



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

August 30, 1990

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: LaSalle County Station Unit 2
Startup Test Report Summary
NRC Docket No. 50-374

Dear Sir:

Enclosed for your information and use is the LaSalle County Station Unit 2 Cycle 4 Startup Test Report Summary. This report is submitted in accordance with Technical Specification NPF-18, Section 6.6.A.1.

LaSalle Unit 2 Cycle 4 began commercial operation on June 12, 1990 following a refueling and maintenance outage. The Unit 2 Cycle 4 core loading consisted of 212 Fresh GE 8x8 NB (GE 9B) fuel bundles and 552 reload bundles. The new fuel has an option for multiple lattice types (i.e., axial zoned enrichment and gadolinia).

The startup test program was satisfactorily completed on August 13, 1990. All test data was reviewed in accordance with the applicable test procedures and, exceptions to any results were evaluated to verify compliance with Technical Specification limits to ensure the acceptability of subsequent test results.

Attached are the evaluation results from the following tests:

- Core Verification
- Single Rod Subcritical Check
- Control Rod Friction and Settle Testing
- Control Rod Drive Timing
- Shutdown Margin Subcritical Demonstration
- Shutdown Margin Test (In-Sequence Critical)
- Reactivity Anomaly Calculation (Critical and Full Power)
- Scram Insertion Times
- Core Power Distribution Symmetry Analysis

If you have any additional questions concerning this matter, please contact this office.

Very Truly Yours,

W.E. Morgan
Nuclear Licensing Administrator

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ZNLD/ID145

cc: Regional Administrator - Region III
NRC Senior Resident Inspector - LSCS
R. Pulsifer - Project Manager, NRR

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LaSalle Unit 2 Cycle 4 Startup Test Report

SUMMARY

LaSalle Unit 2 Cycle 4 began commercial operation on June 12, 1990 following a refueling and maintenance outage. The Unit 2 Cycle 4 core loading consisted of 212 fresh GE8x8NB (GE9B) fuel bundles and 552 reload bundles. The new fuel (GE9B) has an option for multiple lattice types (i.e., axial zoned enrichment and gadolinia) and utilizes a single large central water rod which occupies the space of 4 fuel rods. In addition, 2 Westinghouse LPRM strings were replaced with Reuter-Stokes NA 200 LPRM strings. No control blades were replaced for Unit 2 Cycle 4, however, 49 control blades were shuffled to optimize control blade lifetime.

A comprehensive startup testing program was performed during startup and power ascension. The startup program included:

- local and in-sequence shutdown margin tests.
- reactivity anomaly calculations at initial critical and full power.
- nuclear instrument performance verifications (SRM, IRM, APRM response and overlap checks).
- instrument calibrations (LPRM, APRM, TIPS, core flow).
- control rod drive friction and full core scram timing.
- LPRM response to control rod movement.
- process computer verification, comparison to off-line calculation.
- recirculation system performance data.
- baseline stability data acquisition.

The startup test program was satisfactorily completed on August 13, 1990. All test data was reviewed in accordance with the applicable test procedures, and exceptions to any results were evaluated to verify compliance with Technical Specification limits to ensure the acceptability of subsequent test results.

A startup test report must be submitted to the Nuclear Regulatory Commission (NRC) within 90 days following resumption of commercial power operation (in accordance with Technical Specification 6.6.A.1). The startup test report presented in this on-site review (Attachment B) contains results (evaluations) from the following test:

- Core Verification
- Single Rod Subcritical Check
- Control Rod Friction and Settle Testing
- Control Rod Drive Timing
- Shutdown Margin Subcritical Demonstration
- Shutdown Margin Test (In-sequence critical)
- Reactivity Anomaly Calculation (Critical and Full Power)
- Scram Insertion Times
- Core Power Distribution Symmetry Analysis

A full evaluation of the startup test program is included with the evaluation of LTP-1600-37 (On-Site Review 90-24), Unit Startup Test Program. Data from each startup is available at LaSalle Station.

FINDINGS AND RECOMMENDATIONS

Based upon the preceding discussion and the review of the startup test report, On-Site Review recommends submittal of the "LaSalle County Nuclear Power Station Unit 2 Cycle 4 Startup Test Report" (Attachments B and C) to the NRC in accordance with Technical Specification 6.6.A.1.