



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION V  
1990 N. CALIFORNIA BOULEVARD  
SUITE 202, WALNUT CREEK PLAZA  
WALNUT CREEK, CALIFORNIA 94596

TERA

TERA

June 20, 1979

Docket Nos. 50-397, 50-460  
50-513, 50-508  
50-509

Washington Public Power Supply System  
P. O. Box 968  
3000 George Washington Way  
Richland, Washington 99352

Attention: Mr. N. O. Strand  
Managing Director

Gentlemen:

This Information Notice is provided as an early notification of a possibly significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding the matter, please contact the Director of the appropriate NRC Regional Office.

Sincerely,

R. H. Engelken  
Director

Enclosure:  
IE Information Notice  
No. 79-17

cc w/enclosure:  
M. E. Witherspoon, WPPSS  
A. D. Kohler, WPPSS  
J. P. Thomas, WPPSS  
W. J. Talbott, WPPSS  
G. C. Sorensen, WPPSS

272 030

7907020 453

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

June 20, 1979

IE Information Notice No. 79-17

SOURCE HOLDER ASSEMBLY DAMAGE FROM MISFIT BETWEEN ASSEMBLY AND REACTOR UPPER GRID PLATE

Description of Circumstances:

Recently, the NRC was informed of a problem at two Westinghouse PWR facilities resulting from an apparent misfit between secondary source holder assemblies and the reactor upper grid plate.

The misfit problem was first identified by Carolina Power & Light, licensee for H. B. Robinson Unit 2, who informed the NRC on May 6, 1979, of the circumstances. During the current refueling outage at H. B. Robinson 2, CP&L determined that two secondary source holder assemblies had been damaged during the previous refueling in February 1978, by a misfit between the assembly and the reactor upper grid plate. The misfit resulted from insufficient clearance (i.e. 1/2 to 3/4 inch) between the source holder assembly hub and the grid plate at the core locations containing thermocouple mixing vanes. This lack of sufficient clearance caused minor deformation of the upper grid plate components at the core location and of the source holder assemblies. The deformation also resulted in some bending of the fuel rods in the assembly, however, in no case did this bending result in fuel cladding perforation.

On May 16, 1979, the licensee of D. C. Cook Unit 1 informed the NRC that the present refueling outage would be extended 15 to 20 days to remove the reactor head, which had already been reinstalled following completion of refueling, to correct this misfit problem. They learned of the problem from Westinghouse. Subsequently, the licensee's inspection revealed that the source holder assembly hubs were in contact with the vanes. The source holder was removed from one assembly readily with no apparent damage while in the other the source holder was found stuck in the assembly. The problem was corrected prior to return to operations.

The secondary source assembly rods are normally inserted into rod cluster control assemblies and placed at symmetric locations in the core. Each such assembly contains a symmetrical grouping of rod secondary source rods and between zero and twenty burnable poison rods. Locations in the assembly not filled with a source or burnable poison rod contain a thimble plug. The lack of sufficient clearance for these source holder assemblies apparently exists only at the core locations which contain

212 051  
DUPLICATE DOCUMENT

Entire document previously entered  
into system under:

ANO 7906290220

No. of pages: 4