

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of

SOUTH CAROLINA ELECTRIC & GAS
COMPANY

(Virgil C. Sumner Nuclear Station,
Unit 1)

Docket No. 50-395



MRC STAFF SUPPLEMENT IN SUPPORT OF
MOTION FOR DIRECTED CERTIFICATION

Steven C. Goldberg
Counsel for NRC Staff

August 21, 1981

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contents of the Licensing Board Memorandum. The Staff supplemental position in that regard follows.

II. DISCUSSION

In its Memorandum, the Licensing Board stated that the full explanation for its action is contained in remarks made by the Board Chairman on the record on July 17, 1981 which the Staff referred to in its motion. ^{1/} The Board further indicated that its stated concerns did not derive from the sufficiency of the Staff testimony, but rather from perceived inadequacies in the Staff seismic review itself. According to the Board, such a matter was not susceptible to "correction" through further Staff testimony. ^{2/} The Staff disagrees.

The Licensing Board's Memorandum fails to provide an adequate justification for its unprecedented action. The information presented in the cited portions of the transcript does not provide a reasonable basis from which to conclude that the Staff seismic review was inadequate. From all that has been disclosed to date, the Board seems more intent on getting outside consultants to characterize or "critique" ^{3/} the Staff review than it is in understanding from the Staff the complete scope of its review. Implicit in the Board's argument that it cannot successfully pursue its concerns over the Staff review with the Staff is a supposition that if it posed the same question to the Staff that it seeks to pose to its independent consultants, it could not get a satisfactory answer. This is wholly unfounded. The Staff remains ready, willing and able to address these and other concerns the Board may have relative to its review in this matter.

^{1/} See Staff motion at 2 and 6.

^{2/} Licensing Board Memorandum at 2.

^{3/} Id. at 3.

In the first place, in the cited portion of the record, the Board Chairman stated that his three areas of concern about reservoir-induced seismicity (namely, magnitude, acceleration or g values, and the application of response spectra) became apparent "merely from looking at the SER" (Tr. 3790). The Safety Evaluation Report (SER) and supplement thereto (SSER), in relevant part, constituted the Staff case-in-chief on Contention 4. These documents were published in February, 1981 and April, 1981, respectively. The Board did not express any particular concern over the scope of the Staff seismic review before the hearing. Nor did the Board specify its particular concern in that regard during the testimony of the Staff seismic panel. These concerns were not articulated until the final week of scheduled hearings, weeks after the panel had been excused. The Staff cannot answer questions it is not asked.

Nonetheless, acknowledging that he had "not reviewed the testimony" (Tr. 3790), the Board Chairman asserted that the Board had some concerns relative to the Staff review of the issue which it wanted independent consultants to explore. The Board Chairman stated at the outset of his remarks on the record that he "did not care to have the Staff come on now and give a further explanation of what they did" (Tr. 3791). If the Board has questions about the substance of the Staff review, it should pose those questions to the Staff, not some outside entity. As the Staff noted in its certification motion, the Staff seismic review was conducted over more than a two year period. The entirety of the Staff review, including all the information considered prior to arriving at positions (into which category some of the items raised by the Board fall), cannot possibly be fully incorporated into an SER.

However, the Staff is not being given the opportunity to answer the Board questions about its review. Rather, the Board intends to solicit outside consultants, in fact, to "critique" ^{4/} aspects of the Staff review. The Board would apparently then permit the Staff to "respond" ^{5/} to any positions the consultants might take. The Staff takes issue with the clear implication in the Board Chairman's remarks that Staff cannot be trusted to present independent, unbiased information for the Board's decision. (Tr. 3792). The Commission expects the Staff, and the Staff is prepared, to provide an independent evaluation of the proposals of an applicant, to independently ascertain whether such proposals comply with regulatory requirements, and to so advise the licensing board in this regard. That is precisely what the Staff did in this proceeding. Any conclusion by the Board that the Staff would ignore pertinent data or information which is potentially adverse to the Staff's position is wholly unfounded and is not supported by the record. In turn, the Board Chairman's comments in this regard provide no justification for the extraordinary action of procuring outside Board consultants. In addition, a prejudgment without good cause, by a board member that the Staff would be less than candid with the board regarding such matters with the consequence that the "Staff's concern for its position" would prevail over truth, is completely unacceptable if an impartial adjudication is to be rendered.

A licensing board should not be in the posture of generating its own testimony solely to test the validity of uncontroverted testimony given by

^{4/} Licensing Board Memorandum at 3.

^{5/} Id. at 2.

the parties. As 10 C.F.R. Part 2, Appendix A V(f)(1) indicates, "As to matters pertaining to radiological health and safety which are not in controversy, Boards are neither required nor expected to duplicate the review already performed by the Staff and the ACRS, and they are authorized to rely upon the testimony of the Staff, the Applicant and the conclusions of the ACRS which are not controverted by any parties." While there was a wide range of opinions expressed before the Advisory Committee on Reactor Safeguards (ACRS) and in testimony at these hearings on reservoir-induced seismicity, in the final analysis, the Applicant, Staff and ACRS agreed on the adequacy of the Summer seismic design.^{6/} No legitimate purpose in searching for additional viewpoints on one or more facets of this analysis is evident.

While the Staff disagrees with the Board's assessment of its review, the adequacy of the Staff review is not at issue in this proceeding. See 10 C.F.R. Part 2 Appendix A §V.(f)(1). While Appendix A §V is literally applicable to CP proceedings, Section VIII indicates that sections I-VII of Appendix A apply to operating license proceedings, except as the context requires otherwise. Section V.(f)(1) stands in marked contrast to Section V.(f)(2). The latter section specifically provides that in uncontested CP cases the Board's role includes determining whether the Staff's review has been adequate. No such role is conferred on the Board in contested cases by the provisions of Section V.(f)(1). In fact, that section specifically authorizes Boards to rely on Staff and Applicant testimony and ACRS conclusions which are not controverted. The Applicant has the burden of proof on the contested issues. As relevant to the technical

^{6/} See Staff certification motion at 7-8.

issue underlying this request for certification, the resolution of a particular contention turns on the weight of the evidence of record. In the present case, the evidence is undisputed that the seismic design is adequate.

Even assuming that an inadequate Staff review would warrant the retention of outside consultants, the Board's explanation is insufficient. To illustrate, the Board's first concern is over the manner in which acceleration values for postulated reservoir-induced events were derived. (Tr. 3790). In this regard, the Board questions whether the Brune model was the best model available to use in this situation (Tr. 3791-2). However, the Board never inquired of the Staff as to the appropriateness or applicability of the Brune model. The Board questions the soundness of the g values actually derived (Tr. 3793) and submits that such questions are raised "just from the fact of the SER" (Tr. 3793). While this may have been the case at the time the SER was written, it was not the case at the time the SSER was issued. See, e.g., SSER, §§3.7.2, 18 (item 1); Knight, Tr. 1069-70, 1084, 1087, 1105. The Board, in its expression of concerns, also questions whether the Staff is familiar with certain dates contained in a particular publication (Tr. 3793) or the work of a particular individual (Tr. 3794). However, the Board never asked the Staff whether it was familiar with the publication in question or the work of the specified individual.

Another expressed Board concern is how the Staff can reconcile its position on the magnitude of the maximum reservoir-induced event ($M_z=4.5$) with that of the ACRS ($M_z=5.0$) (Tr. 3746). Although the Staff has made it clear that it adheres to its position on this matter, at the recommendation of the ACRS it has assessed the ability of the plant to safely withstand ground accelerations which might accompany a higher

magnitude event. ^{7/} In the same context, the Board expresses concern over the Staff position on the probability that the reservoir-induced event could exceed a local magnitude 4.5 (Tr. 3798). Questions in this regard were asked and answered by the Staff (See Knight, Tr. 1174-75). The Board did not pursue this matter further.

Finally, the Board queries whether the Staff had received and considered a recent USGS report on the Jenkinsville accelograms (Tr. 3799), yet the Board never posed that question to the Staff. The Applicant testified that the data from this report was used in its seismic analysis which the Staff favorably reviewed (See McGuire, Tr. 3809).

The Board indicates that it plans to call "ACRS consultants" ^{8/} and USGS members Fletcher, Boore and/or Joyner. Presumably, the ACRS consultants alluded to by the Board are Drs. Trifunac and Luco. Dr. Trifunac, as previously noted, ^{9/} was a seismic consultant to the ACRS in this case and his report to the ACRS is a matter of record. He did not dissent from the favorable ACRS letter of March 18, 1981. Dr. Luco did not serve as an ACRS consultant for this case nor did he provide an opinion to the ACRS, either orally or in writing. In any event, neither Dr. Trifunac nor Dr. Luco are noted experts on reservoir-induced seismicity.

^{7/} See Staff certification motion at 7-8; See also Knight, Tr. 1169-1173 regarding the Staff position on its general obligation to address ACRS recommendations.

^{8/} Memorandum at 2.

^{9/} Staff certification motion at 3.

Mr. Fletcher is apparently being solicited to discuss stress drop calculations at the Monticelio Reservoir. The Board states that, in addition to being the subject of considerable testimony, these calculations are a "critical" element in the Staff's position. This is not true. This data was not critical to the formulation of the Staff position on reservoir-induced events (e.g., Sobel, Tr. 1126-27). It was only critical to one member of the Staff with a different view on one aspect of the Staff position. ^{10/} While the Staff would have thought that Mr. Fletcher's calculations and their impact were fairly well explored on the record, at least Mr. Fletcher is being called upon to testify on a matter in which he had some prior involvement, unlike the case with Drs. Boore or Joyner. Whatever the experience of these latter individuals, they are being asked to form a position in a relatively short time period on aspects of the Staff review conducted over a two year period. Further, with no disrespect intended, neither of these individuals are noted experts in the field of reservoir-induced seismicity. In short, the value of the analyses and opinions that might reasonably be expected from the outside consultants the Licensing Board intends to call is questionable in view of the particular expertise of those consultants and the time available to them for performing their analysis.

Perhaps more importantly, discussions between the Staff and USGS at several levels indicate that both the designated USGS witnesses and their

10/ See Staff certification motion at 7.

management regard the Board's action as an unwarranted imposition and disruptive of that agency's work. The Staff did contract with the USGS to assist in one facet of the Staff's review. USGS has fulfilled that obligation. ^{11/} The Board's action has placed an unnecessary strain on NRC-USGS relations and could, if such actions became a pattern, have a deleterious effect on the valued and otherwise cooperative relationship between the USGS and NRC.

In summary, it is the Staff's view that the Board's explanation at the cited transcript pages provides a wholly inadequate explanation of the basis upon which the Board proposes to take the extraordinary action of calling upon independent consultants. There is scant explanation as to why the Board believes the Staff's evaluation to be inadequate and no sufficient explanation as to why the Board has not sought to resolve its concerns through questioning of the Staff.

Beyond this, the Board's sole explanation at the cited transcript pages provides no information as to the procedure by which the outside consultants will be selected and informed as to the nature of their evaluation or how they are to go about performing it. There is no indication as to whether, or what kind of, interaction between the outside consultants and Staff and Applicant experts will take place. Nor is there an indication of the schedule for the selection of the outside consultants, the length of time contemplated for their evaluation or when and in what form their evaluation will be presented. The Board's calling of outside consultants promises to entail delay in resolving the seismic

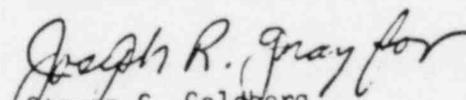
^{11/} See December 30, 1980 letter report, Appendix E to SER, and sponsoring testimony of Mr. Robert H. Morris and Dr. Gregory S. John.

design issues in this proceeding, since, of necessity, those consultants must be selected, advised as to what they are to evaluate, perform their evaluation and present the results thereof, all on an as yet undefined schedule. Only then, under the Board's contemplation, would the other parties be given the opportunity to provide their views. Such delay could be obviated, (as could the potential impact on Staff resources) in large part, by allowing the Staff to move forward with an explanation as to the scope and methods of its review in response to the Board's concerns.

CONCLUSION

The Staff intends to file supplemental testimony addressing the concerns expressed by the Board on the record on or about September 15, 1981. The Staff believes that this will clarify for the Board the scope of the Staff review. For the reasons given above, along with those expressed in the directed certification motion, the Staff requests the Appeal Board to instruct the Licensing Board to review the testimony and evidence of record and to refrain from the retention of outside consultants thereafter unless it can demonstrate that it is essential to do so in order to render a decision on Contention 4.

Respectfully submitted,


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Counsel for NRC Staff

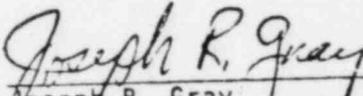
Dated at Bethesda, Maryland
this 21st day of August, 1981.

Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555 *

Atomic Safety and Licensing Appeal
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555 *

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555 *

In addition, three (3) copies were
hand-delivered to the Appeal Board
members at their offices on
August 21, 1981.



Joseph R. Gray
Counsel for NRE Staff