

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

May 7, 1979

IE Information Notice No. 79-11

LOWER REACTOR VESSEL HEAD INSULATION SUPPORT PROBLEM

Virginia Electric and Power Company, North Anna Power Station No. 1 reported on November 8, 1978, a field modification pertaining to the lower vessel head insulation support system which was not seismically analyzed at the time of modification. A subsequent stress analysis indicated that the ASME Code allowable stress and the yield stress for the operating base earthquake (OBE) on some of the instrument guide tubes were exceeded.

For the North Anna No. 1 field modification, the lower vessel head insulation was supported by angle brackets that are clamped onto gridwork to about 20 of the 53 instrument guide tubes. This additional load on the guide tubes was not considered in the original stress analysis.

The maximum stress occurs in the socket welds between the Thimble guide tubes and the Instrumentation nozzles that penetrate the vessel. The maximum stress was about 70 percent of the ultimate and, therefore, violation of the pressure boundary would not be expected.

VEPCO plans to modify the supporting arrangement by building a framework underneath the insulation, which will take the loading off the guide tubes.

All holders of operating licenses and/or construction permits should be aware of the potential problem of exceeding the allowable stress and the yield stress for OBE.

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.

No written response to this information notice is required.

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Enclosure: Listing of IE
Information Notices Issued
in 1979

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LISTING OF IE INFORMATION NOTICES
ISSUED IN 1979

Information Notice No.	Subject	Date Issued	Issued To
79-01	Bergen-Paterson Hydraulic Shock and Sway Arrestor	2/2/79	All power reactor facilities with an OL or a CP
79-02	Attempted Extortion - Low Enriched Uranium	2/2/79	All Fuel Facilities
79-03	Limiter Valve Geared Limit Switch Lubricant	2/9/79	All power reactor facilities with an OL or a CP
79-04	Degradation of Engineered Safety Features	2/16/79	All power reactor facilities with an OL or a CP
79-05	Use of Improper Materials in Safety-Related Components	3/21/79	All power reactor facilities with an OL or CP
79-06	Stress Analysis of Safety-Related Piping	3/23/79	All Holders of Reactor OL or CP
79-07	Rupture of Radwaste Tanks	3/26/79	All power reactor facilities with an OL or CP
79-08	Interconnection of Contaminated Systems with Service Air Systems Used As the Source of Breathing Air	3/28/79	All power reactor facilities with an OL and Pu Processing fuel facilities
79-09	Spill of Radioactively Contaminated Resin	3/30/79	All power reactor facilities with an OL
79-10	Nonconforming Pipe Support Struts	4/16/79	All power reactor facilities with a CP

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