



Nebraska Public Power District

GENERAL OFFICE
P.O. BOX 499, COLUMBUS, NEBRASKA 68602-0499
TELEPHONE (402) 564-8561
FAX (402) 563-5551

NSD920627
September 2, 1992

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Subject: Proposed Change No. 84 to Technical Specifications
"Diesel Generator Fuel Oil Storage Capacity and Fuel Quality Testing"
Cooper Nuclear Station
NRC Docket No. 50-298, DPR-46

Gentlemen:

In accordance with the applicable revisions specified in 10 CFR 50, the Nebraska Public Power District requests that the Cooper Nuclear Station (CNS) Technical Specifications be revised as specified in the attachment. This proposed change increases the minimum amount of Diesel Fuel Oil capacity required to be available in the on-site Diesel Fuel Oil Storage Tanks, and updates the standard to which the fuel oil quality is tested to a more recent edition of the same standard.

The attachment contains a description of the proposed changes, the attendant 10CFR50.92 evaluation, and the applicable revised Technical Specification Pages. This proposed change has been reviewed by the necessary Safety Review Committees and incorporates all amendments to the CNS Facility Operating License through Amendment 153 issued August 12, 1992.

By copy of this letter and attachment the appropriate State of Nebraska official is being notified in accordance with 10 CFR 50.91(b)(1). Copies to the NRC Region IV Office and CNS NRC Resident Inspector are also being sent in accordance with 10 CFR 50.4(b)(2).

Should you have any questions or require additional information, please contact me.

Sincerely,

G. R. Horn
Nuclear Power Group Manager

GMH/tja:chng-84
Attachment

cc: H. R. Borchert
Department of Health
State of Nebraska

NRC Regional Office
Region IV
Arlington, TX

NRC Resident Inspector
Cooper Nuclear Station

9209140198 920902
PDR ADOCK 05000298
P PDR

090050

ACCU

REVISED TECHNICAL SPECIFICATION PAGES
FOR DIESEL FUEL OIL CAPACITY AND QUALITY TESTING

Revised Pages: 193 and 194

I. BACKGROUND

Information Notice 86-70 "Potential Failure of All Emergency Diesel Generators" described, in part, design deficiencies that could disable both Diesel-generators at a nuclear power plant by placing unanalyzed loads on the Diesel-generator power buses. Information Notice 89-50 "Inadequate Emergency Diesel Generator Fuel Supply" described discrepancies at several Nuclear Power Plants where Technical Specifications and/or FSAR did not correctly determine the amount of on-site fuel required to allow 7 day post-accident operation of the Emergency Diesel Generator (EDG).

The Nebraska Public Power District (NPPD) therefore, evaluated its Diesel Generator (DG) Load Study to determine if Cooper Nuclear Station (CNS), DG's had any of the problems identified in the above mentioned Information Notices. NPPD calculated the EDG fuel oil storage requirements in the DG Load Study from guidance contained in Regulatory Guide 1.137, "Fuel Oil Systems for Standby Diesel Generators", as referenced in Information Notice 89-50. The District used the calculation method based on time-dependant loads of the EDG including the capacity to power the engineered safety features.

The evaluation concluded that the 45,000 gallon on-site fuel oil storage requirements as listed in CNS Technical Specification 3.9.A.1.b is adequate to supply a Diesel Generator with enough fuel to power its essential loads for a seven (7) day post-accident event, and takes into account all guidance given in Information Notices 86-70 and 89-50. However, the District wishes to raise this storage requirement, to increase the reserve margin of available on-site diesel fuel oil.

II. DESCRIPTION OF CHANGES

The District requests that the amount of the diesel fuel oil storage requirements be increased from 45,000 to 48,000 gallons, thus providing an expanded reserve margin of available diesel fuel oil, and also to allow for future loading additions that could be powered by the diesel generator during LOCA/LOOP events. In addition, the District also requests that the testing of diesel fuel oil quality be revised to the newer edition of the same ASTM standard, and specify that the quality tests are for those fuel oil properties that are directly related to engine performance. Therefore, the District requests the following CNS Technical Specification revisions:

- o On page 193, in Specification 3.9.A.1.b, change the amount of diesel fuel oil in the fuel oil storage tanks to a "minimum of 48,000 gallons."
- o On page 194, in Specification 4.9.A.2.e, change the diesel fuel oil quality testing standard to "ASTM D975-1989a", and add the phrase "for those fuel oil properties directly related to engine performance."

The proposed revision to Technical Specification 3.9.A.1.b (page 193) will continue to provide for sufficient on-site diesel fuel oil, with an expanded reserve margin, to further ensure continued Diesel Generator operation during a seven day post-accident event.

The proposed revision to Technical Specification 4.9.A.2.e (page 194) will continue to maintain the required quality of emergency diesel fuel oil. The testing of fuel oil quality to the edition of the standard currently referenced in Technical Specifications, ASTM D975-1968, has become increasingly difficult due to diesel fuel oil testing facilities having upgraded to the newer standardized tests. Therefore, the District proposes to revise this specification by testing the fuel oil quality to the newer edition of the same standard "ASTM D975-1989a." The District has reviewed the newer edition of the standard and has determined that it will continue to ensure an equivalent level of fuel oil quality. For this reason, the District considers this change to be administrative. In addition, by including the phrase "for those fuel oil properties directly related to

engine performance" the District will be able to better analyze the parameters determined important to engine performance as specified in ASTM Standard D975-89a Appendix A1 "Significance of ASTM Specification for Diesel Fuel Oil Properties". The quality testing of diesel fuel oil properties will remain as currently performed, the inclusion of the subject phrase reiterates Standard D975-89a and D975-68 requirements.

III. SIGNIFICANT HAZARDS DETERMINATION

10 CFR 50.91(a)(1), requires that licensee requests for operating license amendments be accompanied by an evaluation of significant hazards posed by the issuance of the amendment. This evaluation is to be performed with respect to the criteria given in 10 CFR 50.92(c). The following analysis meets these requirements.

Evaluation of this Amendment with Respect to 10 CFR 50.92

A. The enclosed Technical Specification change is judged to involve no significant hazards based on the following:

1. Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Evaluation

The proposed license amendment will increase the minimum amount of diesel fuel oil available in the diesel fuel oil storage tanks to 48,000 gallons. This proposed increase in the on-site diesel fuel oil storage requirements in no way causes an increase in the probability of an accident previously evaluated. The proposed amendment will continue to ensure that sufficient fuel is stored on-site for seven days of operation of one Diesel Generator unit under postulated accident conditions. The on-site fuel oil requirement is being increased to provide an expanded reserve margin of available diesel fuel oil, and also to allow for any future loading additions that could be powered by the diesel generator during LOCA/LOOP events. Operation of the diesel generators and its auto-start

signals are not altered with this proposed change. The ability of the diesel generators to meet their Safety Design Basis as contained in the Updated Safety Analysis Report (USAR) is not affected by this change. The diesels will remain able to perform their accident mitigative actions as described in the USAR so that the consequences of a previously evaluated accidents remain bounding. Therefore, the probability or consequences of previously evaluated accidents has not significantly increased.

The administrative change, updating the edition of the standard specified for diesel generator fuel oil quality surveillance testing to a newer edition of the same standard will not result in any reduction in quality for the diesel fuel oil and, hence in the ability of the Diesel Generators to perform their intended safety function. The addition of the phrase "for those fuel oil properties directly related to engine performance" will not result in any reduction in quality for the diesel fuel oil. The quality testing of diesel fuel oil properties will remain as currently performed, the inclusion of the subject phrase reiterates what Standards D975-89a and D975-68 currently state. Thus, it is concluded that there is no significant increase in the probability or consequences of previously evaluated accident.

2. Does the proposed License Amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Evaluation

The proposed Technical Specification revision will increase the amount of on-site diesel fuel oil storage required by the Technical Specifications to further ensure continued diesel generator operation during a seven day post-accident event. There is no new plant mode of operation created by this revision, nor does it involve any design modification to existing plant structures, systems, or components. This proposed revision will not change the operation or function of the diesel generators or any accident analyses that involve the

diesel generators as described in the USAR. Therefore, the proposed Technical Specification revision does not create the possibility of a new or different kind of accident.

The use of a newer edition of the same standard for quality testing of the diesel fuel oil, as specified in Standard D975-89a and the inclusion of the phrase "for those fuel oil properties directly related to engine performance", will not reduce the quality of the fuel oil, and as a result, will not affect the operation of the diesel generators. Therefore, updating to a newer edition of the same standard for fuel oil quality, and including the phrase "fuel oil properties directly related to engine performance" will not create the possibility of any new accident or malfunction.

3. Does the proposed amendment involve a significant reduction in the margin of safety?

Evaluation

The proposed Technical Specification revision will increase the minimum amount of on-site diesel fuel oil storage required by the CNS Technical Specifications to 48,000 gallons. This proposed change is being made to further ensure there is sufficient margin in on-site fuel available for seven days of diesel generator operation, by expanding the reserve margin of on-site diesel fuel oil available. All safety functions and safety analyses concerning the diesel generators are not altered in any way, only the amount of available fuel on-site is affected by this change. The proposed change does not allow any new change to plant operating parameters, nor does it affect any plant setpoints. Therefore, raising the amount of required on-site diesel fuel oil storage does not result in a significant reduction in the margin of safety.

Updating the edition of the standard specified for diesel generator fuel oil quality surveillance testing to a newer edition of the same standard, and specifying that the quality testing is for those properties that are directly related to engine performance, will not

result in any reduction in quality for the diesel fuel oil. Thus, this update does not result in a significant reduction in the margin of safety.

B. Additional Basis for the No Significant Hazards Consideration Determination:

The Commission has provided guidance concerning the application of standards for determining whether a significant hazards consideration exists by providing certain examples (51FR7744). The examples include: (i) A purely administrative change to Technical Specifications, e.g. a change in nomenclature, and, (ii) A change that constitutes an additional limitation, restriction or control not presently included in the Technical Specifications, e.g. a more stringent surveillance requirement. The increase in on-site diesel fuel oil storage is within the scope of this example.

IV. CONCLUSION

The District has evaluated the proposed changes described above against the criteria of 10CFR50.92(c) in accordance with the requirements of 10CFR50.91(a)(1). This evaluation has determined that the Proposed Change No. 84 to Technical Specifications will not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility for a new or different kind of accident from any accident previously evaluated, or (3) create a significant reduction in the margin of safety. Therefore, the District requests NRC approval of this proposed Technical Specification Change Number 84.