



Commonwealth Edison

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August 6, 1981

Mr. T. A. Ippolito, Chief
Operating Reactors - Branch 2
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Unit 2
Summary Startup Test Report
for Reload 5 (Cycle 8)
NRC Docket No. 50-237



Dear Mr. Ippolito:

Enclosed for your information and use is the Dresden Unit 2, Reload 5, Cycle 8 Startup Test Report. This report is provided per Technical Specification 6.6.A.1 and is in accordance with previous requests from the NRC Staff.

Please address any questions you may have concerning this matter to this office.

One (1) signed original and thirty-nine (39) copies of this letter and enclosure are provided for your use.

Very truly yours,

Thomas J. Rausch

Thomas J. Rausch
Nuclear Licensing Administrator
Boiling Water Reactors

Enclosure

cc: Region III Inspector - Dresden

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DRESDEN UNIT 2

CYCLE 8

STARTUP TESTING SUMMARY

Dresden Unit 2 resumed commercial operation for Cycle 8 on May 11, 1981 following a refueling and maintenance outage which included the reloading of 88 P8DRB265L fuel assemblies (pre-pressurized, 8x8 retrofit fuel, 2% Gd) and 136 P8DRB265H fuel assemblies (pre-pressurized 8x8 retrofit fuel, 3% Gd). Since this is a new fuel design for Dresden 2, a comprehensive startup testing program was performed as required by Technical Specification 6.6.A.1 (Appendix A to DPR-19, Docket No. 50-237). The following is a summary of the startup testing results.

The major new design feature of the pre-pressurized, 8x8 retrofit fuel is that the helium backfill pressure has been increased from 1 atmosphere to 3 atmospheres, resulting in improved pellet-to-clad heat transfer. As stated in NEDE-23786-1-P (Fuel Rod Pre-pressurization Amendment 1), the pre-pressurization is a relatively simple design improvement expected to enhance fuel reliability. Evaluations of LOCA, transient and stability analyses (see above referenced LTR) indicated that fuel rod pre-pressurization had only minor effects on core safety parameters. In light of these considerations, no significant changes in core response or operation are anticipated.

The startup test program performed was similar to that performed for previous reloads at Dresden 2 and 3. The program consisted of various physics tests (shutdown margin, critical eigenvalue comparison, moderator temperature coefficient, etc.), instrument calibrations (LPRM, TIP's, flow instrumentation), and determination of baseline recirculation flow data as addressed by the Technical Specifications, Final Safety Analysis Report, and previous commitments to the Nuclear Regulatory Commission. No unusual conditions were noted, and test results were similar to previous cycles. This was expected due to the minimal changes in the fuel design.

Summaries of the startup tests identified in the Draft Regulatory Guide on refueling and startup tests for LWR reloads are attached. Additional test results are available at the site.