



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

TIC

MAY 30 1980

State of Illinois
Department of Public Health
ATTN: Mr. Gary N. Wright, Chief
Division of Nuclear Safety
535 West Jefferson Street
Springfield, IL 62761

Gentlemen:

The enclosed IE Circular No. 80-13 titled "Grid Strap Damage in Westinghouse Fuel Assemblies" was sent to the following licensees on May 28, 1980 for information:

American Electric Power Corporation
Indiana and Michigan Power Company
D. C. Cook 1, 2 (50-315, 50-316)

Commonwealth Edison Company
Braidwood 1, 2 (50-456, 50-457)
Byron 1, 2 (50-454, 50-455)
Zion 1, 2 (50-295, 50-304)

Consumers Power Company
Midland 1, 2 (50-329, 50-330)
Palisades (50-255)

Northern States Power Company
Prairie Island 1, 2 (50-282, 50-306)

Public Service of Indiana
Marble Hill 1, 2 (50-546, 50-547)

Toledo Edison Company
Davis-Besse (50-346)

Union Electric Company
Callaway 1, 2 (50-483, 50-486)

Wisconsin Electric Power Company
Point Beach 1, 2 (50-266, 50-301)

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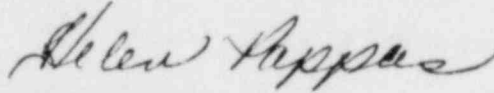
State of Illinois

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MAY 30 1980

Wisconsin Public Service Corporation
Kewaunee (50-305)

Sincerely,



Helen Pappas, Chief
Administrative Branch

Enclosure: IE Circular
No. 80-13

cc w/encl:
Mr. D. W. Kane,
Sargent & Lundy
Central Files
Reproduction Unit NRC 20b
Local PDR
NSIC
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SSINS No.: 6830
Accessions No.:
7910250495

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

May 28, 1980

IE Circular No. 80-13

GRID STRAP DAMAGE IN WESTINGHOUSE FUEL ASSEMBLIES

Description of Circumstances:

During the refueling operation at Salem Unit 1, it was noted by the licensee that some of the assemblies that were removed had suffered grid strap mechanical damage. This was reported to the NRC in LER 79-44. Subsequent to this discovery all fuel assemblies were removed from the core for examination. The degree of the damage to the grid straps was classified in three categories: small pieces missing (15 assemblies), grid material ripped and laid over (5 assemblies), larger sections missing and fuel pins exposed (11 assemblies). No damage to the fuel pins was observed. A total of 31 assemblies suffered some grid damage.

The damage appeared to be the result of corner to corner interaction of the grid straps of diagonally adjacent fuel assemblies during the vertical loading and unloading movements. No correlation of the damage to core location, grid strap elevation, or manufacturing and shipping batches has been identified.

The licensee and the fuel manufacturer established the following guidelines for reloading damaged assemblies: (1) those assemblies with full width pieces missing will not be reloaded for cycle 2, (2) those assemblies with deformed edges and those with small pieces missing will be reloaded with special procedures to prevent further damage.

Salem Unit 1 is fueled with 17X17 Westinghouse assemblies. Similar grid problems have occurred at other facilities fueled with 14X14 and 15X15 Westinghouse assemblies; however, fewer assemblies were damaged in those instances.

Recommended Actions:

All licensees using 14X14, 15X15, or 17X17 Westinghouse assemblies are advised to:

- (1) Visually inspect grid straps of those fuel assemblies which are discharged from the core as well as those assemblies which are moved to the spent fuel pool for control rod return and returned to the core.

DUPLICATE DOCUMENT

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