

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

NRC Inspection Report: 50-482/85-04 Construction Permit: CPPR 147

Docket: 50-482 Category: A2

Licensee: Kansas Gas and Electric Company (KG&E)
Post Office Box 208
Wichita, Kansas 67201

Facility Name: Wolf Creek Generating Station (WCGS)

Inspection At: Wolf Creek Site, Coffey County, Burlington,
Kansas

Inspection Conducted: January 1 to 14, 1984

Inspectors:

J. E. Martin
for W. G. Guldemon, Chief, Resident
Inspection Program, Wolf Creek Task Force
(pars. 2, 3, 4, 5, 7, 8, and 9) *2/24/85*
Date

J. E. Martin
for H. F. Bundy, Resident Reactor Inspector,
Operations, Wolf Creek Task Force
(par. 6) *2/24/85*
Date

Approved:

J. E. Martin
L. E. Martin, Section Chief, Wolf Creek
Task Force *2/24/85*
Date

Inspection Summary

Inspection Conducted January 1 to 14, 1985 (Report 50-482/85-04)

Areas Inspected: Routine unannounced inspection including licensee actions on previous inspection findings; 10 CFR 50.55(e) reports; IE Bulletins and Circulars; independent inspection; preoperational test activities; procedure reviews; TMI-2 Task Action Plan Items; and preoperational test deficiency deferrals. The inspection involved 86 inspector-hours onsite by two NRC inspectors including 48 inspector-hours onsite during offshifts.

Results: Within the eight areas inspected, no items of noncompliance or deviations were identified. Two open items were identified (paragraphs 2 and 5).

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DETAILS

1. Persons Contacted

Principal Licensee Personnel

- *C. C. Mason, Site Director
- *R. M. Grant, Director-Quality
- *R. Stright, Licensing
- *R. H. Belote, Manager, Independent Safety Engineering Group
- *K. R. Ellison, Startup Technical Support Supervisor
- *M. G. Williams, Superintendent of Regulatory, Quality, and Administrative Services
- *W. M. Lindsay, Supervisor of Quality Systems
- J. Zell, Operations Superintendent
- S. Austin, Shift Supervisor
- L. Borders, Shift Supervisor
- R. Anderson, System Test Supervisor
- J. Costello, System Startup Engineer
- J. Dorn, System Startup Engineer
- O. Maynard, Licensing Manager
- G. L. Koester, Vice President-Nuclear

2. Licensee Actions on Previous Inspection Findings

(Closed) Open Item (482/8455-05): This open item tracked completion of modifications to NTC and NTD Cards in the reactor protection system. The need for modification was identified in 10 CFR 50.55(e) Report TE55780-K034. The inspector reviewed Construction Work Permit Numbers SB-183-I and SB-204-I under which the modifications were installed and found them acceptable.

(Closed) Safety Evaluation Report (SER) Item (482/84-00-12): This item tracked a requirement contained in section 9 of the Wolf Creek SER that all fire protection control and sectionalizing valves that are not electrically supervised be locked open and under a management supervisor program with key control and periodic visual checks of the valves. This requirement is adequately addressed by a combination of procedures ADM 13-103, STS FP-001, ADM 02-102, and Technical Specification 4.7.10.2.

(Closed) SER Item (482/84-00-35): This item tracked an SER requirement to conduct natural circulation training to comply with TMI-2 Action Plan Item I.G.1. The licensee has used natural circulation test data from Callaway to program their simulator for natural circulation conditions. Training for all operators will be completed by February 11, 1985. This action satisfies the requirements of Item I.G.1 of the TMI-2 Action Plan.

(Closed) SER Item (50-482/84-00-36): This item tracked an SER requirement that the training supervisor and training engineer possess senior reactor operator (SRO) licenses. These personnel plus two license instructors received their SRO licenses on November 21, 1984.

(Closed) Open Item (482/8455-11): This open item tracked an apparent discrepancy between some of the constants used in the reactor coolant system (RCS) leak rate preoperational test and those used in the normal RCS leak rate surveillance procedure. The licensee has agreed to revise the surveillance procedure to use appropriately conservative constants. The licensee also performed additional preoperational leak rate calculations using these constants and verified that the test results were not significantly affected.

(Closed) SER Items (482/84-00-22, 23, 25, 27, and 28): These items tracked SER requirements for minimum manning levels in the nuclear services, maintenance plant support, technical support, and operations organizations. The current staffing levels exceed those established in the SER in all of the subject departments.

(Closed) SER Item (482/84-00-132): This item tracks an SER requirement to administratively control the handling of light loads over the spent fuel pool. Adequate administrative controls are contained in a recent revision to ADM 08-306.

(Closed) SER Item (482/84-00-53): This item tracks an SER requirement for the licensee to complete a full scale emergency exercise. This has been done.

(Closed) SER Item (482/84-00-109): This item tracks an SER requirement for the licensee to perform a containment structural integrity test at 115 per cent of design pressure. This test was completed in December, 1984. Test results are still under evaluation.

(Closed) SER Item (482/84-00-30): This item tracked an SER requirement for the licensee to have shift consultants on shift. As discussed in paragraph 5 of this report, this requirement has been met.

(Closed) SER Item (482/84-00-13): This item required verification of installation of fire barrier penetration seals. This matter is being tracked by open item 50-482/84-19-06. As such, this SER item is duplicative.

(Closed) Open Item (482/8426-02): This item tracked manning of the independent safety engineering group (ISEG). This open issue is adequately tracked by SER Item 50-482/84-00-33.

(Closed) Open Item (482/8426-04): This item tracked correction of certain human factors deficiencies. This issue is adequately tracked by SER Items 50-482/84-00-40 and 41.

(Closed) Open Items (482/8426-06A and 482/8429-06): These items tracked completion of training for mitigating core damage. This subject is adequately tracked by SER item 50-482/84-00-48.

(Closed) SER (482/84-00-145): This item is adequately tracked by existing open item 482/8426-06B.

(Closed) SER Item (482/84-00-34): This item tracked an SER requirement for NRC review of the licensee's plan for emergency operating procedures. Based on discussions with the NRC Licensing Project Manager this requirement has been satisfied and this item is closed. Documentation of this review will be contained in Supplement 5 to the Wolf Creek SER.

(Closed) Noncompliance Item (482/8432-03): This item documented a failure on the part of the licensee to adequately train receipt inspection personnel on the availability of calibrated measuring devices for the performance of receipt inspections with the results that dimensional checks were not always performed. The inspection verified that receipt inspection personnel were subsequently trained in the requirements of revised Step 7.3.1 of Quality Control Procedure 7.1, "Receipt Inspection," which identifies where calibrated instruments can be obtained.

(Closed) Open Item (482/8432-04): This item tracked a committed-to revision of Quality Control Procedure 7.1, "Receipt Inspection," to include a discussion on the use of calibrated measuring instruments. The revision was made on September 13, 1984.

(Closed) Noncompliance Item (482/8432-06): This item documented a failure on the part of the licensee to adequately evaluate Level V commodities in accordance with established procedures. In response to this item the licensee revised Procedure ADM 01-049, "Procurement Level I and V List," on December 13, 1984, to more clearly delineate evaluation criteria. Additionally, the licensee performed a review of existing Level V evaluations using the new criterion to determine the adequacy of those evaluations.

(Closed) Open Item (482/8401-02): This item tracked the removal of a temporary hanger installed on the safety injection system. The inspector verified that the hanger was removed.

(Closed) SER Item (482/84-00-33): This item tracked an SER requirement for the licensee to implement a seven member ISEG to perform independent assessments of plant operations and performance as required by TMI-2 Task Action Plan (TAP) Item I.B.1.2. The SER also required the ISEG to conduct

evaluations weekly on backshifts. The licensee currently has a six member ISEG in place. While this is one member less than specified in the SER, it is one in excess of that required by TAP Item I.B.1.2 and the Technical Specifications, and is therefore acceptable. By letter number KSLKS 85-010 the licensee promulgated a schedule for backshift ISEG coverage.

(Closed) Open Item (482/8426-06B): This open item tracked a requirement of TAP Item II.E.4.1 to specify in emergency procedures the use of the hydrogen recombiners. The inspector reviewed Emergency Procedures EMG FR-I3, "Response to Voids in Reactor Vessel," EMG FR-Z1, "Response to High Containment Pressure," and EMG E-1, "Loss of Reactor or Secondary Coolant," and found appropriate reference to hydrogen recombiner operation.

(Closed) Open Item (482/8455-02): This item tracked replacement of incore thermocouples as committed to by the licensee in 10 CFR 50.55(e) Report TE53564-K149. The inspector reviewed Construction Work Permit BB-868-I dated October 19, 1984, and completed on December 28, 1984, and concluded that it adequately documented thermocouple replacement.

(Closed) Open Item (482/8455-10): This item tracked replacement of excore neutron detectors as committed to by the licensee in 10 CFR 50.55(e) Report TE53564-K154. The inspector reviewed completed Construction Work Permit SE-83-I and concluded that it adequately documented detector replacement.

(Closed) Open Item (482/8455-12): This item tracked licensee resolution of a switch sticking problem identified during the performance of Preoperational Test SU3-SA03. The licensee subsequently tested the subject switch 20 times with no additional problems. The inspector examined a partially disassembled switch and determined that it was unlikely that any material had entered the switch internals. Further, it was noted that if the pushbuttons on the switch were pushed from an angle as opposed to pushing directly down, the buttons would not depress. Based on this information, this is viewed as an isolated event and the matter is considered closed.

(Closed) SER Item (482/84-00-48): This item tracked an SER requirement for the licensee to complete the training on mitigating core damage required by TMI TAP Item II.B.4. As discussed in paragraph 9 of this report that training has been completed.

(Closed) Open Item (482/8427-01): This item tracked licensee evaluation of excess reactor coolant pump (RCP) seal leakage on the Number 1 seals of C and D RCPs. This evaluation was performed. It concluded that the seal surfaces had rubbed, but no cause could be definitely established. Foreign material contamination was ruled out. The seals were replaced and performed satisfactorily.

(Closed) Noncompliance Item (482/8330-01): This item documented a failure on the part of the licensee to have approved procedures for steam generator chemistry control. The licensee now has in place Procedures ADM 04-007, "Secondary Chemistry Control," and ADM 04-020, "Chemistry Surveillance Program." The inspector reviewed these procedures and verified that they specified adequate sampling frequencies, analytical measurements, and chemical limits for all modes of steam generator operation. It should be noted that the licensee has not explicitly defined a "partially drained" condition for the steam generators. Steam generators in this condition are sampled and maintained in accordance with the requirements established for wet layup conditions.

(Closed) Open Items (482/8444-05 and 482/8444-06): These items track resolution of six weaknesses noted in the licensee's general employee training (GET) program. All items have been adequately addressed by the licensee with the exception of one item on evacuation of nonessential personnel from the plant evacuation initial assembly point for those personnel who do not have transportation immediately available to them. This item was discussed with the licensee's onsite Emergency Plan (E-Plan) Administrator on January 11, 1985. The E-Plan Administrator indicated that various means of transportation could be made available including commandeering the EOF bus. He agreed to review the matter for incorporation into emergency plan procedures. The fact that transportation can be made available is adequate to resolve inspector concerns relative to fuel load and power ascension testing. The results of the licensee's review for incorporation of this matter into procedures will be tracked as an open item which does not constrain the aforementioned activities but which will be reviewed during future inspections. (482/8504-01)

(Closed) Open Item (482/8435-01): This open item tracked licensee closure of Corrective Action Reports (CAR) 16 and 17. The inspector determined that CAR 17 had been responded to, that response had been accepted by quality assurance, and that a followup audit had been performed which demonstrated that the corrective actions had been effective in resolving identified issues. For CAR 16 the inspector determined that the CAR had been responded to and that response was deemed acceptable by quality assurance as documented in letter number KQWLKWO 84-648. A followup audit is scheduled for the period March 15 - April 15, 1985, to assess the effectiveness of corrective actions. The delay in the audit performance is inherent in the licensee's quality assurance program and allows time for agreed upon corrective actions to be fully implemented. This is deemed acceptable for closure of this item based on the assessment of acceptability of the corrective action for CAR 16.

(Closed) Noncompliance Item (482/8307-01): This item documented weaknesses in the Wolf Creek constructor test control program. As documented in NRC Inspection Report 50-482/84-55, the inspector could not

reach a definitive conclusion as to the adequacy of the corrective actions taken by the licensee in response to this item. At that time the licensee's Quality Assurance Manager agreed to perform a followup surveillance to reassess the adequacy of the corrective actions and to consolidate the large volume of documents associated with this issue.

On January 11, 1985, the inspector met with the Manager of Quality Assurance and representatives of his organization to discuss the results of the committed-to surveillance. The surveillance addressed six areas:

- . Verification that the constructor test control procedure was revised to correct identified weaknesses.
- . Verification that specific test procedures were reviewed and revised to reflect changes to the test control procedure.
- . Determination that the test procedures reviewed and revised, included all constructor test activities and, if not, whether the additional procedures identified were adequate.
- . Verification that the constructor test control program and test procedure weaknesses did not impact the technical validity of test results or, if they did, that those issues were appropriately dispositioned.
- . Review of audit and surveillance findings made subsequent to procedure revision to determine the acceptability of the corrective actions taken.
- . Evaluation of the inadequacies for a determination of similarity to identified startup test program weaknesses and root causes.

As a result of the surveillance the licensee's quality assurance organization reached the following conclusions:

- . Appropriate procedural revisions were implemented to correct identified weaknesses.
- . Those procedures revised did not encompass all of the constructor test activities; however, review of those added procedures revealed no deficiencies.
- . The types of programmatic weaknesses addressed did not generally impact the technical validity of constructor test activities. Where problems were identified, they were previously dispositioned in accordance with approved procedures.
- . An audit performed subsequent to procedure revisions concluded that the changes had been effectively implemented.
- . The constructor test program weaknesses were not related to startup test program weaknesses. The former were primarily administrative programmatic weaknesses. The latter were implementation weaknesses.

Based on the results of the licensee's surveillance and the inspector's review of previously compiled documentation, the inspector concurs in the conclusions reached by the licensee.

(Closed) Open Item (482/8426-01): This item tracked NRC acceptance of the licensee's proposal to qualify shift supervisory personnel to satisfy the requirements for performing shift technical advisor duties. Based on discussions with the Office of Nuclear Reactor Regulations (NRR), the licensee's program has been found acceptable.

(Closed) Open Item (482/8424-XX): This unnumbered item documented inspector concerns on failure mode testing of air operated valves. This concern was also expressed in NRC Inspection Report 50-482/84-30. This issue was reviewed and closed in NRC Inspection Report 50-482/84-43.

(Closed) Open Item (482/8455-09): This item tracked completion of certain Limitorque SB-2-80 valve operators with SB-1-60 operators as committed to in 10 CFR 50.55(e) Report TE53564-K146. The inspector verified replacement by review of the completed work documentation.

(Closed) SER Item (482/84-00-29): This item required that the Surveillance and Operations Coordinators, now titled the Operations Coordinators-Operations and the Operations Coordinators-Projects and Planning, have SRO licenses. The personnel occupying these positions are SRO licensed.

(Closed) SER Item (482/84-00-118): This item required incorporation of lead/lag time constants for reactor protection system functions into the Wolf Creek Technical Specifications. The inspector verified by review that time constants were incorporated in the Table 2.2-1 of the final draft copy of the Wolf Creek Technical Specifications.

(Closed) SER Item (482/84-00-113): This item required staff verification of acceptable accommodation of rod bow penalties. This issue was resolved as discussed in Supplement 3 to the Callaway SER. It is further discussed in the bases for Technical Specifications 3/4.2.2 and 3/4.2.3, "Heat Flux Hot Channel Factor, and RCS Flowrate and Nuclear Enthalpy Rise Hot Channel Factor," in the final draft of the Wolf Creek Technical Specifications.

(Closed) SER Item (482/84-00-124): This item required submittal of a plant specific analysis on the effects of a high energy line break on rod control systems outside containment. As discussed in Supplement Number 3 to the Callaway SER, a SNUPPS generic analysis was submitted and was found acceptable.

(Closed) SER Item (482/84-00-105): This item required submittal of letters of agreement with offsite emergency support organizations. The inspector reviewed the letters available which will be included in Revision 15 of the Emergency Plan and found them acceptable for the purposes of this item.

(Closed) SER Item (482/84-00-70): This item required that the licensee provide annual training for offsite emergency support organizations. Such training has been committed to by the offsite agencies as reflected in their letters of agreement.

3. 10 CFR 50.55(e) Reports

(Closed) Barton 752 Transmitters Key (TE53564-K135): This report documented an internal short circuiting problem in Barton 752 transmitters. The shorting condition was caused by a "stacking" of tolerances among the carrier plates, a circuit board trace on one of the plates, and the hold down lockwashers. It was noted that the shorted condition should be immediately apparent upon application of power to the transmitters. The inspectors noted that since the tolerances could be "stacked," if post installation movement of the affected components was to occur in response to a seismic event, for example, a shorted condition could develop. In response to the inspectors' comments, the licensee checked the torque on the fasteners for the affected components on all Barton 752 transmitters used in safety-related applications and verified that it was at a value which would preclude movement.

(Closed) GE AKR-30 and AKR-50 Circuit Breaker (TE53564-K52): This report documented potential bearing deformation in GE type AKR-30 and AKR-50 breakers with resultant inoperability. General Electric has modified 130 of the subject breakers at Wolf Creek by replacing the bearing assemblies. The inspector reviewed the documentation associated with the modification and found it acceptable.

(Closed) 3-Hour Fire Doors (TE53564-K140): This report documented the use of an improper fire door frame-to-wall sealant. The licensee has replaced the sealant with an approved sealant on all 3-hour rate fire door assemblies required per the 10 CFR 50.48 "Fire Hazards Analysis."

(Closed) Mechanical Shock Arrestors (TE53564-K151): This report documented discrepancies in the as installed dimensions of certain snubbers. As a result of the discovery of the situation the licensee performed a documentation review and field walkdown of mechanical snubbers. Additional discrepancies were identified. All discrepancies have been resolved either by rework or reevaluation. The inspector reviewed documentation of rework/reevaluation and found it acceptable.

(Closed) Polar Crane Testing (TE53564-K112): This report documented discrepancies in load testing of the containment polar crane. The inspector reviewed the disposition of these discrepancies and found it acceptable. The generic implications of this item are discussed in paragraph 2 of this report under closure of Noncompliance Item 482/8307-01.

4. IE BULLETINS (IEB) and Circulars (IEC)

(Closed) IEC (81-07): This IEC provided guidance on the minimum level of detectable radioactive contamination on materials to be used for control purposes. Wolf Creek procedural guidance on minimum detectability contained in Procedure HPH 03-011 is consistent with the IEC guidance.

(Closed) IEC (80-09): This IEC documented a case in which internal plant communications were disrupted by a loss of offsite power and electronic equipment was adversely affected by the use of portable radios. The IEC recommended that licensees review the power supplies for plant internal communications systems and upgrade those supplies as necessary to assure that the system will remain operable following a loss of offsite power. It further recommends that licensees perform an evaluation of the sensitivity of electronic equipment to portable radio transmissions. The Wolf Creek internal communication system is powered from either of two nonvital instrument busses both of which can be powered from the emergency diesel generators. The licensee has written and will perform prior to fuel load a special test to determine the sensitivity of electronic equipment to radio transmissions.

(Closed) IEC (80-07): This IEC documented problems with hydraulic actuators on high pressure coolant injection (HPCI) pumps at boiling water reactor facilities. While one of the Wolf Creek auxiliary feedwater pumps is turbine driven, the steam isolation valves are hydraulic actuator operated. As such, this IEC is not applicable to Wolf Creek.

(Closed) IEC (79-21): This IEC documents a number of instances in which uncontrolled releases of radioactive fluids have occurred in the nuclear industry. The IEC provides some general recommendations intended to minimize the potential for uncontrolled releases. The inspector verified that the licensee received the IEC and reviewed their systems for subject applicability.

(Closed) IEC (78-14): This IEC documented the failure of HPCI turbine components at the Peach Bottom facility. Specifically, broken cap screws and missing clamping plates which secure the turbine reversing chambers were discovered. The turbines were manufactured by Terry Turbine. The turbine for the Wolf Creek turbine driven auxiliary feedwater pump was manufactured by Terry Turbine; however, its design does not include reversing chambers. Hence, this IEC is not applicable to Wolf Creek.

(Closed) IEC (77-09): This IEC documented a fuse rating coordination problem at a boiling water reactor facility. According to the licensee, Wolf Creek does not rely on fuse coordination to ensure that safety functions will be satisfied.

(Closed) IEB (76-03): This IEB described failures of certain GE STD relays and prescribed corrective action. Wolf Creek does not use the subject relays.

(Closed) IEB (76-04): This IEB described failures of cold worked piping at boiling water reactor facilities and specifies certain actions for those facilities. While not applicable to Wolf Creek, the licensee determined that their specifications call for stainless steel piping undergoing cold bending to be subsequently re-solution annealed and water quenched, thereby eliminating the problem described in the IEB.

(Closed) IEB (76-05): This IEB describes failures of certain Westinghouse BFD relays and prescribes corrective action. The subject relays are not used at Wolf Creek.

(Closed) IEB (76-07): This IEB describes problems encountered with certain crane hoist control circuit configurations. Those configurations are not employed at Wolf Creek.

(Closed) IEB (78-08): This IEB describes the potential for personnel overexposures during fuel transfer operation between the refueling cavity and the spent fuel pool. Certain actions are prescribed to minimize the potential for this type of occurrence. This subject was addressed in Final Safety Analysis Report (FSAR) Question Q 331.2. In response to this question, the licensee stated that permanent shielding was installed around the fuel transfer tube to keep radiation levels acceptable. As such, no additional actions other than a radiation survey during refueling operations are required.

(Closed) IEB (84-02): This IEB describes failures of GE type HFA relays with lexan or nylon spools and specifies remedial actions. It further directs an evaluation of relays provided by other manufacturers for applicability of the problems described in the IEB. The licensee's response to this IEB, dated June 28, 1984, indicated that the subject relays were not employed at Wolf Creek; however, that response did not address the IEB requirement to "review the general concerns expressed in the bulletin for applicability" and, "if the general concerns apply," to, "describe the short term and long term corrective actions to be taken and the schedules thereof." This deficiency in their response was brought to the attention of the licensee by the inspector. The licensee subsequently sought resolution of the matter through the Standardized Nuclear Unit Power Plant System (SNUPPS) organization. By letter dated December 14, 1984, SNUPPS responded to the licensee. That response cited the fact that the basic concern of the IEB was environmental qualification of the subject relays and that equipment specifications for SNUPPS Class 1E equipment require vendors to environmentally qualify their products to IEEE 323-1974 which includes consideration of aging and qualified life. Hence, relay failure resulting from age-related degradation are not

expected to occur. This evaluation and response are considered acceptable for the purposes of the IEB. The licensee was cautioned to ensure that future IEB responses address all items specified.

(Closed) IEC (80-15): This IEC documented problems with voiding in the reactor vessel of pressurized water reactors during natural circulation cooldowns and specified that licensees pursue recommended actions to prevent such an occurrence. The licensee has in place the following procedures relative to the subject IEC:

- . EMG ES-04 - Natural Circulation Cooldown
- . EMG ES-06 - Natural Circulation Cooldown with Steam Void In Vessel (With Reactor Vessel Level Indicating System (RVLIS))
- . EMG ES-05 - Natural Circulation Cooldown With Steam Void In Vessel (Without RVLIS)

The NRC inspector reviewed these procedures and determined that compliance with EMG ES-04 should prevent void formation during natural circulation cooldown but that EMG ES-05 and 06 are adequate to control and recover from a situation in which void formation occurs.

(Closed) IEC (80-13): This IEC documented pressurized water reactor fuel damage due to grid strap interaction during refueling operations and recommends that licensees implement certain recommendations made by Westinghouse to minimize the potential for this type of occurrence. The licensee has implemented the recommendations in the following procedures as confirmed by inspector review of the procedures:

- . FHP 02-11 - Fuel Shuffle and Position Verification
- . FHP 03-001 - Refueling Machine Operating Instructions

(Closed) IEC (80-05): This IEC documented an event in which lubricating oil was improperly added to an operating emergency diesel generator. It recommends that licensees review their diesel generators for ease of oil addition during operation and verify that sufficient lubricating oil is maintained available to support 7-day operation of the diesel generators. The licensee's emergency diesel generator construction is such that oil can be added during operation. The point of addition is obvious. The licensee is currently maintaining a 20 barrel supply of oil onsite. This corresponds to an 8-day supply.

5. Independent Inspection

- a. By letter dated December 7, 1984, the licensee committed to four specific actions with respect to their shift advisor program. These actions were:

1. Procedure ADM 02-012 will be revised to specifically preclude shift advisors from giving shutdown or stopwork orders.
2. Monthly evaluations of shift advisors will be performed.
3. Shift advisors will receive physical examinations prior to initial criticality.
4. Shift advisors will participate in a requalification program including plant procedures, Technical Specifications, plant systems, and simulator experience.

The NRC inspector reviewed the status of the above actions and determined that they were in progress or scheduled. Based on this, further inspection in this area will not be required and this matter is considered closed.

- b. During the inspection period, the inspector reviewed the licensee's open items tracking system (OITS) to ascertain whether the list was inclusive of all items representing restraints to fuel loading and power ascension, to determine if identified items were being appropriately classified as to the type of constraint they represented, and to determine the total number of outstanding items. Based on a line item by line item review, the inspector determined that the list contained a total of 1764 items. Of these items, 1309 represent constraints to fuel load. Four hundred fifty-five of these items represent constraints on plant mode changes after fuel load. With a few minor exceptions, all items were appropriately classified, confirming the licensee's ability to categorize such items. The exceptions were corrected when pointed out to the licensee by the NRC inspector.

It was determined that the OITS does not include all outstanding work requests. The inspector expressed concern that this document is not comprehensive. The licensee responded to this concern by noting that work requests are separately tracked and categorized. The NRC inspector will review the work request tracking system to ensure that the licensee has properly categorized outstanding work requests. This will be tracked as an open item which must be closed prior to fuel load. (482/8504-02)

6. Preoperational Test Activities

For SU3-SA03, "Engineered Safeguards Verification Test," the NRC inspector verified completion of prerequisites on a sample basis, observed performance, and reviewed test data. Portions of Checklists EG-120 and BN-120 were verified by the NRC inspector. In comparing his verification to Checklist EG-120, completed by the licensee personnel, the NRC

inspector noted that the as-found positions for Valves EG-V413 and EG-V415 were not properly indicated by the persons completing the checklist. The inspector verified that the valves were locked closed as required by operating conditions and were logged as such in the licensee's locked valve log. This situation was discussed with the shift supervisor and Operations Superintendent. The Operations Superintendent advised the personnel who completed the checklist that they should have marked the as-found position of the valves before initialling the checklist. He also stated he would discuss the ambiguous data problem with other operations personnel to preclude recurrence. Because this appears to be an isolated documentation problem, no violation will be issued. The licensee was advised of minor labeling and component identification problems for appropriate corrective action.

The NRC inspector observed portions of the test requiring manual actuation of safety injection. A large number of personnel were involved in performance of this test. The test briefing was comprehensive and all individuals performed their duties efficiently and competently. The operators took appropriate and timely corrective action to compensate for isolated component failures. Test data and deficiencies were logged per administrative requirements.

No violations or deviations were identified.

7. Procedure Review

The NRC inspector reviewed the following procedures and, except as may be noted below, found them technically and administratively acceptable:

- . STS BN-205 - Borated Refueling Water Storage System Inservice Valve Test
- . STS AE-210 - Feedwater System Inservice Check Valve Test
- . ADM 01-029 - Annual Operating Report Instructions
- . STS MT-001 - Pressurizer Heater Verification
- . STS MT-003 - Containment Spray Systems Air Flow Test

8. TMI-2 Task Action Plan (TAP) Items

The following TAP items were reviewed by the NRC inspector and based on evaluations contained in the Wolf Creek Safety Evaluation Report and Supplements 1 through 4, discussions with the NPC Licensing Project Manager and review of procedures are considered closed:

- . I.A.1.1
- . I.C.8
- . II.E.1.1
- . II.E.4.2
- . III.A.1.1
- . I.C.6

TAP Item I.B.1.2 required the licensee to implement a five member ISEG to provide independent oversight and evaluation of plant operations. The licensee currently has in place a six member ISEG. This item is closed.

TAP Item II.K.3.1, "Installation and Testing of Power Operated Relief Valve Isolation System," was found acceptable based on system design in the Wolf Creek SER. The NRC inspector verified that the licensee had in place surveillance and calibration procedures to demonstrate system operability. This item is closed.

TAP Item II.E.4.1 specified certain requirements for control of hydrogen in containment. As addressed in NRC Inspection Report 50-482/84-26 the licensee has satisfied the requirements of this item by the installation of hydrogen recombiners inside containment. As noted in the referenced report the item remained open pending verification that the use of the hydrogen recombiners was appropriately referenced in emergency procedures. This verification has been completed as described in the closure of Open Item 482/8426-06B in paragraph 2 of this report. This TAP item is closed.

TAP Item II.B.4, "Training to Mitigate Core Damage," required licensees to implement a training program in core damage mitigation to be completed by licensed and certain other key personnel. As documented in NRC Inspection Reports 482/84-26 and 84-29, the licensee has implemented an acceptable program. All personnel required to receive the training had received it with the exception of the Plant Manager. The NRC inspector verified that the Plant Manager has satisfactorily completed the required training through self study and examination completion. This item is closed.

9. Preoperational Test Discrepancy Deferrals

The NRC inspector reviewed the following preoperation test discrepancy resolution deferral evaluations and determined that they were adequate to allow the plant to proceed beyond fuel loading without formal NRC approval. This determination is based on one of three considerations:

- . The discrepancy did not affect system operability or the overall acceptability of the preoperational test.
- . The discrepancy is associated with a test not committed to in the FSAR.
- . Evaluation of the discrepancy pursuant to 10 CFR 50.59 identified no unreviewed safety questions.

The deferrals reviewed were:

- . RD #17 - Steam Driven Auxiliary Feedwater Pump Speed Controller
- . RD #06 - Spent Fuel Pool Fill Line Vacuum Breaker
- . RD #15 - Secondary Sample System Closed Cooling Water Flow
- . RD #20 - Reactor Coolant System Final Vibration Report
- . RD #21 - Bechtel Final Report on Structural Integrity Test
- . RD #18 - Turbine Building Elevator

Additional deferrals were reviewed for which the NRC inspector had questions. These questions were such as to cause the inspector to question whether the criteria of 10 CFR 50.59 were being consistently and conservatively applied. Inspections in this are ongoing.

10. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the NRC, and which involve some action on the part of the NRC or licensee, or both. Open items disclosed during the inspection are discussed in paragraphs 2 and 5.

11. Exit Meeting

The NRC inspectors met with the licensee representatives denoted in paragraph 1 on January 14, 1985, to discuss the scope and findings of this inspection. The licensee acknowledged these findings.