



October 27, 2000
LIC-00-0079

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

SUBJECT: Application for Amendment of Facility Operating License No. DPR-40

Omaha Public Power District (OPPD) is submitting this "Application for Amendment of Facility Operating License" to eliminate the requirement for the 13.8 kV transmission line surveillance test.

OPPD proposes to amend Section 3.7 of the Fort Calhoun Station Unit No.1 Technical Specifications to eliminate item (4) which states: "The 13.8 Kv transmission line will be energized and loaded to minimum shutdown requirements at each refueling outage following installation." The 13.8 kV transmission line surveillance test is performed during the refueling outage. Performing the test presents opportunities for human errors or equipment problems and, as a minimum, distracts the operators from other more important tasks.

Attachment C contains a markup reflecting the proposed changes to Appendix A, Technical Specification of the Facility Operating License. Attachment D provides the "Discussion, Justification and No Significant Hazards Consideration."

OPPD requests NRC approval of this proposed amendment by February 16, 2001 in order to support the 2001 refueling outage, which is scheduled to start March 17, 2001.

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OPPD respectfully requests 30 days to implement the proposed specifications following NRC approval. If you have additional questions or require further information, please contact me or members of my staff.

Sincerely,



W. G. Gates
Vice President

WGG/dls

Attachments

c: E. W. Merschoff, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
B. E. Casari, Director - Environmental Health Division, State of Nebraska
Winston & Strawn

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Attachment A
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
Omaha Public Power District) Docket No. 50-285
(Fort Calhoun Station)
Unit No. 1))

APPLICATION FOR AMENDMENT OF FACILITY OPERATING LICENSE

Pursuant to Section 50.90 of the regulations of the U. S. Nuclear Regulatory Commission ("the Commission"), Omaha Public Power District, holder of Facility Operating License No. DPR-40, herewith requests that Technical Specifications set forth in Appendix A of the Facility Operating License be amended to eliminate the requirement for the 13.8 kV transmission line surveillance test.

The proposed changes to Technical Specifications are provided in Attachment C to this Application. A Discussion, Justification, and No Significant Hazards Consideration Analysis, which demonstrates that the proposed changes do not involve significant hazards considerations, is provided in Attachment D. The proposed changes to Appendix A, Technical Specifications of the Facility Operating License, would not authorize any change in the types or any increase in the amounts of effluents or any change in the authorized power level of the facility.

WHEREFORE, Applicant respectfully requests that Appendix A of the Facility Operating License be amended hereto as Attachment A.

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Attachment A
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A copy of this Application, including its attachments, has been submitted to the Director - Nebraska State Division of Environmental Health, as required by 10 CFR 50.91.

OMAHA PUBLIC POWER DISTRICT

By

W. G. Gates

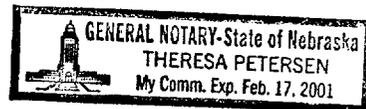
W. G. Gates
Vice President

STATE OF NEBRASKA)
) ss
COUNTY OF DOUGLAS)

Subscribed and sworn to me, a Notary Public in and for the State of Nebraska on this
27th day of October 2000

Theresa Petersen

Notary Public



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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
Omaha Public Power District) Docket No.50-285
(Fort Calhoun Station)
Unit No. 1))

AFFIDAVIT

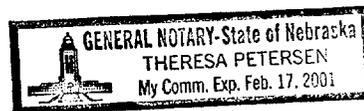
W. G. Gates, being duly sworn, hereby deposes and says that he is the Vice President in charge of all nuclear activities of the Omaha Public Power District; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached information concerning the application for Amendment of the Facility Operating License dated October 27, 2000, regarding elimination of the requirement for the 13.8 kV transmission line surveillance test; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information, and belief.

W. G. Gates
W. G. Gates
Vice President

STATE OF NEBRASKA)
) ss
COUNTY OF DOUGLAS)

Subscribed and sworn to me, a Notary Public in and for the State of Nebraska on this
21th day of October 2000

Theresa Petersen
Notary Public



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Attachment C

Requested Changes of Technical Specifications set forth
in Appendix A of
Facility Operating License
No. DPR-40

TECHNICAL SPECIFICATIONS

3.0 **SURVEILLANCE REQUIREMENTS**

3.7 Emergency Power System Periodic Tests (Continued)

d. During refueling shutdowns the correct function of all D.C. emergency transfer switches shall be demonstrated by manual transfer of normal D.C. supply breakers at the 125 volt D.C. distribution panels.

(3) Emergency Lighting

The correct functioning of the emergency lighting system required for plant safe shutdown shall be verified at least once each year.

(4) Deleted 13.8 Kv Transmission Line

~~The 13.8 Kv transmission line will be energized and loaded to minimum shutdown requirements at each refueling outage following installation.~~

(5) Inverters A, B, C, and D

The correct inverter output (voltage, frequency, and alignment to required 120 V a-c instrument buses) shall be verified weekly.

Basis

The emergency power system provides power requirements for the engineered safety features in the event of a DBA. Each of the two diesel generators is capable of supplying minimum required safety feature equipment from independent buses. This redundancy is a factor in establishing testing intervals. The monthly tests specified will demonstrate operability and load capacity of each diesel generator. These tests are conducted to meet the objectives of NRC Generic Letter 84-15 regarding the issue of reductions in cold fast starts. For this reason, the test verifying a 10 second start will be conducted from ambient conditions once per 184 days for each diesel. Other monthly tests will allow for manufacturer's recommended warm-up to reduce the mechanical stress and wear on the diesel engines. The fuel supply and various controls are continuously monitored and alarmed for off-normal conditions. Automatic starting on loss of off-site power and automatic load shedding, diesel connection, and loading will be verified on a refueling frequency. At the same intervals, capability will be verified for manual emergency control of these functions from the diesel and switch-gear rooms.

Considering system redundancy, the specified testing intervals for the station batteries should be adequate to detect and correct any malfunction before it can result in system malfunction. Batteries will deteriorate with time, but precipitous failure is extremely unlikely. The surveillance specified is that which has been demonstrated over the years to provide an indication of a cell becoming unserviceable long before it fails.

References

- (1) USAR, Section 7.3.4.2
- (2) USAR, Section 8.4.1
- (3) USAR, Section 8.3.4
- (4) USAR, Section 8.4.2

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Attachment D
Discussion, Justification and No Significant Hazards
Consideration

DISCUSSION AND JUSTIFICATION:

The proposed amendment revises Section 3.7 of the Technical Specifications to eliminate item (4) which states: "The 13.8 Kv transmission line will be energized and loaded to minimum shutdown requirements at each refueling outage following installation."

Fort Calhoun Station (FCS) receives 161 kV and 345 kV off-site power from a switchyard at the plant site. Power from the 13.8 kV supply is available in the switchgear room, but the circuit breaker supplying the buses is normally open. The ability to use the 13.8 kV supply, originally a construction power supply, was added during licensing of FCS because in the Atomic Energy Commission (AEC) review of the FCS Final Safety Analysis Report (FSAR), it was noted that the 345 kV lines passed over the 161 kV lines, and should a 345 kV line fall for any reason, the 161 kV line might also be lost.

The 13.8 kV power supply is capable of supplying a small number of 480 V loads. The surveillance test implementing Technical Specification 3.7(4) requires the 13.8 kV line to supply one battery charger, one charging pump, and one group of pressurizer heaters. The 13.8 kV power supply is incapable of supplying post-design basis accident (DBA) loads, and it is not credited in the licensing basis for mitigation of design basis accidents. The emergency diesel-generators are credited for mitigation of the consequences of design basis accidents. In addition, the 13.8 kV power supply is not credited for mitigation of licensing basis transients or postulated events added to the USAR by NRC requirements, such as Station Blackout (SBO).

There is no limiting condition for operation associated with the 13.8 kV line. The 13.8 kV line does not meet any of the four criteria in 10 CFR 50.36 for inclusion in the Technical Specifications. The original Technical Specifications included a surveillance test to load the 13.8 kV line on a refueling frequency. This test would more appropriately have been performed only once to verify capability of the 13.8 kV supply.

The 13.8 kV surveillance test places a significant burden upon the operating crew and involves the switching of many components. However, the benefits in terms of safety enhancement are negligible for the following reasons.

1. Industry experience indicates that the independent failure of the 345 kV line, such that it fell on the 161 kV line at the single point of crossing, is improbable.

2. The reliability and availability of the 161 and 345 kV power supplies have been excellent. Since the AEC concern in 1973, two additional 161 kV lines have been installed, and the switchyard was substantially upgraded. The switchyard upgrade increased the reliability of the switchyard itself and of the transmission grid.
3. The reliability and availability of the on-site emergency diesel-generators have been excellent. The operating crews have twenty-six years of experience with these diesel-generators, and they are operated frequently within the plant and simulated in the FCS simulator. The probability of being able to supply electrical power from the diesel-generators following loss of off-site power is very high. Again, the emergency diesel-generators are credited for mitigation of the consequences of design basis accidents. Upon loss of offsite power, the emergency diesel-generators automatically load onto the vital busses. In addition, the FCS Emergency Operating Procedures (EOPs) require the emergency diesel-generators to be utilized to supply power to the vital busses.
4. The 13.8 kV supply would only be useful in a scenario involving loss of 161 kV power, loss of 345 kV power, failure of both diesel-generators, and survival of the 13.8 kV supply. Such a scenario, in which only the 13.8 kV power supply survives, is extremely improbable.

While the 13.8 kV surveillance test fails to provide any tangible safety benefit, it does entail some risk. It presents opportunities for human errors or equipment problems and, as a minimum, distracts the operators from other more important tasks. Since the benefits are negligible, as described above, conduct of the 13.8 kV surveillance test causes a small net degradation of nuclear safety.

BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION:

The proposed changes to the Fort Calhoun Station Unit No. 1 Technical Specifications do not involve significant hazards consideration because operation of FCS in accordance with the change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

Eliminating the 13.8 kV testing requirement would have no impact upon the probability of an accident previously evaluated. The circuit breaker connecting the 13.8 kV power supply to the station electrical busses is normally open, so this power supply could not play a role in the initiation of any accident.

Eliminating the 13.8 kV testing requirement would have no impact upon the consequences of an accident previously evaluated. Existing accident analyses take no credit for the 13.8 kV power supply.

The 13.8 kV power supply is not credited for mitigation of licensing basis transients or postulated events added to the USAR by NRC requirements, such as Station Blackout (SBO).

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The 13.8 kV power supply is only capable of supplying a limited number of components in the unlikely event that 161 kV, 345 kV, and the diesel-generators are unavailable. Eliminating the 13.8 kV testing requirement would not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

Testing of the 13.8 kV power supply, as described in Technical Specification 3.7(4), is unrelated to any margin of safety. Therefore, deletion of the testing requirement will not reduce any margin of safety.

Based on the above considerations, OPPD concludes that the proposed amendment to FCS Technical Specifications does not involve significant hazards considerations as defined by 10 CFR 50.92 and that the proposed amendment will not result in a condition which significantly alters the impact of the station on the environment. Thus, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22 (c) (9) and, pursuant to 10 CFR 51.22 (b), no environmental assessment need be prepared.