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FORWARDING G. E. EXECUTIVE SUMMARY REPT AND SUPPLEMENT ENTITLED: "TECHINICAL BASIS FOR THE SRSS METHOD OF COMBINING DYNAMIC RESPONSE", DTD APRIL, 1978, IN SUPPORT OF THE MARK II SUBJECT REPT AND FOR GENERIC CONSIDERATION.

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PROJECTS DIVISION

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MFN-180-78

May 1, 1978

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U. S. Nuclear Regulatory Commission  
Division of Systems Safety  
Office of Nuclear Reactor Regulation  
Washington, D. C. 20555

Attention: Mr. J. P. Knight  
Assistant Director For Engineering

Gentlemen:

SUBJECT: EXECUTIVE SUMMARY REPORT AND SUPPLEMENT ENTITLED,  
"TECHNICAL BASIS FOR THE SRSS METHOD OF COMBINING DYNAMIC  
RESPONSE", DATED APRIL 1978

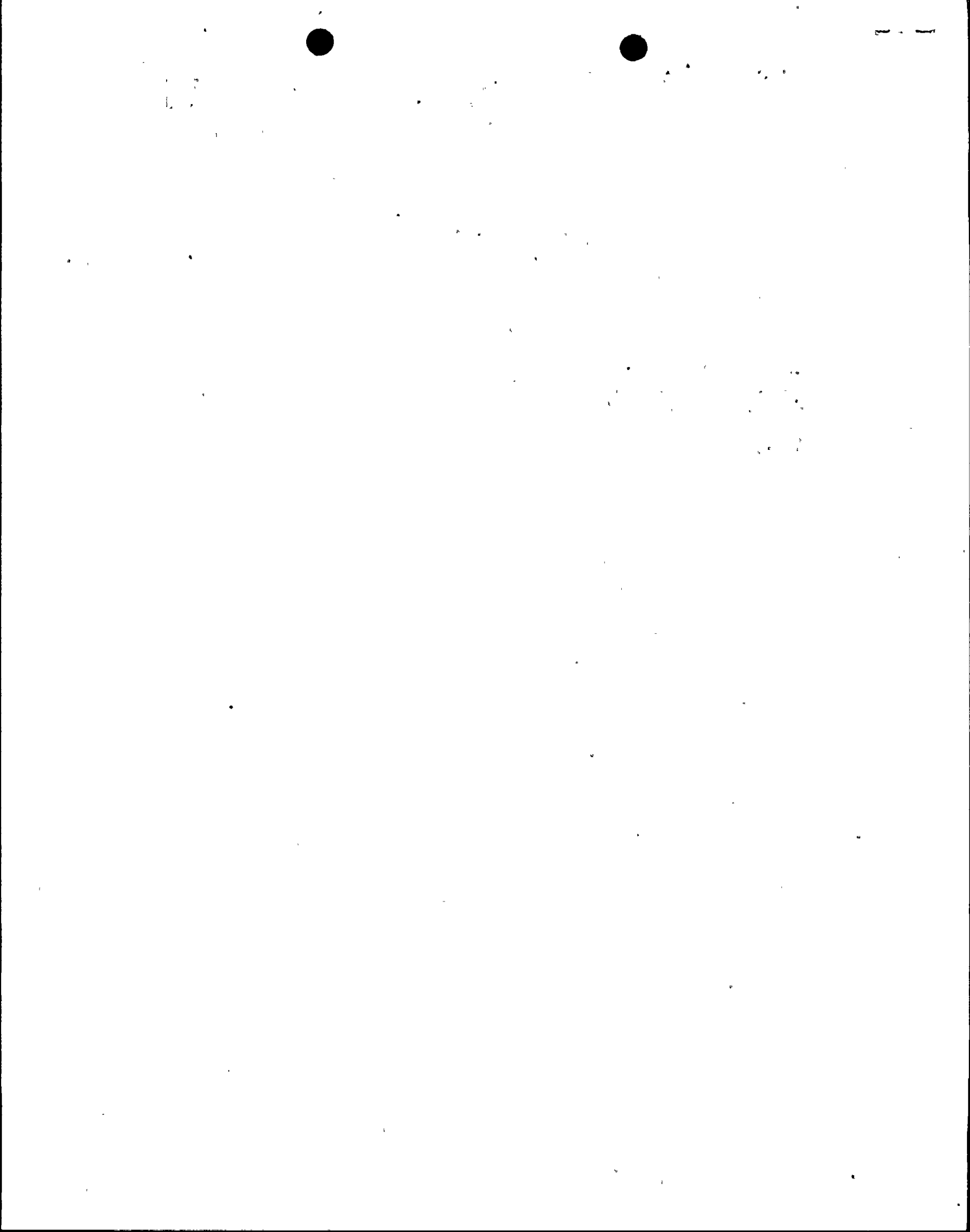
Reference: Letter, LJ Sobon to Olan Parr, dated 8/1/77 transmitting  
GE Report NEDE-24010-P, "Technical Basis For The Use Of  
The Square Root Of The Sum Of Squares (SRSS) Method For  
Combining Dynamic Loads On Mark II Plants-July 1977"

Seventy copies of the subject Summary Report are being provided by  
General Electric in support of the above referenced Mark II report and  
for generic consideration.

The purpose of this Executive Summary Report is to highlight the significant results and conclusions of the Mark II SRSS study and to present important information from subsequent technical studies. A key result that quantitatively demonstrates the dynamic design margin inherent in nuclear plant structures designed to meet ASME Code (or equivalent) stress limits is shown to be related to the energy absorption capability of the component. For structures exhibiting even moderately ductile behavior, this margin is significantly greater than the ratio of static failure stress to code allowable, and therefore assures sufficient additional margin to protect against structural failure even in the unlikely event that peak combined dynamic response exceeds the SRSS value. Based on the material presented in this Summary Report, it is concluded that the use of SRSS method is technically justifiable and represents a prudent and practical engineering approach for the combination of dynamic responses originating from earthquake, LOCA transient and SRV discharge loadings.

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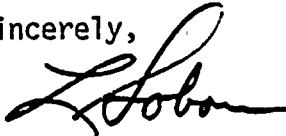
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U. S. Nuclear Regulatory Commission  
Mr. J. P. Knight  
May 1, 1978  
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Any questions regarding this Summary Report should be directed to  
K. G. Hazifotis, Containment Licensing Engineer, (408) 925-2209.

Sincerely,



L. J. Sobon, Manager  
BWR Containment Licensing  
Containment Improvement Programs

LJS:gmm/901-902

Enclosures: Seventy

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