

NS-TMA-4 17

August 1, 1979

R. P. Denise, Acting Assistant Director  
for Reactor Safety  
Division of Systems Safety  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Denise:

We have received your letter of June 22, 1979 requesting information concerning test and analytical methods and techniques used in the measurement of core physics parameters. After discussion with Mr. W. L. Brooks of your staff it has been determined that the information requested is available in previously submitted topical reports or at operating plant sites.

Topical reports submitted previously by Westinghouse covering various portions of your request are:

1. WCAP-9217 (Proprietary), 9218 (Non-Proprietary), "Results of the Control Rod Worth Program". This topical documents the methods and accuracy of control rod worth measurements using critical boron concentrations.
2. WCAP-9485 (Proprietary), 9486 (Non-Proprietary), "PALADON - Westinghouse Nodal Computer Code". This topical documents analytical techniques for calculating core physics parameters.
3. WCAP-8575 (Proprietary), 8576 (Non-Proprietary) and Supplements I and II, "Augmented Startup and Cycle 1 Physics Program" notes several comparisons between power distribution parameters and calculated simulations. Many of the same techniques are utilized in other core physics parameter calculations.

Letters documenting various aspects of your request are:

1. "Rod Exchange Technique for Rod Worth Measurement" (Proprietary) was submitted on Docket No. 50-305, Kewaunee Nuclear Power Plant in May 1978, to substantiate the use of the "Rod Swap" measurement

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technique. This submittal contains comparisons between measured and predicted control bank worths.

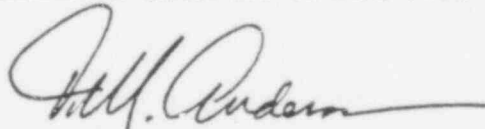
2. Letter NS-TMA-1 (Proprietary), 11/1/78, from T. M. Anderson (Westinghouse) to P. S. Check (NRC) provides additional information on the "Rod Swap" technique.
3. Letter NS-TMA-2072 (Proprietary), 4/24/79, from T. M. Anderson (Westinghouse) to P. S. Check (NRC) provides the test procedure for the "Rod Swap" technique.

In addition, considerable information is available at operating plants sites. Test procedures and acceptance criteria are available for NRC inspection as required by Regulatory Guide 1.68. This information is used for both Cycle 1 and reload tests. The individual plant procedures are available to you through the Office of Inspection and Enforcement. Also the information is provided in summary form through the use of Startup and Reload test reports on the individual plant docket.

Westinghouse believes that the above noted sources should provide more than sufficient information for your review. Because the sources are either formal documents currently on file with the NRC or are available for your inspection at the numerous plant sites, Westinghouse believes that the submittal of a topical report is not necessary. If you have any questions concerning this response, please contact Mr. B. G. Croley, Manager, Reactor Protection Evaluation (Tel: 412/373-4890).

Very truly yours,

WESTINGHOUSE ELECTRIC CORPORATION



T. M. Anderson, Manager  
Nuclear Safety Department

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