

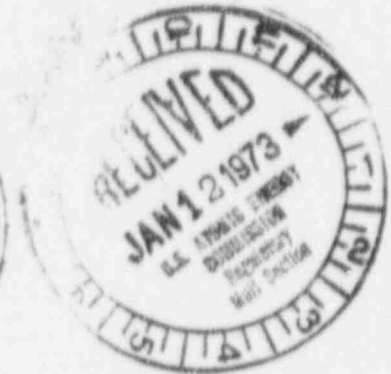
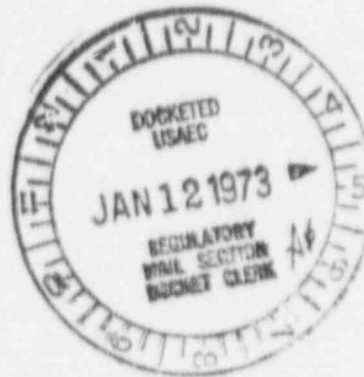
NSP

NORTHERN STATES POWER COMPANY

January 5, 1973

Docket No. 50-263

Mr A Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing
U S Atomic Energy Commission
Washington, DC 20545



Dear Mr Giambusso:

MONTICELLO NUCLEAR GENERATING PLANT E-5979
Postulated Pipe Failures Outside Containmentment

Your letter of December 18 requested documentation and analysis of the consequences of postulated pipe failures outside of the containment structure, including the rupture of a main steam or feedwater line. Attached to your letter was a list of information that you will require, where applicable, for our Monticello facility. If the results of our analysis indicate the need for plant modifications, you have requested a description of such modifications and a schedule estimate for implementing the proposed changes.

Based on investigations to date, we do not see that the postulated type failures will interfere with safe shutdown of the reactor. The following describes the original design general approach taken regarding failures of high energy process lines external to primary containment:

Reactor building pipe tunnel area - This area was analyzed for the largest possible pipe break, a main steam line break, for possible damage to Class I structural members. As a result a protective panel was provided to allow relief of the pressure into the turbine building. No equipment located in the tunnel which is required to function to mitigate the consequences of the break would be adversely affected by the atmosphere within the tunnel following the break.

Suppression pool area - Analysis of a rupture of the largest high pressure line, the HPCI steam line, showed no damage to the structure or containment that would interfere with safe plant shutdown. Further the equipment items required to mitigate the consequences of this accident are not located in the affected area.

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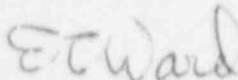
- 2 -

Reactor building, ground floor and above - This area was analyzed for failure of the only system normally containing high pressure, high temperature fluid, the reactor water cleanup system. As a result, the design accommodates the pressure transient resulting from a pipe failure so that no structural damage will occur to interfere with safe plant shutdown. The equipment items required to mitigate the consequences of this accident would not be prevented from performing their functions as a result of the accident.

Turbine building - This area was investigated from the standpoint of gross structural failure as a result of a main steam line break and safe shutdown of the plant is assured.

As we previously indicated to you, no significant problems have been identified whereby failure of steam or feedwater lines would prevent a plant shutdown. However we are proceeding with the detailed investigation in accordance with the informational requirements attached to your letter of December 18, 1972 and our reporting will be submitted by June 15, 1973.

Yours very truly,



E C Ward, Director
Engineering Vice Presidential Staff

Co: G Charnoff
D E Nelson

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Northern States Power Company Minneapolis, Minn. 55401 E. C. Ward		1-5-73	1-12-73	X			
TO:		ORIG	CC	OTHER	SENT AEC PDR X		
Mr. Giambusso		1			SENT LOCAL PDR X		
CLASS: (U) PROP INFO		INPUT	NO CYS REC'D		DOCKET NO:		
			1		50-263		

DESCRIPTION:
Ltr re our 12-18-72 ltr.....furnishing info
regarding postulated pipe failures outside
containment structure.....

ENCLOSURES:

**Do Not Remove
ACKNOWLEDGED**

PLANT NAMES: Monticello

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