

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-4005

November 12, 2004

R. T. Ridenoure Vice President Omaha Public Power District Fort Calhoun Station FC-2-4 Adm. P.O. Box 550 Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION - NRC INTEGRATED INSPECTION REPORT 05000285/2004004 AND 07200054/2004001

Dear Mr. Ridenoure:

On September 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Fort Calhoun Station. The enclosed integrated inspection report documents the inspection findings which were discussed on September 24, 2004, with Mr. David Bannister, Plant Manager, and other members of your staff.

The inspections 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.

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 component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/ by WCWalker acting for

Kriss M. Kennedy, Chief Project Branch C Division of Reactor Projects Omaha Public Power District

-2-

Docket: 50-285 License: DPR-40

Enclosure:

NRC Inspection Report 05000285/2004004 and 07200054/2004001 w/attachment: Supplemental Information

cc w/enclosure: John B. Herman, Manager Nuclear Licensing Omaha Public Power District Fort Calhoun Station FC-2-4 Adm. P.O. Box 550 Fort Calhoun, NE 68023-0550

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RIV:RI:DRP/C	SRI:DRP/C	SRI:DRP/C	C:DNMS/FC&D	C:DRS/EB
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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket:	50-285		
License:	DPR-40		
Report:	05000285/2004004 and 07200054/2004001		
Licensee:	Omaha Public Power District		
Facility:	Fort Calhoun Station		
Location:	Fort Calhoun Station FC-2-4 Adm. P.O. Box 399, Highway 75 - North of Fort Calhoun Fort Calhoun, Nebraska		
Dates:	July 1 through September 30, 2004		
Inspectors:	 J. Hanna, Senior Resident Inspector J. Kramer, Senior Resident Inspector L. Willoughby, Resident Inspector V. Everett, Senior Radiation Specialist C. Johnson, Senior Reactor Inspector, Engineering Branch W. Sifre, Reactor Inspector, Engineering Branch C. Stancil, Reactor Inspector, Technical Support Staff 		
Approved By:	Kriss M. Kennedy, Chief, Project Branch C Division of Reactor Projects		

SUMMARY OF FINDINGS

IR 05000285/2004004, 07200054/2004001; 07/01/2004 - 09/30/2004; Fort Calhoun Station, Integrated Resident and Regional Report.

The report covered a 3-month period of inspection by resident inspectors and announced inspection by a regional senior radiation specialist and reactor 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. <u>NRC-Identified Findings and Self-Revealing Findings</u>

No findings of significance were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

The plant operated at full power throughout this inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors reviewed Procedure OI-EW-1, "Extreme Weather," Revision 8, and Procedure AOP-01, "Acts of Nature," Revision 15, for responding to severe thunderstorms (one inspection sample). The inspectors evaluated the design features and implementation of the procedures to protect structures, systems, and components from the affects of high winds and rain.

b. Findings

No findings of significance were identified.

1R02 Evaluations of Changes, Tests, or Experiments (71111.02)

Biennial Review

a. Inspection Scope

The inspection procedure requires a review of five to seven licensee evaluations and 10 to 15 changes, tests, or experiments that were screened out by the licensee for a one-unit site.

The inspectors reviewed procedures governing the licensee's process for 10 CFR 50.59, evaluations of changes, tests, or experiments. The inspectors also reviewed seven licensee evaluations required by 10 CFR 50.59, and 10 changes, tests, or experiments that were screened out by the licensee.

b. Findings

1R04 Equipment Alignments (71111.04)

.1 Partial Equipment Walkdowns

a. Inspection Scope

The inspectors performed three partial walkdowns (three inspection samples) of the following trains of equipment during outages, operation, or testing of redundant trains. The inspectors verified that the following systems were properly aligned in accordance with system piping and instrumentation drawings and plant procedures:

- High pressure safety injection system, Train B, while testing Motor Control Center 3A1 on August 26, 2004
- Auxiliary feedwater while conducting the monthly run of diesel-driven auxiliary feedwater Pump FW-54 on August 26, 2004
- Raw water system while testing Diesel Generator 2 on September 15, 2004

b. <u>Findings</u>

No findings of significance were identified.

- .2 Complete System Walkdowns
 - a. Inspection Scope

The inspectors conducted a detailed review of the alignment and condition of the component cooling water system (one inspection sample). The inspectors reviewed open work orders and condition reports associated with the system. The inspectors performed a walkdown of accessible portions of the system. During the walkdown, inspectors verified that the system was properly aligned in accordance with piping and instrumentation Drawing 11405-M-10 and Procedure OI-CC-1, "Component Cooling System Normal Operation," Revision 49.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors performed routine fire inspection tours (five inspection samples) and reviewed relevant records for plant areas important to reactor safety. The inspectors observed the material condition of plant fire protection equipment, the control of

transient combustibles, and the operational status of barriers. The inspectors compared in-plant observations with commitments in the licensee's Updated Fire Hazards Analysis Report. The following fire areas were inspected:

- Fire Area 33 Component cooling water heat exchanger area (Room 18)
- Fire Area 2 Safety injection and containment spray pump area (Room 22)
- Fire Area 6.8 Heat exchanger and pump area (Room 5)
- Fire Area 43 Service and condensate tank area (Room 81)
- Fire Area 31 Intake structure (operating floor)

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the probabilistic risk assessment summary notebook for internal flooding events. The inspectors performed a walkdown of Corridor 4 and safety injection pump Rooms 21 and 22, to verify that equipment in these rooms were not subject to damage as a result of internal flooding in Corridor 4 (one inspection sample). The inspectors reviewed the internal flooding analysis that demonstrated that the safety related equipment in these rooms was not vulnerable to this internal flooding.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification (71111.11)

a. Inspection Scope

On September 8, 2004, the inspectors observed licensed operator requalification training activities, including the licensed operators' performance and the evaluators' critique (one inspection sample). The inspectors compared performance in the simulator with performance observed in the control room during this inspection period. The focus of the inspection was on high-risk licensed operator actions, operator activities associated with the emergency plan, and previous lessons-learned items. These items were evaluated to ensure that operator performance was consistent with protection of the reactor core during postulated accidents.

b. Findings

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the requirements of the Maintenance Rule (10 CFR 50.65) and verified that the licensee conducted appropriate evaluations of equipment functional failures, maintenance preventable functional failures, the unplanned capacity loss factor, system unavailability, and classification. The inspectors discussed the evaluations with licensee personnel. The following maintenance rule items were reviewed (two inspection samples):

- Raw Water Pump AC-10B
- Air Compressor A, Filter-Silencer, and Intercool CA-1B

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed risk assessments by the licensee for equipment outages (two inspection samples) as a result of planned and emergent maintenance to evaluate the licensee's effectiveness in assessing risk for these activities. The inspectors compared the licensee's risk assessment and risk management activities against requirements of 10 CFR 50.65 (a)(4). The inspectors discussed the planned and emergent work activities with planning and maintenance personnel. The inspectors verified that plant personnel were aware of the appropriate licensee-established risk category, according to the risk assessment results and licensee program procedures. The inspectors reviewed the effectiveness of risk assessment and risk management for the following activities:

- Outage of the diesel-driven Fire Pump FP-1A and the Blair water supply on July 17, 2004
- Outage of reverse osmosis unit, Air Compressor CA-1A, and diesel-driven Fire Pump FP-1A on July 20, 2004

b. Findings

1R14 Operator Performance During Nonroutine Evolutions and Events (71111.14)

a. Inspection Scope

The inspectors observed the control room operators' response to seven flow streaming events that occurred during the inspection period. The event durations varied from several hours to several days. A flow streaming event involves a shift in the hot leg temperature profile that is measured at the hot leg temperature sensors. This temperature shift affects the reactor delta-T power calculated by the reactor protection system. During a flow streaming event, the reactor protection system delta-T power Channels A and B usually decrease by approximately 4 percent from nominal values while Channels C and D increase by approximately 4 percent. At times during the event, the temperature profile will randomly shift to cause Channels A and B to read higher while Channels C and D read lower. Ultimately, the temperature profile will shift back to its normal position and the delta-T power readings will return to pre-event nominal values. There was no impact on reactor power during the events. This was indicated by nuclear instruments showing no change from nominal values. The operators entered Procedure AOP-15, Section III, "Loss of Flux Indication or Flow Streaming," Revisions 6 or 7, to monitor the events. The licensee initiated Condition Reports 200402672, 200402759, 200402869, 200402918, 200403092, 200403118, and 200403196 to document the events.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed operability evaluations (four inspection samples) to verify that the evaluations provided adequate justification that the affected equipment could still meet its Technical Specification, Updated Safety Analysis Report, and design bases requirements. The inspectors also discussed the evaluations with cognizant licensee personnel. The inspectors reviewed the operability evaluations and cause assessments for the following:

- Oil sampled in machine shop totes found to be the incorrect type and viscosity (Condition Report 200402714)
- Missed surveillance for fuel transfer Penetration M-100 (Condition Report 200402619)
- Alarm response when lube oil engine pressure low alarm was received while running Diesel Generator 1 fully loaded (Condition Report 200402374)

Enclosure

- Potentially nonconservative design for steam generator and reactor coolant pump horizontal and vertical seismic restraints (Condition Report 200402542)
- b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors performed a review of operator workarounds, control room deficiencies, and control room burden lists. The inspectors focused on the cumulative effects (one inspection sample) of the workarounds on the reliability and availability of mitigating systems and the ability of operators to respond in a correct and timely manner to plant transients and accidents. The inspectors reviewed Procedure OPD-4-17, "Control Room Deficiencies, Operator Burdens, and Operator Workarounds," Revision 11, that describes the programs for handling workarounds and deficiencies.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

Biennial Review

a. Inspection Scope

The inspection procedure requires 5-10 permanent plant modifications to be reviewed biennially.

The inspectors reviewed procedures governing plant modifications to evaluate the effectiveness of the programs for implementing modifications to risk-significant systems, structures, and components, such that, these changes did not adversely affect the design and licensing basis of the facility. The inspectors reviewed six permanent plant modification packages (six inspection samples), including associated documentation, i.e., 10 CFR 50.59 screens and safety evaluations, to verify that they were performed in accordance with regulatory requirements and plant procedures. Procedures and plant modifications reviewed are listed in the attachment to this report.

The inspectors interviewed the cognizant design and system engineers for the identified modifications as to their understanding of the modification packages. The inspectors evaluated the effectiveness of Fort Calhoun Station's corrective action process to identify and correct problems concerning the performance of permanent plant modifications. In this effort, the inspectors reviewed the corrective action documents

Enclosure

identified in the attachment to this report and the subsequent corrective actions pertaining to identified problems and errors in the performance of permanent plant modifications. In conjunction with review of the corrective action process, the inspectors reviewed Fort Calhoun Station's internal quality services audits and assessments conducted during the past 2 years to determine the effectiveness of their oversight and subsequent actions resulting from the audits and assessments.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Tests (71111.19)

a. Inspection Scope

The inspectors observed and/or reviewed postmaintenance tests (five inspection samples) to verify that the test procedures adequately demonstrated system operability. The inspectors also verified that the tests were adequate for the scope of the maintenance work performed and that the acceptance criteria were clear and consistent with design and licensing basis documents. The following activities were included in the scope of this inspection:

- Postmaintenance Work Order 159971-01, retest of control room filtered ventilation Fan VA-63A performed on August 10, 2004
- Work Order 00177233-01, perform testing on reactor cooling loop 2B high pressure safety injection isolation Valve HCV-320, on August 25, 2004
- Work Order 00177233-01, perform Motor Control Center MC2 and fast fourier transform testing on reactor cooling Loop 2B Isolation Valve HCV-320, high pressure safety injection on August 25, 2004
- Work Order 00172061-01, clean, inspect, lube, and adjust 480V high pressure safety injection Pump SI-2A, Breaker 1B3A-1, on August 30, 2004, and Work Order 00185265-01, troubleshoot antipump circuit on high pressure safety injection Pump SI-2A, Breaker 1B3A-1, on August 31, 2004
- Work Order 00160398-01, adjust packing on high pressure safety injection Pumps SI-2A and -C discharge crossconnect Valve HCV-305, on September 9, 2004

b. Findings

1R22 <u>Surveillance Testing (71111.22)</u>

a. Inspection Scope

The inspectors observed and/or reviewed the performance and documentation for the following surveillance tests (four inspection samples) to verify that the structures, systems, and components were capable of performing their intended safety functions and to assess operational readiness:

- Procedure OP-ST-AE-0001, "Personnel Access Lock (PAL) O-Ring Seal Test," Revision 14
- Procedure OP-ST-CCW-3005B, "Component Cooling Category A & B Valve Exercise Test (for the C and D valves)," Revision 8
- Procedure OP-ST-RW-3001, "AC-10A RAW Water Pump Quarterly Inservice Test," Revision 30
- Procedure OP-ST-RC-3001, "Reactor Coolant System (RCS) Leak Rate Test," Revision 25

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed Temporary Modification EC 33620 (one inspection sample) that swapped emergency response facility computer system points for in-core instruments G3 (RC-7D-10) and E4 (RC-7D-11), since the cables for G3 and E4 were swapped in containment during head reassembly. In addition, the inspectors reviewed the associated 10 CFR 50.59 screening to confirm that the test was satisfactory and that the modification had no adverse impact on the permanent system.

b. Findings

Cornerstone: Emergency Preparedness

1EP6 Drill Observation (71114.06)

a. Inspection Scope

On August 24, 2004, the inspectors observed an emergency preparedness drill from the simulator and the technical support center (one inspection sample). The purpose of the observation was to evaluate operator performance, licensee event classification, notification of state and local authorities, and the adequacy of protective action recommendations. The inspectors attended the licensee's postdrill critiques and discussed observations with licensee management.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed the licensee's performance indicator data to verify its accuracy and completeness for the following three indicators:

- BI1 Reactor Coolant System Activity
- BI2 Reactor Coolant System Leakage
- MS5 Safety System Functional Failures

The inspectors reviewed the performance indicator data for the last three quarters of 2003 and the first quarter of 2004. The inspectors reviewed Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," and licensee operating logs. The inspectors discussed the status of the performance indicators and compilation of data with licensee personnel.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

The inspectors reviewed problems associated with selected modifications and 10 CFR 50.59 evaluations (one inspection sample) that were identified by licensee

Enclosure

personnel in the corrective action program to evaluate the effectiveness of corrective actions. The sample included open and closed condition reports for the past 3 years, which are listed in the attachment to this report. NRC Inspection Procedure 71152, "Identification and Resolution of Problems," was used as guidance to perform this part of the inspection. Older condition reports that were identified while performing other areas of the inspection were also reviewed.

b. Findings

No findings of significance were identified.

40A5 Other Activities

Onsite Construction of an Independent Spent Fuel Storage Installation (ISFSI) (60853)

a Inspection Scope

On August 26, 2004, the licensee poured the first three sections of the concrete basemat that will be used for dry cask storage of spent fuel at the Fort Calhoun site. The basemat will have six sections totaling 42' wide by 211' long by 2' thick. Adjacent to the basemat will be concrete approach slabs that provide for an overall dimension of the ISFSI pad of 231' by 142'. The licensee performed detailed analysis of the pad design to include the static and dynamic loads on the pad, seismic design of the pad, and liquification potential of the soil under the pad. Compacted backfill to approximately 5' under the pad provided a strong foundation for the expected loading from the weight of the canisters and horizontal storage modules. The NRC inspectors toured the pad area prior to concrete placement to inspect the forms, rebar placement, and cleanliness of the area under the pour. The inspectors observed the pouring of concrete for the three sections of the basemat being poured on August 26, 2004, including quality control of the concrete temperature, slump, and air content. The remaining three sections of the basemat were scheduled to be poured the following week. The following documents were reviewed during this inspection.

- Request for Proposal #1724, Section H, Summary of Work, dated April 23, 2004
- Drawing 59058-EC-1A, "HSM-H Basemat Plan and Details," Revision 0
- Drawing 59058-EC-2A, "HSM-H Basemat Approach Slab Plan and Details," Revision 0
- Drawing 59058-EC-3A, "Electrical Ductline Plan," Revision 0
- Drawing 59058-EY-1A, "Site Location Plan," Revision 0
- Drawing 59058-EY-2A, "Site Grading Plan," Revision 0

- Drawing 59058 EY-2B, "Site Grading Overexcavating Plan," Revision 0
- Drawing 59058-EY-2C, "Site Grading Details, Sections and Profile," Revision 0
- Drawing 59058-EY-2D, "Site Grading Profiles," Revision 0
- Drawing 59058-EY-3A, "Drainage Details and Sections," Revision 0
- S&W Report Number 59058-L(D)-1, "Fort Calhoun Station ISFSI 10 CFR 72.212(b)(2)(i)(B), Basemat Evaluation," Revision 0
- Condition Report 200201296, Change in FEMA and Corp of Engineers Estimates for 100-year and 1000-year Flood Elevations, dated May 10, 2002
- Condition Report 200402445, Manhole Damage, dated July 16, 2004
- Condition Report 200402481, Underground Cable Cut, dated July 20, 2004
- Condition Report 200402597, Truck Safety Issue, dated July 27, 2004
- Condition Report 200402764, Training, dated August 9, 2004
- Materials Testing Proposal (#381) from Thiele Geotech, Inc., dated June 14, 2004
- Resumes/Qualification Sheets for the Thiele Geotech, Inc Personnel Performing the Concrete Testing
- Weekly Summary Reports by Thiele Geotech, Inc., dated August 2 and 9, 2004
- Field Reports by Thiele Geotech, Inc., dated July 26, August 2, and August 11, 2004
- Special Inspection Reports by Thiele Geotech, Inc. for the dates July 26 through August 14, August 19-20, and August 24, 2004 (18 daily reports)
- Compaction Reports by Thiele Geotech, Inc., dated July 26-30, August 2-7, and August 19-20, 2004
- Aggregate Reports by Thiele Geotech, Inc., dated July 22 and 31 and August 14, 2004
- Moisture Content Reports by Thiele Geotech, Inc., dated August 14 and August 19-20, 2004

- Shaw, Stone & Webster Report Number 58209-G(D)-3, Geotechnical Report ISFSI, Revision 0
- Drawing NUH-03-6008, "Standard HUHOMS ISFSI Horizontal Storage Module -ISFSI General Arrangement"
- b <u>Findings</u>

No findings of significance were identified.

40A6 Meetings

Exit Meeting Summary

The results of the ISFSI inspection were presented to Mr. G. Cavanaugh, Supervisor, Nuclear Licensing, and other members of licensee management on August 26, 2004. The licensee's management acknowledged that no proprietary information was examined.

The permanent plant modification inspection findings were acknowledged during an exit meeting presented by the team leader on September 17, 2004, to Mr. Rich Clemens, Division Manager, Nuclear Assessments, and other members of licensee management staff. The lead inspector confirmed that proprietary information, while reviewed, had not been retained by the team.

The results of the resident inspectors' activities were presented to Mr. D. Bannister, Plant manager, and other members of licensee management on September 24, 2004. The licensee's management acknowledged that no proprietary information was examined.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Bannister, Plant Manager

- T. Byrne, Licensing Engineer
- G. Cavanaugh, Supervisor, Nuclear Licensing
- A. Clark, Manager, Security and Emergency Planning
- R. Clemens, Division Manager, Nuclear Assessments
- M. Core, Manager, System Engineering
- P. Cronin, Shift Manager
- D. Dryden, Station Licensing Engineer
- H. Faulhaber, Manager, Work Management
- M. Frans, Assistant Plant Manager
- R. Haug, Manager, Chemistry
- J. Herman, Manager, Nuclear Licensing
- K. Hyde, Supervisor, Design Engineering, Mechanical
- J. McManis, Manager, Design Engineering
- E. Matzke, Station Licensing Engineer
- R. Phelps, Division Manager, Nuclear Engineering
- M. Puckett, Manager, Radiation Protection

Independent Spent Fuel Storage Installation Inspection

Stephen M. Anderson, Project Engineer Kenneth A. Erdman, Project Manager Gary R. Cavanaugh, Supervisor, Nuclear Licensing Steve Weidenhammer, Thiele Geotech, Inc (ACI Certified Program Examiner)

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

None.

LIST OF DOCUMENTS REVIEWED

Modifications

- EC 28526 Small Bore Pipe Restraints in Containment
- EC 11298 Battery Charger Isolation at QSPDS
- EC 27405 Low Pressure Safety Injection Void Detection Instrumentation
- EC 27239 Increase in Size of SDC Purification Cross-Tie
- EC 14964 Letdown Strainer Plugging Modification
- EC 6577 HCV-385/HCV-386 Instrument Air Tubing Replacement

50.59 Evaluations:

- EC 26232 Zinc Injection Equipment
- EC 6606 Heavy Load Path Deviation
- EC 33214 OI-SC-1, Revision 34, Shutdown Cooling Initiation
- EC 34663 Incorporation of CASMO-4 Methodology into Reload Methodology
- EC 33418 FH-11 Fuel Transfer Removal from Locked Components
- EC 14964 Letdown Strainer Plugging Modification
- EC 34240 Update USAR 14.16

50.59 Screenings:

- EC 11298-1 Battery Charger Isolation at QSPDS
- EC 11298-2 Battery Charger Isolation at QSPDS
- EC 11298-3 Battery Charger Isolation at QSPDS
- EC 28526-1 Small Bore Pipe Restraints in Containment
- EC 27405 Low Pressure Safety Injection Void Detectors
- EC 27239-1 SDC Cross-Tie
- EC 27239-2 Charging Pump for SDC Cross-Tie
- EC 6577 HCV-385/HCV-386 Instrument Air Tubing Replacement (Design)
- EC 6577 HCV-385/HCV-386 Instrument Air Tubing Replacement (Installation)
- EC 6577 HCV-385/HCV-386 Instrument Air Tubing Replacement (Testing)

Condition Reports

200305232	200400068
200100836	200403248
200103116	200400090
200401504	200400057
20000077	200403248*
	200305232 200100836 200103116 200401504 200000077

*written by licensee to resolve less than minor FDCR issue.

Work Instructions

CWO 00-0032

Field Changes

FC-1133 FC-1139

Welding Specifications

WPS-801, Joining austenitic stainless steel pipe and plate using the GTAW/SMAW, Revision 9

WPS-122, Prequalified fillet weld joint welding procedure for joining carbon steel plate using the SMAW process

Annunciator Response Procedure, ARP-CB-1/2/3/A2

Surveillance Test

OP-ST-SI-3002, Safety Injection System Category A, B, and C Valve Exercise, Revision 16

Procedures

FCSG-23, 10 CFR 50.59 Resource Manual, Revision 3

PED-QP-2, Configuration Control, Revision 35

PED-QP-11, Independent Design Verification and Independent Review of Configuration Changes, Revision 7

PED-QP-14, Use of Engineering Judgement, Revision 3

PED-MSS-18, Piping and Pipe Component Material Specification, Revision 4

PED-GEI-3, Preparation of Modifications, Revision 36

PED-GEI-29, Preparation of Facility Changes, Revision 14

PED-GEI-35, Preparation of Minor Configuration Changes, Revision 10

PED-GEI-41, Processing Configuration Changes, Revision 11

PED-GEI-60, Preparation of Substitute Replacement Items, Revision 15

NOD-QP-3, 10 CFR 50.59 Reviews, Revision 24

NOD-QP-7, License Amendment Requests, Revision 27

NOD-QP-16, Updated Safety Analysis Report, Revision 19

SO-G-21, Modification Control, Revision 74

Audit Report

04-QUA-083, SARC Audit Report Number 1, Quality Assurance Program, dated August 10, 2004

04-QUA-011, SARC Audit Report Number 72, Engineering Configuration Management, dated January 26, 2004