



Westinghouse Electric Company
CE Nuclear Power LLC

2000 Day Hill Road
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June 12, 2000
LD-2000-0037

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Application of CENPD-390-P, "PHOENIX and POLCA Codes for Nuclear Design" to Mixed BWR Cores

Reference: *Letter, I. C. Rickard to US NRC Document Control Desk, "Submittal of CENPD-390-P for Review and Approval," LD-99-023, April 15, 1999*

The purpose of this letter, submitted in response to a staff request, is to confirm that CE Nuclear Power (CENP) will adhere to the following conditions regarding the application of the PHOENIX / POLCA nuclear design codes for licensing analyses:

1. When applying PHOENIX / POLCA to transition cores, CENP will use fuel-specific data to model the thermal and hydraulic behavior of the non-CENP fuel and confirm that the power distribution uncertainties derived for CENP fuel are applicable to the non-CENP fuel by comparison with available operating data such as LPRM output. The mixed core methodology from CENPD-300-PA will be used to perform thermal limit calculations for non-CENP co-resident fuel.
2. CENP will apply the PHOENIX / POLCA codes to BWR fuel up to and including 10x10 lattices with a maximum enrichment of 5 w/o UO₂, and with burnable absorbers composed of a mixture of UO₂ and Gd₂O₃ with concentrations up to 9 w/o Gd₂O₃. Application of these codes to non-UO₂ fuel or to fuel using burnable poisons other than Gadolinia will need prior NRC approval.
3. The NRC will be informed in writing and provided an opportunity for review of any applications where the PHOENIX / POLCA code is applied to fuel types outside of the range specified in Item 2 above. Also, the staff will be informed of any application and given an opportunity for review where models needed for BWR licensing analysis contained in PHOENIX / POLCA are used for applications outside that used to generate the information contained in the subject report.

Please feel free to contact Virgil Paggen of my staff at 860-285-4700 or me if you have any questions.

Sincerely,
CE Nuclear Power LLC

Ian C. Rickard, Director
Nuclear Licensing

copy: J. S. Cushing (OWFN, 4 D7)
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