

Docket No.: 50-482

October 30, 1986

Mr. Glenn L. Koester  
Vice President - Nuclear  
Kansas Gas and Electric Company  
201 North Market Street  
Post Office Box 208  
Wichita, Kansas 67201

Dear Mr. Koester:

SUBJECT: WOLF CREEK GENERATING STATION - AMENDMENT NO. 3 TO FACILITY  
OPERATING LICENSE NPF-42

The Commission has issued the enclosed Amendment No. 3 to Facility Operating License NPF-42 for the Wolf Creek Generating Station. The amendment is in response to your application dated August 13, 1986.

This amendment modifies the Technical Specifications to delete the maximum uranium weight per fuel rod value.

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

Sincerely,

Paul W. O'Connor, Project Manager  
PWR Project Directorate #4  
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 3 to License No. NPF-42
2. Safety Evaluation

cc w/enclosures:  
See next page

PWR#4/DPWR-A  
MDuncan/rad  
09/30/86

*pwo*  
PWR#4/DPWR-A  
PO'Connor  
09/17/86

*DWalt*  
PWR#4/DPWR-A  
BJYoungblood  
09/24/86

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P PDR

October 30, 1986

AMENDMENT NO. 3 TO FACILITY OPERATING LICENSE NPF-42 -  
WOLF CREEK GENERATING STATION

DISTRIBUTION: w/enclosures:

Docket No. 50-482  
NRC PDR  
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PWR#4 R/F  
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R. Diggs, ADM  
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Mr. Glenn L. Koester  
Kansas Gas and Electric Company

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. 3  
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 August 13, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as 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 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 set forth in 10 CFR Chapter I;
  - 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;
  - 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. 3, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into 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

Paul W. O'Connor, Project Manager  
PWR Project Directorate No. 4  
Division of PWR Licensing-A

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 30, 1986

<i>W</i>	<i>CWB</i>
FOB/DPWR-A	<del>RSB</del> /PWR-A
VBenaroya	CBerlinger
10/24/86	10/24/86

<i>rwol</i>	
PWR#4/DPWR-A	PWR#4/DPWR-A
<i>MDuncan/rad</i>	PO'Connor
10/17/86	10/17/86
<i>BJYoungblood</i>	
PWR#4/DPWR-A	
BJYoungblood	
10/24/86	

~~RSB  
LBell~~

~~RSB  
CBerlinger~~

OGC-Beth  
*J. Karman*  
*[Signature]* 10/2/86

ATTACHMENT TO LICENSE AMENDMENT NO. 3

OPERATING LICENSE NO. NPF-42

DOCKET NO. 50-482

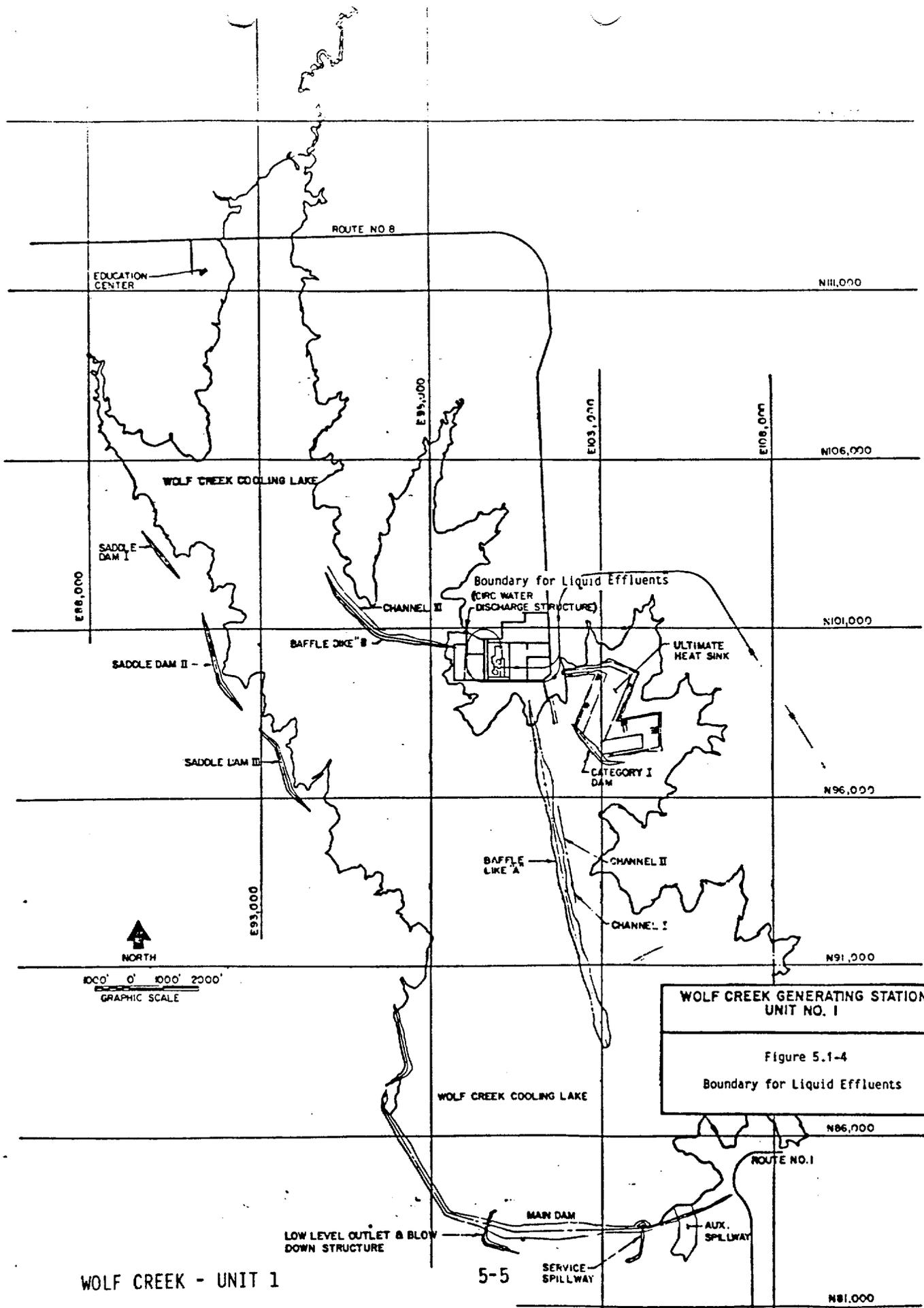
Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised page is identified by the captioned amendment number and contains marginal lines indicating the area of change. The corresponding overleaf page is also provided to maintain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

AMENDED PAGE

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OVERLEAF PAGE

5-5



**WOLF CREEK GENERATING STATION  
UNIT NO. 1**

Figure 5.1-4  
Boundary for Liquid Effluents

WOLF CREEK - UNIT 1

5-5

## DESIGN FEATURES

### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum nominal enrichment of 3.10 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 3.50 weight percent U-235.

#### CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 53 full-length and no part-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 142 inches of absorber material. All control rods shall be hafnium, clad with stainless steel tubing.

### 5.4 REACTOR COOLANT SYSTEM

#### DESIGN PRESSURE AND TEMPERATURE

- 5.4.1 The Reactor Coolant System is designed and shall be maintained:
- In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
  - For a pressure of 2485 psig, and
  - For a temperature of 650°F, except for the pressurizer which is 680°F.

#### VOLUME

5.4.2 The total volume of the Reactor Coolant System, including pressurizer and surge line, is 12,135 ± 100 cubic feet at a nominal  $T_{avg}$  of 557°F.

### 5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 3 TO 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 from Glenn Koester to the NRC dated August 13, 1986, Kansas Gas and Electric Company requested changes to Operating License NPF-42.

At present the Design Features Section 5.3.1, Fuel Assemblies, of the Wolf Creek Technical Specifications identifies a maximum total fuel rod weight of 1,766 grams of uranium. Recent changes by Westinghouse to the fuel design, including chamfered pellets with a reduced dish and use of the integrated dry route process, have increased fuel weights slightly. The proposed change will delete the weight limits from the Technical Specifications to allow use of the slightly heavier fuel.

EVALUATION

The important safety related parameters which are indirectly affected by fuel weight, such as reactor criticality, power level, power distribution and the rate of decay heat production, are all regulated by requirements in the Limiting Condition for Operation sections of the Technical Specification. In addition, the fuel weight is implicitly included in the nuclear design analysis performed for each reactor operating cycle and used to evaluate conformance with established limits for Design Basis Events. For small fuel weight increases without a significant change in fuel design, there is no impact on the safety analysis. A significant change in the fuel design would be the subject of review and changes to the other governing Technical Specifications or may be an unreviewed safety question as defined in 10 CFR 50.59.

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We therefore conclude that there will be no significant safety impact in deleting the maximum fuel weight from Technical Specification 5.3.1. We also find this action preferable to changing the Specification each cycle to accommodate the applicant weight, or to specifying an artificial upper value of the weight to bound future variations. The proposed change is, therefore, acceptable.

#### ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. 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 exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 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 this 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (51 FR 32270) on September 10, 1986, and consulted with the state of Kansas. No public comments were received, and the state of Kansas did not have any comments.

Principal Contributors: Paul W. O'Connor, PAD#4  
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C. Berlinger, RSB

Dated: October 30, 1986