

PRIORITY ATTENTION REQUIRED MORNING REPORT - REGION I SEPTEMBER 22, 1993

Licensee/Facility:
Northeast Utilities
Millstone 3
Waterford, Connecticut

Notification:
MR Number: 1-93-0091
Date: 09/22/93
Resident Inspector

Dockets: 50-423
PWR/W-4-LP

Subject: Failure of Westinghouse Reactor Coolant Pump Diffuser Bolts

Reportable Event Number: N/A

Discussion:

On September 2, while inspecting the reactor lower core support plate, in preparation for core reload, the licensee discovered pieces of a locking cup for the Westinghouse model 93A1 turning vane diffuser hold down bolts. To date, the licensee pulled reactor coolant pumps (RCPs) C and B to determine the source and failure mechanism of the locking cup. To date, the failure mechanism of the locking cup has not been identified .

In response to concerns with potential bolt cracking, the licensee removed a sample of diffuser bolts for inspection. The bolting concern involves intergranular stress corrosion cracking susceptibility and may date back to 1987/1988 vendor information. Of the three bolts inspected to date, two had cracks of 40 percent and 100 percent of the circumference and the third bolt head sheared during removal. The diffuser bolts (23 per pump) are made of alloy A286 stainless steel. The

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licensee is in the process of replacing the diffuser bolts with an improved (strained hardened level one) stainless steel material. The licensee plans to inspect the remaining 2 RCPs and replace diffuser bolts as necessary. The licensee is evaluating the bolting failure along with Westinghouse for potential 10 CFR Part 21 reportability.

Regional Action:

A DRS specialist will be sent to the site to follow the ongoing licensee investigation.

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