



Nebraska Public Power District

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March 22, 1991

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

Subject: Revision to Proposed Change No. 69 to Technical Specifications
Cooper Nuclear Station
NRC Docket No. 50-298, DPR-46

Reference: Letter, L. G. Kundt to USNRC dated August 31, 1989, "Proposed
Change No. 69 to the Cooper Nuclear Technical Specifications, Low-
Low Set"

Gentlemen:

In the above reference, the Nebraska Public Power District (the District) submitted a proposed change to the Cooper Nuclear Technical Specifications that would revise the setpoint tolerance on the Low-Low Set Safety/Relief Valve pressure switches. Subsequent NRC staff review of this application generated a comment regarding a bases section in the proposed change. This has been resolved by clarifying the bases section to remove a potential source of confusion. The revised page (Page No. 180) incorporating this change is attached for consideration. The District considers that the no significant hazards consideration contained in the reference to still be valid.

If you have any questions, please call.

Sincerely,

G. R. Horn
Nuclear Power Group Manager

GRH/grs:sm
Attachment

cc: Regional Administrator
USNRC - Region IV
Arlington, Texas

NRC Resident Inspector Office
Cooper Nuclear Station

H. R. Borchert
Department of Health
State of Nebraska

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Powerful Pride in Nebraska

3.7.A & 4.7.A BASES(cont'd)

The primary containment is normally slightly pressurized during periods of reactor operation. Nitrogen used for inerting could leak out of the containment but air could not leak in to increase oxygen concentration. Once the containment is filled with nitrogen to the required concentration, no monitoring of oxygen concentration is necessary. However, at least twice a week the oxygen concentration will be determined as added assurance.

The 500 gallon conservative limit on the nitrogen storage tank assures that adequate time is available to get the tank refilled assuming normal plant operation. The estimated maximum makeup rate is 1500 SCFD which would require about 160 gallons for a 10 day makeup requirement. The normal leak rate should be about 200 SCFD.

3.7.A.6 & 4.7.A.6 LOW-LOW SET RELIEF FUNCTION

The low-low set relief logic is an automatic safety relief valve (SRV) control system designed to mitigate the postulated thrust load concern of subsequent actuations of SRV's during certain transients (such as inadvertent MSIV closure) and small and intermediate break loss-of-coolant accident (LOCA) events. The setpoints used in Section 3.7.A.6.b are based upon a minimum blowdown range to provide adequate time between valve actuations to allow the SRV discharge line high water leg to clear, coupled with consideration of instrument inaccuracy and the main steam isolation valve isolation setpoint.

The as-found setpoint for NBI-PS-51A, the pressure switch controlling the opening of RV-71D, must be ≤ 1040 psig. The as-found closing setpoint for NBI-PS-51B must be at least 90 psig less than 51A, and must be ≥ 850 psig. The as-found setpoint for NBI-PS-51C, pressure switch controlling the opening of RV-71F must be ≤ 1050 psig. The as-found closing setpoint for NBI-PS-51D must be at least 90 psig below 51C, and must be ≥ 850 psig. This ensures that the analytical upper limit for the opening setpoint (1050 psig), the analytical lower limit on the closing setpoint (850 psig) and the analytical limit on the blowdown range (≥ 90 psig) for the Low-Low Set Relief Function are not exceeded. Although the specified instrument setpoint tolerance is ± 20 psig, an instrument drift of ± 25 psig was used in the analysis to ensure adequate margin in determining the valve opening and closing setpoints. The opening setpoint is set such that, if both the lowest set non-LLS S/RV and the highest set of the two LLS S/RVs drift 25 psig in the worst case directions, the LLS S/RVs will still control subsequent S/RV actuations. Likewise, the closing setpoint is set to ensure the LLS S/RV closing setpoint remains above the MSIV low pressure trip. The 90 psig blowdown provides adequate energy release from the vessel to ensure time for the water leg to clear between subsequent S/RV actuations.

3.7.B & 3.7.C STANDBY GAS TREATMENT SYSTEM AND SECONDARY CONTAINMENT

The secondary containment is designed to minimize any ground level release of radioactive materials which might result from a serious accident. The reactor building provides secondary containment during reactor operation when the drywell is sealed and in service. The reactor building provides primary containment when the reactor is shut down and the drywell is open, as during refueling. Because the secondary containment is an integral part of the complete containment system, secondary containment is required at all times that primary containment is required as well as during refueling. Secondary containment may be broken for short periods of time to allow access to the reactor building roof to perform necessary inspections and maintenance.

The standby gas treatment system is designed to filter and exhaust the reactor building atmosphere to the stack during secondary containment isolation conditions. Both standby gas treatment system fans are designed to automatically start upon containment isolation and to maintain the reactor building pressure to the design negative pressure so that all leakage should be in-leakage. Should one system fail to start, the redundant system is designed to start automatically. Each of the two fans has 100 percent capacity.