

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
REGION IV

IE Inspection Report Nos. 50-445/80-09
50-446/80-09

Docket Nos. 50-445
50-446

Licensee: Texas Utilities Generating Company
(TUGCO)
2001 Bryan Tower
Dallas, Texas 75201

Construction Permit
Nos. CPPR-126
CPPR-127

Facility: Comanche Peak Steam Electric Station
(CPSES)
Units 1 and 2
Glen Rose, Texas

Category A2

Dates of Inspection: March 12-14, 1980

Inspector: Lorenzo Wilborn
Lorenzo Wilborn, Radiation Specialist

3/31/80
Date

Reviewed by Glen D. Brown
Glen D. Brown, Chief, Fuel Facility and
Material Safety Branch

3/31/80
Date

Inspection Summary

Inspection on March 12-14, 1980 (Report Nos. 50-445/80-09 and 50-446/80-09)

Areas Inspected: Routine, unannounced inspection of construction phase and pre-operational environmental protection programs, including organization and administration; audits; environmental protection control program; environmental monitoring and special studies; and a tour of the site and surrounding area. The inspection involved 20 inspector-hours by one NRC inspector.

Results: Of the five areas inspected, one item of noncompliance was identified (Deficiency-groundwater withdrawal rates exceed 250 gpm, Paragraph 6.b.).

DETAILS1. Persons ContactedTexas Utilities Services, Inc. (TUSI)

- *B. E. Glenn, Environmental Engineer
- *J. T. Merritt, Engineering and Construction Manager
- *R. A. Werner, Nuclear Licensing Engineer

Texas Utilities Generating Company (TUGCO)

- *R. A. Jones, Assistant General Superintendent
- *D. E. Deviney, Q. A. Supervisor - Operations
- *D. W. Braswell, Engineering Superintendent
- *C. W. Killough, Q.A. Senior Technician

*Denotes those present at the exit interview.

2. Status of Previous Inspection Findings

The inspector reviewed TUGCO's corrective action as submitted to NRC Region IV in a letter dated May 30, 1978, in response to an item of noncompliance identified in the Region IV letter of May 10, 1978. The inspector had no further questions in the matter and during the current inspection, verified that the stated corrective action had been implemented. (See Paragraph 6.c.)

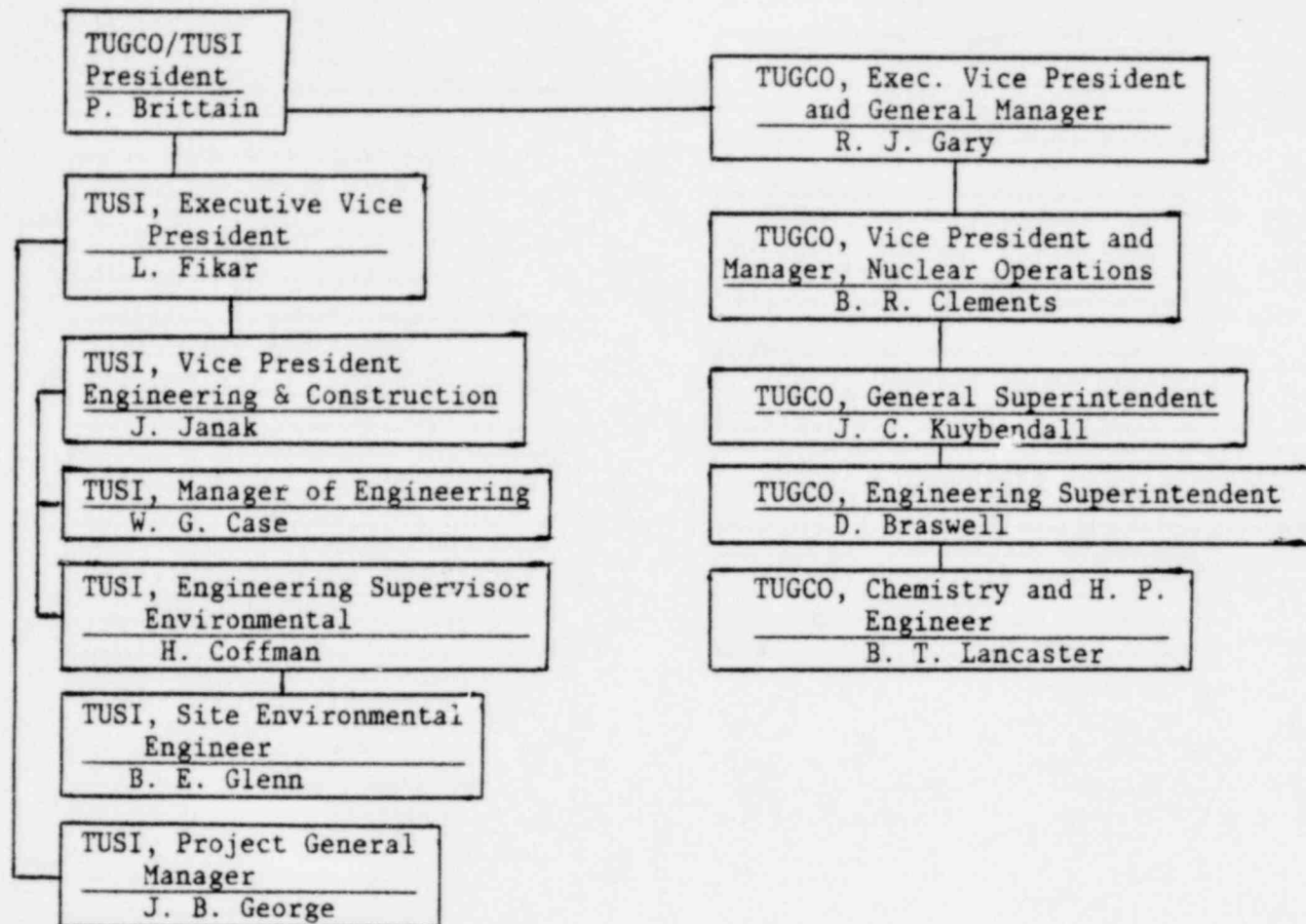
(Closed) Unresolved Item (77-05/01): This item involved TUSI not performing an audit periodically of various contractors performing studies to fulfill Environmental Report (ER) commitments. Review of documented audits revealed appropriate action has been taken by TUSI. This item is considered closed.

(Closed) Unresolved Item (78-08/01): This item involved: Brown and Root, the construction contractor, not following their operating procedures; and concrete residues from the concrete batch plant were escaping the sump and draining down to Panther Creek. Review of the environmental engineers recommended environmental restrictions of construction activities and a tour of the concrete batch plant revealed that no significant problems remain in these areas. This item is considered closed.

(Closed) Unresolved Item (78-08/02): This item involved a study that had not been done to determine the minimum practical level of chlorine residual in the circulating water. The inspector observed a "Chlorine Minimization Plan for Comanche Peak Steam Electric Station, Texas Utilities Generating Company, NPDES Permit TX0065854" dated March 29, 1979, approved by EPA June 8, 1979 and had no further questions at that time. This item is considered closed.

3. Organization and Administration

The inspector inquired as to organizational changes relative to environmental programs. The following chart reflects changes and shows the lines of responsibility currently associated with these programs as indicated by TUSI Personnel:



4. Internal Audits

The inspector discussed and reviewed the QA audit functions of the Environmental Control Program (ECP). A TUSI representative stated that any true audit of contractors performing studies to fulfill Environmental Report (ER) commitments must be limited to a determination that they were or were not carried out in such a way as to satisfy the applicable commitments and obligations, and not deal with the details or merits of the particular techniques used.

Specific details regarding the monitoring of these consultants are provided in the following paragraphs.

Aquatic Monitoring

The aquatic biological monitoring program for Squaw Creek began early in 1975 after commencement of project construction, and supplemented the baseline survey work performed during the period from Spring of 1972 through the fall of 1974. Dames & Moore performed these baseline studies and conducted subsequent surveys up until mid-1977. Their activities are described in the Annual Summary Documents (1975 and 1976) which have been previously submitted to NRC.

On February 1, 1977, an NRC-approved semi-annual survey program began in Squaw Creek. The Austin office of Espey, Huston & Associates (E,H&A) was engaged to assist TUSI in the performance of these surveys. Due to a reduction in the scope of work required, TUSI was now able to perform a significant portion of the field work in-house, and therefore supplement the E,H&A level of effort.

It was through such participation that a TUSI representative was able to monitor the activities of the consultant and determine that monitoring commitments were being satisfactorily met. This type of field surveillance was conducted during subsequent surveys on the following dates: August 4, 1977; February 2, 1978; August 1, 1978; February 22, 1979; August 7, 1979; and February 12, 1980. On all but the last two of these surveys, the TUSI representative was also accompanied by one or two of the TU biological personnel. Visits to E,H&A's Austin office to observe laboratory processing and/or discuss the work with the project technicians were made on July 11, 1978; March 1, 1979; July 12, 1979; August 16, 1979; and February 11, 1980.

Terrestrial Monitoring

The terrestrial biological monitoring program was initiated in the Spring of 1975 by Dames & Moore, who was also responsible for preparation of the original Environmental Report. Their activities during 1975 and 1976 are documented in the previously mentioned Annual Summary reports for those years. In mid-1977, TUSI began to manage this program directly as a result of a streamlining of requirements, and engaged James G. Teer & Associates (whose personnel had performed the original terrestrial baseline studies) to conduct the surveys of flora and fauna (including invertebrates, herpetofauna, and avifauna).

The TUSI representative accompanied the consultant on such field trips on the following dates: May 26, 1977; July 22, 1977; November 17, 1978; April 27, 1979 and June 15, 1979.

These surveys were judged to have been conducted using recognized techniques and in a manner which satisfied TUSI's commitments. Reports

on these survey. were reviewed internally by TU System biological personnel and their comments incorporated therein.

5. Site Tour

- a. The inspector toured the site and surrounding area during the inspection to observe the condition of the site with regard to environmental impacts from construction activities. The following item was identified as needing resolution and corrective action: trash and wood scrap in the areas under the venus transmission line towers. The inspector stated that this item raise questions as to the effectiveness of the site inspection program and would consider the issue to be unresolved (80-09/01) pending action by TUSI.
- b. The inspector noted during the tour that concrete residues from the concrete batch plant were being collected in a sump and then pumped to a setting pond.
- c. The inspector inquired as to the status of the meteorological tower on site. A TUSI representative stated that all required meteorological data has been collected, but the tower is being kept in operation and maintained. He further stated that the weather station log book is being kept which is a record of maintenance, calibrations and use of the station.
- d. The inspector observed that the reforestation of the Squaw Creek Reservoir had been initiated as planned.

6. Environmental Protection Control Program

- a. The inspector discussed the implementation of the CPSES Environmental Protection Control Program and examined selected records. Records of monthly field surveys, performed during the period April 1978 through January 1980, indicated compliance with all CP requirements.
- b. The inspector reviewed records of groundwater withdrawal rates since the most recent inspection of April 1978, and found the rates to be below the allowable daily average of 250 gpm except for the following dates: March 19, 1979 (372.14 gpm); April 25, 1979 (343.60 gpm); December 4, 1979 (264.22 gpm); and December 7, 1979 (286.32 gpm).

The inspector stated that failure to maintain the groundwater withdrawal rates below the allowable constituted noncompliance with Item 3.E.(8) of the NRC Construction Permit Nos. 126 and 127.

- c. A review of the US Geological Survey records for the period April 1978 to September 1979 of water flow in lower Squaw Creek indicated a flow of 1.5 cfs was not maintained in lower Squaw Creek on October 19, 1978 and during the period December 9-14, 1978. The inspector reviewed an investigation report by TUGCO personnel, subject: "Investigation Report on Low Flow Conditions at Squaw Creek for 1978-1979." The report indicated that entries in the C and HP daily log book and the recorder charts show that the make-up pumps were shutdown on October 17, 1978 to change out a transformer. The water release rate from the Auxiliary Flow No. 2 (Roto Cone Valve) was increased to compensate for the loss of Auxiliary Flow No. 1 (M-5 pump). There was no precise method for determining discharge flow from Auxiliary Flow No. 2 and apparently the selected release rate was just too conservative. The flow rate was increased on October 19, 1978. The make-up station chart recorder revealed that the pumps were tripping on and off during the latter part of the weeks of December 3-9 and 10-16, 1978. Discussions with the Electrical Maintenance Section revealed that during this period and continuing until after the first of the year (1979), the make-up pump station was having electrical feeder problems. In September 1979, a flow measuring device and recorder were installed in the Auxiliary Flow No. 2 system to provide a more accurate measurement of actual flow conditions.

7. Environmental Studies and Monitoring Programs

The inspector inquired as to the status of the special studies and evaluations required by item E.(7) of the CP. A TUSI representative stated that a study has been performed to determine the minimum practical level of chlorine residual in the circulating water and will be submitted as part of their ER-operating phase. The inspector observed a copy of the study, subject: "Chlorine Minimization Plan for Comanche Peak Steam Electric Station, Texas Utilities Generating Company, NPDES Permit TX 0065854," prepared for H. B. Coffman, TUSI, March 29, 1979, by James K. Rice, P.E., Consulting Engineer, Olney, Maryland. The study was approved by EPA, June 8, 1979 by letter to Mr. L. F. Fiker from Robert B. Elliott, Chief, General Enforcement Branch (6AEG) and by the NRC, June 11, 1979 by letter to Mr. R. B. Elliott from Mr. Ronald L. Ballard, Chief Environmental Projects Branch I, Division of Site Safety and Environmental Analysis.

The ECP Manual, revised June 8, 1977, describes the program to fulfill the required environmental monitoring outlined in Section 6.1 of the FES.

a. Biological Monitoring

- (1) Terrestrial - A TUSI representative stated that avifauna, reptiles and amphibians and invertebrates are sampled in transects of the site proper. Sampling schedules are described

in Table 1.4-1 of the ECP. Data compiled by Dr. James G. Teer and Company include: (a) Ecological Assessment of the Site of the Comanche Peak Steam Electric Station, June 1979, which covers bird population surveys in April 1979, Avifauna - June 15, 1979, Reptiles and Amphibians - June 15, 1979 and Invertebrates - June 15-16, 1979; and (b) Ecological Assessment of the Herpetofauna in the vicinity of CPSES, November 1978.

- (2) Aquatic - A TUSI representative stated that aquatic studies involving samples consisting of plankton, aquatic macrophytes, benthos and fish began in January 1975 and the fifth year monitoring was completed in August 1979. Dames and Moore performed these baseline studies and conducted subsequent surveys until mid-1977, after which the Austin office of Espey, Huston and Associates was engaged to assist TUSI in the performance of these surveys. Dames and Moore activities are described in the Annual Summary Documents. Documented evidence was available to indicate that Espey, Huston and Associates had monitored two sampling periods, winter (February 22, 1979) and summer (August 7, 1979) and surveyed two stations on lower Squaw Creek.

b. Physical and Chemical Monitoring

- (1) Water Quality - A TUGCO representative stated that monthly measurements are made of temperature, conductance, turbidity, alkalinity, dissolved oxygen and ph on surface waters identified in Figure 1.3-1 of the ECP Manual. These are field measurements by TUGCO personnel. Other chemical parameters are measured on a quarterly basis as described in Table 1.4-1 of the ECP Manual. The inspector reviewed representative data from this program and had no further questions at that time.
- (2) Groundwater - A TUGCO representative stated that the static level is measured on four wells monthly and chemical parameters measured quarterly on two wells. The chemical parameters are described in Table 1.5-1 of the ECP Manual. The inspector reviewed typical data and had no further questions at that time.

8. Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items, items of non-compliance, or deviations. An unresolved item identified during the inspection is discussed in Paragraph 5.a.

9. Exit Interview

The inspector met with TUSI and TUGCO representatives at the site on March 14, 1980 (See Paragraph 1). The inspector summarized the purpose and scope of the inspection, and discussed the findings.