APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

This Report Contains Results of an Investigation

Report: STN 50-482/82-01

Docket: STN 50-482 Category A2

Licensee: Kansas Gas and Electric Company
P. O. Box 208
Wichita, Kansas 67201

Facility Name: Wolf Creek Generating Station

Inspection at: Wolf Creek Site, Coffey County, Kansas

Inspection Conducted: January and February 1982

Inspector: for T. E. Vandel, Senior Resident Reactor Inspector — 3/24/82 Date

Approved: R. E. Hall, Chief, Reactor Project Section C — 3/24/82 Date

Inspection Summary

Inspection During January and February 1982 (Report STN 50-482/82-01)
Areas Inspected: Routine inspection of construction activities including follow up of licensee activities for 50.55(e) construction deficiencies, previous inspection findings, and an allegation item; observation of construction activities regarding electrical components, cables and wireways, and heating, ventilating, and air conditioning duct installation; and review of program and procedures for post tensioning work. The inspection involved 63 inspector-hours by one NRC inspector.
Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Personnel

D. W. Prigel, Manager QA, Wolf Creek Generating Station (WCGS)
J. L. Stokes, Project Support Supervisor, WCGS
G. W. Reeves, Assistant Manager QA, WCGS
C. E. Parry, QA Systems Supervisor, WCGS

Other Personnel

W. J. Friedrich, Project Quality Inspection Manager, Daniel International Corporation (Daniel)
V. J. Turner, Project QA Engineer, Daniel

The above listed licensee and contractor personnel were in attendance at one or both of the exit meetings held on January 14 and February 19, 1982.

Other personnel were contacted during the inspection period.

2. Licensee Action on Construction Deficiency Items

a. Heating/Ventilating/Air Conditioning Duct Supports

During this inspection period, the NRC inspector performed an inspection of repair activities in progress in the control room area elevation 2047' 6" of the Control Building. The results are as follows:

(1) A duct hanger repair in progress had the repair disposition documented on an Engineering Drawing (Traveler) Number SM043611-R3284-Q for Duct Number NP057. Just completed Weld Number 1A, observed by the NRC inspector, was found to be acceptable. The welder (Number D646) who performed the weld to Procedure N-1-1-C-21 was found to be qualified to Procedure N-1-1-C-20 which also qualifies him to Procedure N-1-1-C-21. The above listed Engineering Drawing Traveler was the engineering disposition that had been approved for Deficiency Report (DR) Number 1SD8431MW.

(2) A second duct hanger repair also in progress was observed. This duct support is located in the dividing wall between the control room of the Control Building and the duct chase of the Auxiliary Building. Engineering Drawing Traveler SM043611-R3270-Q dispositioned the repair for DR 1SD8375MW.

The welding work, which appeared acceptable, was being performed by Welder Number D547. This welder was also welding to, and qualified for, Procedure N-1-1-C-21.

(3) The NRC inspector observed that welding and repair activities were being conducted with care with adequate protection of installed equipment being provided at all times.

In discussions with the KG&E Quality Assurance inspectors, it was learned that approximately one-half of the 122 DRs issued have the repair work successfully completed and that the remainder of the repairs should be completed during the upcoming month. It was further learned that the KG&E QA inspectors are following the repair work very closely and are documenting their surveillance and audit activity accordingly.

No violations or deviations were identified.

b. Westinghouse Technical Bulletin WNSD-TB-81-12

Westinghouse Bulletin WNSD-TB-81-12 entitled "Inadvertent PORV Opening," issued November 6, 1981, expressed concern regarding a nuclear plant experience of an inadvertent operation of a pressurizer power operated relief valve (PORV) during a normal plant pressure transient. The licensee involved had previously modified the PORV controller in accordance with a Westinghouse recommendation as outlined in NUREG-0737, Item II.k.3.9. This bulletin then requested the licensee to defeat the derivative action control feature, preferably by option C of the bulletin.

In response to questioning, the NRC inspector was informed that FSAR paragraph 18.2.17.6.2 provides for the time derivative constant in the pressure integral derivative (PID) controller to be turned to "OFF," which in effect removes the derivative action from the controller.

The NRC inspector indicated that he had no further questions.

3. Allegation Regarding Weld Rod Control

An allegation received by Region IV based inspectors on February 11, 1982, concerning weld rod control at Wolf Creek was reviewed by the NRC Resident Reactor Inspector with licensee representatives. The following information was obtained:

. Daniel Procedure Number CWP-503, Revision 12, "Control of Welding Consumables," provides the issuance control requirements.

- Welding rod and wire consumables used by the welding school are issued from Wire Room Number 2.

- Welding consumables used by the school are issued utilizing the W-100 form as required.

- Allegation items one and three, regarding retention of bare wire and spooled wire beyond expiration dates of wire issue slips, were confirmed; however, there was no significance to the finding since the controls applicable to work area weld rod control have no significance in the welding school area. Although bare or spooled wire is returned to the wire room at the end of each days' use, Daniel continued to control the wire by the same W-100 form for ease of paper work. This continued so long as the withdrawing party continued to use the wire, even beyond the expiration limit set by the procedure (48 hours maximum issue limit for GTAW consumables). The customary experience seemed to be that the W-100 issue slip would be issued for 1 week at a time. The responsible Daniel Superintendent, when informed of the problem, committed to compliance with the procedure for work area controls for training purposes. Implemenation of this committment was confirmed by a licensee QA representative. It was acknowledged that all other aspects of the procedure were being followed.

- Allegation item two, regarding mixing of different sizes of covered electrode, Type 7018 in holding ovens, could not be confirmed. Surveillance of the welding school, test shop, and Wire Room Number 2 on two separate occasions failed to detect any mixing of weld rod sizes. Considering the numerous handlings of rod by the various people involved, it was recognized that some degree of possibility for accidental mixing of sizes could occur. However, this is considered to be a remote possibility since the welders and wire room attendants have all been trained regarding this possibility.

The NRC inspector indicated that he had no further questions regarding this allegation.

4. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (STN 50-482/81-01-03): Reactor Vessel Protection/ Housekeeping. The NRC inspector reviewed the results of the licensee audits and surveillance reports relating to review of the subject. Report Number TE-53359-S300 for surveillance coverage of February 4 and 5, dated February 13, 1981, provided the basis for open items relating to housekeeping, cleanliness, protection for plant equipment, and safety hazard concerns. The reactor vessel and refueling pool were specifically identified as an area of concern as follows: "No cover was observed over the refueling pool nor over the reactor vessel. No measures had been taken to protect the open vessel from falling objects. Crane lifting and

transporting operations were observed taking place over the open vessel. Mud and heavy dirt were observed on the upper rim flange of the reactor vessel. This surface has been left unprotected from pedestrian traffic." The open items were responded to, follow up reviewed, and closed with final sign off being completed on November 13, 1981, by the KG&E Assistant QA Manager, Wolf Creek. It is further noted that this activity was the subject of another surveillance audit on December 8-10, 1981, which produced another open item for housekeeping violations in the power block (Report S-421). The corrective action by the constructor was considered acceptable and the open item was closed on March 1, 1982.

The NRC inspector indicated to licensee QA staff that the S-300 audit and report represented a very good indepth review of the concern and that he had no further questions regarding this unresolved matter.

(Closed) Unresolved Item (STN 50-482/81-08-02): Three concerns were identified in the originating report relative to the large number of rejectable welds as follows:

a. The structural significance of the large number of weld deficiencies.

b. The implications regarding the apparent inadequacy in the training and/or performance of the site welders.

c. The implications regarding an apparent inadequacy in the training and/or performance of the QC inspectors who initially accepted the hangers.

Items a and b are being associated with unresolved item STN 50-482/81-08-01 by the licensee and will, therefore, come under review and close out by the NRC inspector along with that unresolved item. This close out deals with the action taken by the licensee for the apparent inadequacy of the QC inspection issue.

Since the identification of this unresolved item at an exit meeting on May 28, 1981, the licensee has undertaken a thorough evaluation of the visual inspection program including a complete audit. The Audit Report Number TE-57061-K53 entitled "Visual Weld Inspection at Wolf Creek" included a 37 page checklist covering program, proceudres, qualification, inspection coverage, and doucmentation. The audit and report identified 20 open items of concern. Resolution of the 20 items was completed with the sign off of the last item on Janaury 22, 1982.

The NRC inspector indicated that this item has now been resolved.

5. Post Tensioning System

The Inryco Quality Assurance Program Manual and the Field Installation Manual were reviewed by the NRC inspector. This is a Bechtel Power Corporation contract supplier under Contract 10466-C-156-0003-07 with the program manual and installations having been reviewed and approved by Bechtel. The manuals reviewed included the following:

. Field Installation Manual Number 00101, Revision 1

. Quality Assurance Manual Number 30039, Revision 3

The NRC inspector had previously expressed concern regarding the random sampling inspection provisions in the program. He was informed by the licensee that they too were concerned and that they had added a contract directly with Inryco for providing additional QC inspection activity. This added inspection provision will be reviewed in detail by a regionally based engineering inspector during a forthcoming site visit.

No violations or deviations were identified.

6. Other Safety-Related Components

Installation activities were reviewed by the NRC inspector for heating, ventilating, and air conditioning ducts located in the duct chase area of the Auxiliary Building elevation 2047' 6". The results of that review are as follows:

. Installation requirements were being met. Robert Irsay Company Installation Drawings R 1041521A (Q), Revision 6 and R 1041521B (Q), Revision 6, which had Bechtel Design Drawing Numbers on them of 10466-M-618.1-0478-07 and 10466-M-618.1-0479-07, were available at the construction location. The drawings titled "Heating, Ventilating and Air Conditioning Duct and Duct Support Locations Auxliary Building Elevation 2047' 6" Area 2" were used to check installation work for compliance. Such things as latest revision of drawings, placement, mounting, installed protection, and as-built drawing preparations were considered in the review.

No violations or deviations were identified.

7. Electrical Equipment, Raceways, and Cables

a. Class 1E Switchgear

An inspection of installed equipment protection for 480 volt load centers and 4160 volt switchgear at elevation 2000' of the Control

Building was conducted periodically. The following protection attributes were observed:

- Prevention of damage from dust, dirt, and adjacent construction
- Use of space heaters
- Care of removed breakers
- Contractor surveillance of activities

No violations or deviations were identified.

b. Wireways and Cables

Observations were made of the installed condition of cable trays, conduits, and cables. Observations were made in the Fuel Handling Building, Auxiliary Building, and in three different elevations of the Control Building (elevation 2000', 2032', and 2074' 6") and included conduits 4 G 6001, 4G3D4A, 4G3D4B, 4 V 1080, 4V1162, 4V1079; cable tray installations 4C8H08, 4J1H08, 1G1C12, 1G1C14; and a drawing control check of four electrical drawings found in the cable spreading room. The results of the observations were as follows:

- Separation was as required by drawings.
- Identification was adequate.
- No sharp edges or burrs were noted.
- Use of bushings, bolting, and grounding was appropriate.
- Cables were arranged neatly.
- Bending radius was under control for coiled cables.
- Protection from damage appeared adequate.
- Cable ends were taped.
- All areas were free of dirt and debris.
- Drawings E-OR3511 (Q), Revision 13; E-OR3512 (Q), Revision 15; E-OR3513 (Q), Revision 11; and E-OR3514 (Q), Revision 12 were determined to be of the latest revision and were being utilized for installation work.

One unresolved matter was identified during observations of Cable Trays 1G1C12 and 1G1C14. An approximately 12" diameter oily waste pipe LE-11-P132/331 had been installed inside the tray hangers at Support A 318. This nonsafety-related pipe was resting on the safety-related tray support and against the vertical support member on the west side. This item will be reviewed further in the next inspection period. (82-01-01)

No violations or deviations were identified.

8. Plant Tour

One or more plant areas were toured several times during the reporting period to observe the general construction practices, area cleanliness, and storage conditions of plant equipment. Examples of specific observations are as follows:

a. Plant Fire Protection

Observations were performed of fire watch implementations where welding activities were in progress. Fire watch workers were queried as to their duties and fire extinguishers were checked for current survey tags, etc. No problem areas were identified.

In addition, fire extinguishers placed throughout the plant area were observed. Extinguishers located in the tendon gallery (two) were observed, one of which had no survey tag attached. The NRC inspector discussed this item with Daniel safety personnel who explained that the extinguisher had a guage installed on it that metered the normal range in green for the unit and so did not need a tag. It was further explained that only two extinguishers were required in the gallery since they were within 70 feet of each other.

b. Plant Storage and Laydown Areas

The general plant outdoor storage areas and laydown areas were toured by the NRC inspector. The general condition of the storage areas appeared adequate; some safety-related materials in storage and/or under QC hold were observed. Identification signs were still visible, material protection was still intact, and no signs of any material deterioration were detected.

c. Installed Plant Equipment Protection

Observations were made regarding installed plant equipment with examples as follows:

- Steam Generator Number 1 (EBB01A) was observed with the primary side hatch cover removed and construction workers were placing a welding dam for the crossover leg piping. A security guard was assigned for access control, safety personnel had cleared the unit for access, and protective measures were being employed for the entry.

- The reactor vessel and refueling pool areas were observed. The metal cover was in place and work in progress at the plant operating floor level prevented any accessibility to the vessel access ladder. Signs were posted for access control, however, the NRC inspector saw one sign partially covered.

No violations or deviations were identified.

9. Unresolved Matters

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. One unresolved item disclosed during this inspection is discussed in paragraph 7.b.

10. Exit Interviews

The NRC inspector met with licensee representatives identified in paragraph 1 to discuss the various findings on January 14, 1982, and in conjunction with R. Stewart, NRC inspector, on February 19, 1982.