

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-482/84-29

Construction Permit: CPPR-147

Docket: 50-482

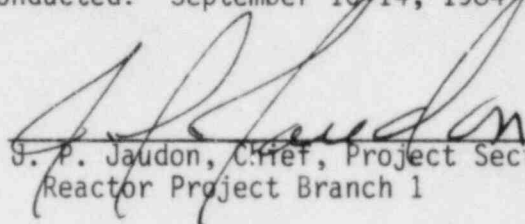
Licensee: Kansas Gas and Electric Company (KG&E)
P. O. Box 208
Wichita, Kansas 67201

Facility Name: Wolf Creek Generating Station

Inspection At: Wolf Creek Site, Burlington, Kansas

Inspection Conducted: September 10-14, 1984

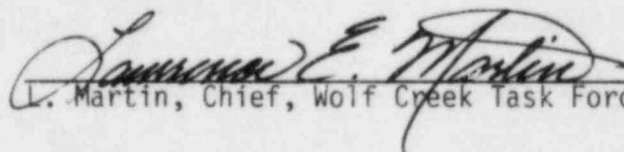
Inspector:



J. P. Jaudon, Chief, Project Section A
Reactor Project Branch 1

10/4/84
Date

Approved:



L. Martin, Chief, Wolf Creek Task Force

10/5/84
Date

Inspection Summary

Inspection Conducted September 10-15, 1984 (Report 50-482/84-29)

Areas Inspected: Routine, unannounced inspection of training department staffing, training records, general employee training, fire brigade training, mechanical and electrical maintenance training, instrument and control technician training, requalification training, and training in the mitigation of core damage. The inspection involved 38 inspector-hours onsite by one NRC inspector.

Results: Within the areas inspected, no violations or deviations were identified.

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DETAILS

1. Persons Contacted

**KG&E

- L. Blackwell, Fire Protection Specialist
- D. Bowman, Academic Coordinator
- *G. Boyer, Technical Support Superintendent
- *G. Bromlett, Instrument and Control Supervisor
- *H. Chernoff, Licensing Engineer
- J. Dagenette, Training Instructor
- *K. Ellison, Startup Engineer
- T. Gleue, Records Clerk
- *C. Hock, Quality Assurance Technician
- W. Hunter, Consultant-Program Development
- G. Lawson, Mechanical
- *W. Lindsay, Supervisor Quality Systems
- A. Mah, Training Supervisor
- T. Massingill, Instrument and Control Training Specialist
- *O. Maynard, Licensing Manager
- *B. McKinney, Instrument and Control Superintendent
- D. Parks, Academic Instructor
- *F. Rhodes, Plant Manager
- *R. Russo, Training Supervisor
- F. Scheiman, Training Consultant
- G. Smith, Training Specialist
- *R. Stright, Supervisor Quality Systems
- K. Thomas, Training Instructor
- R. Travillian, Training Consultant
- *P. Turner, Manager Nuclear Training
- D. Walsh, Maintenance Services Supervisor
- *M. Williams, Superintendent, Regulatory, Quality and Administration
- *R. Wollum, Instrument and Control Supervisor

Kansas Power and Light Company

- *R. Flannigan, Site Representative

Other NRC Personnel

- *B. Breslau, Reactor Inspector, Region IV
- *H. Bundy, Resident Inspector, Wolf Creek Site
- *R. Denise, Director, Wolf Creek Task Force
- *G. Madsen, Reactor Inspector, Region IV
- *R. Smith, Reactor Inspector, Region IV

The NRC inspector also contacted other licensee personnel including administrative, clerical, and operations personnel.

**List of licensee personnel includes consultants working onsite.

*Indicates personnel attending exit meeting held onsite on September 14, 1984.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-482/8327-01): This item was unresolved because the transcript of one licensed operator candidate did not indicate that he had completed a course in applied statistics. The licensee maintained that this was the result of a record error made by Emporia State University. A check of training records indicated that the licensee's position in this matter was correct. Correspondence from Emporia State University had corrected the transcript error.

This item is closed.

(Closed) Open Item (50-482/8372-02): This item was open because the licensee indicated that both the on-shift radiation protection specialist and the chemist would be fire brigade members. It was found during this inspection that radiation protection specialists and chemists had been trained as fire brigade members; however, all operations personnel have also been trained as fire brigade members. The licensee plans to man the fire brigade in accordance with Technical Specification requirements.

This item is closed.

3. Training Department Staffing and Documentation

The purpose of this inspection was to determine if the training department was adequately staffed and if the documentation and procedures which administratively controlled training were adequate.

The NRC inspector found that the training department had 51 authorized positions. At the time of this inspection, there were several positions which were filled either by consultants or by temporary clerical help. It was found that, counting these nonpermanent members of the staff, that training department manning was 50. The NRC inspector concluded that this was adequate manning to support training requirements.

The NRC inspector reviewed several of the administrative procedures which affected training. This review included the following procedures:

<u>Procedure Number</u>	<u>Title</u>	<u>Revision</u>	<u>Issue Date</u>
ADM 01-013	Training Supervisor Duties and Responsibilities	2	April 30, 1984
ADM 04-004	Chemistry Group Training Program	3	June 30, 1984

ADM 05-401	Reactor Engineering Personnel Qualification and Training	1	April 3, 1984
ADM 05-706	Training and Qualification of Computer Engineering Personnel	0	September 21, 1982
ADM 06-100	Training and Qualification Records	1	August 9, 1984
ADM 06-224	Licensed Operator Requalification Training Program	0	August 13, 1984
ADM 13-200	Fire Protection Training Program	0	June 5, 1984

It was noted that these procedures were of varying quality and specificity. Discussions with licensee representatives indicated that the licensee had started a long-term program to upgrade training procedures. This program was a part of the licensee's plan to obtain INPO certification of the training program. The NRC inspector concluded that the licensee's system of training procedures was adequate to support the proposed fuel load date. It was also determined that additional review of training procedures would be required because of the revision and upgrade program. This further review is considered to be an open item (50-482/8429-01), but the closure of the open item is not related to fuel load.

4. Training Records

The purpose of this inspection was to ascertain if the licensee was retaining, in a retrievable format, appropriate training records.

The collection of training records was governed by procedure ADM-06-100, Revision 1, dated August 9, 1984, "Training and Qualification Records." The licensee's training record system, as delineated in procedure ADM-06-100, was to microfilm records and to use a computer data base to locate and summarize records. Microfilming was in progress. The computer data base was being expanded by the records clerk and several temporary clerical personnel. It was noted that first priority for training records had been assigned to cold license candidates. It was also noted that the licensee had extensive training records, in hard copy, in the quality assurance vault. These hard copy records were filed by individual. The licensee recognized the need to incorporate these records into the computer data base and microfilm system.

The NRC inspector noted that the hard copy and computer files did not contain all records of past training. For example, the computer and hard copy files did not document all of the extensive training done for instrument and control technicians. Copies of these records existed in the instrument and control offices. These copies indicated periodic transfer of original records to the training department.

It was concluded that current training was being captured in the training records system. It was also concluded that there was a potential for lost records if the licensee did not adequately capture copies or originals of the records of training conducted by departments other than training. The NRC inspector concluded that the licensee had adequate training records, but it was appropriate to identify the capture of pertinent training records as an open item (50-482/8429-02). This open item does not impact fuel load.

5. General Employee Training

The purpose of this inspection was to determine the status of general employee training (GET) and to assess whether or not this status supported the licensee's projected fuel load date.

The applicant is committed to ANSI/ANS 3.1-1978. ANSI-ANS 3.1-1978 lists eight areas that should be covered by GET. The NRC inspector found that the licensee's program addressed all eight areas. It was noted, however, that responsibility for one area, training in job related procedures and instructions, was assigned to the individual departments. This is a common practice and is acceptable in principle. The NRC inspector noted that there appeared to be a nonuniform approach to this training by various departments. Although no actual deficiencies were noted, this has the potential for being a problem area.

Licensee representatives stated that over 1500 personnel had received GET at the time of the inspection. There were approximately 400 personnel who had not yet received GET, and this training was scheduled to complete by mid-November 1984. The NRC inspector concluded that GET was being conducted satisfactorily and that the licensee's completed and scheduled GET supported the licensee's projected fuel load date.

6. Fire Brigade Training

The purpose of this inspection was to determine if fire brigade training supported the licensee's projected fuel load date.

The NRC inspector found that fire brigade training had been completed for all operations shift personnel and for all shift chemists and radiation protection specialists. In addition, all operations personnel had received fire protection strategy training. In discussions with licensee fire protection representatives, the NRC inspector learned that the licensee had attempted to interject realism into the "hands on" segments of training. In addition to normal training records, the licensee had also taken photographs of field training sessions. The licensee had not yet started routine, quarterly drills, but these were scheduled to start in the fourth quarter of 1984.

The NRC inspector concluded that the fire brigade training status supported the projected fuel load date.

7. Mechanical and Electrical Maintenance Training

The purpose of this inspection was to determine whether or not the status of training of mechanical and electrical maintenance personnel supported the licensee's projected fuel load date.

The only specific FSAR commitments in the area of mechanical and electrical maintenance training concern apprentice training. The NRC inspector found that the requirements for this program were documented in procedure ADM-08-205, Revision 1, dated March 2, 1984, "Maintenance Department Training and Requalification Program." The NRC inspector noted that the maintenance department was conducting training on a weekly basis; however, the training subject was changed every 2 weeks. Additionally, some maintenance personnel had been sent to vendor schools, and vendor representatives had been brought to the site to conduct training. It was also noted that the licensee had started training in the conduct of surveillance tests for maintenance personnel.

The NRC inspector concluded that maintenance department training supported the licensee's projected fuel load date.

8. Instrument and Control Technician Training

The purpose of this inspection was to ascertain if the training of instrument and control (I&E) technicians supported the licensee's projected fuel load date.

The FSAR committed that the I&C supervisor and most KG&E I&C technicians would complete a 15-week Westinghouse I&C course. The NRC inspector found that the Westinghouse I&C course actually was 11 weeks in length. The difference between the 11 and 15 week courses was, according to licensee representatives, caused by the deletion of material not directly related to the Wolf Creek site. The NRC inspector discussed the discrepancy in course length with the NRC representative who had prepared the original review. It was determined that the licensee's training in the I&C area was technically adequate, but the long standing discrepancy (over 2 years) between the FSAR commitment and training actually completed, required resolution. This is an unresolved item pending licensee amendment of the FSAR (50-482/8429-03).

The NRC inspector also noted that the licensee had technically met the commitment to train "most KG&E technicians" in the Westinghouse course. At the time of the inspection, 23 I&C technicians still on board out of a total of 44 had completed the Westinghouse I&C training course. Some individuals who had completed the training had left the company. The NRC inspector concluded that 23 of 44 individuals trained in the course met the literal meaning of "most," if not the connotation of it, but it was pointed out to licensee representatives that the resignation or loss of any one of the 23 trained I&C technicians would place them in deviation of their FSAR commitment.

The NRC inspector also noted that, in the FSAR commitments for replacement training, the licensee committed to classroom training for I&C technicians for the following:

- "1. Fundamentals of instrumentation and control
2. Pneumatic systems and equipment
3. Electronics
4. Plant systems
5. I&C and other job related procedures
6. Surveillance requirements"

The NRC inspector found that items 1, 2, 3, and 5 above were being handled by self study, not classroom training; that item 4 was being taught in the classroom; and that item 6 had not been accomplished. With regard to items 1, 2, 3, and 5, the NRC inspector concluded that the licensee's program was adequate; however, an amendment of the FSAR to reflect actual I&C training is considered to be a second part of the previously discussed unresolved item (50-482/8429-03).

The NRC inspector noted that the systems training was being conducted by the training department for the I&C group. An I&C group representative stated that there were 58 systems to teach and that this was the second time around on systems training. The NRC inspector noted that there was no provision for makeup training and no in place procedure to assure that personnel who missed lectures on certain systems during the initial training received instruction in the missed training during the second session (i.e., year) of systems training.

The NRC inspector could not find that the licensee had a firm plan to assure that there were one or more I&C technicians trained in each surveillance test. An obvious corollary to such training is the reasonable assurance that surveillance test procedures are accurate. Licensee representatives indicated that there were reasons, such as hot functional testing, why this training had not been started. The NRC inspector concluded that, in view of the importance to safety of the surveillance tests performed by I&C, the completion of this training was necessary prior to core load. This is an open item (50-482/8429-04).

The NRC inspector also expressed concern at the apparent insensitivity to FSAR commitments that were demonstrated by the I&C training program. The NRC inspector also expressed concern that there might be other areas in which FSAR commitments had not yet been met. Licensee representatives indicated that they had recently completed an audit of FSAR commitments which had identified at least some of the problems reported herein.

The only other problem found in I&C training related to training records, and this was discussed in paragraph 4 of this report.

9. Requalification Training

The purpose of this inspection was to determine the status of preparations for requalification training of licensed operators.

Licensee representatives stated that they considered their FSAR description of requalification training to be their requalification plan. The NRC inspector noted that the safety evaluation report for this part of the FSAR had been issued in April 1982. The revision dates of the current FSAR description of requalification are dated July 1982, subsequent to the date of the safety evaluation report.

The NRC inspector reviewed the FSAR description of requalification training. It was noted that the description of required records in the FSAR was silent to the results of evaluations. This is a requirement of 10 CFR Part 55, Appendix A. It was also found that the listing of reactivity manipulations required to be completed every 2 year varied from Enclosure 4 to H. R. Denton's letter of March 28, 1980. This difference was the result of the licensee combining two line items of the letter into a single item of the FSAR and, thus, changing the meaning. Licensee submittal of a requalification plan which meets the requirements of 10 CFR part 50.54 is considered an open item (50-482/8429-05).

The NRC inspector also reviewed the licensee's procedure ADM-06-224, Revision 0, dated August 13, 1984, "Licensed Operator Requalification Training Program." It was found that this instruction provided specific implementing instructions for requalification. Only one error was found, and this was the same error noted above concerning reactivity manipulations. Correction of this error is considered to be part of open item 8429-05. This open item is not considered to impact fuel load since the requalification training plan is not required to be submitted until 3 months after the facility license is issued. Licensee representatives stated to the NRC inspector that requalification training would commence October 15, 1984, prior to issuance of the facility license.

10. Training in the Mitigation of Core Damage

The purpose of this inspection was to determine if the licensee had provided training in the mitigation of core damage. This training is an FSAR commitment and discussed in NUREG 0737, item II.3.4.

The NRC inspector found that licensed operators and candidates had completed this training. It was also noted that this training was in progress for instrument control, health physics, and chemistry supervisors and technicians. This training was scheduled to complete in mid-November 1984, which supported the projected core load date.

It was found, however, that mitigation of core damage training had not been completed by the plant manager. This is an FSAR commitment and reflects a NUREG-0737 line item. This is an open item, which must be resolved prior to core load (50-482/8429-06).

11. Unresolved Items

An unresolved item is one about which more information is required in order to determine if the item is a violation, a deviation, or acceptable. Unresolved items were identified in this report as follows:

<u>Paragraph</u>	<u>Number</u>	<u>Subject</u>
8	8429-03	Differences in I&C Training Conducted and FSAR Commitments

12. Exit Interview

An exit interview was conducted on September 14, 1984, with those personnel denoted in paragraph 1 of this report. At this meeting, the scope and findings of the inspection were summarized.