Wayne H. Jens
Vice President
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Detroit Edison

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September 27, 1984
EF2-72252

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Chief
Licensing Branch, No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: (1) Fermi 2
NRC Docket No. 50-341

(2) NRC to Detroit Edison letter, "Preliminary Evaluation of the IDVP Performed by Cygna Energy Services for the Fermi 2 Facility," March 27, 1984

Subject: Annulus Pressurization Piping Load Reevaluation

Dear Mr. Youngblood:

In Enclosure 2 to Reference (2) it was requested that Cygna expand its review to determine whether the piping stress evaluation for safety related piping systems attached to the reactor coolant pressure boundary considered faulted loads, including annulus pressurization. As exhibited in response to Question 110.11 from Appendix E.5 of the Fermi 2 FSAR and records of meetings with your staff, it is clear that such loads were assessed. Based on discussions with Mr. David Terao of NRC-Mechanical Engineering Branch, it was agreed that Detroit Edison should confirm that the assessment for structural integrity was still valid since there had been a difference identified between the as-modeled and as-built configuration in a portion of the RHR system in question.

Edison has completed the as-built analysis of the recirculation and drywell RHR piping for combined annulus pressurization and Design Basis Earthquake (DBE) loadings. The results of this analysis showed that all piping stresses are within Code allowable values (3Sm), and all support components loads are within their Level D component ratings [with one exception where the rating was exceeded by a negligible (4.4%) amount]. However, Detroit Edison is making minor modification (weld size increase) to structural steel for three support to bring all supports into compliance with Code allowable weld stress limits. (It is

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judged that structural integrity would not be challenged in the present as-built configuration.) Appropriate design change documents have been prepared and the additional welding on these supports will be completed prior to fuel load.

In addition, Edison has reviewed the annulus pressurization analysis of all other large bore (NPS $\geq$ 4") reactor coolant pressure boundary piping systems, comparing the analysis input to the as-built configuration. For these piping systems, the existing analyses were found to adequately represent the as-built configurations. Therefore, we conclude that there is no loss of structural integrity (other than the postulated break itself) for this combination of postulated events as was the conclusion of the original analysis.

If you have any questions on this matter, please contact Mr. O. K. Earle at (313) 586-4211.

Sincerely,

Wayne H. Jens

cc: Mr. P. M. Byron
Mr. M. D. Lynch
Mr. D. Terao (NRC-NRR MEB)
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