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

## NEBRASKA PUBLIC POWER DISTRICT

# DOCKET NO. 50-298

### COOPER NUCLEAR STATION

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 130 License No. DPR-46

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nebraska Public Power District (the licensee) dated January 27, 1989, 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.

- 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. DPR-46 is hereby amended to read as follows:
  - 2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 130, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Inedende J. Heble

Fredrick J. Hebdon, 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: May 24, 1989

# ATTACHMENT TO LICENSE AMENDMENT NO. 130

# FACILITY OPERATING LICENSE NO. DPR-46

# DOCKET NO. 50-298

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

#### LIMITING CONDITIONS FOR OPERATION

### 3.9.B (cont'd.)

operable, all core and containment cooling systems are operable, reactor power level is reduced to 25% of the rated and NRC is notified within 24 hours of the situation, the precautions to be taken during this period and the plans for prompt restoration of incoming power.

### b. Diesel Generators

- From and after the date that one of the diesel generators or an associated critical bus is made or found to be inoperable for any reason, continued reactor operation is permissible in accordance with Specification 3.5.F.1 if Specification 3.9.A.1 is satisfied.
- 2. From and after the date that both diesel generators are made or found to be inoperable for any reason, continued reactor operation is permissible only during the succeeding 24 hours in accordance with Specification 3.5.F.2 if Specification 3.9.A.1 is satisified.
- 3. From and after the date that one of the diesel generators or associated critical buses and either the emergency or startup transformer power source are made or found to be inoperable for any reason, continued reactor operation is permissible in accordance with Specification 3.5.F.1, provided the other off-site source, startup transformer or emergency transformer is available and capable of automatically supplying power to the 4160V critical buses and the NRC is notified within 24 hours of the occurrence and the plans for restoration of the inoperable components.

SURVEILLANCE RECUIREMENTS

4.9.A.4 250 VDC Unit Batteries

- Every week, the following parameters shall be verified. The actual values shall be measured and logged:
  - The total battery terminal voltage on float charge shall be equal to or greater than 250 volts,
  - The electrolyte level of each pilot cell is between the minimum and maximum level indication marks,
  - The pilot cell voltage is 2.15V | minimum and specific gravity 1.195 minimum, corrected to 77°F | and electrolyte level,
- b. Every quarter, the following parameters shall be verified. The actual values shall be measured and logged:
  - The electrolyte level of each connected cell is between the minimum and maximum level indication marks.
  - For each connected cell, the voltage is 2.15V minimum and specific gravity is 1.190 minimum, corrected for 77°F and electrolyte level. The average specific gravity of all connected cells will be a minimum of 1.200.
  - The electrolyte temperatures in a representative sample of cells, consisting of at least every sixth cell, are within ±5°F.
- c. Once each operating cycle, the 250V battery charger will be tested to verify that the charger can supply 200 amperes at 250 volts for four hours.

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### LIMITING CONDITIONS FOR OPERATION

3.9.B.5 (cont'd.)

- c. DC Power -
- 1. From and after the date that one of the 125 or 250 volt battery systems is made or found to be inoperable for any reason, continued reactor operation is permissible during the succeeding ten days within electrical safety considerations, provided repair work is initiated in the most expeditious manner to return the failed component to an operable state, and Specifications 3.5.A.5 and 3.5. F are satisfied. The NRC shall be notified within 24 hours of the situation, the precautions to be taken during this period and the plans to return the failed components to an operable state.
- d. RPS/MG Sets
- With one RPS electric power monitoring channel for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable channel to operable status within 72 hours or remove the associated RPS MG set or alternate power supply from service.
- With both RPS electric power monitoring channels for an inservice RPS MG set or alternate power supply inoperable, restore at least one to operable status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

### SURVEILLANCE REQUIREMENTS

4.9.A.4 (cont'd)

- Once each operating cycle, during shutdown, one of the following tests will be performed:
  - A battery service test to verify that battery capacity is adequate to supply the emergency load profile.
  - A performance discharge test, in lieu of the above service test, once every five years to verify that battery capacity is at least 85% of the manufacturer's rating.
  - 3. A performance discharge test, in lieu of the above service test, when the battery shows signs of degradation or has been in service seventeen years or longer.
- 5. Power Monitoring System for RPS System

The above specified RPS power monitoring system instrumentation shall be determined operable:

- a. At least once per operating cycle by demonstrating the operability of over-voltage, under-voltage and under-frequency protective instrumentation by performance of a channel calibration including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  - Over-voltage < 132 VAC, with time delay < 2 sec.</li>
  - Under-voltage > 108 VAC, with time delay < 2 sec.</li>
  - Under-frequency > 57 Hz. with time delay < 2 sec.</li>

The general objective of this Specification is to assure an adequate source of electrical power to operate the auxiliaries during plant operation, to operate facilities to cool and lubricate the plant during shutdown and to operate the engineered safeguards following the accident. There are three sources of ac electrical energy available; namely, the startup transformer, the emergency transformer and two diesel generators. The dc supply is required for switch gear and engineered safety feature systems. This supply consists of two 125V DC and two 250V DC batteries and their related chargers. Specification 3.9.A states the required availability of ac and dc power; i.e., active off-site ac sources and the required amount of on-site ac and dc sources.

Auxiliary power for CNS is supplied from the startup transformer and the normal transformer. Both of these transformers are sized to carry 100% of the station auxiliary load. The emergency transformer is about one third the size of these two transformers and is equal in size to both emergency diesel generators.

The startup transformer and the emergency transformers are the offsite power sources. Their voltage is monitored by undervoltage relays which provide low voltage protection for the emergency buses. Whenever the voltage setpoint and time delay limit for the undervoltage relays have been exceeded, the emergency buses are automatically disconnected from the offsite power source.

If the startup or emergency transformer is lost, the unit can continue to operate since the unit auxiliary transformer is in service, and the emergency or startup transformer and the diesels are available.

If both the startup and emergency transformers become inoperable, the power level must be reduced to a value where by the unit can safely reject the load and continue to supply auxiliary electric power to the station.

In the normal mode of operation, the startup and emergency transformers are energized and two diesel generators are operable. One diesel generator may be allowed out of service based on the availability of power from the startup transformer and the fact that one diesel generator carries sufficient engineered safeguards equipment to cover all breakers. With the startup transformer and one diesel generator out of service, the off site transmission line corresponding to the emergency transformer must be available. Upon the loss of one on-site and one off-site power source, power would be available from the other immediate off-site power source and the two operable on-site diesels to carry sufficient engineered safeguards equipment to cover all breaks. In addition to these two power sources, removal of the Isolated Phase Bus "quick" disconnect links would allow backfeed of power through the main transformer to the unit auxiliary transformer and provide power to carry the full station auxiliary load. The time required to perform this operation is comparable to the time the reactor could remain on RCIC operation before controlled depressurization need be initiated.

Once each operating cycle, during shutdown, either a service test or performance discharge is performed on the 125 V and the 250 V batteries. The performance discharge test is performed in lieu of the service test when a battery shows signs of degradation. Degradation is indicated when battery capacity drops more than 10% of rated capacity from its average on previous performance tests, or is below 85% of the manufacturer's rating.

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#### 3.9 BASES