

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket Nos.: 50-445; 50-446  
License Nos.: NPF-87; NPF-89  
Report No.: 50-445/99-301; 50-446/99-301  
Licensee: TU Electric  
Facility: Comanche Peak Steam Electric Station, Units 1 and 2  
Location: FM-56  
Glen Rose, Texas  
Dates: June 18 to 24, 1999  
Inspectors: Howard F. Bundy, Senior Reactor Engineer  
Gary W. Johnston, Senior Reactor Engineer  
Thomas Meadows, Senior Reactor Engineer (Chief Examiner)  
Approved By: John L. Pellet, Chief, Operations Branch  
Division of Reactor Safety

ATTACHMENTS:

Attachment 1: Supplemental Information  
Attachment 2: Facility Initial Examination Comments  
Attachment 3: Final Written Examinations and Answer Keys

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### EXECUTIVE SUMMARY

Comanche Peak Steam Electric Station, Units 1 and 2  
NRC Inspection Report No. 50-445/99-301; 50-446/99-301

NRC examiners evaluated the competency of six senior operator applicants for issuance of operating licenses at the Comanche Peak Steam Electric Station, Units 1 and 2. The NRC developed the initial license examinations using the guidance in NUREG-1021, Revision 8, April 1999. The initial written examinations were administered to six applicants on June 18, 1999, by NRC and facility proctors in accordance with the guidance in NUREG-1021, Revision 8. The NRC examiners administered the operating tests June 21-24, 1999.

#### Operations

- The six applicants for senior operator licenses passed their examinations. Overall, applicants demonstrated effective oversight and adequate communication techniques during the dynamic scenarios, with normally effective peer and self checking (Sections O4.1 and O4.2).

## Report Details

### Summary of Plant Status

Both units operated at 100 percent power for the duration of this inspection.

## I. Operations

### **04 Operator Knowledge and Performance**

#### **04.1 Initial Written Examination**

##### **a. Inspection Scope**

On June 18, 1999, the NRC and the facility licensee proctored the administration of the written examination, approved by the chief examiner and NRC Region IV supervision, to six individuals who had applied for a senior reactor operator license. The NRC graded the written examinations and evaluated the results for question validity and generic weaknesses.

##### **b. Observations and Findings**

The applicants passed the written examination. Written examination scores ranged from a low of 90 to a high of 100 percent with an average of 96 percent. Post-examination review indicated that the questions missed were primarily due to isolated knowledge and training weaknesses. No broad generic training weaknesses were identified as a result of the missed question analysis. The licensee's post-examination review resulted in no comments.

##### **c. Conclusions**

The license applicants passed the written examinations. No broad knowledge or training weaknesses were identified as a result of evaluation of the graded examinations.

#### **04.2 Initial Operating Test**

##### **a. Inspection Scope**

The examination team administered the various parts of the operating examination to the six applicants on June 21-24, 1999. Each applicant participated in three scenarios. Each applicant was formally evaluated for a senior operator license. Each of the three upgrade applicants received a control room and facilities walkthrough test, which consisted of five tasks, and an administrative test, which consisted of five tasks in four administrative areas. The three instant applicants received an identical examination with five additional tasks that also tested reactor operator skills.

b. Observations and Findings

The applicants passed all sections of the operating test. The examiners noted appropriate use of peer and self-checking practices in all areas of the examinations. One applicant did not perform self-checking at a high level during the integrated plant section of the operating test, but peer checking and three way communications prevented significant impact. When evaluated in the senior operator in charge position for the dynamic scenarios, the examiners observed that all applicants demonstrated effective oversight and adequate communication techniques. The applicants directed crew actions, such that, the priority for mitigating actions was effective and efficient. Communication was usually three way and effective. The applicants displayed correct application of technical specifications and emergency and abnormal procedures that justified their actions.

The applicants generally performed well on the systems and facility walkthrough and administrative tasks. All critical tasks were performed such that the tasks were completed correctly.

c. Conclusions

The six applicants for senior operator licenses passed their examinations. Overall, applicants demonstrated effective oversight and adequate communication techniques during the dynamic scenarios, with normally effective peer and self checking.

**05 Operator Training and Qualification**

05.1 Initial Licensing Examination Development

a. Inspection Scope

The NRC developed the initial licensing examination in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8.

b. Observations and Findings

The NRC developed the initial licensing examination in accordance with guidance provided in NUREG-1021. The facility provided some of the reference materials in electronic media which was easily used for examination development. The material provided adequately supported development of all sections of the examination.

c. Conclusions

The facility provided reference material that adequately supported development of all sections of the examination.

O5.2 Simulator Performance

No fidelity problems were identified with the simulator. The simulator performed well in that it effectively duplicated real plant response and caused minimal delays in examination administration. The simulator staff provided effective technical and logistical support in the examination administration.

O5.3 Examination Security

a. Scope

The examiners reviewed examination security both during onsite preparation week and examination administration week for compliance with NUREG-1021 requirements.

b. Observations and Findings

Members of the licensee's operations and training staff signed onto the NUREG-1021 approved examination security agreement acknowledging their responsibilities for examination security. The licensee maintained secure areas for examination development, review, validation, and administration. Signs were conspicuously posted to avoid inadvertent unauthorized access, and doors were maintained locked with good key control to ensure proper access to sensitive areas. Applicants were maintained under constant supervision and were always escorted to and from examination points.

c. Conclusions

Effective examination security was maintained.

**V. Management Meetings**

**X1 Exit Meeting Summary**

The chief examiner presented the preliminary inspection results to members of the licensee management at the conclusion of the operating test administration on June 24, 1999. The licensee acknowledged the findings presented.

The licensee did not identify as proprietary any information or materials examined during the inspection.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Blevins, VP, Nuclear Operations  
S. Falley, Supervisor, Nuclear Training  
B. Guidemund, Shift Operations Manager  
D. Moore, Manager, Operations  
P. Presley, Senior Training Instructor  
M. Sunseri, Manager, Nuclear Training

NRC

Paul Gage, Senior Reactor Engineer  
John Pellet, Chief, Operations Branch  
Tom Stetka, Senior Reactor Engineer

INSPECTION PROCEDURE USED

NUREG-1021

"Operator Licensing Examination Standards for Power Reactors,"  
Revision 8