Nebraska Public Power District

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

NLS8800060

February 2, 1988

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

Gentlemen:

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

In accordance with the applicable provisions specified in 10CFR50, Nebraska Public Power District requests that the Cooper Nuclear Station Technical Specifications be revised as indicated in Attachment 1. The purpose of these changes is to revise instrument identification (ID) numbers to reflect change-out of various components per previous District commitments.

Attachment 1 contains a description of the proposed changes and the results of the evaluation of the proposed changes with respect to the requirements of 10CFR50.92. Also enclosed are the applicable revised Technical Specification pages.

By copy of this letter and the attachment, the appropriate State of Nebraska Official is being notified in accordance with 10CFR50.91(b).

This proposed change incorporates all amendments to the Cooper Nuclear Station Facility Operating License through Amendment 114 issued December 22, 1987.

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 the signed original, 37 copies are also submitted for your use. Copies are being sent to the NRC Region IV Office and Resident Inspector in accordance with 10CFR50.4(b)(2).



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w/check
$150.00
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Should you have any questions or require additional information, please contact this office.

Sincerely,

L. G. Kuncl
Nuclear Power Group Manager

LGK/mtb:dmr25/1
Attachment

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

NRC Regional Office
Region IV
Arlington, TX

NRC Resident Inspector Office
Cooper Nuclear Station

STATE OF NEBRASKA)
)ss
PLATTE COUNTY )

L. G. Kuncl, being first duly sworn, deposes and says that he is an authorized representative of the Nebraska Public Power District, a public corporation and political subdivision of the State of Nebraska; that he is duly authorized to submit this request on behalf of Nebraska Public Power District; and that the statements contained herein are true to the best of his knowledge and belief.

L. G. Kuncl

Subscribed in my presence and sworn to before me this 2nd day of February, 1988.

Colleen M. Kuta
NOTARY PUBLIC

GENERAL NOTARY-State of Nebraska
COLLEEN M. KUTA
My Comm. Exp. Aug. 4, 1988

Revised Technical Specifications
to Update Instrument ID Numbers

Revised Pages: 10 56
53 70
54 71
55 73

The first proposed change revises the Instrument I.D. Number for the reactor low pressure trip instruments, on pages 53, 54, 70, and 71. The Instrument ID Number is being changed from NBI-PS-52A and C to NBI-PS-52A1, A2, C1 and C2. The reason for this change is that the two existing switches are dual element switches, which are being replaced with four single element switches. Each of the single element switches is being given a separate ID Number.

The NBI-PS-52A and C switches are currently dual element, independent setpoint Barksdale switches. One contact of each switch provides one of the closing signals to the reactor recirculation discharge valves when reactor pressure reaches 185 to 235 psig. The other contact of each switch provides a pressure permissive input to t e Core Spray and Low Pressure Coolant Injection (LPCI) injection valves, when reactor pressure reaches 450 psig, decreasing.

The existing Barksdale pressure switches were environmentally qualified to IE Bulletin 79-01B (DOR Guidelines). It has become necessary to replace the existing switches, since available spares on site are limited and it is no longer possible to purchase qualified replacements. The new switches selected to replace the existing Barksdale switches are Static-O-Ring Model 9TA-B4-NX-C1A-JJTTX6. These are single element switches that are qualified to the more stringent 10CFR50.49 and NUREG-0588, Category I requirements. Each of the dual element switches (NBI-PS-52A and 52C) will be replaced with two single element switches to duplicate their dual element function. These switch pairs will share a common sensing line, but will be installed as separate switches and will, therefore, be assigned a separate ID Number. The switches will be mounted on the same racks, at the same location, and will be m unted using seismically qualified brackets and fasteners. Also, there is no effect on circuit loading since the new switches function in the same manner as the old switches and consume no power.

The second proposed change is to revise the RHR Crosstie Valve Limit Switch Instrument I. D. Number from RHR-LMS-2 to RHR-LMS-8. This change is made on page 55, Table 3.2.B of the Technical Specifications. This is a typographical error and is administrative in nature. Control Room indication of the RHR Crosstie valve position was wired to the limit switch as a part of LPCI modifications. This change was made to ensure that the RHR Crosstie Valve, RHR-MO-20, position indication was a true indication. Prior to this modification, the control room annunciator that indicated "valve open" was wired to indicate control switch position, which is not necessarily the actual valve position. The appropriate Burns and Roe drawings correctly label the cross-tie limit switch as RHR-LMS-8. However, there is a typographical error in the ID number listed in the Technical Specifications that has never been corrected.

The third proposed change would revise pages 56 and 73 of the Technical Specifications. The high drywell pressure instrument I. D. Numbers would be changed from 14A-K5 A and B(6) and 14A-K6 A and B(6) to PC-PS-101A, B, C, and D. These incorrect instrument I.D. Numbers were previously corrected on pages 53, 54, 70 and 71. Since the note (6) referred to initial Startup Testing after construction and has since been deleted, only the correct ID Numbers remain.

Finally, the District proposes to change the instrument range for the fuel zone reactor water level instruments (NBI-LI-91 A and B) on page 10, Figure 2.1.1, of the Technical Specifications. This proposed change reflects changes to reactor level measurement instrumentation in accordance with the commitments made by the District to comply with the guidance of Regulatory Guide 1.97. The District committed to provide qualified redundant level measurement channels down to 6 inches below the bottom of active fuel and up to +225 inches above top of active fuel. The District also committed to a single qualified channel for the upper water level range, from +225 inches to the centerline of the main steamlines at 287.44 inches, referenced to top of active fuel. The range of the fuel zone level instruments is, therefore, being extended from: -100" to +200" to: -150" to +225". This allows these instruments, NBI-LI-91 A and B, to cover the range between 6" below the bottom of active fuel (-150") and slightly above the top of the steam separators (+225"), where zero is top of active fuel. Also, a new steam nozzle range level transmitter will be installed to cover the range from +160 inches to +340 inches above top of active fuel. This single qualified level transmitter covers the upper range from well below +225 inches to well above the centerline of the steamlines. These changes are being reflected in Figure 2.1.1 of the Technical Specifications.

The guidance of Regulatory Guide (RG) 1.97 recommends Category 1 instrumentation for vessel level, with a range from the bottom of the core support plate to the centerline of the main steamline. The increase in the range of the fuel zone level instruments extends the range down to the bottom of the core support plate (6 inches below the bottom of active fuel) and up to the top of the steam separator. The addition of the steam nozzle range provides Category 1 level instrumentation (except redundancy) from the top of the steam separator up to the centerline of the main steamlines. Although some new equipment is being installed to improve level measurement capability, the other existing ranges and equipment configurations will remain the same.

Evaluation of this Amendment 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 change involve a significant increase in the probability or consequences of an accident previously evaluated:

Evaluation:

a. The first proposed change will not alter the function or operation of the pressure switches. Each dual element, independent setpoint Barksdale switch will be replaced with two single element Static-O-Ring (S-O-R) pressure switches. Each of the new switches will use the existing electrical circuits

and will be installed on the existing instrument racks. The new switches will be mounted with S-O-R seismically qualified brackets and fasteners. The new switches meet all original design specifications of the switches to be replaced and will have no effect on circuit loading since they consume no power. The new switches share a common sensing line, and therefore, each pair of new single element switches exactly duplicates the function of the dual element switch replaced.

This change is, therefore, primarily administrative in nature, to provide a separate ID Number for each of the four new single element switches. The new switches will not change the function or operation of the instrument, and thus, will not increase the probability or consequences of any accident previously evaluated. Further, the new switches are qualified to the new, more stringent environmental qualification standards, and will thus provide increased assurance of operation in post accident environments.

b. The second proposed change, revision of the RHR crosstie valve limit switch ID Number, does not involve an increase in the probability or consequences of an accident previously evaluated. This change is strictly administrative. The ID Number of this limit switch, as listed on the appropriate Cooper Nuclear Station drawings, has always been RHR-LMS-8. The currently listed I.D. Number is a typographical error. This change, therefore, cannot affect the probability or consequences of an accident.

c. The third proposed change, to revise the I.D. Number of the high drywell pressure instrument from 14A-K5 A and B and 14A-K6 A and B to PC-PS-101 A, B, C and D, is also an administrative change. This administrative change corrects a typographical error that was previously overlooked, and therefore, does not involve an increase in the probability or consequences of an accident.

d. The increase in the range of NBI-LI-91 A and B is in accordance with the District's commitment to provide redundant qualified level instruments down to 6 inches below the bottom of active fuel (-150") and up to just above the top of the steam separator (+225"). Also, the new steam nozzle range instrument will provide Category 1 level measurement capability from +160 inches up to the centerline of the main steamlines, with the exception of redundancy. This is in accordance with the commitments made to comply with the guidance of Regulatory Guide 1.97. The existing level transmitters will be used for the fuel zone range. They are redundant and environmentally qualified. A third new environmentally qualified transmitter will also be installed. This transmitter will be powered from the same division as one of the other two, and will provide indication to resolve any ambiguity in the readings from the two redundant transmitters due to electronic failure. The increase in the range of the fuel zone reactor water level indicators from -100" to +200" to -150" to +225" provides a

wider range of accurate water level indication, to assist the operator in assessing level in the vessel. The new qualified level transmitter in the steam nozzle range will provide accurate indication up to above the steamlines. This increased level indication is in accordance with NRC guidance and improves the operator's assessment capability. Therefore, this change cannot increase the probability or consequences of an accident previously evaluated. Also, since environmentally qualified equipment is used, and a third indication is being installed to resolve a mismatch in the fuel zone, this change will decrease the probability of false level indication contributing to any accident.

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

Evaluation:

a. This proposed change will not modify in any way the safety function of the NBI pressure switches. In the original design, one contact of each of the two dual element switches provided a signal to close the recirculation system discharge valve. The other contact of each dual element switch provided one of the inputs to the Core Spray and LPCI injection valves. This function has not changed. The only change is that instead of a switch with dual contacts, two single contact switches will be used. The existing sensing lines, electrical circuits, instrument racks and setpoints will be used. This change will not create any new or different kind of accident, since the two single element switches exactly duplicate the dual element switch function, with no negative effects on the circuitry.

b. Revising the I.D. Number of the RHR crosstie valve limit switch is purely administrative. No hardware changes are being made. This I.D. Number has always been RHR-LMS-8 instead of RHR-LMS-2 as currently listed. This administrative change does not create any new or different kind of accident.

c. The change to correct the high drywell pressure instrument I.D. Numbers is also administrative. This typographical error correction cannot create any new or different kind of accident, since it involves no hardware changes or changes in the function or operation of the instruments.

d. The increase in the range of the fuel zone level instruments and the addition of the steam nozzle range instruments in Figure 2.1.1 of Technical Specifications cannot create any new or different kind of accident. This change increases the range, by providing accurate level measurement capability from the core support plate to above the centerline of the main steamlines. These level instruments provide indication of water level in the vessel, but do not provide any RPS or ESF input signals. The range increase will provide better water level assessment capability and is in accordance with NRC

guidance provided in Regulatory Guide 1.97. This increase in the range of NBI-LI-91 A and B and the addition of the steam nozzle range cannot create any new or different kind of accident, since they are used for assessment purposes only. Also, since environmentally qualified equipment is used and a third indication is being installed in the fuel zone to resolve any ambiquity in the two redundant indications, this change will decrease the probability of false level indication contributing to any new or different kind of accident.

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

   a. The only change involved is to replace the Instrument I.D. Numbers NBI-PS-52A and C with NBI-PS-52A1, A2, C1 and C2. This will provide a separate I.D. Number for each single element switch. If each switch has a unique I.D. Number, the tracking of maintenance and surveillances is easier. This change does not alter the system electrically, and therefore, changing the I.D. Numbers does not affect any margin of safety.

   b. The instrument I.D. Numbers in the Technical Specifications do not constitute a margin of safety. These I.D. Numbers are part of a system intended to track data and work on particular components. This change corrects incorrect I.D. Numbers, and therefore has no negative affect on any margin of safety.

   c. The correction of the high drywell pressure instrument I.D. Number is also a change to correct a typographical error. These I.D. Numbers are not part of the margin of safety, and therefore, this change does not reduce any margin of safety.

   d. Since this proposed change would add range onto the existing fuel zone level instruments plus provide accurate level measurement up to the steamlines, providing capability to assess water level over more of the vessel, this change does not reduce any margin of safety. Further, the redundant, qualified equipment and addition of a third indication in the fuel zone, to resolve questions in case of two different readings, reduces the likelihood of false indication contributing to the consequences of an accident. Therefore, this change does not reduce any margin of safety.

B. Additional basis for proposed no significant hazards consideration determination:

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48CFR14870). The examples include: "(i) A purely administrative change...." The District feels that proposed changes a, b, and c fall under this example. Proposed change d falls under the example: "(vii) A change to conform a license to changes in the regulations, where the License change results in very minor changes to the facility operations clearly in keeping with the regulations."