

February 17, 1994

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

Subject:

Byron Station Unit 2

Mid-Cycle Revision to the Cycle 5 Operating Limits Report

NPF-66; NRC Docket No. 50-455

References:

 Westinghouse WCAP-9272-P-A, dated October 1985;
"Westinghouse Reload Safety Evaluation Methodology", (originally issued March 1978)

 J. A. Bat er Letter to Dr. T. E. Murley, dated October 20, 1993, "Byron Station Unit 2 Cycle 5 Reload"

Dear Dr. Murley:

Pursuant to Generic Letter 88-16, "Removal of Cycle Specific Parameter Limits From Technical Specifications," and Technical Specification 6.9.1.9, "Operating Limits Report," Commonwealth Edison is providing the NRC with a mid-cycle revision to the Byron Unit 2 Cycle 5 Operating Limits Report. The purpose of this letter is to transmit the Byron Unit 2 Cycle 5 revised Fxy and Fq*P values in the Operating Limits Report and to inform you of an error that was discovered in the values originally supplied.

During Byron Unit 2 Cycle 5 operation, a trend of the Operating Limits Parameter, Fxy, showed that this limit would possibly be exceeded during the cycle. As Byron has Fq(z) Technical Specifications, exceeding an Fxy limit would require that an additional surveillance be performed to ensure Fq LOCA margin was available at those axial locations where the limit was exceeded. Since the original Fxy limits were developed using predicted Cycle 5 information, CECo initiated an investigation of the available margin associated with this limit through design calculations utilizing actual cycle depletion information. This updated calculation will preclude the station from performing unnecessary additional surveillances as indicated in Technical Specification 3/4.2.2, Heat Flux Hot Channel Factor - Fq(z).

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A review of the maximum Fq*P limit revealed that an error existed in the original Operating Limits Report values. The Cycle 5 analysis values were generated using only the limiting end of the burnup window when the full burnup band should have been utilized. A review of the BY2C5 Safety Parameter Interaction List (SPIL) limits was performed which verified that this error did not impact station operation or the conclusions provided in the Reload Design Safety Evaluation. Corrective actions have been taken by Commonwealth Edison to preclude this from occurring in the future.

Attachment 1 provides the revised Operating Limits Report for Cycle 5 pursuant to Technical Specification 6.9.1.9. The revised Operating Limits Report was developed by CECo applying NRC approved reload design methodologies developed by Westinghouse as described in Reference 1. Commonwealth Edison has verified that the revised limits do not effect the cycle specific limits generated during the reload design process.

In summary, the Byron Unit 2 Cycle 5 revised Operating Limits Report, pursuant to the requirements of Technical Specification Section 6.9.1.9, was generated and verified by Commonwealth Edison using NRC approved methodologies.

Please direct any questions regarding this notification to this office.

Very truly yours,

Joseph A. Bauer

Nuclear Licensing Administrator

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Attachment

cc: G. F. Dick - Byron Project Manager, NRR

J. B. Martin - Regional Administrator, Region III

H. Peterson - Senior Resident Inspector - Byron