

October 13, 1987

Docket No. 50-482

Mr. Bart D. Withers  
President and Chief Executive Officer  
Wolf Creek Nuclear Operating Corporation  
Post Office Box 411  
Burlington, Kansas 66839

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TAlexion	

Dear Mr. Withers:

SUBJECT: WOLF CREEK GENERATING STATION - AMENDMENT NO. 10 TO FACILITY  
OPERATING LICENSE NO. NPF-42 (TAC NO. 65672)

The Commission has issued the enclosed Amendment No. 10 to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The amendment consists of changes to the Technical Specifications in response to your application dated June 19, 1987.

The amendment revises Wolf Creek Generating Station (WCGS) Technical Specification 3/4.3.3, Radiation Monitoring for Plant Operation. The proposed revision changes the required number of minimum channels OPERABLE for Table 3.3-6 Functional Unit 1.a., Containment Atmosphere - Gaseous Radioactivity High (GT-RE 31 & 32). The requested revision also modifies ACTIONS 27 and 30 of Table 3.3-6 to permit an allowed outage time of 72 hours with the number of OPERABLE channels one less than the minimum channels OPERABLE requirement.

A copy of our related Safety Evaluation is enclosed. The notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

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Paul W. O'Connor, Project Manager  
Project Directorate - IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

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Enclosures:

1. Amendment No. 10 to License No. NPF-42
2. Safety Evaluation

cc w/enclosures:

See next page

LTR NAME: WOLF CREEK AMEND TAC 65672			
PD4-LA <i>on</i>	PD4-PM <i>PWC</i>	<i>OGC</i>	PD4-D <i>MC</i>
PNoonan	PO'Connor		JCalvo
10/5/87	10/13/87	10/9/87	10/13/87

Mr. Bart D. Withers  
Wolf Creek Nuclear Operating Corporation

Wolf Creek Generating Station  
Unit No. 1

cc:

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

KANSAS GAS & ELECTRIC COMPANY

KANSAS CITY POWER AND LIGHT COMPANY

KANSAS ELECTRIC POWER COOPERATIVE, INC.

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 10  
License No. NPF-42

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Wolf Creek Generating Station (the facility) Facility Operating License No. NPF-42 filed by Kansas Gas and Electric Company acting for itself and Kansas City Power and Light Company and Kansas Electric Power Cooperative, Inc., (licensees) dated June 19, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment 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;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-42 is hereby amended to read as follows:

2. Technical Specification

The Technical Specifications contained in Appendix A, as revised through Amendment No. 10, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. KG&E shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Jose A. Calvo*

Jose A. Calvo, Director  
Project Directorate - IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 13, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 10

FACILITY OPERATING LICENSE NO. NPF-42

DOCKET NO. 50-482

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE PAGES

3/4 3-40  
3/4 3-41

INSERT PAGES

3/4 3-40  
3/4 3-41

## INSTRUMENTATION

### 3/4.3.3 MONITORING INSTRUMENTATION

#### RADIATION MONITORING FOR PLANT OPERATIONS

##### LIMITING CONDITION FOR OPERATION

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3.3.3.1 The radiation monitoring instrumentation channels for plant operations shown in Table 3.3-6 shall be OPERABLE with their Alarm/Trip Setpoints within the specified limits.

APPLICABILITY: As shown in Table 3.3-6.

##### ACTION:

- a. With a radiation monitoring channel Alarm/Trip Setpoint for plant operations exceeding the value shown in Table 3.3-6, adjust the Setpoint to within the limit within 4 hours or declare the channel inoperable.
- b. With one or more radiation monitoring channels for plant operations inoperable, take the ACTION shown in Table 3.3-6.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

##### SURVEILLANCE REQUIREMENTS

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4.3.3.1 Each radiation monitoring instrumentation channel for plant operations shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and ANALOG CHANNEL OPERATIONAL TEST for the MODES and at the frequencies shown in Table 4.3-3.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS

WOLF CREEK - UNIT 1

3/4 3-40

Amendment No. 10

<u>FUNCTIONAL UNIT</u>	<u>CHANNELS TO TRIP/ALARM</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>ACTION</u>
1. Containment					
a. Containment Atmosphere-Gaseous Radioactivity-High (GT-RE-31 & 32)	1	1	All	###	26
b. Gaseous Radioactivity-RCS Leakage Detection (GT-RE-31 & 32)	N.A.	1	1, 2, 3, 4	N.A.	29
c. Particulate Radioactivity-RCS Leakage Detection (GT-RE-31 & 32)	N.A.	1	1, 2, 3, 4	N.A.	29
2. Fuel Building					
a. Fuel Building Exhaust-Gaseous Radioactivity-High (GG-RE-27 & 28)	1	2	**	##	30
b. Criticality-High Radiation Level					
1) Spent Fuel Pool (SD-RE-37 or 38)	1	1	*	≤ 15 mR/h	28
2) New Fuel Pool (SD-RE-35 or 36)	1	1	*	≤ 15 mR/h	28
3. Control Room					
Air Intake-Gaseous Radioactivity-High (GK-RE-04 & 05)	1	2	All	#	27

TABLE 3.3-6 (Continued)

TABLE NOTATIONS

- \*With fuel in the respective fuel storage pool.
- \*\*With irradiated fuel in the fuel storage areas or fuel building.
- #Trip Setpoint concentration value ( $\mu\text{Ci}/\text{cm}^3$ ) is to be established such that the actual submersion dose rate would not exceed 2 mR/h in the control room.
- ##Trip Setpoint concentration value ( $\mu\text{Ci}/\text{cm}^3$ ) is to be established such that the actual submersion dose rate would not exceed 4 mR/h in the fuel building.
- ###Trip Setpoint concentration value ( $\mu\text{Ci}/\text{cm}^3$ ) is to be established such that the actual submersion dose rate would not exceed 9 mR/h in the containment building. The Setpoint value may be increased up to the equivalent limits of Specification 3.11.2.1 in accordance with the methodology and parameters in the ODCM during containment purge or vent provided the Setpoint value does not exceed twice the maximum concentration activity in the containment determined by the sample analysis performed prior to each release in accordance with Table 4.11-2.

ACTION STATEMENTS

- ACTION 26 - With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge valves are maintained closed.
- ACTION 27 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, isolate the Control Room Emergency Ventilation System and initiate operation of the Control Room Emergency Ventilation System in the recirculation mode within 72 hours, or with no OPERABLE channels within 1 hour.
- ACTION 28 - With less than the Minimum Channels OPERABLE requirement, operation may continue for up to 30 days provided an appropriate portable continuous monitor with the same Alarm Setpoint is provided in the fuel area. Restore the inoperable monitors to OPERABLE status within 30 days or suspend all operations involving fuel movement in the fuel building.
- ACTION 29 - Must satisfy the ACTION requirements for Specification 3.4.6.1.
- ACTION 30 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, isolate the Fuel Building Ventilation System and initiate operation of the Emergency Exhaust System to maintain the fuel building at a negative pressure within 72 hours, or with no OPERABLE channels within 1 hour.



TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION FOR PLANT  
OPERATIONS SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. Containment				
a. Containment Atmosphere-Gaseous Radioactivity-High (GT-RE-31 & 32)	S	R	M	All
b. Gaseous Radioactivity-RCS Leakage Detection (GT-RE-31 & 32)	S	R	M	1, 2, 3, 4
c. Particulate Radioactivity - RCS Leakage Detection (GT-RE-31 & 32)	S	R	M	1, 2, 3, 4
2. Fuel Building				
a. Fuel Building Exhaust-Gaseous Radioactivity-High (GG-RE-27 & 28)	S	R	M	**
b. Criticality-High Radiation Level				
1) Spent Fuel Pool (SD-RE-37 & 38)	S	R	M	*
2) New Fuel Pool (SD-RE-35 & 36)	S	R	M	*
3. Control Room				
Air Intake-Gaseous Radioactivity-High (GK-RE-04 & 05)	S	R	M	All

\*With fuel in the respective fuel storage pool.

\*\*With irradiated fuel in the fuel storage areas or fuel building.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 10 TO FACILITY OPERATING LICENSE NO. NPF-42

KANSAS GAS & ELECTRIC COMPANY

KANSAS CITY POWER AND LIGHT COMPANY

KANSAS ELECTRIC POWER COOPERATIVE, INC.

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

INTRODUCTION

By letter dated June 19, 1987 the Wolf Creek Nuclear Operating Corporation proposed changes to the Technical Specifications. Those changes would: (1) reduce the number containment atmosphere gaseous radioactivity monitors required to be operable from two to one, and (2) increase from 1 hour to 72 hours the permitted period of inoperability for one channel of both the control room air intake monitors and the fuel handling building atmosphere monitors.

EVALUATION

The two containment atmosphere gaseous radioactivity monitors serve two principal purposes. They isolate containment and the control room if radioactivity levels are too high and, at lower levels, they aid in the detection of RCS leakage. The Standard Technical Specifications (NUREG-0452) requirement is that one of these monitors be operable or that the containment purge valves be closed. One operable monitor is adequate because other instruments provide redundancy. The present requirement of the Wolf Creek Technical Specifications is that both channels be operable for the purge valves to remain open. The staff concludes that other monitors provide the necessary redundancy at Wolf Creek and that safety requirements can be met by requiring a single channel be operable. It was also noted that the present requirement (that the purge valves be closed unless both monitors are operable) has an adverse effect on radiation control. That is, during cold shutdown when work is being performed inside containment, closing the purge valves causes releases to be unmonitored and unfiltered and it causes occupational exposure to be increased. Therefore the change in number of channels operable is acceptable.

The purpose of the control room air intake gaseous radioactivity monitors is to automatically place the control room ventilation system in the emergency mode of operation if radiation levels are too high. The Standard Technical Specifications permit the system to continue to operate in

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the normal mode with one operable monitor. The Wolf Creek Technical Specifications permit only one hour of normal operation when only 1 monitor is operable. The staff finds that the monitors are redundant so a single monitor meets the safety requirements. Furthermore, the present requirement tends to cause excessive use of the emergency system and thereby to reduce the probability of it serving its intended purpose in an emergency. Therefore it is acceptable to change the time period for operating in the normal mode with one operable monitor from 1 to 72 hours.

The main purpose of the fuel handling building exhaust gaseous radioactivity monitors is to initiate isolation of the fuel handling building and to initiate operation of the emergency exhaust system in the event of a fuel handling accident. The Standard Technical Specification requires operation of the emergency exhaust system if fuel movement is to continue with the monitor inoperable. The present Wolf Creek Technical Specifications require both monitors to be operable and provide only 1 hour in which to actuate the emergency exhaust system if either monitor becomes inoperable. The staff finds that the safety requirements are met by a single operable monitor because during fuel movement the requisite redundancy is provided by portable instruments. Therefore it is acceptable to change the time period for operating in the normal exhaust mode from one hour to 72 hours.

#### ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and in a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: October 13, 1987

Principal Contributors: Charles Willis  
Paul O'Connor