



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

NRC FAR

MAR 8 1979

Docket No. STN 50-594

Mr. Charles Gogolick  
GIBBSSAR Project Manager  
Gibbs & Hill, Inc.  
393 Seventh Avenue  
New York, New York 10001

Dear Mr. Gogolick:

SUBJECT: REQUEST FOR CLARIFICATION

This is in response to the letter dated January 8, 1979 from Mr. Prieto of your staff to Mr. Harold Denton, Director, NRR, which requested guidance or clarification in the following areas:

- (a) Question - A utility references GIBBSSAR which is currently designed for 0.30g horizontal ground acceleration and plans to locate the plant at a preapproved site with a maximum horizontal ground acceleration of 0.15g. In determining the compatibility of plant and site, one of the parameters to be verified would be the maximum bearing pressure. When the bearing pressure of the plant is calculated using a dynamic load associated with 0.30g, the results are not compatible with the bearing strength of the site. However, when the dynamic load is calculated using the actual site information, the results are satisfactory. Which approach would be utilized by the NRC in their confirmatory analyses?

Response - The staff's approach would be as in the review of the SNUPPS application, which involved a common power block design utilized at several specific site locations (i.e., one design "g" value, but several site-specific "g" values varying from one plant location to another). Specifically, in the example cited above, the 0.30g value would be used by the staff, as required in verifying the design of the proposed facility as described in the SSAR; and the facility would be constructed in accordance with the design specifications corresponding to the 0.30g value. The site-specific "g" value (0.15), derived from and supported by evaluation of geologic and seismic data associated with the proposed

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site, would be used by the staff as required in performing or verifying analyses of site-related aspects, such as soil/structure interactions, and in checking plant responses to specific site characteristics.

- (b) Question - What potential licensing problems might be associated with amending the current GIBBSSAR application to include an option for design at a somewhat lower "g" value, e.g., 0.15g or 0.20g? Such an option would minimize change to the plant design and would primarily be accomplished by changes to reinforcement size and spacing. These details are currently not available in the GIBBSSAR and presently are treated as final design information. No significant changes to the arrangement drawings are anticipated beyond those normally associated with proceeding from preliminary to final design.

Response - Our current policy is to discourage inclusion of options, such as the one proposed here, within a single PDA. We would intend, therefore, to issue a separate PDA covering a GIBBSSAR design based on a lower design "g" value, as proposed above. Whether such an option should be submitted for review by NRC as an amendment to the current GIBBSSAR application or as a separate application, and how the matter of associated fees would be handled in this case, involves major policy questions being considered currently within the staff. Our complete response in this regard must, therefore, be deferred until these policy matters are resolved.

A separate policy question is raised in connection with your proposal for a design "g" value of 0.15g in the context of a standard plant application, viz., "Could a balance-of-plant design with a design "g" value of 0.15g or even 0.20g be applied to a sufficient number of available or potential plant sites within the U. S. to warrant consideration and approval as a "standard" design?" This is another aspect of your question which cannot be definitively answered at this time, although the preliminary feelings are that a design "g" value of 0.15g would limit site applicability to such an extent that a reference design application would not be accepted on that basis.

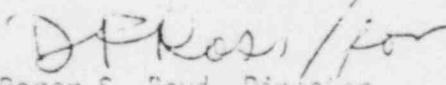
- (c) Question - What problems might be created in the review of a PSAR application utilizing the reference plant option, because of exceptions taken by the utility/applicant? An example would be a case where the utility/applicant takes an exception to the current (0.30g) GIBBSSAR design and submits an application referencing GIBBSSAR, but with a lower design "g" value.

Response - The most obvious and direct effect associated with the proposed exception is that it would "open up" anew for review by the staff those sections of the GIBBSSAR SSAR affected by the proposed exception ... (but only those sections). The applicability of regulatory criteria, guides, etc., used in reviewing those sections would, therefore, be determined on the basis of the docketing date of the PSAR application, rather than the original GIBBSSAR application.

In general, we discourage specific plant exceptions to standard designs; but there is a precedent for an applicant taking exception in this manner, and the staff has reviewed such exceptions in the past. In the specific example cited, it does not appear that significant delay should be incurred beyond the normal CP review interval in reviewing a PSAR application referencing the current GIBBSSAR design with the single exception noted (i.e., a lower design "g" value). At the same time, it must be realized that, due to considerations such as those mentioned briefly above, the potential for unanticipated delays in the review process cannot be ruled out.

I hope you find this responsive to your questions and concerns in this area. If you have any further questions regarding these matters, please do not hesitate to pursue them with us.

Sincerely,

  
Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

cc: Mr. Fredrick W. Gettler, Vice President  
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