

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

April 18, 2001

Mr. C. L. Terry TXU Electric Senior Vice President & Principal Nuclear Officer ATTN: Regulatory Affairs Department P.O. Box 1002 Glen Rose, Texas 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION -

NRC INSPECTION REPORT 50-445/01-02; 50-446/01-02

Dear Mr. Terry:

On March 31, 2001, the NRC completed an inspection at your Comanche Peak Steam Electric Station, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on April 5, 2001, with Mr. Mike Blevins and other members of your staff.

This 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. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made 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/NRC/ADAMS/index.html (the Public Electronic Reading Room).

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

Sincerely,

/RA/

David N. Graves, Chief Project Branch A Division of Reactor Projects Dockets: 50-445

50-446

Licenses: NPF-87

NPF-89

Enclosure:

NRC Inspection Report

50-445/01-02; 50-446/01-02

cc w/enclosure: Roger D. Walker TXU Electric Regulatory Affairs Manager P.O. Box 1002 Glen Rose, Texas 76043

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G. R. Bynog, Program Manager/ Chief Inspector Texas Department of Licensing & Regulation Boiler Division P.O. Box 12157, Capitol Station Austin, Texas 78711

County Judge P.O. Box 851 Glen Rose, Texas 76043

Chief, Bureau of Radiation Control Texas Department of Health 1100 West 49th Street Austin, Texas 78756-3189

John L. Howard, Director Environmental and Natural Resources Policy Office of the Governor P.O. Box 12428 Austin, Texas 78711-3189 TXU Electric -3-

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Section Chief, DRP/TSS (PHH)
RITS Coordinator (NBH)

Only inspection reports to the following: Scott Morris (SAM1) NRR Event Tracking System (IPAS) CP Site Secretary (LCA) Dale Thatcher (DFT)

R:\ CPSES\2001\CP2001-02RP-SCS.wpd

RIV:SRI:DRP/A	RI:DRP/A	C:DRS/PSB	C:DRS/OB	C:DRS/EMB	C:DRP/A
ATGody	SCSchwind	GMGood	ATGody	JLShackelford	DNGraves
/RA/	DBAllen for	JNicholas for	/RA/	/RA/	/RA/
04/18/01	04/11/01	04/12/01	04/18/01	04/11/01	04/18/01

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket Nos.: 50-445

50-446

License Nos.: NPF-87

NPF-89

Report No.: 50-445/01-02

50-446/01-02

Licensee: TXU Electric

Facility: Comanche Peak Steam Electric Station, Units 1 and 2

Location: FM-56

Glen Rose, Texas

Dates: January 14 through March 31, 2001

Inspectors: A. T. Gody, Senior Resident Inspector

S. C. Schwind, Resident Inspector

G. W. Johnston, Sr. Operations Engineer, Operations Branch

G. E. Werner, Operations Engineer, Operations Branch F. A. Sanchez, Operations Engineer, Operations Branch

D. R. Carter, Health Physicist

C. J. Paulk, Senior Reactor Inspector, Engineering and Maintenance

Branch

Approved By: D. N. Graves, Branch Chief, Project Branch A

Division of Reactor Projects

Attachment: Supplemental Information

SUMMARY OF FINDINGS

Comanche Peak Steam Electric Station, Units 1 and 2 NRC Inspection Report 50-445/01-02; 50-446/01-02

IR 05000445-01-02, IR 05000446-01-02; on 01/14/2001-3/31/2001; TXU Electric; Comanche Peak Steam Electric Station, Units 1 and 2. Integrated Resident and Regional Report. No findings identified.

The inspection was conducted by resident inspectors and Region IV inspectors. The inspection identified no findings of significance. The significance of most findings is indicated by their color (green, white, yellow, or red) using IMC 0609 "Significance Determination Process" (SDP). The NRC's program for ensuring the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html. Findings for which the SDP does not apply are indicated by "no color" or by the severity level of the applicable violation.

Licensee Identified Violations

Violations of very low significance which were identified by the licensee have been reviewed by the inspector. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in 4OA7 of this report.

Report Details

Summary of Plant Status

Both units began the report period at 100 percent power.

On March 9, 2001, Unit 1 reduced reactor power to approximately 99 percent as the unit entered coastdown for its eighth refueling outage. On March 17, 2001, a pressure switch in the electrohydraulic control (EHC) system failed which resulted in isolation of extraction steam to all feedwater heaters. Reactor power momentarily increased to 95 percent before stabilizing with the plant at 90 percent power. Following repairs to the EHC system, the unit returned to 92 percent power and resumed coast down. On March 24, 2001, the unit was shut down for its eighth refueling outage and remained shutdown through the end of the report period.

On January 25, 2001, the Unit 2 high pressure feedwater Heater 1B developed a tube leak. Power was reduced to approximately 87 percent reactor power and the Train B heater string was isolated. Repairs were completed and the unit returned to 100 percent power on January 27, 2001. On March 12, 2001, a pressure switch in the Unit 2 EHC system failed which resulted in isolation of extraction steam to all feedwater heaters. Reactor power momentarily peaked at approximately 104 percent. Reactor power was reduced to 80 percent power for testing and repairs to the EHC system. The unit returned to 100 percent power on March 13, 2001 and remained at approximately 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity [REACTOR-R]

1R04 <u>Equipment Alignment</u>

a. <u>Inspection Scope (71111.04)</u>

The inspectors conducted a detailed semi-annual inspection of the control room heating, ventilation, and air conditioning system to ascertain if the system and its operating procedures were in accordance with the design and licensing bases of the system. Outstanding maintenance work requests and design issues were reviewed to determine if any impacted the system's ability to operate as designed.

b. <u>Findings</u>

No findings of significance were identified.

1R05 <u>Fire Protection</u>

a. <u>Inspection Scope (71111.05)</u>

The inspectors toured the following areas to assess the licensee's control of transient combustible materials, the material condition and lineup of fire detection and suppression systems, the material condition of manual fire equipment and passive fire

barriers, and evaluated the effectiveness of compensatory measures for degraded equipment:

- Unit 1 motor-driven auxiliary feedwater system (Fire Zone 1SB5 and 1SB6)
- Unit 1 turbine-driven auxiliary feedwater system (Fire Zone 1SC7)
- Unit 2 motor-driven auxiliary feedwater system (Fire Zone 2SB5 and 2SB6)
- Unit 2 turbine-driven auxiliary feedwater system (Fire Zone 2SC7)
- Units 1 & 2 Battery & Inverter Room Corridors (Fire Area EA)

b. <u>Findings</u>

No findings of significance were identified.

1R06 Flood Protection Measures

a. <u>Inspection Scope (71111.06)</u>

The inspectors conducted an annual inspection of flood protection measures at Comanche Peak. This included a review of flood analysis documentation and calculations to determine areas in the plant susceptible to flooding from internal sources. Based on that review and a review of the probabilistic risk assessment, a walkdown of the Unit 1 and Unit 2 diesel generator rooms was performed to assess the adequacy of flood protection measures.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

a. Inspection Scope (71111.07)

The inspectors reviewed a selected sample of safety-related heat exchanger testing and inspection, cleaning, and maintenance records for the component cooling water, shutdown cooling, and emergency diesel generator heat exchangers. This review was performed to verify that the licensee maintained the heat exchangers in a condition as described in the original plant design in order to perform their safety-related functions. The inspectors also verified that the licensee had identified: (1) potential heat exchanger deficiencies, which could mask degraded performance; and (2) potential common cause heat sink performance problems, which had the potential to increase risk. In addition, the inspectors reviewed heat exchanger design calculations and vender information for the subject heat exchangers to ensure that the heat exchangers were performing within their design basis.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

.1 Quarterly Requalification Activities Review

a. Inspection Scope (71111.11)

The inspectors observed operator performance during an exam scenario in the control room simulator and attended the training critique. Simulator observations concentrated on the conduct of operations, procedure usage, and command and control.

b. Findings

No findings of significance were identified.

.2 <u>Biennial Review of Licensed Operator Requalification Program</u>

a. Inspection Scope (71111.11)

Examination security measures and procedures were evaluated for compliance with 10 CFR 55.49. The licensee's sample plan for the written examinations was evaluated for compliance with 10 CFR 55.59 and NUREG-1021, as referenced in the facility requalification program procedures. Maintenance of license conditions was evaluated for compliance with 10 CFR 55.53 by review of facility records, procedures, and tracking systems for licensed operator training, qualification, and watchstanding. Remedial training and examinations for examination failures were reviewed for compliance with facility procedures and responsiveness to address areas failed.

In addition, the inspectors: (1) interviewed nine personnel (five operators, three instructors/evaluators, and a training supervisor) regarding the policies and practices for administering examinations; (2) observed the administration of two dynamic simulator scenarios to three requalification crews by facility evaluators, including an operations department manager, who participated in the crew and individual evaluations; and (3) observed five facility evaluators administer five job performance measures, including two in the control room simulator in a dynamic mode, and three in the plant under simulated conditions. Each job performance measure was observed being performed by an average of four requalification candidates. The inspectors also reviewed the remediation process for two individuals, one of which involved a written examination failure, and the other a job performance measures failure.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule

a. Inspection Scope (71111.12)

The inspectors independently verified that the licensee properly implemented 10 CFR 50.65, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the following equipment performance problems.

- Electrohydraulic control system pump motor reliability
- Containment spray system heat exchanger component cooling water outlet Valve 2-HV-4575 failure
- Vents and drain system functions and performance criteria for risk-significant Valves 2-HV-5157 and 2-HV-5158
- Charging flow control Valves 1-FCV-121 and 2-FCV-121 performance problems
- Cyclic trip of Breaker 8000 in the 354 Kv switchyard
- Failure of diesel generator starting air Compressor 2-03 due to loose fuse clips in the supply breaker

The inspectors' review focused on whether the structures, systems, or components (SSC's) that experienced problems were properly characterized with respect to the scope of the program, whether the SSC failure or performance problem was properly characterized, the adequacy of the licensee's significance classification for the SSC, the appropriateness of the performance criterion established for the SSC (if applicable), and the adequacy of corrective actions for SSCs classified in accordance with 10 CFR50.65a(1) as applicable.

b. Findings

No findings of significance were identified.

1R14 Nonroutine Plant Evolutions and Events

a. <u>Inspection Scope (71111.14)</u>

The inspectors observed licensed operator performance during the following plant transients:

- On January 25, 2001, the Unit 2 high pressure feedwater Heater 1B developed a tube leak which required operators to rapidly reduce power to approximately 87 percent.
- On March 12, 2001, a pressure switch in the Unit 2 EHC system failed which resulted in isolation of extraction steam to all feedwater heaters. Reactor power

momentarily peaked at approximately 104 percent before operators could stabilize the plant below 100 percent. Power was further reduced to approximately 80 percent to allow for testing and repairs to the EHC system.

b. <u>Findings</u>

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope (71111.15)

The inspectors selected operability evaluations conducted by the licensee during the report period involving risk-significant systems or components to review. The inspectors evaluated the technical adequacy of the licensee's operability determination, verified that appropriate compensatory measures were implemented, and verified that the licensee considered all other pre-existing conditions, as applicable. Additionally, the inspectors evaluated the adequacy of the licensee's problem identification and resolution program as it applied to operability evaluations. Specific operability evaluations reviewed are listed below.

- Smart Form 1999-000447-00 regarding availability of post-LOCA water volume in containment (NSAL 97-009)
- Smart Form 2001-000141-00 regarding abnormal noise in station service water Pump 2-01
- Smart Form 1999-000241-00 regarding operability of the residual heat removal system crosstie valves due to pressure locking and thermal binding issues
- Quick Technical Evaluation 2001-00289-00 regarding operability of safety-related ventilation equipment with as-built feeder breaker and electrical cable design
- Quick Technical Evaluation 2001-00406-00 regarding operability of Unit 1, Train B motor-driven auxiliary feedwater pump flow control valves with non-ASME qualified valves installed in the instrument air system

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. <u>Inspection Scope (71111.19)</u>

The inspector witnessed or reviewed the results of postmaintenance testing for the following maintenance activities:

- Local leak rate testing of the Unit 1 pressurizer liquid space sample line orifice isolation Valve 1-HV-4167 following corrective maintenance due to system leakage
- Preventive maintenance on 1-HV-2494A, Unit 1 motor-driven auxiliary feedwater
 Pump 1-02 containment isolation valve to Steam Generator 1-04
- Reactor coolant drain tank Pump 2-02 pump and motor replacement
- Diaphragm replacement in 1-HV-2452-2, Unit 1 turbine driven auxiliary feedwater pump steam supply valve from Steam Generator 1-01
- Diesel Generator 2-02 tachometer loop calibration

In each case, the associated work orders and test procedures were reviewed to determine the scope of the maintenance activity and determine if the test adequately tested components affected by the maintenance. The Updated Final Safety Analysis Report, Design Basis Documents, and selected calculations were also reviewed to determine the adequacy of the acceptance criteria listed in the test procedures.

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope (71111.20)

The inspectors evaluated licensee Unit 1 outage activities to ensure that risk was considered in developing the outage schedule, plant configuration was controlled in consideration of facility risk, mitigation strategies were developed and properly implemented, and Technical Specification requirements were implemented to maintain the appropriate defense-in-depth. Specific outage activities reviewed and/or observed by the inspectors include:

- Defense-in-depth and mitigation strategy review
- Refueling outage schedule and risk assessment review
- Unit shutdown and cooldown
- Decay heat removal
- Electrical power sources
- Midloop activities

b. <u>Findings</u>

No findings of significance were identified.

1R22 <u>Surveillance Testing</u>

a. Inspection Scope (71111.22)

The inspectors evaluated the adequacy of periodic testing of ETP-203B, "Residual Heat Removal System Radioactive Leakage Inspection Test", Revision 2 including aspects such as preconditioning; the impact of testing during plant operations; the adequacy of acceptance criteria including test frequency and test equipment accuracy, range and calibration; procedure adherence; record keeping; the restoration of standby equipment; test failure evaluations; and the effectiveness of the licensee's problem identification and correction program.

b. <u>Findings</u>

No findings of significance were identified.

1R23 <u>Temporary Plant Modifications</u>

a. Inspection Scope (71111.23)

The inspector reviewed the installation of temporary pipe clamps on leaking welds on the Unit 1 turbine plant cooling water condensate pump motor bearing cooler return lines. This review included the system design bases documentation, Updated Final Safety Analysis Report (UFSAR) and Technical Specifications (TS). The inspector also verified that the installation of the clamps was consistent with the modification documents and that configuration control of the modification was adequate.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness [EP]

1EP6 Drill Evaluation

a. Inspection Scope (71114.06)

The inspector observed operator performance during a graded simulator exercise involving a continuous rod withdrawal accident and steam generator tube rupture. Observations were focused on the shift manager's implementation of the emergency plan, emergency classification declaration, offsite notifications, and protective action recommendation development activities. The inspector also attended the critique to compare observations against those of the licensee to determine if they were adequately identifying performance problems.

b. <u>Findings</u>

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety [OS]

2OS3 Radiation Monitoring Instrumentation

a. Inspection Scope (71121.03)

The inspector interviewed cognizant licensee personnel and compared the following items to regulatory requirements:

- Calibration, operability, and alarm setpoint, when applicable, of selected portable radiation detection instrumentation, continuous air monitors, whole-body counting equipment, personnel contamination monitors, electronic alarming and pocket dosimeters, control room north ventilation intake radiation Monitor X-RE-5895, Unit 1 main steam line radiation and leak rate Monitors 1-RE-2328 and 1-RE-2327A, Unit 2 condenser off gas radiation Monitor 2-RE-2959, Unit 1 component cooling water radiation Monitor 1-RE-4510, and Unit 2 piping penetration high range area radiation Monitor 2-RE-6293
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- The status and surveillance records of self-contained breathing apparatus staged and ready for use in the plant
- The licensee's capability for refilling and transporting self-contained breathing apparatus air bottles to and from the control room and operations support center during emergency conditions
- Control room operator and emergency response personnel training and qualifications for use of self-contained breathing apparatus
- Nuclear Overview Department Evaluation Reports EVAL-2000-003, EVAL-2000-008, and EVAL-2000-041
- Radiation Protection Self-Assessment SA-2001-003, "Radiation Detection Instrumentation"
- Selected significant corrective action documents, initiated from January 2000 to March 2001, that involved radiation monitoring instrument deficiencies or self-contained breathing apparatus. The following 11 corrective action documents (Smart Forms) were reviewed in detail: 1999-2053, 2000-230,

2000-611, 2000-667, 2000-1462, 2000-1560, 2000-1702, 2000-1911, 2000-2273, 2000-2281, and 2001-284

 Health physics procedures implementing the radiation instrumentation program and respiratory protection program

b. <u>Findings</u>

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA2 Identification and Resolution of Problems

a. Inspection Scope (71152)

The inspectors reviewed the six Smart Forms the licensee initiated in response to NCV 50-445/9910-01; 50-446/9910-01 for failure to correctly implement a design modification to the component cooling water outlet valves on the residual heat removal and containment spray heat exchangers. The review was performed to determine the effectiveness, as well as the completeness, of the corrective actions the licensee undertook to address this issue.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

(Closed) Licensee Event Report 50-445/01-001-00, "Emergency Diesel Fuel Oil Technical Specification Surveillance Was Not Met" On January 4, 2001, the licensee determined that the test method used to detect water and particulate contamination of new diesel generator fuel oil was not in accordance with Technical Specifications Bases. There were no adverse effects on diesel fuel oil purity or the emergency diesel generators because the test method employed by the licensee was effective. This condition was entered into the licensee's corrective action program as Smart Form 2001-000030-00. This Technical Specification violation was reported to the NRC as Licensee Event Report (LER) 445/01-001-00 on January 31, 2001, and constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC Enforcement Policy.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. C. Lance Terry, Senior Vice President and Principal Nuclear Officer, and other members of licensee management at

exit meetings on February 16, March 15, March 30, and April 5, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

4OA7 <u>Licensee Identified Violations</u>. The following findings of very low significance 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 noncited violations (NCV).

If you deny this noncited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Comanche Peak Steam Electric Station, Units 1 and 2 facility.

NCV Tracking Number

Requirement Licensee Failed to Meet

(1) NCV 50-445/01002-01

Technical Specification 5.4.1 states, in part, that written procedures shall be established, implemented, and maintained. Step 5.9.2 of procedure SOP-506, "Spent Fuel Pool Cooling and Cleanup System," states to close Valves XSF-0220, XSF-0067 and XSF-0068 following completion of spent fuel pool transfer canal draining operations. Contrary to this requirement, Valve XSF-0220 was found open on February 1, 2001, following completion of transfer canal draining operations which established a gravity drain path from Spent Fuel Pools X-01 and X-02 to the recycle holdup tank. This violation is documented in Smart Form 2001-000221-00 and is being treated as a noncited violation.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- M. Blevins, Vice President
- D. Davis, Nuclear Overview Manager
- S. Ellis, Operations Manager
- R. Flores, System Engineering Manager
- T. Hope, Regulatory Compliance Manager
- J. Jank, Chemistry Supervisor
- M. Lucas, Maintenance Manager
- T. Marsh, Operations Training Supervisor
- D. Moore, Plant Manager
- C. Rice, LORT Staff
- R. Slough, Senior Licensing Engineer
- M. Sunseri, Nuclear Training Manager
- D. Wilder, Radiation and Industrial Safety Manager

NRC

S. Schwind, Resident Inspector, Project Branch A

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-445/01002-01 NCV Failure to follow procedure (Section 4OA7)

Closed

50-445/01-001-00 LER Emergency Diesel Fuel Oil Technical Specification Surveillance

Was Not Met (Section 4OA3)

50-445/01002-01 NCV Failure to follow procedure (Section 4OA7)

Discussed

None.

DOCUMENTS REVIEWED

Procedures

<u>NUMBER</u>	<u>TITLE</u>	REVISION
NTP-103	Design	8
NTP-105	Implementation	13
ODA-315	Licensed Operator Maintenance Tracking	4
PPT-P2-6200	CCW to RHR/CS HX Outlet Valve Flow Control Test	1
PPT-TP-86B-7	Unit 2 Safety Chilled Water Flow Balance for DM 92-71	0
PPT-TP-96A-9	Unit 1 Safety Chilled Water Flow Balance for DM 92-71	0
STA-734	Service Water System Fouling Monitoring Program	2
TDM-901B	Systems Data Throttled Valves/Flow Rates	5
TRA-204	Licensed Operator Requalification Training	12
TRA-204, Attachment 8.A	Licensed Operator Annual Requalification Examination Development and Security Guidelines	12
TRA-204, Attachment 8.B	Requalification Training Commitments	12
TRA-204, Attachment 8.C	Performance Enhancement Guidelines	12
<u>Calculations</u>		
<u>NUMBER</u>	<u>TITLE</u>	REVISION
16345-ME(B)-255	The Effects of RHR and SFP Operation on CCW Pump Performance	1, CNs 1, 2, & 3
16345-ME(B)-267	CCW Flow Distributions	1
16345-ME(B)-316	CT and RH Heat Exchangers Clean UAs	1
16345-ME(B)-609	Performance Prediction and Fouling Factor Determination of CCW Cooler	2
IC(S)-011	Station Service Water CCW Heat Exchanger Outlet Flow Loop Accuracy Calculation (F-4265 & F-4266)	3

Calculations

<u>NUMBER</u>	<u>TITLE</u>	REVISION
IC-CA-0229-5108	Instrument Loop Accuracy Calculation for Determination of Errors Associated with CCW Flow Balancing for RHR and CT Heat Exchanger Outlet Flows (1-FT-4556, 4558, 4560, and 4562)	0
ME-CA-0229-2188	Component Cooling Water Heat Exchanger Fouling Factor Analysis	6
ME-CA-0229-5127	The Concerns Raised by SMF-1999-001334 on Calculation ME(B)-255 Rev. 1	0
ME-CA-0229-5129	CCW Parameters for Fouling Monitoring	0
ME-CA-0229-5145	Post LOCA Cavitation Evaluation for the CCW 18" Butterfly Valves Located at the Outlet of the RHR and Containment Spray Heat Exchangers	0
ME-CA-0229-5154	Boundary Conditions for the CCW Fouling Monitoring Program for Increased CCW Flows	0
RXE-LA-CPX/0-021	Maximum CCW, RHR, and CT Flows to Remain Under the Post-LOCA Temperature Limit	0

Other Documents Reviewed

2000/2001 Requalification Sample Plan

Dynamic Simulator Scenario Index

EVAL-2000-012 "Training and Qualification" 3/30/2000

Licensed Operator Regualification (LORT) Dynamic Exam Scenarios:

Licensed Operator/STA Requalification Curriculum (00-01) January 9, 2001

LORT Annual RO Written Exam Material Code LO49.G01.EE1 and EE2

LORT Simulator Annual Examination, Revision Date 12/4/00

LORT JPM Annual Examination, Revision Date 12/4/00

LORT Annual SRO Written Exam Material Code LO49.G01.EEA and EEB

Simulator Exercise Guide, LO44.JIT.SD1, Revision Date 9/20/99

Simulator Action Request Index

Simulator Exercise Guide, LO44.SYS.CW1, Revision Date 2/15/00

Simulator Exercise Guide, LO44.SYS.CC1, Revision Date 4/8/00

Simulator Exercise Guide, LO44.E00.BOS, Revision Date 2/11/00

Training Program Curriculum Licensed Operator and STA Requalification June 14, 1999

Job Performance Measures (JPMs)

AO3501A	AO6405	AO6424A	RO1026	RO1223	RO1503
AO3528	AO6407	AO6426A	RO1120A	RO1301	RO3610
AO5407A	AO6415	RO1022	RO1120B	RO1335A	RO7006
AO5412B	AO6424	RO1022A	RO1205A	RO1335A	

Smart Forms

1999-001326

1999-001334

1999-001377

1999-001396

1999-001397

1999-002851

2001-000640

2001-000660

2001-000665