Essential Raw Cooling Water Building
- Control Building Elevation 732 (Mechanical Equipment Room and Relay Room)
- Auxiliary Building Elevation 714 (Corridor)
- Auxiliary Building Elevation 690 (Corridor)
- Yard Area Fire Fighting Equipment

b. Findings

No findings of significance were identified. One licensee identified violation is discussed in Section 4OA7.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed as-found simulator training on August 1, 2005. The training involved three scenarios. The first was a reactor trip without complications. The second scenario was a failed turbine impulse pressure instrument resulting in automatic rod insertions. During the recovery, a steam generator U-tube leak occurred leading to a manual reactor trip and initiation of safety injection. Following the trip, operators dealt with a faulted steam generator and the leak degraded into a ruptured steam generator requiring rapid plant cooldown and depressurization. Additional anomalies included a protection system train failure requiring manual start of ECCS components. The third scenario involved a ruptured steam generator with subsequent loss of offsite power. 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 and emergency plan event classification; timely control board operation and manipulation, including high-risk operator actions; oversight and direction provided by shift manager, including the ability to identify and implement appropriate TS actions; independent event classification by the Shift Technical Advisor; and group dynamics involved in crew performance. The inspectors also observed the scenario debrief and evaluation and reviewed simulator fidelity to verify that it matched actual plant response. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the condition of the Thermal Barrier Booster Pumps and associated records to verify effectiveness in terms of: 1) appropriate work practices; 2) identifying and addressing common cause failures; 3) scoping in accordance with 10 CFR 50.65 (b); 4) characterizing reliability issues for performance; 5) trending key parameters for condition monitoring; 6) charging unavailability for performance; 7) classification in accordance with 10 CFR 50.65(a)(1) or (a)(2); 8) appropriateness of performance criteria for systems, structures, and components (SSCs) and functions classified as (a)(2); and 9) appropriateness of goals and corrective actions for SSCs and functions classified as (a)(1). Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the following five activities to verify that the appropriate risk assessments were performed prior to removing equipment for maintenance. The inspectors verified that risk assessments were performed as required by 10 CFR 50.65 (a)(4), and were accurate and complete. When emergent work was performed, the inspectors verified that the plant risk was promptly reassessed and managed. The inspectors verified the appropriate use of the licensee's risk assessment tool and risk categories in accordance with Procedure SPP-7.1, On-Line Work Management, Revision 6S1, and Instruction 0-TI-DSM-000-007.1, Risk Assessment Guidelines, Revision 8. Documents reviewed are listed in the attachment.

- Removal of two B-Train ERCW Pumps from Service and ERCW Traveling Screen D-A Inoperable for Repairs
- Grid Conditions while Unit 1 Turbine Driven AFW Removed from Service
- Sentinel Assessment for the Week of August 8-12, 2005
- RHR Train 1A Mid-Cycle Outage
- MCR HVAC A-Train Outage

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

For the three operability evaluations described in the PERs listed below, the inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available, such that no unrecognized increase in risk occurred. The inspectors reviewed criteria in the UFSAR to verify that the system or component remained available to perform its intended function. In addition, the inspectors reviewed implemented compensatory measures to verify that the measures worked as stated and the measures were adequately controlled. The inspectors also reviewed a sampling of PERs to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the attachment.

- PER 73307, EDG 1B Exhaust Fan Discharge Damper Failed Open
- PER 76900, SG Blowdown Does Not Isolate on AFW Start if AFW is Already On
- PER 85334, SI Pump 2A Low Differential Pressure

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors reviewed the cumulative effects of deficiencies that constituted operator workarounds to determine whether or not they could affect the reliability, availability, and potential for misoperation of a mitigating system; affect multiple mitigating systems; or affect the ability of operators to respond in a correct and timely manner to plant transients and accidents.

The inspectors also assessed whether operator workarounds were being identified and entered into the corrective action program at an appropriate threshold. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

.1 Current Review of Ongoing Modifications

a. Inspection Scope

The inspectors reviewed Design Change Notice (DCN) D21854, Modify Diesel Starting Air System to Improve Performance of Pressure Control Valves, Revision A, and interviewed engineering personnel regarding the modification and associated post-modification testing to verify that (1) the design bases, licensing bases, and performance capability had not been degraded through this modification, and (2) the modification was not performed during increased risk-significant configurations that placed the plant in an unsafe condition. The inspectors also interviewed maintenance personnel performing the work, observed modification work in progress and post-modification testing, reviewed work orders used to implement the design, applicable sections of the UFSAR, plant modification procedures, system drawings, supporting analyses, TSs, and related PERs. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

.2 Biennial Review

a. Inspection Scope

The inspectors evaluated design change packages for seven modifications, in the Mitigating Systems and Barrier Integrity cornerstone areas, to evaluate the modifications for adverse effects on system availability, reliability, and functional capability. The following modifications and the associated attributes were reviewed:

D21592-A, Add New High Point Vents to CVCS [Chemical and Volume Control], SI [Safety Injection], and RHR [Residual Heat Removal] Systems (Mitigating Systems, Barrier Integrity)

- Seismic and Vibration Evaluation
- Materials/Replacement Components (material compatibility, traceability, certification) (sample)
- Plant Document Updating (critical drawings, UFSAR, Operations procedures)
- Post-Modification Testing
- Installation Records (welding, nondestructive examinations, cleanliness) (sample)

D21612, Replace Motor-Driven Auxiliary Feedwater Pump 2A-A (Mitigating Systems)

- Seismic and Vibration Evaluation
- Materials/Replacement Components (material compatibility, traceability, certification) (sample)
- System Flow Requirements Evaluation
- Vendor Pump Testing
- Plant Document Updating (critical drawings, setpoints)
- Post-Modification Testing
- Installation Records (instrumentation calibration, relay setpoints)

D21783, Increased Letdown Flow [resin bed flow alarm Set Points] (Mitigating Systems)

- Flowpaths
- Control Signals
- Material Compatibility [with higher flow]
- Plant Document Updating (drawings, operating procedures)

D21616, Re-calibrated Pressure Switches Associated with MDAFW Pumps (Mitigating Systems)

- Control Signals
- Plant Document Updating (drawings, operating procedures, setpoint documents)
- Post-Modification Testing

D21551, AFW Level Control Valves - Actuator Capacity Increase (Mitigating Systems)

- Control Signals
- Material Compatibility
- Plant Document Updating (drawings, operating procedures, setpoint documents)
- Post-Modification Testing

D21347, Lateral Hydraulic Snubbers Not Adequate (Mitigating Systems)

- Seismic and Vibration Evaluation
- Materials/Replacement Components (material compatibility, traceability, functional properties)
- Plant Document Updating (drawings)
- Installation Records
- Structural

D21747, Replace Hydraulic Snubbers with Mechanical Snubbers (Mitigating Systems)

- Seismic and Vibration Evaluation
- Materials/Replacement Components (material compatibility, functional properties)
- Plant Document Updating (drawings, procedures)

- Post-Modification Testing
- Installation Records
- Structural

For selected modification packages, the inspectors observed the as-built configuration. Documents reviewed included procedures, engineering calculations, modification design and implementation packages, work orders, site drawings, corrective action documents, applicable sections of the UFSAR, supporting analyses, TSs, and design basis information.

The inspectors also reviewed selected PERs and a self-assessment associated with modifications to confirm that problems were identified at an appropriate threshold, were entered into the corrective action process, and appropriate corrective actions had been initiated.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed the five post-maintenance tests listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the licensee's test procedure to verify that the procedure adequately tested the safety function(s) that may have been affected by the maintenance activity, that the acceptance criteria in the procedure were consistent with information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed the test data, to verify that test results adequately demonstrated restoration of the affected safety function(s). Documents reviewed are listed in the attachment.

- WO 05-778295-000, Replace Battery in Unit 1 Control Bank D Step Counter
- WO 04-781489-000, Test and Calibrate Low Oil Level Switch on Auxiliary Control Air Compressor B
- WO 04-777605-000, RHR Pump 1A Relay Functional Test
- WO 05-779451-000, Containment Annulus Differential Pressure Switch Out of Tolerance
- WO 05-779670-000, Eagle 21 Analog Input Board Failure

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

For the four surveillance tests identified below, by witnessing testing and/or reviewing the test data, the inspectors verified that the SSCs involved in these tests satisfied the requirements described in the TS surveillance requirements, the UFSAR, applicable licensee procedures, and that the tests demonstrated that the SSCs were capable of performing their intended safety functions. Documents reviewed are listed in the attachment. Those tests included the following:

- 0-PI-SXP-018-007.5, Diesel Generator 2A-A Fuel Oil Transfer Pumps, Lube Oil Circ Pumps, Fuel, Oil Priming & A-C Lube Oil Soak Back Pumps Performance Testing, Revision 8,*
- 1-SI-SXP-003-201.S, Turbine-Driven Auxiliary Feed Water Pump 1A-S Performance Test, Revision 14,*
- 0-SI-SFT-031-144.A, Control Room Emergency Ventilation Test, Train A, Revision 9
- 2-SI-OPS-082-007.B, Electrical Power System Diesel Generator 2B-B, Revision 33

* This procedure includes inservice testing requirements

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the temporary modification described in Temporary Alteration Control Form (TACF) 2-05-014-068, Temporarily Cable Lift and Jumper Installation, Revision 0, and the associated 10 CFR 50.59 screening, and compared it against the UFSAR and TS to verify that the modification did not affect the operability or availability of any safety system. The inspectors walked down the TACF to ensure it was installed in accordance with the modification documents and reviewed post-installation testing to verify that the actual impact on permanent systems was adequately verified by the tests. The inspectors also verified that permanent plant documents were updated to reflect the TACF to ensure that plant configuration control was maintained. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

Resident inspectors evaluated the conduct of a routine licensee emergency drill on August 24, 2005, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation (PAR) development activities. The inspectors observed emergency response operations in the simulated control room to verify that event classification and notifications were done in accordance with EPIP-1, Emergency Plan Classification Matrix, Revision 36. The inspectors also attended the licensee critique of the drill to compare any inspector-observed weakness with those identified by the licensee in order to verify whether the licensee was properly identifying failures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This was accomplished by reviewing the description of each new PER and attending daily management review committee meetings.

4OA3 Event Followup

.1 (Closed) Licensee Event Report (LER) 05000328/2005-002-00, Incorrect Unit 2 Nuclear Instrumentation System Calibration

While performing Nuclear Instrumentation System (NIS) channel calibrations on May 4 and May 10, 2005, the licensee determined that rate trip bistable setpoints for two of four power range channels (N41 and N42) were out of TS limits. The licensee identified that the out-of-limit condition was caused by incorrect calculations used in the calibrations performed during previous functional tests. The result was that 2 of 4 NIS rate trip circuits were inoperable for a period longer than allowed by TS 3.3.1.1. The inspectors reviewed the LER and PER 82360, which documented this event in the licensee's corrective action program, to verify that the cause of the condition was identified and that corrective actions were appropriate. The inspectors also verified that

timely notifications were made in accordance with 10 CFR 50.73. The incorrect previous calculations were determined to be a licensee performance deficiency and therefore a finding in the NRC ROP. This finding is more than minor because it had a credible impact on safety, in that the power range high neutron flux rate trip circuit response would have been slower than allowed during a ramped power transient. The finding affects the Equipment Performance attribute of the Mitigating Systems Cornerstone and was considered to have very low safety significance (Green) with respect to the availability, reliability, and capability of the system to prevent undesirable consequences (i.e. core damage). The affected power range high neutron flux rate trip circuits' response to step change power transients was unaffected and evaluations determined that they would respond sufficiently during those accidents to accomplish NIS rate trip protection. The enforcement aspects of the violation are discussed in Section 4OA7. This LER is closed.

4OA5 Other Activities

NRC Temporary Instruction (TI) 2515/163, Operational Readiness of Offsite Power

Completion of this TI was documented in NRC Inspection Report 05000327 and 328/2005003. However, after an NRC headquarters review of the data provided, additional information related to the TI was requested. The inspectors collected this information from licensee discussions, site procedures, and licensee documentation. The information was subsequently provided to the headquarters staff for further analysis.

4OA6 Meetings, including Exit

Exit Meeting Summary

On October 7, 2005, the resident inspectors presented the inspection results to Mr. Dave Kulisek and other members of his staff, who acknowledged the findings.

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 Violations

The following findings of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

- Facility Operating License Section 2.C(16) (Unit 1) and 2.C(13) (Unit 2) required that the licensee implement and maintain an approved fire protection plan. Licensee Fire Protection Plan LCO 3.7.12 required that all fire barrier penetrations in fire zone boundaries protecting safety-related areas shall be functional and if not, either restored to operable or operability of fire detectors

verified on at least one side of the non-functional barrier and an hourly fire watch patrol established within one hour. Contrary to the above, on August 29, 2005, the licensee failed to establish an hourly fire watch after opening fire barriers in safety-related areas for approximately 11 hours as part of actions for a tornado watch. This was identified in the licensee's corrective action program as PER 88538. This violation was of very low safety significance because all other defense-in-depth fire protection measures (detection, suppression, procedures, and personnel) were in place.

- TS 3.3.1.1 required that NIS channels be demonstrated operable by the performing channel functional tests quarterly while in Mode 1 and that at least 3 power range NIS channels be operable. Contrary to this, on May 4 and May 10, 2005, the licensee determined that two of four NIS channels were found inoperable due to incorrect calibrations of rate trip bistables conducted on February 1 and April 22, 2005. The result was that 2 of 4 NIS rate trip circuits were inoperable for a period longer than allowed by TS 3.3.1.1. This was identified in the licensee's CAP as PER 82360. The finding was of very low safety significance because two of four channels were fully functional and available to perform required reactor trip functions and evaluations determined that as-found bistable trip settings in the faulty channels were adequate to respond to those events where rate trips are credited for protection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee personnel:

J. Bajraszewski, Licensing Engineer
R. Douet, Site Vice President
K. Wilkes, Emergency Preparedness Manager
M. Gillman, Operations Manager
K. Jones, System Engineer Manager
Z. Kitts, Licensing Engineer
D. Kulisek, Plant Manager
P. Pace, Licensing and Industry Affairs Manager
K. Parker, Maintenance and Modifications Manager
R. Reynolds, Interim Security Manager
R. Richie, Chemical/Environmental Manager
R. Rogers, Engineering Manager
P. Sawyer, Radiation Protection Manager
J. Smith, Site Licensing Supervisor

NRC personnel:

R. Bernhard, Region II, Senior Reactor Analyst
D. Pickett, Project Manager, Office of Nuclear Reactor Regulation
G. Wiseman, Region II, Senior Reactor Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

05000328/2005-002-00	LER	Incorrect Unit 2 Nuclear Instrumentation System Calibration (Section 4OA3)

Attachment

LIST OF DOCUMENTS REVIEWED

Section 1R02: Evaluation of Changes, Tests, or Experiments

Full Evaluations

EDC E-21582-A, Removal of Fuel Assembly Thimble Plugs
UFSAR Change Package 19-23, Upgrade of Control Room Air Conditioning System
TACF 1-03-036-241, System 141, Switchyard Transformers Sudden Pressure Relay Inactivation
D21854, Modify Diesel Starting Air System to Improve Performance of the Pressure Control Valves
UFSAR Change Package 19-14, ES-1, Revision 12, Revise Step Sequence for Change-Over from Injection to Re-circulation Modes
TACF 2-03-038-061, System 77, Ice Condenser Air Handling Unit Condensate Drain Line
E20841A, Spent Fuel Pool Heat Decay Load Engineering Change
WO 01-005035-000, Change Component Cooling System Throttle Valve to Residual Heat Removal to Full Open

Screened Out Items

D21580, Install 3-Inch Piping Branch on Essential Raw Cooling Water (ERCW) Header
D20501-A, Install High-Point Vents in RHR System
FSAR Change Package 19-17, Control Room Ventilation System Modes of Operation
D21592-A, Add New High-Point Vents to Chemical and Volume Control, Safety Injection, and Residual Heat Removal Systems
D21612, Replace Motor-Driven Auxiliary Feedwater Pump 2A-A
D21783, Increased Letdown Flow [Resin Bed Flow Alarm Setpoints]
D21616, Re-Calibrated Pressure Switches Associated with MDAFW Pumps
D21551, AFW Level Control Valves - Actuator Capacity Increase
UFSAR Change Package 19-24, Clarify Battery Loads
D21511, Change of MFP [2-PS-54-10A and 10 B] Trip Logic
D21781, SG Narrow Range Level Transmitter Scaling
D21347, Lateral Hydraulic Snubbers Not Adequate
D21747, Replace Hydraulic Snubbers with Mechanical Snubbers
D21505, Replace Unit AFW (Auxiliary Feedwater) Steam Traps

Self-Assessment Documents

SQN-ENG-05-01, 50.59 Self-Assessment, August 01-19/2005
Audit Report No. SSA0406, Engineering Functional Area Audit
PER 20252, 50.59 Screening Documents Did Not Meet All Requirements
PER 20474, Repositioning Components Allowed without Procedure and 50.59
PER 28376, Incorrect Responses in 50.59 Screening Documents
PER 69835, Inconsistency in Identifying Quality vs. Non-Quality Procedures and Associated 50.59 Reviews
PER 69846, Incorrect 50.59 Screening Response
PER 76532, Incomplete Corrective Action for Inconsistent Classification of Procedures

PER 16954, 50.59 Screening Not Performed for Disabled Computer Points

Section 1R04: Equipment Alignment

1,2-47W845-5, Essential Raw Cooling Water Mechanical Flow Diagram, Revision 54
0-SO-67-1 Attachment 1, Essential Raw Cooling Water Power Checklist, Change 22
1,2-47W848-1, Compressed Air System Flow Diagram, Revision 45

Section 1R05: Fire Protection

1,2-47W494-5, Fire Protection - Fire Cells - Plan Elevation 749.0, Revision 9
AOP-N.02, Tornado Watch/Warning, Revisions 14 and 15
SQN-26-D054/EPM-ABB-IMPFHA, SQN Fire Hazards Analysis Calculation, Appendix A
PER 88529, Wood Stored in Unit 1 Transformer Room on Elevation 749
PER 88538, Compensatory Action Fire Watches Not Put in Place Per Fire Protection Plan

Section 1R11: Licensed Operator Requalification

Emergency Procedure E-3, Steam Generator Tube Rupture, Revision 15

Section 1R12: Maintenance Rule Implementation

Regulatory Guide 1.160, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, Revision 2
EPM-4, Emergency Procedure User's Guide, Revision 13

Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation

Sentinel Run for 5 through 24 July, 2005
SQN Daily Work Schedule for 11 through 17 July, 2005
Sentinel Run for 8 through 28 August, 2005
SQN Daily Work Schedule for 15 through 21 July, 2005
Sentinel Run for 5 through 24 September, 2005
SQN Daily Work Schedule for 12 through 18 September, 2005

Section 1R15: Operability Evaluations

PER 78641, Isolating Steam Generator Blowdown Should Not Be Required During AFW Testing

Section 1R16: Operator Work-Arounds

OPDP-1, Revision 5, Conduct of Operations, Attachment L - Operator Workarounds
AUO Round Deficiency (ARD) 1, Unit 1 Auxiliary Building
ARD 2, Unit 2 Auxiliary Building
ARD 3, Unit 1 Turbine Building
ARD 4, Unit 2 Turbine Building
ARD 5, Control Building

ARD 6, Radwaste
ARD 7, Outside
ARD 8, Con DI

Section 1R17: Permanent Plant Modifications

DCN 21854, Modify Diesel Starting Air System to Improve Performance of Pressure Control Valves, Revision A
PER 64337, Pressure Control Valve Blowdown
Functional Evaluation 40663 2B-B Diesel Generator Pressure Control Valve Blowdown
PMTI-SQN-21854, Post-Modification Test Instruction DG 1A-A Starting Air Five Start Capacity Verification, Revision 0
WO 05-772416-000, Implement DCN 21854 Diesel Engine 1A1, Revision 5
WO 05-772412-000, Implement DCN 21854 Diesel Engine 1A2, Revision 1
WO 05-772416-001, Implement DCN 21854 Diesel Engine 1A1 Instrumentation, Revision 4
WO 05-772412-001, Implement DCN 21854 Diesel Engine 1A2 Instrumentation, Revision 0
1-SI-OPS-082-007.A, Electrical Power System Diesel Generator 1A-A, Revision 34
0-PI-SXV-082-201.A, Diesel Starting Air Valve Test for Diesel Generator Set 1A-A, Time Frame A, Revision 5
0-PI-SXV-082-201.B, Diesel Starting Air Valve Test for Diesel Generator Set 1A-A, Time Frame B, Revision 9
1-SI-OPS-082-007.B, Electrical Power System Diesel Generator 1B-B, Revision 33
0-PI-SXV-082-202.B, Diesel Starting Air Valve for Diesel Generator Set 1B-B, Time Frame B, Revision 5
0-PI-SXV-082-202.A, Diesel Starting Air Valve for Diesel Generator Set 1B-B, Time Frame A, Revision 6
2-SI-OPS-082-007.A, Electrical Power System Diesel Generator 2A-A, Revision 35
0-PI-SXV-082-203.B, Diesel Starting Air Valve Test for Diesel Generator Set 2A-A, Time Frame B, Revision 8
0-PI-SXV-082-203.A, Diesel Starting Air Valve Test for Diesel Generator Set 2A-A, Time Frame A, Revision 6
WO 05-772420-000, Implement DCN 21854 Diesel Engine 2B1, Revision 1
WO 05-772415-000, Implement DCN 21854 Diesel Engine 2B2, Revision 2
2-SI-OPS-082-007.B, Electrical Power System Diesel Generator 2B-B, Revision 34
0-PI-SXV-082-204.B, Diesel Starting Air Valve Test for Diesel Generator Set 2B-B, Time Frame B, Revision 6
0-PI-SXV-082-204.A, Diesel Starting Air Valve Test for Diesel Generator Set 2B-B, Time Frame A, Revision 6

Self-Assessment Documents

CRP-ENG-04-003, Self-Assessment of Post-Modification Test Effectiveness
PER 31499, ERCW Couplings Modified without Proper Work Instructions
PER 33338, Spent Fuel Pool Level Switch Configuration Would Not Allow Modification Installation
PER 33732, Boric Acid Tank Limits Prematurely Removed from Technical Requirements Manual
PER 64148, Unauthorized Modification to Control Room Flooring

PER 65752, Post-Maintenance Testing Deficiencies
PER 66102, Self-Assessment Area for Improvement for Design Review Board
PER 66103, Post-Modification Testing Area for Improvement
PER 67070, Calculation Issued Prior to Field Work
PER 69609, Sequencing Requirements for DCN Not Fully Complied With
PER 69633, Error in Procurement Data Sheet
PER 69840, Inadequate Engineering Documentation of Critical Thinking
PER 81830, Hanger Inspection Rejections

Section 1R19: Post-Maintenance Testing

0-SI-OPS-085-011.0, Reactivity Control Systems Moveable Control Assemblies, Revision 21
0-PI-SFT-032-001.B, Auxiliary Control Air Operability Test, Revision 11
0-SI-SXV-032-200.B, Train B Auxiliary Air Compressor Cooling Water Inlet Valve Operability Test, Revision 0

Section 1R22: Surveillance Testing

SQTP001, ASME Section XI Inservice Code Class Boundaries for the Second 10-Year Interval, Revision 26
NUREG-1482, Guidelines for Inservice Testing at Nuclear Power Plants, Revision 1
TI-50, Air Flow Measurements and Balancing Methods, Revision 18
0-SO-82-4, Diesel Generator 2B-B, Revision 21
Regulatory Guide 1.137, Fuel Oil Systems for Standby Diesel Generators, Revision 1

Section 1R23: Temporary Plant Modifications

TS and Bases 3/4.4.1, Reactor Coolant Loops and Coolant Circulation
TS and Bases 3/4.4.12, Low Temperature Over-Protection (LTOP) System
UFSAR 5.5.1, Reactor Coolant Pumps
UFSAR 5.5.1.2, Design Description
UFSAR 5.5.1.3, Design Evaluation
UFSAR 5.5.7, Residual Heat Removal System
UFSAR 5.5.7.2, Design Description
UFSAR 5.6, Instrumentation Application
UFSAR 5.6.3, Pressure Indication
UFSAR 7.2, Reactor Trip System
UFSAR 7.2.1, Description
UFSAR 7.2.1.1, System Description
UFSAR 15.2.6, Startup of an Inactive Reactor Coolant Pump
UFSAR 15.2.9, Loss of Off-Site Power to the Station Auxiliaries
Unit 2 Operations Log of August 15, 2005, 13:45, which discusses work to be performed
Mechanical Control Diagram - Reactor Coolant System, 2-47W610-1, Revision 10
Wiring Diagram, 6900V Unit Auxiliary Power Schematic Diagram, 1,2-45N763-2, Revision 16
Wiring Diagrams, 6900V Unit Boards 2A & 2B, Single Lines, 2-45N721-2, Revision 10
Mechanical Logic Diagrams - Reactor Coolant System, 2-47W611-1, Revision 3

Section 4OA3: Event Followup

LER 05000328/2005-002-00, Incorrect Unit 2 Nuclear Instrumentation System Calibration
PER 82360, Nuclear Instrumentation Power Range Out of Tech Spec Tolerance
Standard Programs and Processes (SPP)-10.3, Verification Program, Revision 1

Section 4OA7: Licensee-Identified Violations

LER 05000328/2005-002-00, Incorrect Unit 2 Nuclear Instrumentation System Calibration
PER 82360, Nuclear Instrumentation Power Range Out of Tech Spec Tolerance
Standard Programs and Processes (SPP)-10.3, Verification Program, Revision 1