



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 12, 1979

Note to: William Russell

On May 30, 1979, Mr. Denise provided to you an overview of the Beaver Valley site. We would like to suggest that the following modification be made to the overview in order that we avoid the use of specific probabilistic numerical values based on preliminary information unless absolutely necessary.

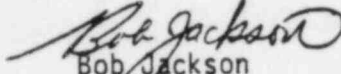
Our overview of the Beaver Valley site indicates the following:

1. The SSE free field ground motion (Housner-based spectra anchored at .125g) approximates what the application of current Standard Review Plan procedures (Trifunac and Brady correlation and R. G. 1.60) would provide for soil or rock sites in this region where soil amplification is not considered significant. For an added perspective, the Beaver Valley spectrum is more conservative than that used for design of Maine Yankee, and is roughly equivalent to a Regulatory Guide 1.60 spectra anchored at about 0.1g for frequencies of 2 to 10 hertz.
2. Examination of suites of response spectra recorded at sites with different foundation conditions indicates that when representative rock motion and current methods for evaluating soil amplification are considered then the resultant derived response spectra could exceed the present design spectra for Beaver Valley.
3. Although it is difficult to make specific predictions of such spectra without detailed analysis, the differences between the original assumed ground motion and a more recent estimate would be more like, for example, the smaller departures noted in the Sequoyah NPP review rather than the larger departures noted during our Maine Yankee review.
4. There is an almost total lack of historical seismicity in the vicinity (50 kilometer radius) of the Beaver Valley site.

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Summary

Based upon limited consideration of current Standard Review Plan procedures, strong ground motion records at sites with different foundation conditions and the absence of historical seismicity, we conclude that the original Beaver Valley response spectrum is an adequate representation of free field ground motion for use in the pipe-stress analysis which is being evaluated under the current show cause order.


Bob Jackson

cc: R. Denise
J. Knight



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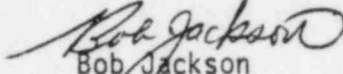
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