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12 November 1979

Mr. Darrell Eisenhut, Acting Director  
Division of Operating Reactors  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Eisenhut:

Although our SSRT report on Dresden 2 was virtually completed recently, and ready for final editing and reproduction, we have received word of a revised computation of the turbine building design parameters made by the applicant's consultant John A. Blume Associates. This revision has provided moments of inertia and shear areas for the turbine building structure which are increased by several orders of magnitude over the corresponding values originally computed by the Blume organization and used in our present draft report.

When these increases are taken into account, an approximate estimate of their effect leads to changes in forces and stresses in the turbine building-reactor containment building connection, and to moderately large changes, generally increases, in the in-structure or floor-response spectra for equipment.

Although our calculations and studies in our report were intended only to give only approximate estimates for checking the capability of the facility to resist the postulated earthquake environment, it is our feeling that our previous estimates may be too inaccurate even for this purpose.

Hence, two alternatives exist with regard to issuing our report. These are as follows:

(1) We may issue our report with suitable caveats, after some further minor additional studies and estimates and recommend that the licensee revise the design studies and report on the turbine building-reactor building junction forces and stresses, and the floor response spectra, paying particular attention to the most recently determined physical parameters for the turbine building and to a proper 2 or 3-D model for the combined structures. Then we would be able to help you review the applicant's analysis by further checking before you give final approval.

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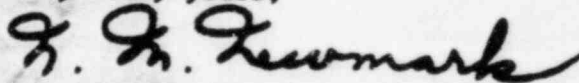
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(2) We may choose to refine the model and the calculations under contracts between NRC-DOR and either LLL or EDAC, to make somewhat more definitive estimates of the seismic capability of the plant and equipment; but these will still be only approximate estimates, yet somewhat more reliable than our current values. To do this will require at least 4 to 5 months of effort at a cost to NRC of possibly 75 to 100 thousand dollars. We shall then issue our report, but we may have to face the possibility that the results might be uncertain enough that we would have to ask the licensee to make further analyses himself, and we shall probably have to review and check these.

The final decision as to which course of action to take must be made by NRC. We are prepared to go ahead under either basis.

This letter was discussed in a conference call with most of the members of SSRT.

Very truly yours,



M. M. Newmark,  
Chairman, SSRT

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cc: R. P. Kennedy  
J. D. Stevenson  
F. J. Tokarz  
W. J. Hall  
D. M. Crutchfield  
H. A. Levin  
C. Hofmayer

P.S. Each author of each chapter of the Dresden report is requested to send to M. M. Newmark and W. J. Hall by 5 December 1979 the changes required in his chapter of the report as required by latest analysis from Tom Nelson in a letter dated 2 November. We should probably give ranges in numerical values rather than single values. We shall plan a meeting on 6 December or 19 December either in Chicago or Urbana to review the report and to plan the future SEP programs.