

EXXON NUCLEAR COMPANY, Inc.

2101 Horn Rapids Road

P. O. Box 130, Richland, Washington 99352

Phone: (509) 375-8100 Telex: 15-2878

January 6, 1983

JCC:004:83

Mr. L. E. Phillips
Core Performance Branch
Division of Systems Integration
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

SUBJECT: XN-NF-621(P), Revision 1, "Exxon Nuclear DNB Correlation for PWR Fuel Designs," April 1982

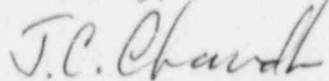
Ref.: Letter, J. C. Chandler (ENC) to L. E. Phillips (NRC), same subject, dated January 3, 1983; JCC:001:83

Dear Mr. Phillips:

Table 2 of the reference letter provided our proposed range of applicability for the XNB critical heat flux correlation. A typographical error in the hydraulic diameter limits caused the upper value to be given as 0.510 inch rather than the 0.528 inch supported by the experimental conditions in the subject report. Similarly, an error in the table gave a minimum heated length of 144 inches rather than the 66 inches supported by the experimental data. A corrected Table 2 is attached.

Please revise our proposed range of applicability to correct these errors. If you have any questions, please feel free to call, telephone (509) 375-8639.

Sincerely,



J. C. Chandler
Reload Fuel Licensing

JCC:gf
Attachment
As noted

CC: Mr. J. J. Holonich (USNRC)

T010

Table 2 Range of Applicability

| | |
|---|------------------------------------|
| Pressure (psia) | 1395-2425 |
| Inlet Avg. Mass Velocity (Mlb/hr-ft ²) | .92 - 3.04 |
| Local enthalpy (Btu/lb) | 594.85 - 821.24 |
| X | -.2 - +.3 |
| Heat length (in.) | 66 - 168 |
| Spacer span (in.) | 14.3 - 22 |
| Inlet subcooling (Btu/lb) | 37.2 - 336.34 |
| Vendor | ENC, CE, Westinghouse |
| Grid Design | Non-vaned, vaned |
| Axial profile | Chopped cosine, uniform, upskew |
| Hydraulic Diameter (nominal channel)(inch) | 0.463 - 0.528 |