



to DEA
by
5/24

PRIORITY ROUTING
Second
✓ 105-2185
✓ 105-548
✓ 105-
FILE F

James G. Keppler, Regional Administrator
Office of Inspection and Enforcement
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

N. F. Kalivianakis
J. Kalivianakis

8506040258 850515
PDR ADOCK 05000254
R PDR

MAY 20 1985

QUAD-CITIES NUCLEAR POWER STATION

UNIT ONE

SUMMARY STATUS OF FUEL PERFORMANCE
END OF CYCLE SEVEN

May 1985

At the end of this reporting period, Quad-Cities Unit One had completed seven Reactor cycles of operation. During that time, 1768 fuel assemblies had seen duty in the Unit One core.

In April, 1984, 551 fuel assemblies were tested using dry out-of-core sipping equipment. Included in this total is a known leaker assembly discharged during a past refueling outage that was sipped to test the sensitivity of the equipment. Two failed fuel assemblies were identified; a total of 113 fuel assembly failures have occurred in Unit One.

Upon closer examination, it was determined that fuel rod C1, in bundle LY3056 (once-burned), and fuel rod F1, in bundle LJU084 (twice-burned), had failed due to manufacturing defects. The bundles were reconstituted by General Electric (rod C1 in LJU084 to LY3056, rods C1 and F1 in LJB487 to LJU084), successfully sip tested, and were installed in Unit One for further irradiation in Cycle Eight.

Additional testing and examination of the four Barrier Lead Test Assemblies (LJB586, 587, 588, and 589) was performed in April, 1984. All four assemblies were visually inspected, the water rods were replaced, and all fuel rod lengths were measured. In addition, five rods out of each of the Zr liner assemblies (LJB586 and 587) were visually inspected, eddy current and ultrasonic tested, and profilometry tested. The Barrier Lead Test Assemblies are undergoing their fourth cycle of irradiation in Cycle Eight.

For Unit One Cycle Eight, 196 new LY-P8X8R (barrier clad) assemblies were 100 percent visually inspected and loaded.

QUAD-CITIES NUCLEAR POWER STATION

UNIT TWO

SUMMARY STATUS OF FUEL PERFORMANCE
END OF CYCLE SEVEN

May 1985

At the end of this reporting period, Quad-Cities Unit Two had completed seven Reactor cycles of operation. During that time, 1855 fuel assemblies had seen duty in the Unit Two core. Of those 1855 fuel assemblies, 289 were determined to have failed and were discharged as leaker assemblies. All of the assemblies specified as being failed were of the initial fuel batch 7X7 lattice CX or CY bundles.

In April, 1985, 78 fuel assemblies were tested using dry out-of-core sipping equipment. Included in this total are: two known leaker assemblies discharged during previous refueling outages (to test sensitivity of the equipment), 16 barrier fuel ramp cell assemblies (from the Barrier Fuel Demonstration Project), 16 barrier fuel ramp cell buffer assemblies, 28 miscellaneous barrier fuel assemblies, and 16 discharged non-barrier assemblies to be used in the EPRI-funded fuel decontamination program. No additional failed fuel assemblies were identified.

For Unit Two Cycle Eight, 176 new LYA-P8X8R (barrier clad) assemblies were 100 percent visually inspected and loaded.