

Nebraska Public Power District

GENERAL OFFICE
P.O. BOX 499, COLUMBUS, NEBRASKA 68601-0499
TELEPHONE (402) 564-8561

NLS8600113

March 11, 1986

Office of Nuclear Reactor Regulation
BWR Project Directorate No. 2
Division of BWR Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. Daniel R. Muller

- Attachment: 1) Evaluation of Technical Specification Change with Respect to 10CFR50.92
2) General Electric Safety Evaluation of Main Steam Line High Flow Setpoint for Cooper Nuclear Station

Dear Mr. Muller:

Subject: Expedited Technical Specification Change
Main Steam Line High Flow Setpoint
Cooper Nuclear Station
Docket No. 50-298

Based upon discussions with our NRC Project Manager, this letter is written to request an expeditious change to the Cooper Nuclear Station Technical Specifications to change the Main Steam Line High Flow Setpoint for Primary Containment Isolation from 140% of rated steam flow to 150% of rated steam flow.

Cooper Nuclear Station Technical Specification 3.2.A states that when primary containment is required, the limiting conditions for operation for the instrumentation that initiates primary containment isolation are given in Table 3.2.A. The table includes the main steam line high flow instrument with a setpoint of < 140% of Rated Steam Flow. It was recently discovered that these instruments are presently set at 140% of design steam flow which corresponds approximately to 150% of rated steam flow. A Safety Evaluation has determined that the present setpoint of < 150% of rated flow does not present a safety concern and does not have any safety implication. The required no Significant Hazards Determination, proposed Technical Specification Pages are attached along with a copy of a General Electric Safety Evaluation.

8603170318 860311
PDR ADOCK 05000298
P PDR

Acc!
1/1

Mr. Daniel R. Muller
Page 2
March 11, 1986

The primary reason this expedited Technical Specification change is requested is to prevent unnecessary shutdown of Cooper Nuclear Station since the setpoint is currently in violation with the plant Technical Specifications. Reducing the instrument setpoints to below 140% of rated steam flow could result in inadvertent containment isolation caused by the quarterly trip of main steam line isolation valves to verify closure times as required in Specification 4.7.D.1.b. The resulting increased flow in the other main steam lines could exceed the high flow setpoint, causing primary containment isolation leading to a Reactor Trip.

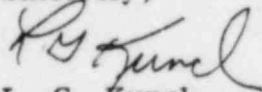
Mr. H. R. Borchert, Nebraska Department of Health, has been notified by telephone of the circumstances at Cooper Nuclear Station, and is being copied on this letter.

This change has been reviewed by the necessary Safety Review Committees and payment of \$150 is submitted in accordance with 10CFR170.12. In addition to three (3) signed originals, forty (40) copies are also submitted for your use.

This proposed license amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10CFR, Part 20, and changes in surveillance requirements. The District has determined that this amendment involves no significant increase in the amounts, and no significant change in the type, of any effluents that may be released off site, and that there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, the District is of the opinion that this amendment would meet the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Pursuant to 10CFR51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with this amendment.

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

Sincerely,



L. G. Kuncl
Vice-President - Nuclear

LGK:lk11/5
Attachments

cc: H. R. Borchert
Nebraska Department of Health
✓ J. M. Taylor, Director
NRC Office of Inspection & Enforcement
Director, U.S. NRC, Region IV
CNS Senior Resident Inspector

Evaluation of this Revision with Respect to 10CFR50.92

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 consequence of an accident previously evaluated?

Evaluation

The proposed amendment changes the setpoint only so it will not affect the probability of an accident previously evaluated. The design basis accident where the consequences would be changed is the Main Steam Line break accident. The Main Steam Line high flow is primarily for detection of large breaks with other methods available to detect small breaks or steam leaks. These other methods of isolation for Cooper Nuclear Station (CNS) include temperature sensors and radiation monitors in the main steam tunnel, low steam line pressure and low reactor water level. The variation of the high flow setpoint from 140% to 150% of rated steam flow will not affect the analysis in the CNS Updated Safety Analysis Report (USAR), Section XIV-6, for a guillotine break of the main steam line. The guillotine break will cause flow rates in excess of the 150% of rated steam flow from the upstream side of the break and would be limited by the main steam line flow restrictor to approximately 200% of rated flow rate. The proposed license amendment involves no significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed license amendment create the possibility for a new or different kind of accident from any accident previously evaluated?

Evaluation:

The proposed amendment does not change the mode of operations at CNS and will not introduce the possibility for any new or different kind of accident from any accident previously evaluated.

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

Evaluation:

The proposed amendment does not affect the probability or consequences of a guillotine break in the main steam line as analyzed in the USAR. The safety implication of the setpoint of 150% of rated flow is limited to the difference in ability to detect a break between 150% and 140%. As noted in the USAR, a setpoint of 140% of rated steam flow would detect steam line breaks greater than 0.3 ft.². The does release for such a break is only 2.7×10^{-7} of that allowed by 10CFR100. A setpoint of 150% of rated steam flow would detect steam line breaks greater than 0.38 ft.². Other sensors previously described would detect all breaks below this

value. The difference in total dose release between the two break sizes is approximately 10%. This 10% increase in the extremely small dose calculated will not significantly change the existing margin for the limits allowed by 10CFR100. Therefore, the ability of the plant to detect and isolate a main steam line break outside of containment would not be adversely affected.