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November 8, 1996

ComEd

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

Subject: Zion Station Units 1 and 2
Supplement to Response to Request for Additional Information
Operating Licenses DPR-39 and DPR-48
NRC Docket Nos. 50-295 and 50-304

Reference:
1) Letter from R. P. Tuetken, Commonwealth Edison, to U.S. Nuclear Regulatory Commission, dated July 26, 1996, - Application for Amendment to Facility Operating Licenses DPR-39 and DPR-48.

2) Letter from C. Y. Shiraki, U. S. Nuclear Regulatory Commission, to I. Johnson, Commonwealth Edison, dated October 18, 1996, Request for Additional Information

3) Letter from J. H. Mueller, Commonwealth Edison, to U. S. Nuclear Regulatory Commission, dated October 22, 1996, Response to Request for Additional Information

This letter supplements Commonwealth Edison's (ComEd's) response to an NRC Request for Additional Information regarding a proposed amendment to the Zion Station Units 1 and 2 Facility Operating Licenses.

ComEd previously submitted, in Reference (1), a request to amend the Zion Station Technical Specifications. The proposed amendment would remove the requirements governing reactor coolant system pressure and temperature limits for heatup, cooldown, low temperature operation, and hydrostatic testing from the Technical Specifications. These requirements would be governed by a ComEd controlled Pressure Temperature Limits Report (PTLR). The NRC subsequently issued a request for additional information (Reference. 2) concerning the proposed amendment. ComEd's response to the NRC request was provided via Reference (3).

ComEd has revised two of the calculations submitted via Reference (3); Calculation No. 22S-B-004E-189, "Low Temperature Overpressure Protection (LTOP) Setpoint Calculation," and Calculation No. 22S-B-004E-166, Revision 0, "COMS/LTOP Pressure Instrument Loop Accuracy Calculation." Copies of these revised calculations are provided as Attachments A and B to this letter, respectively. Revision bars in the attached copies indicate the specific changes to the calculations. A general discussion of the more significant changes is provided in the following sections.

Revision 1 to Calculation No. 22S-B-004E-189

The calculation has been revised to correct the sign of the pressure difference due to static head, ΔP_{elev}, as used in Section 6.

The minimum temperature upon which the calculation is based has been changed from 65°F to 60°F to be consistent with the minimum steady state temperature data point indicated in WCAP-14664, "Zion Units 1 and 2 Heatup and Cooldown Limit Curves for Normal Operation." This change affected the density value, ρ, used in the determination of static head in Section 4.2.

The value for instrument uncertainty, $P_{Instrument\ Uncertainty}$, identified in Section 4.5 and used in Section 6 was changed to reflect the new value determined by a revision to Zion Calculation No. 22S-B-004E-166, "COMS/LTOP Pressure Instrument Loop Accuracy Calculation." The revision to this calculation is discussed below.

Revision 1 to Calculation No. 22S-B-004E-166

The assumption stated in Section 3.1 was revised to reference the applicable ComEd methodology document. A new item, 5.1.6, was added, to reference ISA-S67.04-1982, which currently is the edition of the standard accepted by the NRC via a Regulatory Guide.

The module temperature effects were recalculated as random variables, as specified by the vendor. The transmitter drift was adjusted to reflect the potential for the surveillance period to be extended 25%. For clarity, statements were added that transmitter bistable drift are 2σ random values.

The assumed range of temperatures to which the pressure instrument will be subjected has been changed from 65°F - 105°F, to a range of 65°F - 90°F, to more realistically reflect the temperatures that will be encountered during COMS operation. This is noted in a new Section 3.6, and affects the M&TE temperature error determination in Section 6.3.1.2.1.2, the pressure instrument temperature error determination in Section 6.3.1.5.2, and ultimately, the summary and conclusions in Section 7.

Overall Effect of Changes

The overall effect of these changes, as indicated in the Summary and Conclusions in Section 7 of calculation No. 22S-B-004E-189, is that the minimum acceptable Appendix G Curve Pressure, based upon the current LTOP setpoint is 469 psig at 60°F, rather than 472 psig at 65°F as previously indicated. These values are conservative relative to the values used in WCAP-14664, and therefore the pressure/temperature curves provided in the WCAP remain valid.

Please direct any questions you may have concerning this submittal to this office.

Respectfully,

J. H. Mueller
Site Vice President
Zion Station

Attachments

cc: NRC Regional Administrator - RIII
Zion Station Project Manager - NRR
Senior Resident Inspector - Zion Station
Office of Nuclear Facility Safety - IDNS
IDNS Resident Inspector
Zion NLA
Reg. Assurance File
DCD Licensing

Attachment A

Zion Calculation No. 22S-B-004E-189, Revision 1