UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

MAY 28 1980

In Reply Refer To:
RII:JPO
50-369, 50-370
50-269, 50-270
50-287, 50-413
50-414

Duke Power Company
Attn: W. O. Parker, Jr.
Vice President, Steam Production
P. O. Box 2178
Charlotte, North Carolina 28242

Gentlemen:

The enclosed Circular No. 80-13, is forwarded to you for information. If there are any questions related to your understanding of the suggested actions, please contact this office.

Sincerely,

James P. O'Reilly
Director

Enclosures:
1. IE Circular No. 80-13
2. List of Recently Issued IE Circulars

8007210449

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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 replacement and are subsequently returned to the core.

(2) Review the fuel handling precautions recommended by Westinghouse at a meeting on May 25, 1979, with NRC and the licensee for Salem (Attachment 1). Adopt those recommendations which are pertinent.

No written response to this Circular is required. If you require additional information regarding these matters, contact the Director of the appropriate NRC Regional Office.

Attachment:
Summary of Meeting Notice
dated 5/30/79