

**ENCLOSURE**

**U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV**

Docket No.: 50-482  
License No.: NPF-42  
Report No.: 50-482/99-20  
Licensee: Wolf Creek Nuclear Operating Corporation  
Facility: Wolf Creek Generating Station  
Location: 1550 Oxen Lane, NE  
Burlington, Kansas  
Dates: November 16-19, 1999  
Inspector(s): William A. Maier, Senior Emergency Preparedness Inspector, Plant Support Branch  
Ronald A. Kopriva, Senior Project Engineer, Projects Branch B  
Paul J. Elkmann, Emergency Preparedness Analyst, Plant Support Branch  
Approved By: Gail M. Good, Chief, Plant Support Branch  
Attachment: Supplemental Information

## EXECUTIVE SUMMARY

### Wolf Creek Generating Station NRC Inspection Report No. 50-482/99-20

A routine, announced inspection of the licensee's performance and capabilities during the full-scale, biennial exercise of the emergency plan and implementing procedures was performed. The inspection team observed activities in the control room simulator, technical support center, operations support center, and emergency operations facility.

#### Plant Support

- Overall exercise performance was good. The control room, technical support center, operations support center, and emergency operations facility successfully implemented key emergency plan functions including emergency classifications, protective action recommendations, notifications, and dose assessment. The scenario was adequate to demonstrate the onsite objectives (Sections P4.2, P4.3, P4.4, P4.5).
- Control room staff performance was generally good. Operations personnel implemented the emergency plan as appropriate. Communications among the crew were consistently clear. Emergency classifications were correct and generally timely. Notifications were accurate and timely except for the failure to notify the NRC of the unusual event declaration (Section P4.2).
- Technical support center staff performance was good. Staffing and activation were prompt, but early staffing after the unusual event announcement precluded a reliable evaluation of prompt staffing capability after an alert declaration, as is assumed in the emergency plan. The site emergency manager demonstrated strong command of the technical support center and the facility staff. The general emergency declaration was timely and accurate. The engineering team provided timely and useful technical support to the control room. The technical support center staff used emergency plan implementing procedures appropriately (Section P4.3).
- Operations support center staff performance was good. The center was activated with appropriate personnel, and it was equipped properly to perform its function. Briefings were concise, informative, and regularly performed. Job priorities were clearly identified. Information sharing was timely and status boards were well maintained. Contamination controls and radiological surveys were always complete. Communication was challenged when the base station radio malfunctioned, requiring communication augmentation with a hand-held radio. Debriefings for returning repair teams were weak in the failure to identify suggestions and ideas from returning repair team personnel (Section P4.4).
- Emergency operations facility staff performance was good. Facility set-up was rapid and organized. The offsite emergency manager demonstrated effective facility control. An appropriate focus was maintained on habitability concerns and protection of facility staff. The dose assessment and environmental monitoring groups performed very well and worked closely with offsite agencies (Section P4.5).

- There was slow communication to the offsite emergency manager of the need to consider protective actions beyond the emergency planning zone. This manager was not informed of this need until almost one hour after it was identified (Section P4.5).
- Offsite agencies were integrated into the functions of the emergency operations facility, and their concerns were promptly addressed by licensee staff. Excellent support was provided by the licensee to the state on the issue of protective action recommendations outside of the emergency planning zone. Licensee news statements were not complete, because they lacked specific information on plant conditions (Section P4.5).
- Two exercise control problems were noted that affected the exercise results. These were inadequate simulation of the severity of the initiating fire and failure to prevent the premature staffing of the technical support center at the unusual event declaration (Section P4.6).
- The licensee's critique process was very thorough. The post-exercise facility debriefs were very well organized and inclusive. Participants were self critical of their performances. Response managers held responders accountable for their actions, emphasizing the need for improvement where appropriate. The licensee's formal critique was well structured and referenced onsite objectives. The licensee appropriately captured the most important performance issues in the corrective action system, initiating 13 problem identification reports for issues requiring followup (Section P4.7).

#### IV. Plant Support

#### **P4 Staff Knowledge and Performance in Emergency Preparedness**

##### **P4.1 Exercise Conduct and Scenario Description (82301, 82302)**

The licensee conducted its full-scale, biennial emergency preparedness exercise on November 17, 1999. The exercise was conducted to test major portions of the onsite (licensee) and offsite emergency response plans. The licensee activated its emergency response organization and all emergency response facilities. The Federal Emergency Management Agency evaluated the offsite response capabilities of the State of Kansas and Coffey County. The Federal Emergency Management Agency will issue a separate report.

The exercise scenario was conducted using the plant control room simulator. A containment ventilation mini-purge was in progress as an initial condition of the scenario. The exercise began at 8 a.m. with a report of a fire in the turbine building. The fire occurred in a hydrogen line located above the electrical bus supplying power to two reactor coolant pumps and to a transformer supplying normal power to one vital bus. The fire caused damage to, and de-energization of, the electrical bus. This event was designed to cause an alert declaration.

The loss of power to the two reactor coolant pumps caused a reactor trip at 8:02 a.m. Several control rods failed to fully insert, causing mechanical damage to the fuel and release of radioactive fission products into the reactor coolant.

Debris from the core entered the seal package of a running reactor coolant pump causing a small leak of reactor coolant from the seal package. The leak rate increased steadily to 480 gallons per minute by 9 a.m. This event was designed to cause a site area emergency declaration.

The loss of reactor coolant with fuel damage caused radiation levels in the containment building to increase. The in-progress containment ventilation mini-purge failed to isolate, bypassing the third fission product barrier. This created a monitored release of radioactive material to the environment through the plant ventilation exhaust plenum.

By 9:30 a.m., the radiation levels in the containment building were 2800 R/hr, confirming the loss of the fuel clad barrier. This event was designed to cause both a general emergency declaration, based on the loss of three fission product barriers, and a protective action recommendation to the offsite response agencies.

At 12:15 p.m., the containment mini-purge was isolated, terminating the release. The exercise ended at 2 p.m., after the completion of offsite environmental sampling.

## P4.2 Control Room

### a. Inspection Scope (82301-03.02)

The inspectors observed the control room simulator staff perform emergency tasks. These tasks included:

- Facility management and control
- Diagnosis of plant conditions
- Implementation of normal, abnormal, and emergency operating procedures
- Emergency classification
- Notifications and communications
- Adherence to the emergency plan and emergency plan implementing procedures

The inspectors reviewed applicable emergency plan sections, operating procedures, facility logs, checklists, and notification forms.

### b. Observations and Findings

The control room supervisors demonstrated good facility management and control. The crew consistently used repeat-backs and the phonetic alphabet to maintain clear communications. Crew briefings were informative and complete. The control room crew was properly augmented after the unusual event declaration. Control room logs were generally limited in the scope of information that was recorded, making it difficult to reconstruct emergency plan activities. The licensee's evaluation team also recognized a need for improvement in logkeeping in the control room and documented this observation in the formal exercise report.

The crew recognized abnormal and emergency conditions as they occurred, using appropriate normal, abnormal, and emergency operating procedures to respond to exercise events and plant conditions. Reactor operators maintained good awareness of board indications. The crew performed frequent peer checks in order to ensure proper board operations. The crew reduced the radiological release rate by shifting the containment fans to high speed. The shift supervisor and shift technical advisor were continually aware of the potential for a radiological release via the stuck open mini-purge damper.

The control room emergency manager performed three emergency classifications: a notification of unusual event, an alert, and a site area emergency. Emergency events were appropriately recognized and correctly classified. The shift supervisor allowed himself to become distracted, however, from classification duties for approximately 5 minutes in order to oversee control board operations following the report of the fire and the reactor trip. This distraction delayed the notification of unusual event classification by 5 minutes. This delay did not significantly affect the overall response capability, since the emergency response organization was not required to be activated until the declaration of an alert.

The control room performed all offsite notifications within 15 minutes. Control room notification forms were completed correctly. The emergency notification system

communicator generally performed well, except for failure to inform the NRC about the notification of unusual event classification. The unusual event was classified at 8:19 a.m., and the alert was classified at 8:35 a.m. The emergency notification system communicator notified the NRC about the alert declaration at 8:56 a.m., 21 minutes after the classification (37 minutes after the unusual event classification). The communicator appropriately discussed all plant conditions and emergency events which had occurred, including the events connected to the unusual event declaration. The communicator did not, however, inform the NRC that an unusual event had been declared. After the NRC inspectors informed the licensee's evaluation team of this observation, the licensee agreed that the notification of the unusual event declaration via the emergency notification system had not occurred. Problem Identification Report 1999-3720 was written to investigate this problem for possible corrective action.

c. Conclusions

Control room staff performance was generally good. Operations personnel implemented the emergency plan as appropriate. Communications among the crew were consistently clear. Emergency classifications were correct and generally timely. Notifications were accurate and timely except for the failure to notify the NRC of the unusual event declaration.

P4.3 Technical Support Center

a. Inspection Scope (82301-03.03)

The inspectors observed the technical support center staff perform emergency tasks. These tasks included:

- Staffing and activation
- Facility management and control
- Accident assessment and classification
- Assistance and support to the control room and emergency operations facility
- Adherence to emergency plan and procedures

The inspectors reviewed applicable sections of the emergency plan, procedures, checklists, and facility logs.

b. Observations and Findings

Staffing and activation of the technical support center was prompt, but it occurred prematurely. The licensee's emergency plan described the technical support center to be staffed and activated following an alert declaration. Exercise responders began reporting to the technical support center immediately following the plant public address announcement of the unusual event declaration. The facility was activated 34 minutes after the plant page announcement of the unusual event and 16 minutes after the pager activation announcement of the alert. The licensee's goal for facility activation was within 30 minutes of an alert notification. An undirected, early response to emergency response facilities could possibly occur during certain actual emergency conditions due to the personal initiative of certain responders. The inspectors, therefore, considered

this early response to be a exercise control issue and not a performance issue (see Section P4.6).

The site emergency manager demonstrated strong command of the technical support center staff. People were held accountable for results of tasks assigned to them. The site emergency manager also demanded multiple options for solutions to major challenges posed by the scenario. The site emergency manager shifted priorities when appropriate and resolved conflicts between subordinates.

Accident assessment and classification were effective. The general emergency declaration was timely, accurate, and anticipated by the technical support center operations team. The basis for the general emergency declaration was the release of radioactive gaseous effluent to the environment at rates exceeding the general emergency declaration threshold. This classifying condition differed from that assumed in the scenario development; however, it was proper for the existing plant conditions. The operations coordinator and the site emergency manager independently analyzed plant conditions and reached agreement prior to the classification.

The engineering team at the technical support center actively planned mitigation strategies for stopping the radiological release. Blocking the air flow to the downstream filter train and flooding the filter train to establish a loop seal were two of the alternative strategies considered.

The engineering team provided timely and useful technical support to the control room. The engineering team referred the control room operators to appropriate procedures for performing emergency tasks, such as the isolation of downstream dampers for stopping the radiological release. The technical support center engineering team quickly performed shutdown margin calculations and conveyed those calculations to the control room.

The technical support center staff used emergency plan implementing procedures appropriately. The proper checklists were referred to when simulating the start of the emergency diesel generator for the facility and when starting the emergency ventilation system. The site emergency manager used checklists when conducting information turnovers with the managers of other facilities. Most of the technical support center staff maintained detailed and informative logs which described the important activities of the facility.

c. Conclusions

Technical support center staff performance was good. Staffing and activation were prompt, but early staffing after the unusual event announcement precluded a reliable evaluation of prompt staffing capability after an alert declaration, as is assumed in the emergency plan. The site emergency manager demonstrated strong command of the technical support center and the facility staff. The general emergency declaration was timely and accurate. The engineering team provided timely and useful technical support to the control room. The technical support center staff used emergency plan implementing procedures appropriately.

P4.4 Operations Support Center

a. Inspection Scope (82301-03.05, 03.08)

The inspectors observed the operations support center staff and repair teams perform emergency tasks. These tasks included:

- Facility staffing and activation
- Facility management and control
- Repair team activities
- Implementation of onsite protective actions
- Adherence to emergency plan and procedures

The inspectors reviewed applicable sections of the emergency plan, procedures, checklists, and facility logs.

b. Observations and Findings

The operations support center was co-located with the technical support center and was staffed in a timely manner; 16 minutes after the alert announcement. Telephones, radios, and other equipment necessary for the operations support center to function were in place. Current lists of resources and personnel were maintained. Habitability surveys in the facility were performed regularly.

The maintenance assistant, responsible for coordinating the operations support center, demonstrated very good command and control by effectively communicating plant status and job priorities. Noise levels and distractions were kept to a minimum throughout the exercise. Operations support center briefings were concise and informative. Throughout the exercise, the status boards were well maintained. Operations support center personnel correctly used two-part communications when issuing and responding to directions.

Good emergency team briefings were conducted prior to team dispatch. The maintenance assistant provided teams with the appropriate information for proper assessment of equipment conditions and rapid performance of assigned tasks. Radiation doses to repair team members were minimized appropriately. Repair tasks were properly prioritized and priorities modified appropriately according to changing plant conditions. Emergency teams were briefed by health physics personnel in accordance with the team assignment priority.

Good communications were maintained between the repair teams and the operations support center staff. The operations support center team director informed the field teams when there was a change in radiological or plant equipment conditions. During the exercise, the operations support center radio base station experienced a low hum which interfered with transmitting and receiving information. The operations support center staff compensated for this problem by use of a hand-held radio, which maintained continuous communications. Radiation protection personnel assigned to repair teams kept the team communicator updated on radiological conditions in the plant and along traversed routes.



The operations support center team communicator properly maintained accountability of teams and team members. When one team failed to respond to radio communications for 16 minutes, the maintenance assistant began organizing a search and rescue team. At another point during the exercise, team accountability was challenged as a replacement repair team was split, and a member from the replacement team was reassigned to the original team while out in the field. The tracking of the teams and team members was performed well, and accountability was always maintained. The team communicator generally maintained good radio contact with the teams and relayed the team reports to the operations support center supervisor for further relay to technical support center staff.

Returning repair teams were debriefed, and the appropriate debriefing status sheets were filled out. The debriefings were weak and did not obtain beneficial feedback from the repair teams. Potentially valuable information gained by the repair teams was not solicited, and suggestions and ideas were not captured. For example, one team was dispatched to close an air operated ventilation isolation damper. When the decision was made to disassemble the actuator, the mechanic that had attempted to close the damper made a suggestion to obtain one from the warehouse to train the team on its disassembly. This suggestion was never acted upon, nor was it identified during the team debrief in the operations support center.

c. Conclusions

Operations support center staff performance was good. The center was activated with appropriate personnel, and it was equipped properly to perform its function. Briefings were concise, informative, and regularly performed. Job priorities were clearly identified. Information sharing was timely, and status boards were well maintained. Contamination controls and radiological surveys were always complete. Communication was challenged when the base station radio malfunctioned, requiring communication augmentation with a hand-held radio. Debriefings for returning repair teams were weak in the failure to identify suggestions and ideas from returning repair team personnel.

P4.5 Emergency Operations Facility

a. Inspection Scope (82301-03.04)

The inspectors observed the emergency operations facility staff perform emergency tasks. These tasks included:

- Facility staffing and activation
- Facility radiological habitability
- Facility management and control
- Offsite dose assessment
- Notification of offsite response agencies
- Protective action decision making
- Interaction with offsite response agency personnel

The inspectors reviewed applicable emergency plan sections, emergency plan implementing procedures, forms, dose projections, and press releases.

b. Observations and Findings

The emergency operations facility was promptly staffed, considering its remote location from the plant. Arriving personnel were knowledgeable of their duties and appropriately used procedures and checklists to set up the facility. Communications with the plant were quickly established, and important information was immediately displayed on status boards. The facility was declared activated 25 minutes after the alert announcement, within the licensee's stated goal of 60 minutes.

The facility radiation protection technician, radiation coordinator, and offsite emergency manager maintained appropriate concern for facility habitability. Evacuation of the emergency operations facility was considered during the initial phase of the radiological release, while the facility was in the radiological plume. The offsite emergency manager directed appropriate precautionary activities to prepare for the possibility of facility relocation.

The emergency operations facility was directly in the plume when offsite agency personnel arrived. At that time, personnel monitoring and smear analysis could not be performed due to excessive background radiation, although a step-off pad was in place. The facility radiation protection technician effectively controlled all personnel at the checkpoint. Good technical decisions were made in initially bringing state personnel into the facility in anticontamination clothing. When area radiation levels decreased, state personnel were promptly frisked and released from anticontamination clothing.

The offsite emergency manager demonstrated effective facility control. Facility briefings were frequent, complete, and informative. Many short, topical announcements were used to inform the staff of important events as they occurred. The emergency operations facility staff was attentive to briefings and to the information posted on status boards.

The licensee's dose assessment group generally performed well. They aggressively tracked plant monitors to detect when a radiological release occurred; however, approximately 20 minutes elapsed between the recognition of elevated plant vent effluent monitor readings and the offsite emergency manager's declaration that a release was in progress. This declaration was delayed until operations confirmed that a release pathway existed. The inspectors considered this confirmation to be unnecessary, since the effluent monitors were reliably expected to be able to identify the existence of a radiological release. The inspectors discussed this practice with the licensee's exercise evaluation team and learned that the practice of confirming the release pathway was consistent with licensee management expectations for declaring the existence of a radiological release. The inspectors accepted the licensee's position.

The dose assessment group performed frequent dose projections, determining source terms from containment radiation levels, effluent monitors, and back calculation from environmental measurements. Changes in release duration estimates were promptly incorporated into dose calculations as they became available.

Environmental monitoring teams were well controlled. There was good cooperation between the licensee and offsite agencies in establishing missions for the joint monitoring teams, especially in assessing the plume at and beyond ten miles. Air samples were appropriately collected by the environmental monitoring teams. The team tracking board was effectively maintained.

Protective action recommendation decisions were consistently made in a timely manner. In almost all cases, the radiological assessment coordinator immediately made the offsite emergency manager aware of changes that could result in changes to protective action recommendations within the emergency planning zone. The offsite emergency manager made protective action recommendations with input and direct support from the radiological coordinator. The emergency operations facility effectively tracked the protective actions that were implemented, promptly identifying a case in which a zone not covered by a licensee protective action recommendation was evacuated. This discrepancy was quickly discussed and resolved with the offsite agencies.

At one point in the scenario, a series of conservative dose projections identified a potential need to extend protective actions beyond the 10-mile emergency planning zone. Coordination and discussion of this contingency between the licensee's dose assessment organization and the offsite agencies were good; however, there was slow communication of that discussion to the attention of the offsite emergency manager. Almost an hour elapsed from the time when licensee dose projections identified the potential need for protective action recommendations beyond 10 miles and the time that the offsite emergency manager became aware of this information. The State of Kansas technical staff was briefed on this information about 20 minutes before the licensee's offsite emergency manager was briefed.

The inspectors discussed this issue with the licensee's exercise evaluation team. The inspectors were informed that a wind shift occurred during the interval prior to the offsite emergency manager being informed of the need to consider extending a protective action recommendation beyond 10 miles. The inspectors acknowledged that such a wind shift would require recalculation of the dose projection, but that activity should not have delayed a report to the offsite emergency manager of the magnitude of the radiological hazard.

Offsite agencies were well integrated into the functions of the emergency operations facility, and their concerns were promptly addressed by licensee staff. Coordination between the licensee's radiological staff and the Kansas Department of Health and Environment was excellent. Senior offsite agency staffs had ready access to licensee managers and were included in all management conferences. Frequent informational meetings were held between key licensee directors and offsite agency directors in order to focus on vital activities, discuss changing conditions, and arrive at common action plans.

Excellent support was provided by the licensee to the state on the consideration of protective action recommendations outside of the emergency planning zone. Licensee managers were sensitive to the state's role in determining appropriate actions and remained involved to support the state. Appropriate resources were made available to

assist the state in this area. Technical discussions on this subject were timely and extensive.

The licensee issued 13 news statements during the exercise. These news statements were taken from a bank of prescribed news statements whose contents had been agreed upon by the licensee and the offsite response agencies. Therefore, these news statements lacked specific information regarding conditions at the plant and the release of radioactive material. News statements released at the beginning of the exercise contained only the emergency classification and boilerplate descriptive text. The first four news statements announced that details would follow in a subsequent news statement, but the first news statement that included any information about plant events was No. 13, the last news statement, which was issued late in the scenario. This news statement was intended primarily for rumor control. While all information contained in the previous 12 news statements was factually correct, the overall lack of detail limited their usefulness.

The inspectors discussed this item with the licensee, which informed the inspectors that details of plant status were presented to the media via press briefings at the media center. The inspectors concluded that this practice adequately conveyed information to the public. They noted, however, that the sentence in the news statements announcing that details would follow, when they were not immediately forthcoming, was misleading and raised doubts about the credibility of the news statements. The licensee agreed with the inspectors' determination, and senior licensee management at the exit interview recognized a need to investigate changing the content of the prescribed news statements.

Emergency operations facility logs did not fully capture all of the critical decisions made by managers or the basis for decisions. Instructions to staff were not fully logged by either managers or staff. Many logs were either not detailed enough to allow a full reconstruction of activities or not clearly labeled as to who maintained the log. The licensee's evaluation team also identified that overall facility log keeping could be improved and included that observation as an area for improvement in its formal exercise report.

c. Conclusions

Emergency operations facility staff performance was good. The facility set-up was rapid and organized. The offsite emergency manager demonstrated effective facility control. An appropriate focus was maintained on habitability concerns and protection of facility staff. The dose assessment and environmental monitoring groups performed very well and worked closely with offsite agencies. There was slow communication to the offsite emergency manager of the need to consider protective actions beyond the emergency planning zone. This manager was not informed of this need until almost one hour after it was identified. Offsite agencies were integrated into the functions of the emergency operations facility, and their concerns were promptly addressed by licensee staff. Excellent support was provided by the licensee to the state on the issue of protective action recommendations outside of the emergency planning zone. Licensee news statements were not complete, because they lacked specific information on plant conditions.

P4.6 Scenario and Exercise Control

a. Inspection Scope (82301, 82302)

The inspectors made observations during the exercise to assess the challenge and realism of the scenario and to evaluate exercise control.

b. Observations and Findings

The licensee submitted the exercise objectives and scenario for NRC review on August 13 and September 13, 1999, respectively. The inspectors discussed minor questions related to the exercise and objectives with licensee staff on October 8, 1999. All questions were resolved by the licensee. The exercise objectives and scenario were reviewed and considered adequate to meet emergency plan requirements (reference NRC letter to licensee dated October 26, 1999).

The following exercise control problems detracted from the realism and training value of the exercise:

- The report to the control room of the location and extent of damage of the fire was not timely or descriptive enough to prompt the desired alert classification. Instead, the shift supervisor declared an unusual event, which was proper, given the information available at the time of classification. The licensee's evaluation team also recognized this exercise control problem. Problem Identification Report 1999-3713 was written to investigate this problem for possible corrective action.
- The licensee did not provide sufficient control to prevent the premature staffing and setup of the technical support center. The licensee's emergency plan describes these facilities being staffed and activated following an alert declaration. During the exercise, however, the technical support center staffing and setup began immediately following the announcement of the unusual event. The inspectors recognized that responders would likely begin immediate staffing following notification of an actual fire prompting an unusual event declaration. However, this practice during the exercise prevented the inspectors from determining if the facility could be activated within the time goals of the emergency plan. The licensee's exercise evaluation team also recognized the early staffing of the technical support center as an issue warranting further investigation. Problem Identification Report 1999-3710 was written to capture this issue for evaluation and corrective action.

c. Conclusions

The scenario was adequate to demonstrate the licensee's onsite objectives. Two exercise control problems were noted that affected the exercise results. These were inadequate simulation of the severity of the initiating fire and failure to prevent the premature staffing of the technical support center at the unusual event declaration.

**P4.7 Licensee Self Critique**

**a. Inspection Scope (82301-03.13)**

The inspectors observed and evaluated the licensee's post-exercise facility debriefs at the emergency operations facility and the technical support center. They also observed the formal management critique on November 19, 1999, to determine whether the licensee's critique process would identify and characterize weak or deficient areas in need of corrective action.

**b. Observations and Findings**

The senior response managers at the emergency operations facility and the technical support center conducted on-station debriefs immediately following the exercise. These debriefs were very well organized, and adequate time was allotted for inclusion of all comments from the participants. The managers were self critical of their performances, establishing balanced self assessments by all responders, in which positive observations did not dominate the discussion. Where performance was not up to standards, the managers emphasized the need for improvement.

The licensee's formal executive summary critique of the exercise occurred on Friday, November 19, 1999, immediately following the station morning meeting. The critique was attended by the licensee's senior managers. The critique included an overall self-assessment of performance and it commented that the stated onsite exercise objectives had been met. The critique referenced 13 problem identification reports written to capture exercise performance items for entry into the licensee's corrective action system. The licensee identified most of the significant items the NRC inspection team identified.

**c. Conclusions**

The post-exercise facility debriefs were very well organized and inclusive. Participants were self critical of their performances. Response managers held responders accountable for their actions, emphasizing the need for improvement where appropriate. The licensee's formal critique was well structured and referenced onsite objectives. The licensee appropriately captured the most important performance issues in the corrective action system, initiating 13 problem identification reports for issues requiring followup.

**P8 Miscellaneous Emergency Preparedness Issues (92904)**

**P8.1 (Closed) Inspection Follow-up Item (50-482/9702-01):** The licensee completed all the actions committed to in its April 18, 1997, letter responding to this item. No examples of ineffective technical support center communications adversely affecting the overall exercise response were observed. There was good communication between the site emergency manager and his subordinates about topics affecting emergency classification.

## V. Management Meetings

### **X1 Exit Meeting Summary**

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on November 19, 1999. The licensee acknowledged the facts presented. All copies of proprietary information provided to the inspectors were either returned or destroyed.

The Federal Emergency Management Agency and the NRC scheduled a public meeting in the Coffey County courthouse on November 18, 1999, to discuss the preliminary exercise results. The NRC team leader provided a preliminary overall assessment of the licensee's onsite response.

## ATTACHMENT

### SUPPLEMENTAL INFORMATION

#### PARTIAL LIST OF PERSONS CONTACTED

##### Licensee

M. Blow, Manager, Chemistry and Radiation Protection  
G. Boyer, Vice President and Chief Administrative Officer  
T. East, Superintendent, Emergency Planning  
D. Fehr, Manager, Administrative Services  
R. Flannigan, Manager, Nuclear Engineering  
A. Harris, Superintendent, Licensing  
J. Johnson, Manager, Resource Protection  
D. Knox, Manager, Maintenance  
O. Maynard, President and Chief Executive Officer  
B. McKinney, Vice President and Plant Manager  
R. Muench, Vice President, Engineering and Information Services  
J. Pippin, Manager, Training  
C. Redding, Regulatory Specialist  
K. Scherich, Acting Manager, Support Engineering  
E. Schmotzer, Manager, Purchasing and Materials Services  
R. Sims, Manager, System Engineering  
C. Warren, Vice President and Chief Operating Officer  
C. Younie, Manager, Operations

#### LIST OF INSPECTION PROCEDURES USED

IP 82301: Evaluation of Exercises at Power Reactors  
IP 82302: Review of Exercise Objectives and Scenarios for Power Reactors  
IP 92904: Follow-up - Plant Support

#### ITEMS OPENED, CLOSED, AND DISCUSSED

##### Opened

None

##### Closed

50-482/97002-01 IFI Exercise weakness - Ineffective internal/external technical support center communications (Section P8.1)

##### Discussed

None



LIST OF DOCUMENTS REVIEWED

Emergency Plan and Procedures

AP 02-006	Radiological Emergency Response Plan	Revision 0
EPF 06-011-01	Plant Team Briefing Checklist	Revision 0
EPF 06-011-05	Plant Team Debriefing Checklist	Revision 0
EPP 06-001	Control Room Operations	Revision 1
EPP 06-002	Technical Support Center Operations	Revision 2
EPP 06-003	Emergency Operations Facility Operations	Revision 3
EPP 06-005	Emergency Classification	Revision 1
EPP 06-006	Protective Action Recommendations	Revision 0
EPP 06-007	Emergency Notifications	Revision 1
EPP 06-010	Personnel Accountability and Evacuation	Revision 1
EPP 06-012	Dose Assessment	Revision 0
EPP 06-013	Exposure Control and Personnel Protection	Revision 1
EPP 06-015	Emergency Response Organization Callout	Revision 0
EPP 06-016	Accident Assessment and Mitigation	Revision 1
EPP 06-017	Core Damage Assessment Methodology	Revision 0