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FILE

Consumers Power Company

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

April 19, 1978

Mr James G Keppler
Office of Inspection and Enforcement
Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

DOCKET 50-255 - LICENSE DPR-20 -
PALISADES PLANT - LICENSEE EVENT
REPORT 78-008

Attached is Licensee Event Report 78-008 for the Palisades Plant as required by Technical Specification 6.9.2(a).2.

David P. Hoffman

David P Hoffman
Assistant Nuclear Licensing Administrator

CC: Director, Office of Nuclear Reactor Regulation
Director, Office of Inspection and Enforcement

APR 21 1978

Palisades

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | M I P A L 1 (2) LICENSEE CODE | 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE NUMBER | 4 1 1 1 1 (4) LICENSE TYPE | (5) CAT

CON'T 0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 2 5 5 (7) DOCKET NUMBER | 0 4 0 5 7 8 (8) EVENT DATE | 0 4 1 9 7 8 (9) REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 Reanalysis of the cycle 2 core axial power distribution has shown that
0 3 the power distribution limits of TS 3.10.3 were exceeded by approximately
0 4 12 percent for steady state operation during cycle 2. The limits were
0 5 exceeded only in the upper portion of the core. This condition was dis-
0 6 covered through the use of an improved incore analysis (INCA) computer
0 7 code.
0 8

0 9 | SYSTEM CODE: R C (11) | CAUSE CODE: X (12) | CAUSE SUBCODE: Z (13) | COMPONENT CODE: Z Z Z Z Z Z (14) | COMP. SUBCODE: Z (15) | VALVE SUBCODE: Z (16)

(17) LER/RO REPORT NUMBER | EVENT YEAR: 7 8 | — | SEQUENTIAL REPORT NO.: 0 0 8 | / | OCCURRENCE CODE: 0 1 | REPORT TYPE: T | — | REVISION NO.: 0

ACTION TAKEN: X (18) | FUTURE ACTION: Z (19) | EFFECT ON PLANT: Z (20) | SHUTDOWN METHOD: Z (21) | HOURS (22): 0 0 0 0 | ATTACHMENT SUBMITTED: Y (23) | NPRD-4 FORM SUB.: N (24) | PRIME COMP. SUPPLIER: Z (25) | COMPONENT MANUFACTURER: Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The incore analysis (INCA) code used during cycle 2 yielded a poor rep-
1 1 resentation of the axial power distribution in the core region above the
1 2 topmost incore detectors. A revised form of the INCA code gives a better
1 3 representation of core power near the top of the core, and will be used
1 4 for cycle 3 operation.

1 5 | FACILITY STATUS: G (28) | % POWER: 0 0 0 (29) | OTHER STATUS (30): N/A | METHOD OF DISCOVERY: A (31) | DISCOVERY DESCRIPTION (32): Use of revised INCA code

1 6 | ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): N/A | LOCATION OF RELEASE (36): N/A

PERSONNEL EXPOSURES

1 7 | NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): N/A

PERSONNEL INJURIES

1 8 | NUMBER: 0 0 0 (40) | DESCRIPTION (41): N/A

LOSS OF OR DAMAGE TO FACILITY (43)

1 9 | TYPE: Z (42) | DESCRIPTION: N/A

PUBLICITY

2 0 | ISSUED: N (44) | DESCRIPTION (45): N/A | NRC USE ONLY

Attachment to LER 78-008
Consumers Power Company
Palisades Nuclear Plant
Docket 050-255

Discussion

Recent revisions to the Incore Analysis (INCA) computer code have been made in order to more accurately determine the core axial power distributions. As a result of the improved code, the discovery was made that the axial power distribution limits of Technical Specification 3.10.3 were exceeded by approximately 12 percent for steady state conditions during Cycle 2. During transient conditions such as Xenon oscillations, the limits may have been exceeded by a greater amount. The attached figure shows the computed axial power distribution using both the old and revised INCA codes.

Cause

This condition was caused by the use of an INCA code which did not give a good representation of the axial power distribution in the core region above the uppermost detector.

Corrective Action

Use of the improved INCA code during Cycle 3 is expected to prevent recurrence of this condition.

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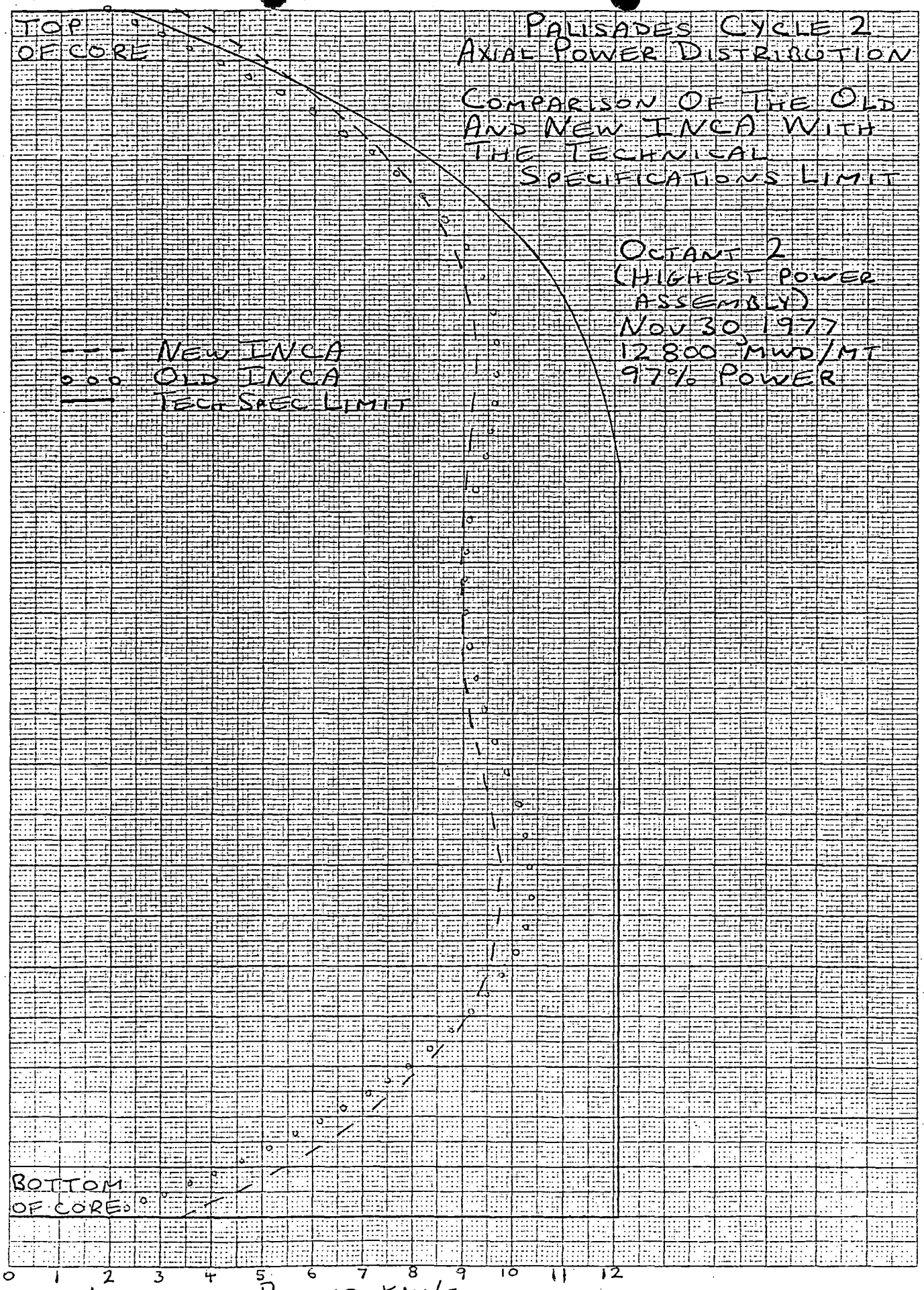
FIGURE 2



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