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 AUTH. NAME AUTHOR AFFILIATION
 ALEXICH, M. P. Indiana & Michigan Electric Co.
 RECIP. NAME RECIPIENT AFFILIATION
 DENTON, H. R. Office of Nuclear Reactor Regulation, Director (post 851125)

SUBJECT: Informs that WCAP-11145 will be ref in order to satisfy requirements of TMI Action Item II.K.3.31, per Generic Ltr 83-35. Rept documents results of series of small break LOCA analyses performed w/NOTRUMP evaluation model.

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INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631
COLUMBUS, OHIO 43216

July 30, 1986

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Donald C. Cook Nuclear Plant Unit Nos. 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
WOG SBLOCA GENERIC ANALYSIS USING NOTRUMP

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

- Reference:
1. S. A. Varga Letter to J. E. Dolan, May 24, 1985 TMI Action Item II.K.3.31 licensing condition.
 2. NRC Generic Letter 83-35 from D. G. Eisenhut, "Clarification of TMI Action Plan Item II.K.3.31," November 2, 1983.
 3. L. D. Butterfield letter to J. Lyons, "Westinghouse Owners Group Transmittal of WCAP-11145, OG-190," June 11, 1986.

Dear Mr. Denton:

The letter of S. A. Varga to J. E. Dolan (Reference 1) of May 24, 1985 required Indiana & Michigan Electric Company (I&MECo) to submit a plant-specific analysis utilizing the new NRC-approved NOTRUMP Small Break LOCA (SBLOCA) Evaluation Model (EM), as required by TMI Action Plan Item II.K.3.31. In Reference 2, the NRC Staff indicated that the resolution of TMI Action Plan Item II.K.3.31 may be accomplished by generic analyses to demonstrate that the previous NRC-approved WFLASH SBLOCA EM results were conservative when compared with the new NOTRUMP SBLOCA EM. Such generic studies were undertaken by the Westinghouse Owners Group (WOG), of which AEPSC/I&MECo is a participating member. The WOG has completed these generic studies and has submitted the results of the analyses to the NRC in the topical report WCAP-11145 (Reference 3). The purpose of this letter is to inform you that I&MECo is referencing topical report WCAP-11145 in order to satisfy the requirements of TMI Action Item II.K.3.31 for the D. C. Cook Nuclear Plant in a generic fashion, in accordance with Reference 2.

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Topical report WCAP-11145 documents the results of a series of Small Break LOCA (SBLOCA) analyses performed with the NRC-approved NOTRUMP SBLOCA Evaluation Model. Cold-leg break spectrum analyses were performed for the limiting SBLOCA plant from each of the Westinghouse 4-loop, 4-loop Upper Head Injection (UHI), 3-loop, and 2-loop plant categories. The limiting SBLOCA plant in each category was defined on the basis of previous SBLOCA analyses which were performed with the NRC approved WFLASH SBLOCA EM. In addition to the cold-leg break spectrums, a hot-leg and pump suction break were performed as part of the 4-loop plant analyses, confirming that the cold leg was still the worst break location. Comparison of the NOTRUMP cold-leg break spectrum results with the previously generated WFLASH results showed that the WFLASH results were conservative for all plant categories. In particular, the 4-loop plant category results showed that the NOTRUMP SBLOCA EM calculated a limiting Peak Clad Temperature (PCT) which was 537°F lower than that previously calculated by the WFLASH SBLOCA EM.

The generic results documented in WCAP-11145 demonstrated that a plant-specific reanalysis of the 4-loop D. C. Cook Nuclear Plant with the NOTRUMP SBLOCA EM would result in the calculation of a limiting PCT which would be significantly lower than the 1716°F for Unit 1 and 1754°F for Unit 2 PCT currently calculated with the WFLASH SBLOCA EM. Hence, the WFLASH SBLOCA EM results which currently form the licensing basis for D. C. Cook are conservative and still valid for demonstrating the adequacy of the Emergency Core Cooling System to mitigate the consequences of a SBLOCA, as required by 10 CFR 50.46. It is therefore concluded that a plant-specific analysis is not needed in order for D. C. Cook to comply with TMI Action Item II.K.3.31. Rather, I&MECo references WCAP-11145 in order to comply with TMI Action Item II.K.3.31 on a generic basis, in accordance with Reference 2. This should satisfy the request mentioned in Mr. S. A. Varga's letter dated May 24, 1985 to J. E. Dolan referencing Generic Letter 83-35.

Since the analysis of record for small-break loss-of-coolant accident analysis for both units of the Donald C. Cook Nuclear Plant is the analysis using WFLASH SBLOCA EM, we believe that the evaluation transmitted by Westinghouse Topical Report WCAP-11145 is applicable to both units of the Donald C. Cook Nuclear Plant. For this reason, we are requesting that TMI Action Item II.K.3.31 be closed for both units of the Donald C. Cook Nuclear Plant.

This document has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,


M. P. Alexich
Vice President

BR5
7/20/86