

November 27, 1991

Dr. Thomas E. Murley, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, DC 20555

Attn: Document Control Desk

Subject:

Zion Station Units 1 and 2

Application for Amendment to Facility

Operating Licenses DPR-39 and DPR-48 and

Appendix A, Technical Specifications

Supplemental Information

NRC Docket Nos. 50-295 and 50-304

References: (a) July 10, 1991 letter from S.F. Stimac

to T.E. Murley

(b) October 31, 1991 letter from S.F. Stimac

to T.E. Murley

Dear Dr. Murley:

In reference (a), Commonwealth Edison Company (CECo) proposed an amendment to Facility Operating Licenses DPR-39 and DPR-48 and the associated Technical Specifications. The purpose of this amendment is to allow the use of 15 X 15 VANTAGE 5 fuel, in combination with the present 15 X 15 Optimized Fuel Assembly core, and ultimately as the entire core, for Zion Station Units 1 and 2. Reference (a) also proposed an amendment to remove cycle-specific parameter limits from the Technical Specifications and relocate them to a Core Operating Limits Report (COLR). The purpose of this letter is to provide supplemental information in support of the reference (a) amendment requests.

The COLR submittal included the addition of proposed Specification 6.6.1.F.2.7 to reference NFSR-0081, "Commonwealth Edison Company Topical Report of Benchmark of PWR Nuclear Design Methods Using the Phoenix-P and ANC Computer Codes", latest NRC approved revision. At the time that the amendment was initially prepared, this topical report had not yet been approved by NRC. Subsequently, Revision 0 of the topical was approved by NRC on March 11, 1991 via letter from R.M. Pulsifer to T.J. Kovach. The NRC Reviewer of this amendment has requested, via the Project Manager, that CECo incorporate the applicable revision information into proposed Specification 6.6.1.F.2.7. The requested change has been incorporated and marked-up and typed copies of the revised page 316a are included in Attachment A.

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As noted above, reference (a) requested a change to allow the use of VANTAGE 5 fuel and to relocate cycle-specific parameters to a COLR. In order to optimize the utilization of resources (CECo and NRC), the amendment request was constructed such that VANTAGE 5 and COLR changes are interrelated. Therefore, CECo requests that both portions of the amendment be approved simultaneously, utilizing the effective date as specified in reference (a) (effective concurrent with the initial loading of VANTAGE 5 fuel assemblies in Zion Unit 1).

Reference (a) also provided a schedule for submittal of a supplemental report describing the results of VANTAGE 5 fuel assembly hydraulic testing. Reference (b) provided clarification regarding the content of the hydraulic testing supplemental report. The testing to determine the hydraulic characteristics of the 15x15 Low Pressure Drop and Intermediate Flow Mixer (IFM) grids has been completed. The preliminary results are described in Attachment B, Westinghouse "Hydraulic Test Report for 15x15 Low Pressure Drop and Intermediate Flow Mixer Grids." The final pressure drop results will be provided to your Staff by December 31, 1991. These results indicate that the fuel assembly pressure drop of the VANTAGE 5(IFM) design agrees very well with the pressure drop of the current Optimized Fuel Assembly (OFA) design, which was also part of the hydraulic test program. The OFA results are higher than previous OFA measurements and the impact is being evaluated.

As noted above, the preliminary results appear to indicate pressure drops for OFA which are slightly higher than those determined by previous measurements. Although these results are preliminary, CECo has begun the process of determining their impact on existing analyses. An initial evaluation has determined that these new results do not significantly impact existing analysis results. A final evaluation to determine the actual impact on existing analyses will be completed by December 16, 1991.

It should be noted that the information in Attachment B is considered proprietary information to Westinghouse Electric Corporation and is supported by an affide it signed by Westinghouse Electric Corporation, the owner of the information. Attachment C contains the affidavit that sets forth the basis on which the information may be withheld from public disclosure by the NRC and addresses the considerations listed in paragraph (b)(4) of 10CFR2.790 of the NRC's regulations. Accordingly, CECo requests that the information contained in Attachment B be withheld from public disclosure in accordance with 10CFR2.790.

The Evaluations of Significant Hazards Considerations and Environmental Assessments, provided as Enclosure 1, Appendices F & G and Enclosure 2, Appendices B & C to reference (a), are not affected by this supplemental information.

To the best of my knowledge and belief, the statements contained herein are true and correct. In some respects, these statements are not based on my personal knowledge but upon information received from other Commonwealth Edison and contractor employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please direct any questions to this office.

Respectfully,

S.F. Stimac Nuclear Licensing Administrator

Attachments: (A) Marked up and Typed Copies of Proposed Technical Specification Page 316a

(B) Westinghouse Hydraulic Test Report

(C) Proprietary Documentation

cc: A. Bert Davis, Regional Administrator - RIII J.B. Hickman, Project Manager - NRR J.D. Smith, Senior Resident Inspector - Zion Office of Nuclear Facility Safety - IDNS