

JUL 30 1976

Docket No. 50-410

Niagara Mohawk Power Corporation
ATTN: Mr. Gerald R. Rhode
Vice President - Engineering
300 Erie Boulevard, West
Syracuse, New York 13202

Distribution
Docket File
LWR #4 File
NRC PDR
Local PDR
DBVassallo
CMoon
WKane
MService
JKnight
ELD
IE (3)
ACRS (16)
RCDeYoung

Gentlemen:

On May 7, 1975 we were informed by a pressurized water reactor plant licensee, Virginia Electric & Power Company, that the asymmetric loads resulting from a postulated pipe rupture at a particular location in the reactor coolant system had not been taken into account in the original design of the reactor vessel support system for North Anna Units 1 and 2. (Docket Nos. 50-338 and 50-339). As you may be aware, we have been pursuing this subject on a generic basis with pressurized water reactor plant licensees and applicants for the past several months.

Although we are aware that the loads for this postulated condition are not limiting for boiling water reactor plants and can be properly accounted for in the final design, we will require such verification at the final design stage. The attachment to this letter outlines the information that we will require in our review of this matter for Nine Mile Point Nuclear Station - Unit 2.

Another generic matter which we have been reviewing on operating plants deals with radial cracks which have occurred in the blend radii of reactor vessel feedwater nozzles. The attachment to this letter outlines the information that we will require in our review of this matter for Nine Mile Point Nuclear Station - Unit 2.

We request that you provide us with a schedule for providing the requested information within 2 weeks from your receipt of this letter. Should you require any clarification of this matter, contact the staff's assigned Licensing Project Manager immediately.

Sincerely,

Original signed by
C. W. Moon

D. B. Vassallo, Chief
Light Water Reactors Branch No. 4
Division of Project Management

OFFICE	DPM/LWR #4	DSB/MEB	DPM/LWR #4			
SURNAME	WKane/pav	JKnight	DBVassallo			
DATE	07/28/76	07/29/76	07/30/76			

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ATTACHMENT

1. With respect to the reactor vessel and its supports:
 - (a) Provide drawings of the reactor support system sufficient to show the geometry, dimensions of all principal elements and the type of material they are fabricated from.
 - (b) Demonstrate that the analytical methods, models, and load considerations have adequately considered the dynamic forces that result from:
 - . Transient asymmetric differential pressure loadings on the reactor internals.
 - . Asymmetric loadings from transient differential pressures that exist around the exterior of the reactor vessel resulting from postulated pipe rupture considered separately for each of the main coolant lines at the reactor vessel nozzle safe end. The main steam, feedwater, and reactor recirculation discharge and suction lines should be considered.
2. Several of the boiling water reactor plants have reported finding radial cracks in the area of the blend radii on the reactor vessel feedwater nozzles. In one of the plants, the cracks were reported again after they were ground out and the degree of thermal cycling was reduced by changing the sparger sleeve. Describe any planned design modifications to eliminate this condition or any plans to assure safe reactor operation coupled with continuous examination of the area of the feedwater nozzles where the cracking has occurred.

