



Westinghouse
Electric Corporation

Water Reactor
Divisions

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NS-NRC-86-3098
January 17, 1986

Herbert N. Berkow, Director
Standardization and Special Projects Directorate
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Transmittal of Topical Report (WCAP-10965 Proprietary/WCAP-10966 Non-Proprietary), ANC - A Westinghouse Advanced Nodal Computer Code", for NRC Review and Approval

REFERENCES: 1. Camden, T. M. et al, "PALADON - Westinghouse Nodal Computer Code", WCAP-9485A (Proprietary) and WCAP-9486A (Non-Proprietary), December 1978.
2. Ankney, R., "PALADON - Westinghouse Nodal Computer Code", Supplement 1, WCAP-9485A (Proprietary) and WCAP-9486A (Non-Proprietary), September 1981.
3. Bordelon, F. M. et al, "Westinghouse Reload Safety Evaluation Methodology", WCAP-9272-P-A and WCAP-9273-NP-A, July 1985.
4. NRC letter from D. G. Eisenhower to Licensees of Operating Reactor and Applicants for Operating License, dated August 20, 1984.

ATTENTION: Harold Bernard, Project
Standardization and Special Projects Directorate

Carl Berlinger, Reactor Systems Branch
Chief, Division of PWR Licensing A

Dear Mr. Berkow:

Enclosed are:

1. Twenty-five (25) of WCAP-10965-P, "ANC - A Westinghouse Advanced Nodal Computer Code", (Proprietary).
2. Fifteen (15) copies of WCAP-10966-NP, "ANC - A Westinghouse Advanced Nodal Computer Code", (Non-Proprietary).

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Two R.d Sheets

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Mr. H. N. Berkow
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Also enclosed are:

1. One (1) copy of Application for Withholding, AW-86-007 (Non-Proprietary).
2. One (1) copy of Affidavit, AW-76-31 (Non-Proprietary).
3. One (1) copy of Proprietary Information Notice.

This topical is submitted for your review and approval as a supplement to the PALADON topical reports, References 1 and 2.

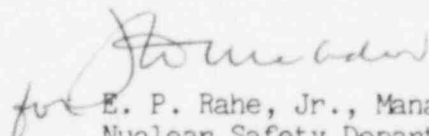
References 1 and 2 provide the data which demonstrated the ability of PALADON to accurately predict assembly power, rod power, and reactivities. To improve the prediction accuracy and to eliminate the need to periodically benchmark nodal calculations against discrete calculations, a new nodal method described in WCAPS 10965/10966 has been incorporated into PALADON. The ANC (Advanced Nodal Code) includes new nodal methods to predict assembly power, rod power and reactivities. The topical is intended to confirm the accuracy of ANC predictions for core design evaluations and to demonstrate that the conclusions given in the Nuclear Design section of the approved Westinghouse Reload Methodology topical, Reference 3, are valid when the ANC is applied to core design calculations.

Westinghouse intends to apply the ANC methodology to an upcoming reload scheduled to startup in the third quarter of 1986. A timely NRC review and approval of the enclosed topical in accordance with Reference 4 is requested to meet this scheduled startup.

This submittal contains proprietary information of Westinghouse Electric Corporation. In conformance with the requirements of 10CFR Section 2.790, as amended, of the Commission's regulations, we are enclosing with this submittal an application for withholding from public disclosure and an affidavit. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission.

Correspondence with respect to the affidavit or application for withholding should reference AW-86-007 and should be addressed to R. A. Wiesemann, Manager of Regulatory and Legislative Affairs, Westinghouse Electric Corporation, P.O. Box 355, Pittsburgh, Pennsylvania 15230.

Very truly yours,


for E. P. Rahe, Jr., Manager
Nuclear Safety Department

WMS/kk
Enclosures