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OYSTER CREEK NUCLEAR GENERATING STATION TOPICAL REPORT 045 SUPPLEMENTRY INFORMATION

Attached are copies of published reports and papers on the new control rod model in RETRAN-02 MODO4 and how it compares with the old one. These references address the following:

- Validation of the new rod model. The model was validated by PP&L, NSAC and GPUN, Section V of EPRI NP-5509-CCM, December 1987.
- Limitations of the old rod model. The strong effects of the flux weighing on the cross sections made the BNL-TWIGL based old model inappropriate in many cases. This has been addressed by calculating the control fraction in the three dimensional static simulator and passing the information to RETRAN rather than calculating the fraction from the collapsed cross-sections information - NUREG-CP-0080, 1986 (G. C. Gose & J. A. McClure).
- Difficulties encountered with the old model are documented by J. A. Naser, et al. (EPRI NP-3803-SR, February 1985) in Comparison of One-Dimensional & Point Kinetics for Various LWR Transients. See "Conclusion from the BWR Study."
- Southern Company Services Study on Hatch-2 where the difficulties of the old model are presented (A. Alapour & E. B. Gibson, EPRI NP-3803-SR, 1985).

Note: Plots of the point kinetic transient runs for MODO4 and MODO3 will be provided when available.

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