



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

KANSAS GAS AND ELECTRIC COMPANY

KANSAS CITY POWER & LIGHT COMPANY

KANSAS ELECTRIC POWER COOPERATIVE, INC.

DOCKET NO. STN 50-482

WOLF CREEK GENERATING STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

License No. NPF-32

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for license filed by Kansas Gas and Electric Company, Kansas City Power & Light Company, and Kansas Electric Power Cooperative, Inc. (licensees), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Wolf Creek Generating Station, Unit No. 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-147 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission, (except as exempted from compliance in Section 2.D below);
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I, (except as exempted from compliance in Section 2D below);
 - E. Kansas Gas and Electric Company* is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

*Kansas Gas and Electric Company is authorized to act as agent for the Kansas City Power & Light Company and the Kansas Electric Power Cooperative, Inc., and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140 "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-32, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Based on the foregoing findings regarding this facility, Facility Operating License No. NPF-32 is hereby issued to Kansas Gas and Electric Company, Kansas City Power & Light Company, and Kansas Electric Power Cooperative, Inc. (the licensees) to read as follows:
- A. The license applies to the Wolf Creek Generating Station, Unit No. 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by Kansas Gas and Electric Company, Kansas City Power & Light Company, and Kansas Electric Power Cooperative, Inc. The facility is located in Coffey County, Kansas, approximately 28 miles east-southeast of Emporia, Kansas, and is described in the licensees' "Final Safety Analysis Report", as supplemented and amended, and in the licensees' Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Kansas Gas and Electric Company (KG&E), Kansas City Power & Light Company (KCPL) and Kansas Electric Power Cooperative, Inc. (KEPCO).
 - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50 "Domestic Licensing of Production and Utilization Facilities," KG&E, to possess, use and operate the facility at the designated location in Coffey County, Kansas, in accordance with the procedures and limitations set forth in this license;
 - (2) KCPL and KEPCO to possess the facility at the designated location in Coffey County, Kansas, in accordance with the procedures and limitations set forth in this license;

- (3) KG&E, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (4) KG&E, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) KG&E, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) KG&E, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

KG&E is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (170 megawatts thermal);

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. KG&E shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan;

(3) Antitrust Conditions

Kansas Gas & Electric Company and Kansas City Power & Light Company shall comply with the antitrust conditions delineated in Appendix C to this license.

(4) Environmental Qualification (Section 3.11, SSER #4, Section 3.11, SSER #5)*

All electrical equipment within the scope of 10 CFR 50.49 shall be qualified by November 30, 1985.

(5) Seismic and Dynamic Qualification (Section 3.10, SSER #5)

Prior to exceeding five percent of rated power, KG&E shall, for that equipment which is not completely qualified, complete such qualification or submit justification for safe operation at power levels greater than five percent.

(6) Fire Protection (Section 9.5.1, SER, Section 9.5.1.8, SSER #5)

- (a) KG&E shall maintain in effect all provisions of the approved fire protection program as described in the SNUPPS Final Safety Analysis Report for the facility through Revision 17, the Wolf Creek site addendum through Revision 15, and as approved in the SER through Supplement 5, subject to provisions b & c below.
- (b) KG&E may make no change to the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.
- (c) KG&E may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval, provided:
 - (i) such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59).

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

- (ii) such changes do not result in failure to complete the fire protection program approved by the Commission prior to license issuance.

KG&E shall maintain, in an auditable form, a current record of all such changes including an analysis of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, together with supporting analyses.

(7) Qualification of Personnel (Section 13.1.2, SSER #5, Section 18, SSER #1)

KG&E shall have on each shift operators who meet the requirements described in Attachment 2.

(8) NUREG-0737 Supplement 1 Conditions (Section ??, SER)

KG&E shall complete the requirements described in Attachment 3 to the satisfaction of the NRC. These conditions reference the appropriate items in Section 22, "TMI Action Plan Requirements for Applicants for Operating Licenses," in the Safety Evaluation Report and Supplements 1, 2, 3, 4, and 5 NUREG-0881.

(9) Post-Fuel-Loading Initial Test Program (Section 14, SER Section 14, SSER #5)

Any changes in the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(10) Inservice Inspection Program (Sections 5.2.4 and 6.6, SER)

Within nine months of the date of this license, KG&E shall submit for staff review and approval, the inservice inspection program which conforms to the ASME Code in effect 12 months prior to the date of issuance of this license.

(11) Emergency Planning

- (a) In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(b) Prior to exceeding five percent of rated power, letters of agreement shall be signed by Coffey County with ambulance services and with funeral directors in surrounding counties providing for the transportation of non-ambulatory patients from the Coffey County Hospital and from the Golden Age Lodge Nursing Home in the event of an emergency evacuation occasioned by an accident at the Wolf Creek Plant. These executed letters of agreement shall be submitted to the NRC staff and shall be included in the Coffey County Plan.

(12) Steam Generator Tube Rupture (Section 15.4.4, SSER #5)

Prior to restart following the first refueling outage, KG&E shall submit for NRC review and approval an analysis which demonstrates that the steam generator single-tube rupture (SGTR) analysis presented in the FSAR is the most severe case with respect to the release of fission products and calculated doses. Consistent with the analytical assumptions, the licensee shall propose all necessary changes to Appendix A to this license.

(13) Low Temperature Overpressure Protection (Section 5, SSER #5)

By June 1, 1985, KG&E shall submit for NRC review and approval a description of equipment modifications to the residual heat removal system (RHRS) suction isolation valves and to closure circuitry which conform to the applicable staff requirements (SRP 5.2.2). Within one year of receiving NRC approval of the modifications, KG&E shall have the approved modifications installed. Alternately, by June 1, 1985, KG&E shall provide acceptable justification for reliance on administrative means alone to meet the staff's RHRS isolation requirements, or otherwise, propose changes to Appendix A to this license which remove reliance on the RHRS as a means of low temperature overpressure protection.

(14) LOCA Reanalysis (Section 15.3.7, SSER #5)

Prior to restart following the first refueling outage, KG&E shall submit for NRC review and approval a reanalysis for the worst large break LOCA using an approved ECCS evaluation model. At this time that model is the 1981 Westinghouse model. A modified version of the 1981 model which includes the BART computer code may be used.

(15) Generic Letter 83-28

KG&E shall submit responses to and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in their November 15, 1983, February 29, 1984, and February 6, 1985 letters.

(16) Surveillance of Hafnium Control Rods (Section 4.2.3.1(10), SER and SSER #2)

KG&E shall perform a visual inspection of a sample of hafnium control rods during one of the first five refueling outages. A summary of the results of these inspections shall be submitted to the NRC.

- D. Exemptions from certain requirements of Appendix J to 10 CFR Part 50, and from a portion of the requirements of General Design Criterion 4 of Appendix A to 10 CFR Part 50, are described in the Safety Evaluation Report. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, these exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.
- E. KG&E shall fully implement and maintain in effect all provisions of the Commission approved Physical Security, Guard Training and Qualification, and Safeguards Contingency plans, including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plans, which contain Safeguards Information as described in 10 CFR 73.21 are collectively entitled "Wolf Creek Generating Station, Physical Security Plan Revision 0, transmitted by letter dated February 8, 1980, Revision 1, transmitted by letter dated September 8, 1981, Revision 2, transmitted by letters dated March 31, 1982 and April 30, 1982, Revision 3, transmitted by letter dated May 8, 1984, Revision 4, transmitted by letter dated August 15, 1984, Revision 5, transmitted by letter dated September 28, 1984, Revision 6, transmitted by letter dated November 30, 1984, Revision 7, transmitted by letter dated January 11, 1985, and Revision 8, transmitted by letter dated February 14, 1985; Safeguards Contingency Plan, Revision 0, transmitted by letter dated February 8, 1980, Revision 1, transmitted by letter dated September 8, 1981, Revision 2, transmitted by letters dated March 31, 1982 and April 30, 1982, (Revision 3 was not submitted), Revision 4, transmitted by letter dated August 22, 1984 (Revision 5 was not submitted), Revision 6, transmitted by letter dated November 30, 1984, Revision 7, transmitted by letter dated January 11, 1985 and Revision 8, transmitted by letter dated February 14, 1985; and the Security Training and Qualification Plan Revision 0, transmitted by letter dated July 30, 1981, Revision 1, transmitted by letters dated March 31, 1982, and April 30, 1982, (Revisions 2 through 5 were not submitted), Revision 6, transmitted by letter dated November 30, 1984, Revision 7, transmitted by letter dated January 11, 1985, and Revision 8, transmitted by letter dated February 14, 1985.

- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, the licensee shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written followup within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c) and (e).
- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as of the date of issuance and shall expire at Midnight on March 11, 2025.

FOR THE NUCLEAR REGULATORY COMMISSION

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Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachments/Appendices:

- 1. Attachment 1 - Tests and Other Items which must be Completed
- 2. Attachment 2 - Operating Staff Experience Requirements
- 3. Attachment 3 - NUREG-0737, Supplement 1, Requirements
- 4. Appendix A - Technical Specifications (NUREG-1104)
- 5. Appendix B - Environmental Protection Plan
- 6. Appendix C - Antitrust Conditions

Date of Issuance: MAR 11 1985

*See previous concurrences

DL:LB#1	DL:LB#1 <i>pow</i>	*DL:LB#1	*DE/SAB	SP	SP <i>Signature</i>
MRushbrook:es	PO'Connor	JStevens	AToalston	JSaltzman	IDinitz <i>letter</i>
02/ /85	02/19/85	01/8/85	01/8/85	02/ /85	02/ /85
*OELD	DL:LR#1	*AD:DL	D:DL <i>da</i>	D:NRB	
Karman	*BJYoungblood	TMNovak	HThompson	HDeCon	
01/10/85	01/24/85	01/31/85	03/1 /85	03/11 /85	

ATTACHMENT 1

1. Prior to achieving initial criticality, the licensee shall complete, to the satisfaction of Region IV, the following activities:
 - a. All outstanding test deficiencies and associated retesting from Radwaste System Preoperational Tests SU3-HA01, SU4-HB01, SU4-HB02, SU4-HC01, SU4-HC02, and SU4-HC04 shall be resolved consistent with system operability requirements. (482/8323-03, 04, 06, and 07)
 - b. The primary containment high radiation monitors shall be source checked and calibrated. (482/8406-04)
 - c. Establish by additional testing, the capability to close the pressurizer power operated relief valves following a pressure blowdown of approximately 200 psig starting at normal system operating pressure. (482/8455-04)
 - d. Verify that operating vibration of the turbine driven auxiliary feedwater pump is acceptable. (482/8509-01)
 - e. Resolve by test, the thermal expansion test discrepancies identified during the performance of Preoperational Test SU3-0004, "Power Conversion and ECCS Thermal Expansion Test." (482/8509-04)
 - f. Establish by test, the operability of process radiation monitors SJ-RE-01 (CVCS Letdown Monitor), GE-RE-92 (Condenser Air Discharge Monitor), and GH-RE-23 (Waste Gas Decay Tank Vent Monitor).
 - g. Preoperational testing and calibration of area, process and effluent radiation monitors. (482/8323-08, 09)
2. Prior to exceeding 5 percent of rated thermal power, the licensee shall complete, to the satisfaction of Region IV, the following activities:
 - a. Complete implementation of a radiochemistry training program for all required personnel. (482/8404-03)
 - b. Implementation and operability demonstration of the postaccident sampling system. (482/8404-07)
 - c. Demonstration of the ability to conduct timely shift augmentation. (482/8425-52)
 - d. Submit an evaluation demonstrating acceptable operation of ECCS, component cooling water, essential service water, and motor driven auxiliary feedwater pumps at the minimum electrical frequency allowed by Technical Specifications for the emergency diesel generators. (482/8459-06)

3. Prior to startup following the first refueling outage, the licensee shall complete, to the satisfaction of Region IV, the following activities:
 - a. Replace the emergency diesel generator lube oil keep warm pumps, with pumps satisfying ASME Section III Class 3 requirements.
(482/8455-01)

ATTACHMENT 2

Operating Staff Experience Requirements

KG&E shall have a licensed senior operator on each shift who has had at least six months of hot operating experience on a same type plant, including at least six weeks at power levels greater than 20% of full power, and who has had start-up and shutdown experience. For those shifts where such an individual is not available on the plant staff, an advisor shall be provided who has had at least four years of power plant experience, including two years of nuclear plant experience, and who has had at least one year of experience on shift as a licensed senior operator at a similar type facility. Use of advisors who were licensed only at the R0 level will be evaluated on a case-by-case basis. Advisors shall be trained on plant procedures, technical specifications and plant systems, and shall be examined on these topics at a level sufficient to assure familiarity with the plant. For each shift, the remainder of the shift crew shall be trained in the role of the advisors. The training of the advisors and remainder of the shift crew shall be completed prior to exceeding 5% power. Prior to exceeding 5% power, KG&E shall certify to the NRC the names of the advisors who have been examined and have been determined to be competent to provide advice to the operating shifts. These advisors, or fully trained and qualified replacements, shall be retained until the experience levels identified in the first sentence above have been achieved. The names of any replacement advisors shall be certified by KG&E prior to these individuals being placed on shift. The NRC shall be notified at least 30 days prior to the date KG&E proposes to release the advisors from further service.

ATTACHMENT 3

NUREG-0737, SUPPLEMENT 1, REQUIREMENTS

(1) Control Room Design Review (I.D.1, SSER #5)

Prior to May 1, 1985, KG&E shall submit for review and approval by the NRC staff, the results of the function and task analysis to identify control room operation tasks and information and control requirements during emergency operations. The results of the task analysis shall be compared to a control room inventory. For those Human Engineering Discrepancies (HEDs) identified by this analysis that require correction, the submittal shall include the proposed correction and implementation schedule; and for those HEDs for which no planned correction is proposed, a basis for that determination shall be documented.

(2) Functional and Task Analysis (I.C.1, SSER #5)

Prior to startup following the first refueling outage, KG&E shall submit for staff review and approval, a description of the process used to complete the functional and task analysis, including a description and justification for all information and control deviations from the Westinghouse Owners Group Emergency Response Guidelines, Revision 1.

(3) Emergency Response Capabilities (Generic Letter 82-33, Supplement 1 to NUREG-0737)

Prior to restart following the first refueling outage, KG&E shall have a fully functional Technical Support Center and Emergency Operations Facility and a fully operable Emergency Response Facilities Information System (ERFIS).

(4) Regulatory Guide 1.97 (Section 7.5.2.3, SSER #3)

Prior to restart following the first refueling outage, KG&E shall have installed and operable the following instrumentation.

- (a) Source range instrumentation qualified to post-accident conditions
- (b) Reactor vessel water level instrumentation
- (c) Subcooling monitors
- (d) Radiation monitors for releases from steam generator safety/relief valves or atmospheric dump valves, and
- (e) Auxiliary feedwater pump turbine exhaust monitor