

Westinghouse
Electric Corporation

Water Reactor
Divisions

PWR Systems Division
Box 355
Pittsburgh Pennsylvania 15230

April 12, 1979

NS-TMA-2066

Edson G. Case
Deputy Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

Dear Mr. Case:

TURKEY POINT SEISMIC ANALYSIS

At the request of Florida Power and Light, a detailed file search was conducted of piping analyses performed by Westinghouse for the Turkey Point Units. Three analyses were performed by Westinghouse including a seismic analysis of the reactor coolant loop, the pressurizer surge line, and the pressurizer spray line.

The analysis of the loop was performed using the algebraic summation technique for intramodal responses. The analyses of the pressurizer surge and spray lines were performed using the absolute summation technique.

A reanalysis of the Turkey Point loop has been performed incorporating the absolute summation of intramodal responses. The results are presented in the attached table. The results from the previous analysis, which were reported in Revision 9 of the FSAR, page 5A-20, are also shown for comparison. As with the original analysis, both horizontal and vertical components of the seismic response spectrum were input simultaneously. Two different directions of the horizontal component were chosen and the results reported were for the most severe loading condition.

As can be seen from the table, the magnitude of the stresses are essentially unchanged, and stresses are well below allowables. The method of combination has little effect on the pipe stresses due to the lack of coupling between the horizontal and vertical modes of the

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Mr. Edson G. Case

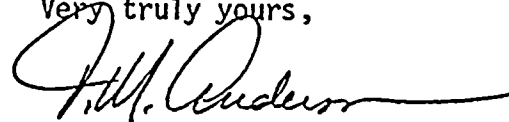
-2-

April 12, 1979

main loop piping.

The results of this comparison were reported to Florida Power and Light on April 12, 1979.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'T. M. Anderson', with a long horizontal flourish extending to the right.

T. M. Anderson, Manager
Nuclear Safety

COMPARISON OF SEISMIC STRESSES

<u>Location</u>	<u>Maximum Stress, psi</u>	
	<u>Previous Analysis</u>	<u>Reanalysis</u>
Reactor Coolant Pump Inlet	4085	4100
Reactor Coolant Pump Outlet	3616	3700
10 Inch Accumulator Line	3201	3300
Steam Generator Outlet	2274	2300
Reactor Vessel Inlet	1289	1300
Reactor Vessel Outlet	182	200
Pressurizer Surge Line Connection	78	100
Steam Generator Inlet	71	100

Maximum allowable seismic stress = 13,125 psi

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 AUTH.NAME AUTHOR AFFILIATION
 ANDERSON,T.M. WESTINGHOUSE ELECTRIC CORP.
 RECIP.NAME RECIPIENT AFFILIATION
 CASE,E.G. OFFICE OF NUCLEAR REACTOR REGULATION

SUBJECT: FORWARDS RESULTS OF SEISMIC REANALYSIS FOR REACTOR COOLANT
 LOOP,PRESSURIZER SURGE LINE & PRESSURIZER SPRAY LINE.
 CONCLUDES RESULTS ARE ESSENTIALLY UNCHANGED FROM FSAR.

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MAY 22 1979



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Mike

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Westinghouse
Electric Corporation

Water Reactor
Divisions

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Box 355
Pittsburgh Pennsylvania 15230

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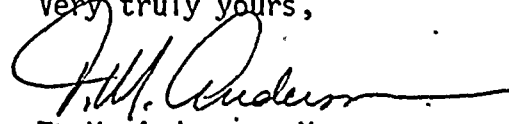
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