STONE & WEBSTER ENGINEERING CORPORATION

245 SUMMER STREET, BOSTON, MASSACHUSETTS

ADDRESS ALL CORRESPONDENCE TO P.O. BOX 2325, BOSTON, MASS. 02107

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April 27, 1979

Mr. Victor Stello, Jr., Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Stello:

Attached is one copy of the Stone & Webster Engineering Corporation status report on "Plan for Verification of Dynamic Analysis Codes", dated April 27, 1979. This plan addresses the verification requirements in Enclosure 3 to your April 2nd letters on the following dockets:

Addressee	Unit	Docket No.
G. T. Berry	Power Authority of the State of New York - James A. FitzPatrick Nuclear Plant	50-333
C. N. Dunn	Duquesne Light Company Beaver Valley Power Station Unit 1	50-334
W. L. Proffitt	Virginia Electric & Power Company Surry Power Station, Unit 1	50-280
	Surry Power Station, Unit 2	50-281
R. H. Groce	Yankee Atomic Electric Company Maine Yankee Atomic Power Station	50-309

This submittal is, therefore, applicable to the above listed dockets.

Very truly yours,

S. B. Jacobs

S. B. Jacobs
Chief Licensing Engineer

Enclosure

I hereby acknowledge receipt of the attached material.

Signature

7905040615

Date

Title

April 27, 1979

STATUS REPORT
ON
STONE & WEBSTER

Plan for Verification of Dynamic Analysis Codes

Requirement 1 - Copies of the program listings for PSTRESS/SHOCK 2, PSTRESS/SHOCK 3, PSTRESS/SHOCK 1, and NUPIPE-SW were transmitted to Dr. Harold Denton, Director of the Office of Nuclear Reactor Regulation, on April 6, 1979 on a proprietary basis. This completed the Stone & Webster commitment with regard to Requirement 1.

Requirement 2 - Comparison runs by NUPIPE and PSTRESS/SHOCK 3 for the Hovgaard Bend and low frequency coffee table benchmark problems are complete for both the earthquake excitations received. These results will be transmitted to the NRC on April 27, 1979.

Completion of the Reactor Coolant Loop benchmark problem continues to be delayed by the transfer of personnel from this effort to other activities. For this reason, completion of this requirement cannot be forecasted at this time.

Requirement 3 - Three (3) Maine Yankee pipe stress problems run on PSTRESS/SHOCK 1 were compared with NUPIPE results for the same conditions. These results were presented in a report to the NRC staff of April 20, 1979. The staff determined that the SHOCK 1 program was acceptable for use on Maine Yankee, contingent upon receipt of three (3) additional items of information. This additional information will be given to Yankee Atomic Electric Company on April 27, 1979.

It is determined that many Maine Yankee and Surry 1 & 2 pipe stress problems were run on an earlier version or versions of the SHOCK series of programs, denoted as SHOCK 0. No listings of the SHOCK 0 programs are available and it is not possible to run this program. Therefore, verification of the dynamic pipe stress computer programs used prior to SHOCK 1 is not possible.

Requirement 4 - The last confirmatory problem, Maine Yankee Problem Number 803 coded on NUPIPE, was transmitted to the NRC staff on April 18, 1979. This completed the Stone & Webster commitment with regard to Requirement 4.