NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

April 24, 1979

Mr James G Keppler
Director - Region III
Office of Inspection and Enforcement
U S Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Mr Keppler:

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

Response to IE Bulletin No. 79-07 dated April 14, 1979

IE Bulletin 79-07 requested that we review the computer codes used for the seismic analysis of safety related piping systems and supply certain information concerning these codes. Information was to be supplied for codes used in the original plant design and all subsequent piping system additions and modifications.

Our review indicates that computer codes have been used by the following organizations for seismic analysis of Prairie Island safety related piping:

Organization	n Piping System	
Westinghouse Electric Corporation	Reactor Coolant System	
Stone & Webster	Cooling System Improvements (now in progress)	
Fluor Power Services Incorporated (FPSI)	All other safety related piping	

The atached table provides the following information for the computer codes used by these organizations:

- a. Code name and source
- b. Notation (if algebraic summation used)
- c. Method of code verification

R 26 1979

NORTHERN STATES POWER COMPANY Mr James G Keppler Page 2 April 24, 1979

As noted in the table, ADLEPIPE was used in the analysis of one safety injection line in Unit No. 1 by Nuclear Services Corporation under contract to FPSI. Since available documentation could not rule out the possibility that algebraic summation was used in this analysis, it was repeated using PIPESTRSS and the design was found to be satisfactory. None of the other codes which may have been used in the seismic evaluation of Prairie Island safety related piping systems contain the deficiency described in IE Bulletin 79-07 or other known deficiencies.

As noted in the table, information is not yet available concerning some aspects of the verification of FPSI and Stone and Webster seismic analysis codes. This information will be provided to you when it becomes available. Please contact us if you require additional information concerning our response.

Very truly yours,

L J Wachter

Vice President - Power Production and System Operation

cc: Mr G Charnoff NRC Office of Inspection and Enforcement Washington, DC

Attachment

2258 194

Computer Codes Used for Seismic Analysis of Safety Related Piping Systems at the Prairie Island Nuclear Generating Plant

Organization	Code Name and Source	Algebraic Summation Used?	Method of Code Verification
Westinghouse Electric Corp.	WESTDYN - Westinghouse	No	Documentation of code verification was provided to the NRC in topical report, WCAP-8252, Revision 1.
Stone and Webster	NUPIPE - Stone & Webster	No	To be supplied
Fluor Power Services, Inc.	PIPESTRSS - Fluor Power Services	No	ADLPIPE (note 1)
	ADLPIPE - subcontracted to Nuclear Services Corp.	No	(note 2)
2258			

Notes:

95

^{1.} We believe the algebraic summation option was not used in the ADLPIPE verification calculations. Documentation of this is still being pursued.

^{2.} ALDPIPE was originally used in the analysis of one safety injection line in Unit No. 1. A review of available documentation indicated that we could not rule out the possibility that algebraic summation was used. This analysis was repeated using PIPESTRSS. The new analysis confirmed the adequacy of the original design.