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UNITED STATES

August 27, 1992

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

Dear Mr. Withers:

SUBJECT: WOLF CREEK GENERATING STATION - ISSUANCE OF AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NPF-42 (TAC NO. M84257)

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 17, 1992.

The amendment changes the Appendix A Technical Specifications by adding a footnote to Note 11 of Table 4.3-1 which states that the complete verification of the operability of the shunt trip relay circuitry shall be implemented prior to Wolf Creek's startup from the first shutdown to Mode 3 occurring after August 14, 1992. The change was required due to the discovery that the existing surveillance procedure does not adequately verify the operability of the shunt trip contacts associated with the manual reactor trip function.

Your letter dated August 17, 1992, requested that this amendment be treated as an emergency because insufficient time exists for the Commission's usual 30day notice without Wolf Creek being required to shutdown due to the inability to perform the surveillance procedure with the unit in operation.

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A Temporary Waiver of Compliance was issued to cover the period from the discovery of this discrepancy on August 14, 1992, until this emergency TS amendment could be reviewed and issued.

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# Mr. Bart D. Withers

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A copy of the Safety Evaluation supporting the amendment is also enclosed. The Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for a Hearing will be included in the Commission's next biweekly <u>Federal Register</u> notice.

### Sincerely,

### Original Signed By

William D. Reckley, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

| Enclosures:          |           |
|----------------------|-----------|
| 1. Amendment No. 55  | to NPF-42 |
| 2. Safety Evaluation |           |
| -                    |           |
| cc w/enclosures:     |           |
| see next page        |           |
|                      |           |

| DISTRIBUTION<br>Docket File<br>NRC PDR<br>Local PDR<br>PDIV-2 R/F<br>BBoger<br>MVirgilio<br>EPeyton<br>WReckley(2)<br>OGC | GHill (4)<br>Wanda Jones<br>CGrimes<br>PDIV-2 P/F<br>ACRS (10)<br>PA<br>ARM/LFMB<br>AHowell, Region IV<br>DHagan |
|---|--|
| OGC   | DHagan   |
| OC/LFMB   | RWharton   |
| SNewberry   |  |

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| DATE   | 8/29/92   | 8/20/92    | 8/24/92            | 8/24/92   | 8/25/92 |

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### Mr. Bart D. Withers

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cc w/enclosures: Jay Silberg, Esq. Shaw, Pittman, Potts & Trowbridge 2300 N Street, NW Washington, D.C. 20037

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Robert Eye, General Council Kansas Department of Health and Environment LSOB, 9th Floor 900 SW Jackson Topeka, Kansas 66612



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

# WOLF CREEK NUCLEAR OPERATING CORPORATION

# WOLF CREEK GENERATING STATION

# DOCKET NO. 50-482

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55 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 the Wolf Creek Nuclear Operating Corporation (the Corporation), dated August 17, 1992, 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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- 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. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 55, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

ili\_D Reckley\_ for

Suzanne C. Black, Director Project Directorate IV-2 Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 27, 1992

### ATTACHMENT TO LICENSE AMENDMENT NO. 55

# 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 page is also provided to maintain document completeness.

### REMOVE

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### INSERT

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# TABLE 4.3-1

# REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| <u>Fun</u><br>18. | <u>CTIONAL UNIT</u><br>Reactor Trip System Interloc | CHANNEL<br><u>CHECK</u><br>ks (Contir | CHANNEL<br><u>CALIBRATION</u><br>nued) | ANALOG<br>CHANNEL<br>OPERATIONAL<br>TEST | TRIP<br>ACTUATING<br>DEVICE<br>OPERATIONAL<br>TEST | ACTUATION<br>LOGIC TEST | MODES FOR<br>WHICH<br>SURVEILLANCE<br>IS REQUIRED |
|-------------------|---|---------------------------------------|--|--|--|-------------------------|---|
|                   | d. Power Range<br>Neutron Flux, P-10                | N.A.                                  | R(4)                                   | R  | N.A.   | N. A.                   | 1, 2  |
|                   | e. Turbine Impulse Chamber<br>Pressure, P-13        | N. A.                                 | R                                      | R  | N. A.  | N. A.                   | 1   |
| 19.               | Reactor Trip Breaker                                | N.A.                                  | N.A.                                   | N.A.                                     | M(7, 16)   | N. A.                   | 1, 2, 3*, 4*, 5*                                  |
| 20.               | Automatic Trip and<br>Interlock Logic               | N.A.                                  | N.A.                                   | N. A.                                    | N. A.  | M (7)                   | 1, 2, 3*, 4*, 5*                                  |
| 21.               | Reactor Trip Bypass Breaker                         | N.A.                                  | N. A.                                  | N.A.                                     | M(17),R(18)  | N.A.                    | 1, 2, 3*, 4*, 5*[                                 |

WOLF CREEK - UNIT 1

3/4 3-11

## TABLE 4.3-1 (Continued)

### TABLE NOTATIONS

\*Only if the Reactor Trip System breakers happen to be closed and the control rod drive system is capable of rod withdrawal.

##Below P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.

###Below P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

- (1) If not performed in previous 31 days.
- (2) Comparison of calorimetric to excore power indication above 15% of RATED THERMAL POWER. Adjust excore channel gains consistent with calorimetric power if absolute difference is greater than 2%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (3) Single point comparison of incore to excore AXIAL FLUX DIFFERENCE above 15% of RATED THERMAL POWER. Recalibrate if the absolute difference is greater than or equal to 3%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (4) Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (5) Detector plateau curves shall be obtained, evaluated and compared to manufacturer's data. For the Intermediate Range and Power Range Neutron Flux channels the provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (6) Incore Excore Calibration, above 75% of RATED THERMAL POWER. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (7) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (9) Quarterly surveillance in MODES 3\*, 4\* and 5\* shall also include verification that permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window. Quarterly surveillance shall include verification of the Boron Dilution Alarm Setpoint of less than or equal to an increase of twice the count rate within a 10-minute period.
- (10) Setpoint verification is not required.
- \*\*(11) The TRIP ACTUATING DEVICE OPERATIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip circuits for the Manual Reactor Trip Function. The test shall also verify the OPERABILITY of the Bypass Breaker trip circuit(s).
  - (12) At least once per 18 months during shutdown, verify that on a simulated Boron Dilution Doubling test signal the normal CVCS discharge valves will close and the centrifugal charging pumps suction valves from the RWST will open within 30 seconds.

WOLF CREEK - UNIT 1

<sup>\*\*</sup>Complete verification of OPERABILITY of the manual reactor trip switch circuitry shall be performed prior to startup from the first shutdown to Mode 3 occurring after August 14, 1992.

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



# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-42 WOLF CREEK NUCLEAR OPERATING CORPORATION

# WOLF CREEK GENERATING STATION

# DOCKET NO. 50-482

# 1.0 INTRODUCTION

By application dated August 17, 1992, Wolf Creek Nuclear Operating Corporation (the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-42) for the Wolf Creek Generating Station. The proposed changes would add a footnote to Note 11 of Table 4.3-1 which states that the complete verification of the operability of the shunt trip relay circuitry shall be implemented prior to the unit's startup from the first shutdown to Mode 3 (Hot Standby) occurring after August 14, 1992. The change was required due to the discovery that the existing surveillance procedure does not adequately verify the operability of the shunt trip contacts associated with the manual reactor trip function. However, since the surveillance procedure can be performed only during shutdown conditions, it was requested that the amendment allow continued operation unit until the next shutdown to Mode 3.

## 2.0 EVALUATION

The design of the Wolf Creek Generating Station manual trip function includes both undervoltage and shunt trip actuating devices to provide redundant mechanisms to open the reactor trip breakers. The shunt trip contacts which result in energizing the shunt trip coil and opening of the reactor trip breaker include those closed by the reactor trip and safety injection handswitches and an additional contact which closes when the auto shunt trip relay "STA" is de-energized by the opening of the undervoltage contacts. The existing surveillance procedure utilized at the Wolf Creek Generating Station included the measurement of voltage across the shunt trip coil but did not include re-opening of the contact closed by the "STA" auto shunt trip relay. With the contact closed, it was not possible to verify that the contacts associated with the handswitches had also closed and therefore the procedure failed to adequately verify the shunt trip feature as required by Technical Specification 4.3.1.1. This discrepancy was discovered during a review of industry operation experience and discussions with several plants which had discovered similar procedural deficiencies.

The proposed Technical Specification change would allow continued operation of the Wolf Creek Generating Station until a revised surveillance procedure is performed prior to start-up from the next shutdown to Mode 3. The revised procedure would individually verify the operability of the manual trip function shunt trip contacts. Generic Letter 85-09 describes the precautions which are applicable to testing of the manual shunt trip contacts and which will be incorporated into the licensee's revised procedure.

The Wolf Creek Generating Station reactor protection system is highly reliable and it is unlikely that a manual trip would be required to mitigate an anticipated or design basis event. In addition, although the surveillance procedure has been incomplete, there is no reason to believe that any element of the manual trip function is inoperable. The manual shunt trip circuitry tested satisfactorily during pre-operational testing. Additional confidence is provided by the fact that the manual trip function has performed as expected when called upon. The redundancy of the reactor trip system also ensures that a failure of any single manual shunt trip contact would not prevent a successful manual trip resulting from the undervoltage relays or manual shunt trip associated with the second manual trip handswitch.

Based upon its review, the staff finds the proposed change to the surveillance requirements for testing of the manual shunt trip circuitry does not have a significant safety impact and is therefore acceptable.

#### 3.0 EMERGENCY CIRCUMSTANCES

In the letter dated August 17, 1992, the licensee requested that this amendment application be treated as an emergency because unless approved, the Technical Specifications would require a plant shutdown. Operation from August 14, 1992, until the completion of the NRC review of this proposed amendment was covered by a Temporary Waiver of Compliance.

Regarding the timeliness of the licensee's submittal, the discrepancy between the Technical Specification surveillance requirements and the existing surveillance procedure was determined to render the manual trip function inoperable on August 14, 1992. Upon determining that the surveillance procedure was inadequate to satisfy the Technical Specifications, the licensee requested and received a Temporary Waiver of Compliance verbally on August 14, 1992. By letters of August 17, 1992, the licensee requested the Temporary Waiver of Compliance and a Technical Specification change on an emergency basis.

Accordingly, pursuant to 10 CFR 50.91(a)(5), the Commission has determined that there are emergency circumstances warranting prompt approval of the proposed change.

# 4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of that facility in accordance with the amendment would not:

- 1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- 2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3. Involve a significant reduction in a margin of safety.

This amendment has been evaluated against the standards in 10 CFR 50.92. It does not involve a significant hazards consideration because:

- 1. The change would not involve a significant increase in the probability or consequences of an accident previously evaluated. Delaying the implementation of the surveillance requirement involves no physical modification of the facility, nor does it affect any operational parameters. The accident analyses in Chapter 15 of the Updated Final Safety Analysis Report (UFSAR) do not take credit for the manual trip function and are therefore not affected by the proposed change. The reliablity and redundancy associated with the reactor protection system provide a high confidence that the reactor can be successfully tripped even if the contacts affected by the procedural inadequacy failed.
- 2. The change would not create the possibility of a new or different kind of accident from any accident previously evaluated. No physical changes to the plant or changes to operating parameters are proposed. Those accidents which might involve failure of the manual shunt trip function are bounded by those performed to evaluate the failure of the reactor protection system.
- 3. The change would not involve a significant reduction in a margin of safety. It is likely that the manual shunt trip function would perform and there is no adverse safety impact involved in delaying the performance of the required surveillance. In the case where the manual shunt trip function is assumed to be inoperable, the margin of safety is maintained by redundant features of the reactor protection system and procedures addressing failures of the protection system.

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### 5.0 STATE CONSULTATION

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In accordance with the Commission's regulations, the Kansas State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC 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 made a final no significant hazards consideration finding with respect to this amendment. Accordingly, the 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 the amendment.

### 7.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: William D. Reckley

Date: August 27, 1992