

February 10, 1997

Mr. Neil S. Carns  
President and Chief Executive Officer  
Wolf Creek Nuclear Operating Corporation  
Post Office Box 411  
Burlington, Kansas 66839

SUBJECT: WOLF CREEK GENERATING STATION - AMENDMENT NO. 104 TO FACILITY  
OPERATING LICENSE NO. NPF-42 (TAC NO. M94283)

Dear Mr. Carns:

The Commission has issued the enclosed Amendment No. 104 to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated December 13, 1995, as supplemented by letter dated October 10, 1996.

The amendment revises the 125-volt D.C. Sources (3.8.2.1 and 3.8.2.2) and Onsite Power Distribution (3.8.3.1 and 3.8.3.2) TS to include provisions for installed spare battery chargers, which will be added to the plant design before startup from the ninth refueling outage.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original Signed By

James C. Stone, Senior Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosures: 1. Amendment No. 104 to NPF-42  
2. Safety Evaluation

cc w/encls: See next page

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Mr. Neil S. Carns

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February 10, 1997

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104  
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 December 13, 1995, as supplemented by letter dated October 10, 1996, 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.

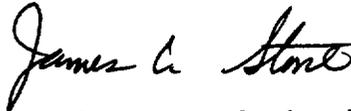
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-42 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 104, 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 and shall be implemented prior to startup from the ninth refueling outage, currently scheduled to begin in September 1997.

FOR THE NUCLEAR REGULATORY COMMISSION



James C. Stone, Senior Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: February 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 104

FACILITY OPERATING LICENSE NO. NPF-42

DOCKET NO. 50-482

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

3/4 8-9  
3/4 8-12  
3/4 8-13  
3/4 8-15

INSERT

3/4 8-9  
3/4 8-12  
3/4 8-13  
3/4 8-15

## ELECTRICAL POWER SYSTEMS

### 3/4.8.2 D.C. SOURCES

#### OPERATING

#### LIMITING CONDITION FOR OPERATION

---

3.8.2.1 As a minimum, the following D.C. electrical sources shall be OPERABLE:

- a. 125 Volt Batteries NK11 and NK13 and associated Full Capacity Chargers NK21, NK23, or installed spare NK25 (powered from NG01), and
- b. 125 Volt Batteries NK12 and NK14 and associated Full Capacity Chargers NK22, NK24, or installed spare NK26 (powered from NG04).

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTION:

With one of the required battery banks and/or full capacity chargers inoperable, restore the inoperable battery bank and/or full capacity charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.8.2.1 Each 125-volt battery bank and connected charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
  - 1) The parameters in Table 4.8-2 meet the Category A limits, and
  - 2) The total battery terminal voltage is greater than or equal to 130.2 volts on float charge.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

---

- b. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 110 volts, or battery overcharge with battery terminal voltage above 150 volts, by verifying that:
  - 1) The parameters in Table 4.8-2 meet the Category B limits,
  - 2) There is no visible corrosion at either terminals or connectors, or the cell-to-cell and terminal connection resistance of these items is less than  $150 \times 10^{-6}$  ohm, and
  - 3) The average electrolyte temperature of at least every sixth cell is above 60°F.
- c. At least once per 18 months by verifying that:
  - 1) The cells, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration,
  - 2) The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material,
  - 3) The resistance of each cell-to-cell and terminal connection is less than or equal to  $150 \times 10^{-6}$  ohm, and
  - 4) The battery charger will supply at least 300 amperes at 130.2 volts for at least 1 hour.
- d. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status simulated emergency loads for the design duty cycle when the battery is subject to a battery service test;
- e. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. Once per 60 month interval this performance discharge test may be performed in lieu of the battery service test required by Specification 4.8.2.1d.; and
- f. At least once per 18 months, during shutdown, by giving performance discharge tests of battery capacity to any battery that shows signs of degradation or has reached 85% of the service life expected for the application. Degradation is indicated when the battery capacity drops more than 10% of rated capacity from its average on previous performance tests, or is below 90% of the manufacturer's rating.

TABLE 4.8-2

BATTERY SURVEILLANCE REQUIREMENTS

PARAMETER	CATEGORY A <sup>(1)</sup>		CATEGORY B <sup>(2)</sup>	
	LIMITS FOR EACH DESIGNATED PILOT CELL	LIMITS FOR EACH CONNECTED CELL	LIMITS FOR EACH CONNECTED CELL	ALLOWABLE <sup>(3)</sup> VALUE FOR EACH CONNECTED CELL
Electrolyte Level	>Minimum level indication mark, and < ¼" above maximum level indication mark	>Minimum level indication mark, and < ¼" above maximum level indication mark		Above top of plates, and not overflowing
Float Voltage	≥ 2.13 volts	≥ 2.13 volts <sup>(6)</sup>		> 2.07 volts
Specific Gravity <sup>(4)</sup>	≥ 1.200 <sup>(5)</sup>		≥ 1.195	Not more than 0.020 below the average of all connected cells
			Average of all connected cells > 1.205	Average of all connected cells ≥ 1.195 <sup>(5)</sup>

TABLE NOTATIONS

- (1) For any Category A parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that within 24 hours all the Category B measurements are taken and found to be within their allowable values, and provided all Category A and B parameter(s) are restored to within limits within the next 6 days.
- (2) For any Category B parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that the Category B parameters are within their allowable values and provided the Category B parameter(s) are restored to within limits within 7 days.
- (3) Any Category B parameter not within its allowable value indicates an inoperable battery.
- (4) Corrected for electrolyte temperature and level.
- (5) Or battery charging current is less than 2 amps when on charge.
- (6) Corrected for average electrolyte temperature.

## ELECTRICAL POWER SYSTEMS

### D.C. SOURCES

#### SHUTDOWN

### LIMITING CONDITION FOR OPERATION

---

3.8.2.2 As a minimum, the following D.C. electrical sources shall be OPERABLE:

- a. 125 Volt Batteries NK11 and NK13 and associated Full Capacity Chargers NK21, NK23, or installed spare NK25 (powered from NG01), or
- b. 125 Volt Batteries NK12 and NK14 and associated Full Capacity Chargers NK22, NK24, or installed spare NK26 (powered from NG04).

APPLICABILITY: MODES 5 and 6.

#### ACTION:

With the required battery bank and/or full capacity charger inoperable, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes or movement of irradiated fuel; initiate corrective action to restore the required battery bank and/or full capacity charger to OPERABLE status as soon as possible.

### SURVEILLANCE REQUIREMENTS

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4.8.2.2 The above required 125-volt battery banks and connected chargers shall be demonstrated OPERABLE in accordance with Specification 4.8.2.1.

ELECTRICAL POWER SYSTEMS

3/4.8.3 ONSITE POWER DISTRIBUTION

OPERATING

LIMITING CONDITION FOR OPERATION

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3.8.3.1 The following electrical busses shall be energized in the specified manner with tie breakers open between redundant busses within the unit:

- a. Division #1 A.C. Emergency Busses consisting of:
  - 1) 4160-Volt Emergency Bus #NB01, and
  - 2) 480-Volt Emergency Busses #NG01, NG03, and
  - 3) 480-Volt Emergency Bus #NG05E.
  
- b. Division #2 A.C. Emergency Busses consisting of:
  - 1) 4160-Volt Emergency Bus #NB02, and
  - 2) 480-Volt Emergency Busses #NG02, NG04, and
  - 3) 480-Volt Emergency Bus #NG06E.
  
- c. 120-Volt A.C. Vital Bus #NN01 energized from its associated inverter connected to D.C. Bus #NK01,
  
- d. 120-Volt A.C. Vital Bus #NN02 energized from its associated inverter connected to D.C. Bus #NK02,
  
- e. 120-Volt A.C. Vital Bus #NN03 energized from its associated inverter connected to D.C. Bus #NK03,
  
- f. 120-Volt A.C. Vital Bus #NN04 energized from its associated inverter connected to D.C. Bus #NK04,
  
- g. 125-Volt D.C. Bus #NK01 energized from Battery #NK11 and Charger #NK21 (or #NK25 powered from NG01),
  
- h. 125-Volt D.C. Bus #NK02 energized from Battery #NK12 and Charger #NK22 (or #NK26 powered from NG04),
  
- i. 125-Volt D.C. Bus #NK03 energized from Battery #NK13 and Charger #NK23 (or #NK25 powered from NG01), and
  
- j. 125-Volt D.C. Bus #NK04 energized from Battery #NK14 and Charger #NK24 (or #NK26 powered from NG04).

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With one of the required divisions of A.C. emergency busses not fully energized due to an item 1) or 2) bus, reenergize the division within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. With one of the required divisions of A.C. emergency busses not fully energized due to the item 3) bus only, reenergize the division within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

## ELECTRICAL POWER SYSTEMS

### LIMITING CONDITION FOR OPERATION

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#### ACTION (Continued)

- b. With one A.C. vital bus either not energized from its associated inverter, or with the inverter not connected to its associated D.C. bus: (1) reenergize the A.C. vital bus within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and (2) reenergize the A.C. vital bus from its associated inverter connected to its associated D.C. bus within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one D.C. bus not energized from its associated battery bank or charger, reenergize the D.C. bus from its associated battery bank and charger within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

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4.8.3.1 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

## ELECTRICAL POWER SYSTEMS

### ONSITE POWER DISTRIBUTION

#### SHUTDOWN

#### LIMITING CONDITION FOR OPERATION

---

3.8.3.2 As a minimum, one of the following divisions of electrical busses shall be energized in the specified manner:

a. Division 1, consisting of:

- 1) 4160-Volt Emergency Bus #NB01, and
- 2) 480-Volt Emergency Busses #NG01, NG03 and NG05E, and
- 3) 120-Volt A.C. Vital Busses #NN01 and NN03 energized from their associated inverter connected to D.C. Busses #NK01 and NK03, and
- 4) 125-volt D.C. Busses #NK01 and NK03 energized from Batteries #NK11 and NK13 and Chargers #NK21 and NK23 (Spare Charger #NK25 powered from NG01 may be connected in place of #NK21 or #NK23), or

b. Division 2, consisting of:

- 1) 4160-Volt Emergency Bus #NB02, and
- 2) 480-Volt Emergency Busses #NG02, NG04 and NG06E, and
- 3) 120-Volt A.C. Vital Busses #NN02 and NN04 energized from their associated inverter connected to D.C. Busses #NK02 and NK04, and
- 4) 125-Volt D.C. Busses #NK02 and NK04 energized from Batteries #NK12 and NK14 and Chargers #NK22 and #NK24 (Spare Charger #NK26 powered from NG04 may be connected in place of #NK22 or #NK24).

APPLICABILITY: MODES 5 and 6.

#### ACTION:

Without one of the above required divisions of electrical busses energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel; initiate corrective action to energize at least one division of the required busses in the specified manner.

#### SURVEILLANCE REQUIREMENTS

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4.8.3.2 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-42

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

1.0 INTRODUCTION

By letter dated December 13, 1995, as supplemented by letter dated October 10, 1996, 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 revise the 125-volt D.C. Sources Technical Specifications 3.8.2.1 and 3.8.2.2 and the Onsite Power Distribution Technical Specifications 3.8.3.1 and 3.8.3.2.

The 125-volt D.C. Sources Technical Specifications 3.8.2.1 and 3.8.2.2 would be revised to include provisions for installed spare chargers which will be added to the plant design before startup from the ninth refueling outage.

The Onsite Power Distribution Technical Specifications 3.8.3.1 and 3.8.3.2 would be revised to indicate that spare charger NK25 may be connected in place of charger NK21 or NK23 and spare charger NK26 may be connected in place of charger NK22 or NK24.

The October 10, 1996, supplemental letter forwarded additional information concerning compliance with IEEE-308-1974, "IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations" (IEEE-308) and did not change the staff's original no significant hazards determination published in the Federal Register on January 22, 1996 (61 FR 1639).

2.0 BACKGROUND

The current power block DC power system consists of four independent Class 1E 125-volt DC subsystems, four non-Class 1E 125-volt DC subsystems, and one non-Class 1E 250-volt DC system. The Class 1E DC system provides DC electric power to the Class 1E DC loads and for control and switching of the Class 1E systems. Each Class 1E DC power subsystem consists of one 125-volt battery, one battery charger, one inverter, and distribution switchboards. For Load Group 1, the battery chargers for DC subsystems 1 and 3 are supplied 480-volt AC power from Class 1E busses NG01 and NG03, respectively. Similarly, for

Load Group 2, the battery chargers for DC subsystems 2 and 4 are supplied 480-volt AC power from Class 1E busses NG02 and NG04, respectively. Physical separation, electrical isolation, and redundancy of the two load groups are provided to comply with the requirements of IEEE Standard 308.

Currently, one spare battery charger and one spare inverter are provided for the power block. These items are physically located central to all of the Class 1E DC systems. They are not, however, electrically connected. In the event of the failure of a charger or inverter, the spare is manually connected to the affected system. Therefore, the malfunctioning equipment may be repaired without imposing long-term disruption of the system. However, the connection of the spare battery charger cannot be completed within the 2-hour allowed outage time.

In the proposed modification, the current spare battery charger will be permanently installed as a spare battery charger for the 125-volt DC busses NK01 and NK03 and powered from either Class 1E bus NG01 or non-Class 1E bus PG19. A new battery charger will be installed as a spare battery charger for 125-volt DC busses NK02 and NK04 and powered from either Class 1E bus NG04 or non-Class 1E bus PG20. Each Class 1E DC power subsystem will then consist of one 125-volt battery, one primary battery charger, one inverter, distribution switchboards, a shared spare battery charger, and spare battery charger transfer switches. In the event of a failure of a primary battery charger, the respective spare battery charger can be quickly aligned to provide power to the affected DC power subsystem. Therefore, the malfunctioning equipment may be repaired without imposing long-term disruption of the system. Once the spare battery charger is aligned to a given DC power subsystem all of the required annunciated trouble conditions are monitored on the spare battery charger and an annunciator window on the main control boards is lit to alert the control room staff that a spare battery charger is in use.

The batteries, racks, chargers, inverters, and auxiliary distribution equipment (switchboards and transfer switches) are designated seismic Category 1, and are designed to maintain their functional capability during and after an SSE. This modification will be made under the provisions of 10 CFR 50.59. The modification will allow 125-volt DC power to be supplied from the installed spare chargers within the Technical Specification 3.8.2.1 and 3.8.2.2 allowed outage time of 2 hours.

### 3.0 EVALUATION

The technical specifications would be revised as follows:

- Technical Specification 3/4.8.2.1 - D.C. Sources - Operating

Parts a and b of the Limiting Condition for Operation would be modified to read as follows:

- "a. 125 Volt Batteries NK11 and NK13 and associated Full Capacity Chargers NK21, NK23, or installed spare NK25 (powered from NG01), and

- b. 125 Volt Batteries NK12 and NK14 and associated Full Capacity Chargers NK22, NK24, or installed spare NK26 (powered from NG04)."

Surveillance Requirement 4.8.2.1 would be modified to require that surveillances be performed only on the battery chargers that are connected to the DC busses.

- Technical Specification 3/4.8.2.2 - D.C. Sources - Shutdown

Parts a and b of the Limiting Condition for Operation would be modified to read as follows:

- "a. 125 Volt Batteries NK11 and NK13 and associated Full Capacity Chargers NK21, NK23, or installed spare NK25 (powered from NG01), or
- b. 125 Volt Batteries NK12 and NK 14 and associated Full Capacity Chargers NK22, NK24, or installed spare NK26 (powered from NG04)."

Surveillance Requirement 4.8.2.2 would be modified to require that sureveillances be performed only on the battery chargers that are connected to the DC busses.

- Technical Specification 3/4.8.3.1 - Onsite Power Distribution - Operating

Parts g, h, i, and j of the Limiting Condition for Operation would be modified to read as follows:

- "g. 125-Volt D.C. Bus #NK01 energized from Battery #NK11 and Charger #NK21 (or #NK 25 powered from NG01),
- h. 125-Volt D.C. Bus #NK02 energized from Battery #NK12 and Charger #NK22 (or #NK 26 powered from NG04),
- i. 125-Volt D.C. Bus #NK03 energized from Battery #NK13 and Charger #NK23 (or #NK 25 powered from NG01), and
- j. 125-Volt D.C. Bus #NK04 energized from Battery #NK14 and Charger #NK24 (or #NK 26 powered from NG04)."

- Technical Specification 3/4.3.8.3.2 - Onsite Power Distribution - Shutdown

Parts a.4) and b.4) of the Limiting Condition for Operation would be modified to read as follows:

- "a.4) 125-Volt D.C. Busses #NK01 and NK03 energized from batteries #NK 11 and NK 13 and Chargers #NK21 and NK23 (Spare Charger #NK25 powered from NG01 may be connected in place of #NK21 or #NK23), or

b.4) 125-Volt D.C. Busses #NK02 and NK04 energized from batteries #NK 12 and NK 14 and Chargers #NK22 and #NK24 (Spare Charger #NK26 powered from NG04 may be connected in place of #NK22 or #NK24)."

In the event of a failure of the primary battery charger, the installation of the spare battery charger will allow 125-volt DC power to be supplied from the installed spare battery charger within the allowed outage time of 2 hours. The spare battery chargers will be located in switchgear rooms 3301 (NK25) and 3302 (NK26). These rooms are separate from the rooms that house the primary battery chargers. Conduits and cabling will be installed in accordance with the separation criteria as defined in IEEE 384-1974. The staff finds this acceptable.

The spare chargers will be installed such that each one can only supply one DC bus at a time from their respective safety-related bus, NG01 for charger NK25 and NG04 for charger NK26. Alternate AC nonsafety-related electrical feeds to spare battery chargers NK25 and NK26 will be provided for maintenance purposes only during safety-related AC train outages. The AC transfer switch in each redundant load group allows the spare battery charger to be powered from either a class 1E AC source or a non-class 1E AC source.

The following design features and administrative controls will prevent the spare battery chargers from being powered from a non-Class 1E AC circuit for the performance of safety related functions. There are three control switches located on the panel face of the AC transfer switch. One is a hand switch which operates the Class 1E AC circuit breaker to connect the transfer switch to the Class 1E AC bus. The second is a keylock switch which operates the non-Class 1E circuit breaker to connect the transfer switch to the non-Class 1E AC bus. The third is a hand switch which connects the spare battery charger to either the Class 1E or non-Class 1E bus at the transfer switch. In order to prevent Class 1E to non-Class 1E separation conflicts, only one power source can be energized at a time. The breaker close circuits are interlocked through isolation relays, located in each AC transfer switch, so that the open breaker cannot be closed unless the other breaker is open. Each keylock switch has a unique key code to prevent the key for one load group from inadvertently being used to operate the non-Class 1E breaker for the second load group. The keys for the keylock switches will be administratively controlled by the control room to ensure that the non-Class 1E breaker is closed only during load group outages (see Figure 1). The staff finds the design and controls for prevention of the use of non-Class 1E power for 1E functions acceptable.

Additional switches will be installed in the output of the primary battery chargers. These switches will prevent the connection of two battery chargers (the primary and the spare) to the same DC bus (see Figure 1). The staff finds this acceptable.

The spare battery chargers are equivalent to those in the present design. They are seismic Category I and meet separation criteria by use of appropriate isolation devices. The control building heat load and air conditioning calculations have been revised to reflect the new spare battery charger and

transfer switch installation. The air conditioning system capacity is capable of cooling the additional heat loads. The staff finds this acceptable.

Normally, the primary battery chargers are supplied from two different 480-volt AC busses. However, if battery charger NK23 (Load Group 1) or NK24 (Load Group 2) failed and the spare battery charger was placed in service, both operational battery chargers in the affected Load Group would be powered from the same 480-volt AC bus (NG01 for Load Group 1 and NG04 for Load Group 2). The licensee has evaluated this condition and determined that the additional load imposed on busses NG01 and NG04 with both battery chargers connected is within the capacity of the busses. The staff finds this acceptable.

The surveillance requirements associated with the battery chargers are being changed to require only those chargers actually supplying power to the DC busses to be surveilled. However, the licensee will maintain the spare chargers energized and available for immediate alignment to the DC bus in the event the primary battery charger fails. The staff finds this acceptable because if the spare charger is incapable of supplying the DC bus when called on, the action statement would require a plant shutdown within 2 hours of the original failure. During the action statement time, the batteries would be supplying the required DC loads. The 18-month surveillance requirements will be performed on all the battery chargers, including the spare battery chargers. The staff finds this acceptable.

The original design of the DC power system was in accordance with IEEE-308. This modification will maintain compliance with IEEE-308. The installation of the third battery charger in the two redundant DC power systems does not compromise the separation requirements. Load Group 1 and Load Group 2 will continue to be completely separated from each other. The staff finds this acceptable.

#### 4.0 STATE CONSULTATION

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.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 1639). 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.

#### 6.0 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.

Attachment: Figure 1

Principal Contributor: James Stone

Date: February 10, 1997

