9/12/00 For review

April 2, 1982

SECY-82-139

ADJUDICATORY ISSUE
(Notation Vote)

For: The Commissioners

From: James A. Fitzgerald, Assistant General Counsel

Subject: REVIEW OF ALAB-663, IN THE MATTER OF SOUTH CAROLINA ELECTRIC AND GAS COMPANY

Facility: Virgil C. Summer Nuclear Station, Unit 1

Review Time Expires: April 23, 1982, as extended.

Discussion: In ALAB-663 the Appeal Board explains the reasons for its unpublished order of October 19, 1981 in which the Board denied a staff motion for directed certification. By that motion the staff sought interlocutory review of a Licensing Board decision to call its own witnesses to supplement the record on the seismic issue. The Appeal Board denied the staff's motion but strongly disapproved of the Licensing Board's action.

Contact: Patricia R. Davis, OGC, 43224

5/13

1. Background

The sole intervenor in the Summer OL proceeding, Mr. Brett Bursey, 1/ raised the following seismic contention:

> (a) The FSAR [Final Safety Analysis Report] is inadequate with respect to the description of seismic activity in the area of the Summer Plant site;
>
> (b) The plans for monitoring site seismicity are inadequate in that they do not consider the seismic effect of filling the reservoir. Site seismicity should be monitored for one year subsequent to filling the reservoir and prior to the granting of the operating license.

In addition, the Licensing Board expressed its own concerns about staff's Safety Evaluation Report (SER) relating to earthquake magnitude and ground acceleration. The hearing on the seismic issues began on June 22-24, 1981. Applicants and staff presented a panel of expert witnesses; the staff's included two representatives of the USGS and a consultant from the Los Alamos National Laboratory. Intervenor limited his participation on this issue to cross-examination. The Board questioned both staff's and applicants' panels.

During the week of July 6, 1981 the Licensing Board indicated to the parties that it was considering "retaining" its own expert witnesses. It identified three principal areas of concern: (1) the g values for ground acceleration, (2) the application of response spectra, and (3) earthquake magnitude. Tr. 3790.

The staff objected to the Licensing Board's proposed actions and filed with the Appeal Board a motion for directed certification. 2/ The Appeal

---

1/ The Appeal Board denied a late intervention petition from Fairfield United Action (FUA) on June 1, 1981. FUA's petition for review is now in the D.C. Circuit Court of Appeals.

2/ Applicant did not object. Rather it seemed more interested in just completing the hearings.

Board issued on August 10, 1981 an order directing the Licensing Board to explain fully its reasons for calling on the assistance of independent consultants. The Licensing Board responded to the Appeal Board order on that same day and explained that its reasons could be found at certain pages from the hearing transcript (Tr. 3790-3817). The Licensing Board stated that it would save time by retaining its own witnesses rather than asking for additional staff testimony first.

In a memorandum of August 25, 1981, the Appeal Board concluded that "a grant of directed certification may be warranted" but chose to delay ruling on the motion because the staff intended to file supplemental testimony. The Appeal Board opined that once the Licensing Board saw the staff's additional testimony it might decide that Board witnesses were no longer necessary. In another memorandum issued two days later, the Appeal Board again declined to rule on the motion for directed certification. The Board stated that the novelty of the Licensing Board's actions and their potential effect on the "basic structure of the proceedings" foreclosed a summary rejection of the staff's motion, and the Appeal Board indicated that it might take interlocutory review. The Board went on to state that while it might be within the Licensing Board's discretion to call upon independent consultants to supplement the record, the Licensing Board should only do so in "that most extraordinary situation in which it is demonstrated beyond question that a board simply cannot otherwise reach an informed decision on the issue involved." Memorandum of August 27, 1981, p. 6. The Board concluded by stating that if, after reviewing the staff's supplemental testimony, the Licensing Board still felt the need to call its own witnesses, the Appeal Board expected it to provide its reasons in detail. The Appeal Board would then act on the directed certification motion.

The Licensing Board issued its independent experts' reports on the seismic issue on September 16 and again on September 29, 1981. In a memorandum of October 2, 1981, the Appeal Board directed the Licensing Board not to call any independent consultants as Board witnesses unless and until (1) it furnished the Appeal Board with a detailed statement of its reasons for wishing to

do so, and (2) the Appeal Board ruled on the staff's motion for directed certification.

On October 15, 1981, the Licensing Board reaffirmed its intention to call independent experts and further explained its reasons for doing so. The Board stated that the disagreement among the staff, applicants and ACRS as to the maximum earthquake, the fact that the staff did not use traditional methods of estimation but rather used state-of-the-art modelling techniques and the uniqueness of the situation all led it to seek information from additional experts. The Licensing Board also explained why it chose the experts it selected. See Licensing Board decision, Slip op. pp. 3-4. 3/
The Licensing Board set out the legal basis for its action in calling its own witnesses. The Licensing Board pointed out that trial judges have the inherent power to call their own witnesses, particularly expert witnesses. Federal Rule of Evidence 706 codifies that inherent power. In addition, federal administrative judges have claimed the same right. The Licensing Board stated that it had found no court or administrative case in which an appellate tribunal had reversed a trial level decision to call on expert witnesses. The Board also pointed out that NRC's licensing boards have called their own experts in the past. 4/ The Licensing Board concluded that it could not claim to meet the new standard the Appeal Board had suggested for calling witnesses:

3/ The Board chose Drs. William B. Joyner, David M. Boore, and J. P. Fletcher of the USGS and Drs. Enrique Luco and Mihail Trifunac, seismic consultants to ACRS.

4/ Citing: Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-519, 9 NRC 42 (1979); ALAB-604, 12 NRC 149, 150-151 (1980); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), Docket Nos. 50-443 and 50-444 (November 6, 1980 unpublished order); Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), Docket Nos. 50-361-OL and 50-362-OL; Public Service Electric Gas Co. (Hope Creek Generating Station, Units 1 and 2), LBP-78-15, 7 NRC 642 (1978); and Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), LBP-78-26, 8 NRC 102 (1978); Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-382, 5 NRC 603-608 (1977).

the Licensing Board must demonstrate "beyond question that a Board simply cannot otherwise reach an informed decision on the issue involved." The Licensing Board asserted that the Appeal Board's standard is not a reflection of established precedent and that traditionally the standard has been that the decision to call or not to call a witness for the Board must rest in the sound discretion of the tribunal alone." Citing Midland, supra, 5 NRC at 60.

The Licensing Board also questioned the action of the Appeal Board in indicating that it would review the Licensing Board's decision on an interlocutory basis. The Licensing Board stated that it knew of no legal precedent for such action.

On October 19, 1981, the Appeal Board denied the staff's motion for directed certification. The Appeal Board concluded that it would be justified in certifying the merits of the seismic issue to itself, but decided to allow the Licensing Board to proceed as it wished to minimize further delay of the proceeding. The Appeal Board announced only its result, promising a full explanation in a subsequent memorandum (ALAB-663).

2. Appeal Board Decision

In ALAB-663 the Appeal Board explained its reasons for concluding (1) that a grant of directed certification would have been justified, and (2) that the standard it had established for calling Board witnesses was proper.

In response to the Licensing Board's assertion that the Appeal Board's insertion of itself into the governance of the Licensing Board proceedings was improper, the Appeal Board stated that the Licensing Board lacked an understanding of the relationship of licensing and appeal boards in the administration of the Commission's adjudicatory process. The Appeal Board observed that it has the authority to perform the review functions which would otherwise be performed by the Commission, including its power to direct certification of questions arising in proceedings before licensing boards. The Appeal Board concluded that its interference in the proceeding was justified and within its power because the

Licensing Board's proposed course of action would have affected "the basic structure of the proceeding in a pervasive or unusual manner." 5/ The Appeal Board stated that it has no desire to second-guess the licensing boards on their day-to-day rulings, but when a board calls upon independent consultants, its action is no longer routine and signals the possible need for further scrutiny.

The Appeal Board also strongly disapproved of the Licensing Board's failure to follow the Appeal Board's instructions in its August 27th order. That order directed the staff to file supplemental testimony and called upon the Licensing Board to provide detailed reasons if it felt, after receiving the staff's supplemental testimony, that it still needed to call board experts. The Licensing Board provided no such reason, but proceeded to retain board experts and distribute reports from those experts. The Appeal Board felt that the Licensing Board's failure to abide by the directions and standards set by the appellate board was unacceptable and that an attitude such as that manifested by the Licensing Board would "substitute chaos for order in this Commission's adjudicatory process." ALAB-663, Slip op. at 18.

On the merits of whether the Licensing Board should have called its own experts, the Appeal Board reaffirmed its earlier conclusion that the Licensing Board's action was improper. The Appeal Board did not hold that the Licensing Board had no power to call the witnesses, rather it held that the Licensing Board had not reasonably exercised that power. The Appeal Board decided that although "'a licensing board may well have the latitude to call upon independent consultants itself for the purpose of supplementing what it deems to be an unsatisfactory record' the exercise of that power should be confined to those instances where it is beyond question that a board could not 'otherwise reach an informed decision on the issue involved.'" ALAB-663, Slip op. p. 22. The Appeal Board further stated that while the

---

5/ This is the established standard for interlocutory review. Public Service Electric & Gas Co. (Salem Nuclear Generating Station, Unit 1), ALAB-588, 11 NRC 533, 536 (1980).

Licensing Board might disapprove of the Appeal Board's standard it had pointed to nothing which might indicate an inconsistency with prevailing practice in either the courts or the NRC.

The Appeal Board found the Licensing Board's reliance on Rule 706 of the Federal Rules of Evidence not to be useful in supporting the Licensing Board's position. Although the Licensing Board's research uncovered "no court cases ... in which a trial court ... was reversed in calling its own expert," that research also disclosed no instance in which a court used Rule 706 in circumstances even remotely approximating those in this case.

The Appeal Board found the NRC cases cited by the Licensing Board to be of no precedential support for the Licensing Board's action. The Appeal Board distinguished each of those cases on the ground that each was factually different from the Summer case. The Board concluded, then, that its standard for calling Board witnesses represented neither a departure from accepted practice nor the establishment of a "new policy". The Board stated that it knew of no instance in which an adjudicatory tribunal has called its own experts to pass independent judgment on the uncontroverted testimony of witnesses who are acknowledged to be "highly competent and credible". The Appeal Board did not address the cases from other agencies cited by the Licensing Board.

The Appeal Board also found unconvincing the Licensing Board's argument that, aside from its inherent right to call witnesses, its action in this case was justified because without those witnesses' testimony the Licensing Board could not satisfy its safety concerns and thus would be unable to perform its adjudicatory function. The Appeal Board found the Licensing Board's argument to be troublesome. The Appeal Board saw the Licensing Board as injecting a novel element into the Commission's adjudicatory process; it would undermine the staff's role as representative of the public interest by adding another party to audit and duplicate the staff's work. The licensing boards are intended to perform that auditing function and contain two technical members who by training and experience are

equipped to make scientific judgments without resort to independent experts.

The Appeal Board stated that it was not suggesting that a licensing board ignore deficiencies in the staff's analysis and testimony or play no role in the development of a complete record. It suggested only that the licensing boards should give the staff an opportunity to explain, correct or supplement its testimony before resorting to outside experts. In addition, the boards must articulate good reasons for the decision; vague doubts would not suffice. That is what it meant by requiring a demonstration "beyond question that a board simply cannot otherwise reach an informed decision on the issue involved." The Appeal Board saw no difficulty for a licensing board to satisfy that standard.

3. OGC Analysis

Ex. 5

EX. 5

Recommendation:

James A. Fitzgerald
Assistant General Counsel

Attachments:
1. ALAB-663
2. Licensing Board decision
3. Staff Requirements memo
4. Letter

Commissioners' comments should be provided directly to the Office of the Secretary by c.o.b. Monday, April 19, 1982.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Monday, April 12, 1982, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

DISTRIBUTION:
Commissioners
Commission Staff Offices
Secretariat

ATTACHMENT 1

Release

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

'81 DEC 14 P3:38

Administrative Judges:

Alan S. Rosenthal, Chairman
Dr. John H. Buck
Christine N. Kohl

SERVED DEC 14 1981

In the Matter of	)	
SOUTH CAROLINA ELECTRIC AND GAS COMPANY ET AL.	)	Docket No. 50-395 OL
(Virgil C. Summer Nuclear Station, Unit 1)	)	

Mr. Steven C. Goldberg for the Nuclear Regulatory Commission staff.

Mr. Joseph B. Knotts, Jr., Washington, D.C., for the applicants, South Carolina Electric and Gas Company et al.

MEMORANDUM

December 14, 1981

(ALAB-663)

On October 19, 1981, we entered an unpublished order in which, although noting that it was "not without merit," we nonetheless denied a petition for directed certification[1/] filed by the NRC staff in this operating license proceeding. Because of

---

1/ See 10 CFR 2.718(i); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-271, 1 NRC 478, 482-83 (1975).

the need to act definitively upon the petition without further delay, that order did not do more than briefly state the reasons for that result. We indicated that a full explanation would be provided in a subsequent memorandum.[2/]

By its petition, the staff sought our interlocutory review of a determination by the Licensing Board to invoke the assistance of several "independent consultants" on certain seismic issues that arose from a contention of the single intervenor, Brett Allen Bursey.[3/] The Board contemplated asking these individuals to furnish it with written reports on certain aspects of those issues and the expert testimony which had already been received from applicant and staff seismic witnesses. In addition, the Board proposed to call upon at least some of the "independent consultants" to testify as its witnesses at a further hearing which it intended to hold on the seismic issue. The gravamen of the staff's petition was that these measures were unjustified and that our intercession was merited under the

---

2/ The text of the October 19 order, as well as of our several prior issuances in the course of consideration of the staff's petition, are included in the Appendix to this opinion.

3/ The "independent consultants" the Board had in mind were: (1) two consultants to the Advisory Committee on Reactor Safeguards (ACRS), Dr. Enrique Luco and Dr. Mihailo Trifunac; and (2) three members of the United States Geological Survey (USGS), Dr. William B. Joyner, Dr. David M. Boore, and Dr. Jon P. Fletcher.

long-prevailing standard for appellate consideration of interlocutory licensing board rulings.

In order to place the petition and our ultimate denial of it in proper context, it is necessary to recite in some detail both the background of the controversy and the developments in the wake of our receipt of the staff's request for relief. We do so in Part I below. In Part II, we explicate the basis for the conclusions reached in our October 19 order.

I.

A. In an unpublished prehearing conference order, the Licensing Board modified and restated intervenor Bursey's contention A4 as follows:

> (a) The FSAR [Final Safety Analysis Report] is inadequate with respect to the description of seismic activity in the area of the Summer Plant site;
>
> (b) The plans for monitoring site seismicity are inadequate in that they do not consider the seismic effect of filling the reservoir. Site seismicity should be monitored for one year subsequent to filling the reservoir and prior to the granting of the operating license.

Order of April 24, 1978, at p. 5. Before the evidentiary hearing began, however, the Licensing Board expressed its own more particularized seismic concerns about those aspects of the staff's Safety Evaluation Report (SER) relating to earthquake

magnitude and ground acceleration. Tr. 390-92. In response to the Board's inquiry, the staff advised that it would present a panel of experts, including USGS consultants, to testify on such matters, and that it would supplement the SER prior to hearing. Tr. 394-99.

The hearing commenced with consideration of the seismic issues on June 22-24, 1981. Applicants and the staff each presented a panel of expert witnesses, the staff's including, inter alia, two representatives of the USGS (as promised) and an independent consultant from the Los Alamos National Laboratory. See Tr. 702, 1058.[4/] Intervenor Bursey presented no witnesses of his own, limiting his participation to cross-examination. The Board, however, questioned both the applicants' and the staff's panels.

According to the Licensing Board, during the week of July 6, 1981, it indicated to the parties via a conference call that it was considering "retaining" its own experts. LBP-81-47, 14 NRC ___, ___ (1981) (slip opinion, p. 4). At the hearing the following week, the Board confirmed this course of action. Tr. 2512. In response to a staff request, the Board Chairman identified

---

4/ The staff had also previously submitted its supplemental SER in April 1981.

four areas of specific concern to him: (1) whether "the [g] values suggested for the different magnitudes have been fully substantiated by the testimony;" (2) whether "the application of those time histories pegged to these [g] values has been fully substantiated;" (3) whether there has been "a full enough disclosure on the accelerometer readings at Jenkinsville;" and (4) "whether the Charleston earthquake ought to be migrated to the periphery of the coastal province, or the edge of the piedmont province." Tr. 2514-15.

Several days later at the hearing, the Licensing Board discussed these concerns further. Tr. 3790-3817. It then focused on three principal issues: (1) the g values for ground acceleration, (2) the application of response spectra, and (3) earthquake magnitude. Tr. 3790. The tenor of the Board's complaint was a dissatisfaction with the treatment given these points by the SER and corresponding staff testimony.

As to the first matter, the Board queried whether the Brune model, upon which applicants relied in ascertaining the g values for ground acceleration and with which the staff agreed, provided the best means to compute those values. Tr. 3791. The Board stated that the staff should have relied on other means and data to determine g values (Tr. 3793), but

declined to permit the staff to justify its position or explore the matter further (Tr. 3791).[5/] With regard to the application of response spectra, the Board stated that "if the Applicant is not going to use a standard response * * * spectrum[,] * * * the NRC staff ought to inquire whether what is brought in instead is a better item than the original, either more representative or more applicable to the particular site." Tr. 3794. The Board then noted that it did "not believe anything like that was done." Ibid. On the third point, earthquake magnitude, the Board questioned the staff's "commit[ment]" to the value it found and expressed "some trouble understanding what it is [the staff] base[s] that decision on and what kind of probability [the staff] really [has] in mind." Tr. 3796.

5/ As an example of such other data, the Board referred to a 1977 NOAA study of U.S. earthquakes between 1939 and 1975. Tr. 3793. The Board also described its view of how the staff should have proceeded in determining g values (Tr. 3792):

> [I]f the staff is going to determine what the appropriate [g] value is it ought to first make a determination of what the best data is [sic] for it. Secondly, it ought to make a determination as to the values to be used in conjunction with that formula; and the[n] thirdly, go through the motions of applying that formula to that data. Well, all I can see is that they tried the third.

As a result of these asserted deficiencies in the staff's analyses, the Licensing Board concluded that it wanted its own independent, expert consultant(s) to clarify the principal issues described -- i.e., "someone other than [one who] is already in the proceedings." Tr. 3797, 3809. See also Tr. 3791, 3793, 3794, 3795. The Board also identified other specific matters that it wanted its experts to review -- the Charleston earthquake and the USGS reports on the Jenkinsville accelerometers. Tr. 3798, 3799.[6/]

B. The staff filed its petition for directed certification with us on August 7, 1981. The specific relief sought was a direction to the Licensing Board to refrain from calling independent consultants as its witnesses without first affording the parties themselves the opportunity to respond to the Board's concerns. Upon receipt of the petition, we issued a memorandum on August 10 requesting the Licensing Board to provide us with "a full explanation of the reasons why it believed it necessary

---

6/ At this point, applicants recalled one member of their seismic panel in an effort to respond to some of the Board's concerns. The witness pointed out that applicants had analyzed the USGS report on the Jenkinsville accelerograms and endeavored to explain why the model used to estimate g values was the most appropriate for the Summer site. Tr. 3809-12. The Board noted, however, that its concern was with the staff's, not the applicants' case, and it generally reaffirmed its desire to seek the assistance of independent consultants. Tr. 3812-17.

to invoke the assistance of independent consultants on the seismic issues presented in this proceeding." See p. 36, infra.

On August 13, the Licensing Board responded to that request. In an unpublished memorandum, it informed us that its comments at Tr. 3790-3817 (see pp. 5-7, supra) constituted its "full explanation." The Board added (at p. 2) that, as those comments were said to reflect, its dissatisfaction was not with the staff's testimony but, rather, was directed to "the [s]taff's review as disclosed by the testimony -- a matter that does not lend itself to correction merely by further [s]taff testimony" (emphasis supplied). Thus, according to the Board, the appropriate course was "to attempt to arrange for independent consultants and further hearings with all deliberate speed," with an opportunity thereafter given to the parties to respond to the positions taken by the consultants. Ibid.

As authorized by us, on August 21 the staff responded to the Licensing Board's memorandum.[7/] At the conclusion of the response, it stated that, on or about September 15, 1981, it proposed to file supplemental testimony addressing the concerns which prompted the Board to seek the assistance of independent consultants. Taking note of that representation, we entered an

---

7/ The applicants also responded.

order on August 25 in which we, inter alia, (1) directed the staff to file the supplemental testimony no later than September 15; (2) announced that the motion for directed certification would be held in abeyance pending the Licensing Board's receipt and consideration of that testimony; and (3) stated that a further explanation would be provided in a subsequent memorandum. See pp. 38-39, infra.

We issued that explanatory memorandum on August 27. Because its full text is provided in the Appendix to this opinion, we need not rehearse its content in detail here. In essence, it apprised the Licensing Board of our views that (1) independent consultants should not be called upon to supplement an adjudicatory record except in "that most extraordinary situation in which it is demonstrated beyond question that a board simply cannot otherwise reach an informed decision on the issue involved;" (2) in this instance, the staff had not "been given a fair opportunity to resolve the Board's concerns respecting the sufficiency of its seismic review;" and (3) the staff's supplemental testimony would "enable the Board to review the record more carefully and focus its concerns more precisely." See pp. 45-46, infra. We also informed the Board that (id. at 46):

> [i]n the event that, upon full consideration of the original and supplemental testimony, the

> Board still is of the view that it cannot resolve the seismic issue on the basis of the evidence adduced by the parties themselves, we shall expect it to provide its reasons in some detail. With those reasons in hand, we will then act on the directed certification motion.

The staff filed its supplemental testimony on schedule, together with an offer to introduce it formally and respond to questions at the hearing session scheduled for September 22. At the inception of that session, however, the Board indicated that it had not as yet had "an opportunity to fully consider" the supplemental testimony and that, therefore, it was not prepared then to address it. Tr. 3886-87. Applicants' counsel thereupon inquired as to when the Licensing Board might be "in communication" with this Board. The Licensing Board Chairman responded as follows (Tr. 3887-88):

> Mr. Knotts, if you would care to expound upon what the procedures are and what the obligations are with regard to the Appeal Board's memorandum, we'd be glad to hear from you. But I don't think at this point that we're prepared to say anything about it, and as I indicated in the conference call, there are some procedural problems and substantive problems with regard to that memorandum, but to the extent that you want to offer your positions we'd be glad to hear them, or any other party before we decide on what we ought to do further, that is orally here at hearing.

This prompted a further discussion in which the Board stated that it proposed to have the independent consultants testify

during the week of October 12. Tr. 3888.[8/] Although this proposal was satisfactory to the applicants' counsel -- who desired to have all further seismic testimony taken during that week -- the staff expressed doubt that it would be prepared to go forward in advance of the disposition of its pending motion for directed certification. In this connection, staff counsel made specific reference to our August 27 memorandum. Tr. 3889. The scheduling discussion concluded with the Board's observation that it had done all it could to expedite the proceeding "short of capitulating to something that we don't think is proper." Tr. 3890.

On September 30, the applicants filed with the Licensing Board a "Motion to Establish Schedule" in which they alluded to the foregoing dialogue. When this motion came to our attention, we reviewed the September 22 transcript and concluded that the Licensing Board had apparently misapprehended the instructions contained in our August 27 memorandum. Accordingly, on October 2, we issued another memorandum in which the Licensing Board was

---

8/ The Licensing Board had previously called upon the consultants to submit written reports and, as of September 22, two of the reports had been provided (one authored by Drs. Joyner and Fletcher jointly and the other by Dr. Trifunac). A third report, authored by Dr. Luco, was received by the Board on September 25. In its September 15 supplemental testimony, the staff commented briefly upon the Joyner-Fletcher report, which it had received a few days earlier.

specifically directed "not to call any independent consultants as Board witnesses unless and until (1) it has furnished to us its detailed statement of reasons; and (2) the pending directed certification motion is thereafter acted upon by us." See pp. 47-48, infra.

On October 15, the Licensing Board issued a memorandum and order in which it reaffirmed its intention to call upon the independent consultants to testify as Board witnesses. LBP-81-47, 14 NRC ___. The Board acknowledged that the "[s]taff reviewers appeared * * * to be highly competent and credible experts in the fields of geology, seismology, geophysics, and structural engineering." But, as the Board saw it, "none of them was established to be in the forefront (as opposed to being merely highly competent) in the formulation of the highly complex modelling required to arrive at maximum magnitudes and ground motion, and the application of response spectra, in this unique situation involving extremely shallow reservoir-induced seismicity in the Eastern United States." Thus, the Board decided "to seek out those persons in the forefront of the various disciplines to review the record and give their opinions." In its apparent judgment, the five selected individuals met that standard. Id. at ___ (slip opinion, pp. 2-4).9/

9/ At a later point in its memorandum, the Board took note of the staff's assertion that certain of the written reports submitted by independent consultants corroborated
(FOOTNOTE CONTINUED ON NEXT PAGE)

The Board acknowledged that this explanation did not satisfy the standard for calling Board witnesses which had been set forth in our August 27 memorandum. It endeavored, however, to justify the disregard of that standard on several grounds. First, the Board deemed the standard to be inconsistent with established precedent, improper, and contrary to the public interest. Second, according to the Board, only the Commission itself is empowered to make such "new policy." Third, the Board found nothing in our August 27 and October 2 memoranda which required the application of the "suggested standard." (In this connection, the Board expressed confidence that, upon a reexamination of the matter in "the context of the live facts of this case" as "disclosed by * * * the transcript of hearing," we would reject the "new standard" and uphold its action.) Id. at ___ (slip opinion, pp. 12-16).10/

9/ (FOOTNOTE CONTINUED FROM PREVIOUS PAGE) the staff's position on the seismic issue. In the Board's view, this assertion provided further justification for the decision to call the consultants as witnesses. 14 NRC at ___ (slip opinion, pp. 11-12).

10/ On the strength of its asserted belief that we had not directed it to employ the standard set forth in the August 27 memorandum, the Licensing Board disclaimed any intention to disobey an order of this Board. Id. at ___ (slip opinion, pp. 14-15).

II.

It was against this background that we issued our October 19 order in which, as earlier noted, the staff's petition for directed certification was summarily denied, despite our belief that it was "not without merit." We now turn to an elucidation of the basis for the several conclusions which were announced in that order: (1) that, in its October 15 memorandum and order, the Licensing Board failed to comply with the directions contained in our August 27 memorandum; (2) that the Licensing Board's critique of the content of the August 27 memorandum was neither invited nor appropriate; (3) that, in the circumstances, clear warrant existed for our assuming immediate jurisdiction over the merits of the seismic issue; and (4) that, notwithstanding those considerations, we had no practical alternative to allowing the Licensing Board to pursue its proposed course of calling its own witnesses. See pp. 49-50, infra.

A. We thought the instructions to the Licensing Board contained in our August 27 memorandum were free of room for any possible or reasonable doubt as to their import. We explicitly called upon the Board to take certain steps following its receipt of the staff's supplemental testimony. First, it was to give "full consideration" to both that testimony and the staff testimony previously filed. This, we said, should enable it to "focus

its concerns more precisely." Then, if still persuaded that it could not "resolve the seismic issue on the basis of the evidence adduced by the parties themselves," it was to provide detailed reasons. With those reasons in hand, we would act upon the pending staff petition for directed certification -- which, we noted earlier in the memorandum, was "clearly" not susceptible of summary rejection.

As we have seen, however, the Board did not observe those instructions -- even though they were repeated in our October 2, memorandum.[11/] The short of the matter is that, in reaffirming its intention to call its own witnesses, the Licensing Board set forth in its October 15 memorandum and order virtually no explanation respecting why an informed decision on the seismic issue could not be reached on the basis of the testimony of the parties. Indeed, while not saying so explicitly, the Board left the distinct impression that it found itself unable to persist in any such claim. For one thing, there was no repetition of the Board's earlier insistence that the staff's seismic review was deficient. For another, the Board characterized the "[s]taff

---

11/ As noted above at pp. 11-12, we issued our October 2 memorandum in response to the Board's comments at the September 22 hearing -- lest the Board continue to harbor further doubts as to what we expected.

reviewers" (i.e., the sponsors of the staff testimony) as "highly competent and credible experts" in the various scientific disciplines relevant to the seismic inquiry. See p. 12, supra.

As we have also seen, the Licensing Board offered several reasons why, notwithstanding its disclaimer of an intent to disobey our directives, it had not undertaken the task assigned to it. None of those reasons, however, has colorable merit. Beyond that, in large measure they reflect an apparent and vexatious lack of understanding regarding the relationship of licensing and appeal boards in the administration of this Commission's adjudicatory process.

Section 2.785(a) of the Rules of Practice, 10 CFR 2.785(a), empowers an appeal board "to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission" in, inter alia, proceedings on applications for operating licenses under 10 CFR Part 50. Specifically included within this express delegation is the authority conferred by Section 2.718(i) of the Rules, 10 CFR 2.718(i), to direct the certification of questions arising in proceedings before licensing boards. 10 CFR 2.785(b)(1). It was, of course, precisely that authority which the staff requested we invoke in the circumstances of this case. And, likewise, our August 27

memorandum was an integral part of the process of determining (1) whether there was sufficient cause for stepping into the controversy; and (2) if so, what the ultimate result should be.

To this end, it was necessary to consider at the threshold whether the established standards for our interlocutory review had been met -- more particularly, whether the Licensing Board's proposed course of action would affect "the basic structure of the proceeding in a pervasive or unusual manner."[12/] It was in that context that we addressed the matter of the responsibilities and prerogatives of licensing boards with regard to the development of the evidentiary record, culminating in the conclusion that a board is not to call witnesses of its own unless it "cannot otherwise reach an informed decision on the issue involved." See pp. 44-45, infra. And it was that conclusion which undergirded our unfulfilled directive to the Licensing Board.

In sum, then, we issued the August 27 memorandum within the adjudicatory framework and in response to a specific request for

---

12/ Public Service Electric and Gas Co. (Salem Nuclear Generating Station, Unit 1), ALAB-588, 11 NRC 533, 536 (1980). The Licensing Board's suggestion (14 NRC at ___ (slip opinion, p. 13)) that review of its interlocutory action "can only be [obtained] in the final appeal" is simply incorrect and not in accord with our "established precedent."

relief (1) which the staff was authorized to make under a settled interpretation of the Rules of Practice; and (2) upon which we were empowered to act under an express delegation of the Commission's review authority. This being so, the Licensing Board's obligation was patent: it was duty-bound to carry out our instructions so long as they were not countermanded by our own superior tribunal -- the Commission. It mattered not whether that Board thought those instructions to be legally infirm. Nor was it of moment whether, in the Board's view, we had crossed the line separating "adjudication" and "policy making." Licensing boards -- in common with trial courts -- have not been given the function of passing their own judgment on the soundness or propriety of the rulings and instructions of a reviewing appellate tribunal, let alone the power, in effect, to nullify them if not to the boards' liking. Indeed, to sanction the attitude manifest in the statement of the Board below at the September 22 session that it would not "capitulat[e] to something that [it did not] think * * * proper"[13/] would substitute chaos for order in this Commission's adjudicatory process.

13/ See p. 11, supra.

The unacceptability of the Licensing Board's response to the August 27 memorandum is not at all lessened by the Board's statement that "as we read the issuances of the Appeal Board in this proceeding, we do not find any order to us that requires the application of the suggested standard" for calling Board witnesses. 14 NRC at ___ (slip opinion, p. 15) (emphasis supplied). There was absolutely nothing in the August 27 memorandum which could have fairly been taken as giving the Licensing Board the option of applying or ignoring the standard as it saw fit. We set forth the standard in unqualified terms and, once again, it provided the foundation for the directions to the Board. In this connection, we fail to see the relevance of the Board's notation that, as of August 27, we had not as yet determined even whether to grant the petition for directed certification. Ibid. While that is quite true, it scarcely altered the binding effect upon the Board of rulings made, and instructions given, ancillary to our consideration of the petition.[14/] Equally

---

14/ As the Licensing Board seemingly recognized (14 NRC at ___ fn. 2), the fact that we denominated the August 27 issuance a "memorandum" rather than an "order" was of no significance. Lest there be any misunderstanding in that regard, the use of the "memorandum" format was a courtesy to the Licensing Board and rested on our assumption that it would faithfully carry out the instructions to it set forth therein, without the necessity of being formally "ordered" to do so.

irrelevant is the Board's stress (ibid.) upon our indication in the August 27 memorandum (p. 40 fn. 1, infra) that we had not undertaken a review of the seismic testimony adduced to that point. As the memorandum made manifest, none of the conclusions reached therein (least of all the articulated generic standard for calling Board witnesses) was dependent upon such a review.[15/]

B. Putting aside the matter of the Licensing Board's failure to comply with our explicit directions, its October 15 memorandum and order confirmed our earlier misgivings respecting the propriety of the proposed resort to independent witnesses. More particularly, it removed all doubt that, in the circumstances of this case, such resort will "affect the basic structure of the proceeding in a pervasive or unusual manner." See p. 43, infra.

As previously noted, the Board below seemingly no longer finds it necessary to call its own witnesses for the purpose of curing what it had initially perceived to be deficiencies in

---

15/ The Licensing Board also chafed at our request for a detailed explanation of its action. 14 NRC at ___ fn. 4. Not only is the provision of an explanation a patently reasonable request, but -- as we regrettably have had to point out on prior occasions -- it also is a board obligation of some considerable moment. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-504, 8 NRC 406, 410-12 (1978).

the staff's seismic review. Although the Board did not explicitly so acknowledge, this is a reasonable inference from (1) its characterization of the staff's reviewers as "highly competent and credible experts" in the relevant disciplines; and (2) the absence of any suggestion on its part that the staff testimony, as supplemented on September 15, had crucial shortcomings. Rather, it now appears, the Board contemplates casting its witnesses in the role of auditors; i.e., their function will be to pass independent judgment on whether the analysis and conclusions of the staff reviewers -- neither controverted by any other party nor alleged to be inherently suspect -- should be accepted by the Board. The asserted justification for the use of Board witnesses to this end was essentially twofold: (1) a trial tribunal has unrestricted, inherent power to call its own witnesses (in the case of federal district courts, a power now embodied in Rule 706 of the Federal Rules of Evidence); and (2) without the aid of the second opinion of experts possessing (at least in the Board's judgment) still better qualifications, the Board would not be able to perform its adjudicatory function satisfactorily. Neither of these reasons, however, withstands scrutiny.

1. Contrary to the impression that might be garnered from the tenor of much of the Licensing Board's discussion of

the "legal basis for calling board witnesses,"[16/] we neither held nor implied in our August 27 memorandum that such basis was lacking. The issue was not the existence of such power, but rather the reasonable exercise of it. We decided simply that, although "a licensing board may well have the latitude to call upon independent consultants itself for the purpose of supplementing what it deems to be an unsatisfactory record," the exercise of that power should be confined to those instances where it is beyond question that a board could not "otherwise reach an informed decision on the issue involved." See p. 45, infra. While, as has been seen, the Licensing Board disapproves of that standard, it pointed to nothing which might indicate an inconsistency with prevailing practice in either the federal courts or this agency.

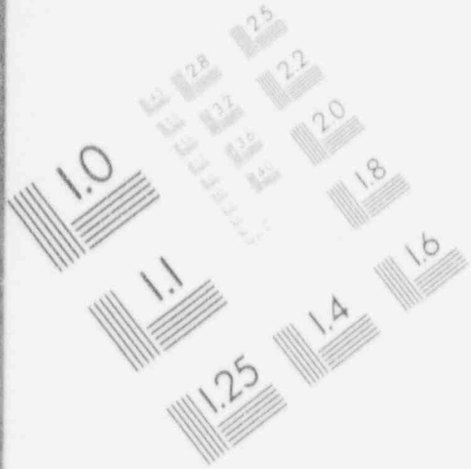
Insofar as Rule 706 of the Federal Rules of Evidence is concerned, the Board itself took note[17/] of the fact that the Rule was designed to give express recognition to "the inherent power of a trial court to appoint an expert under proper circumstances to aid in the just disposition of a case." Scott v.

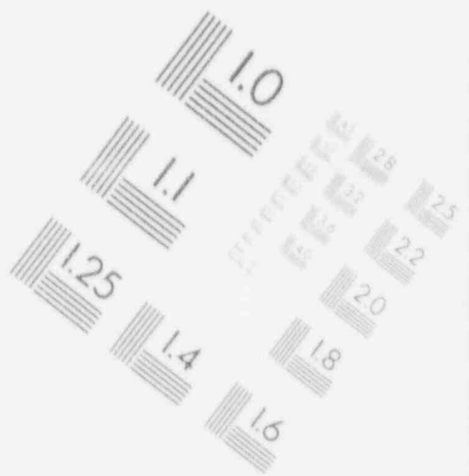
16/ 14 NRC at ___ (slip opinion, pp. 8-11).

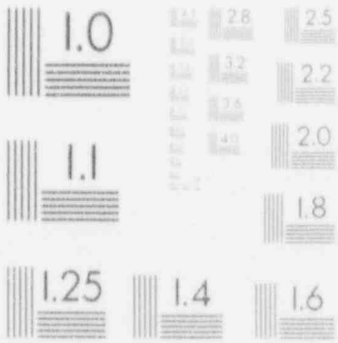
17/ Id. at ___ (slip opinion, p. 9).

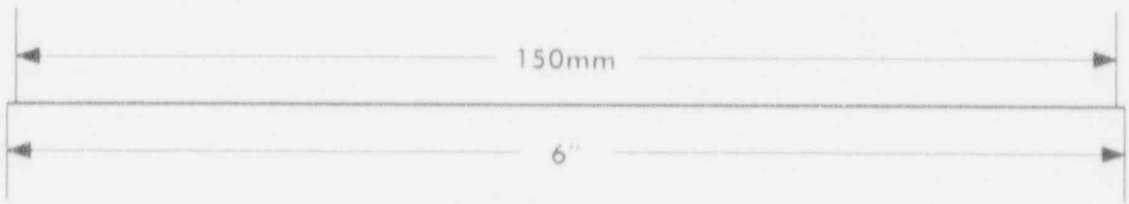
2

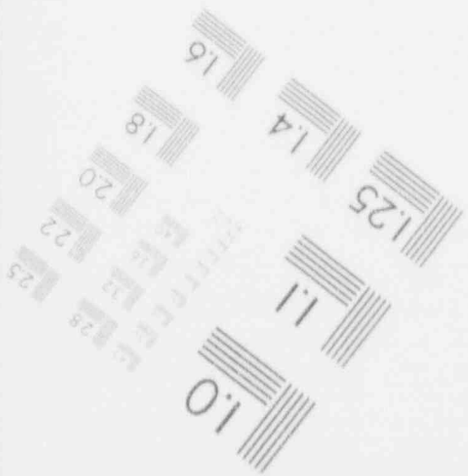
IMAGE EVALUATION TEST TARGET (MT-3)

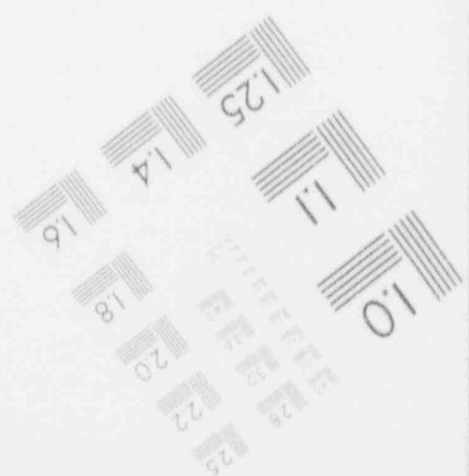








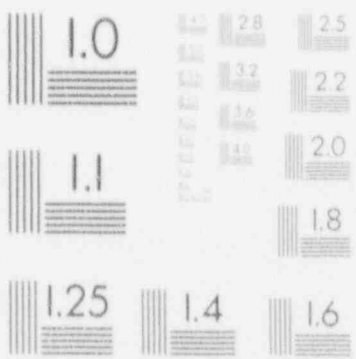


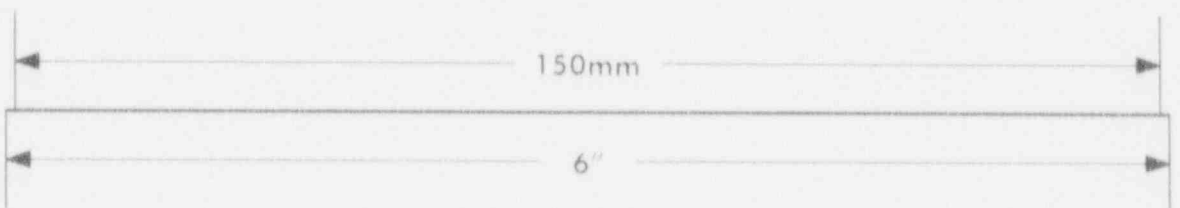


PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

2

IMAGE EVALUATION TEST TARGET (MT-3)

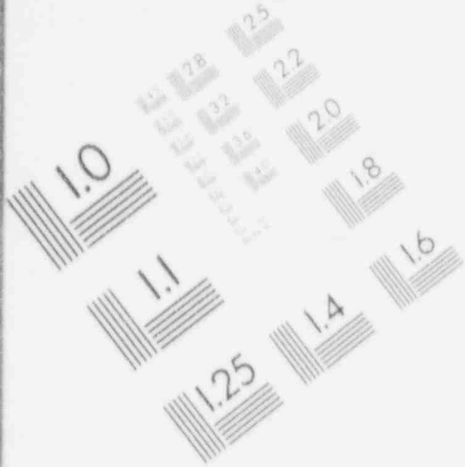


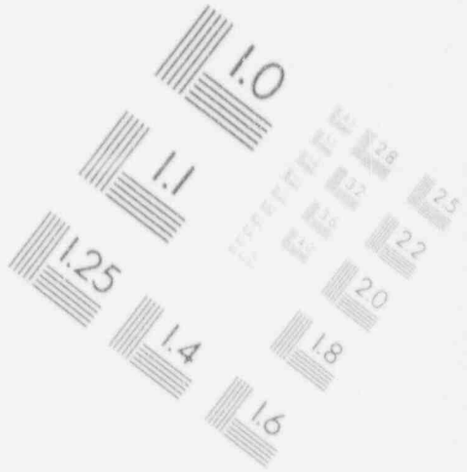


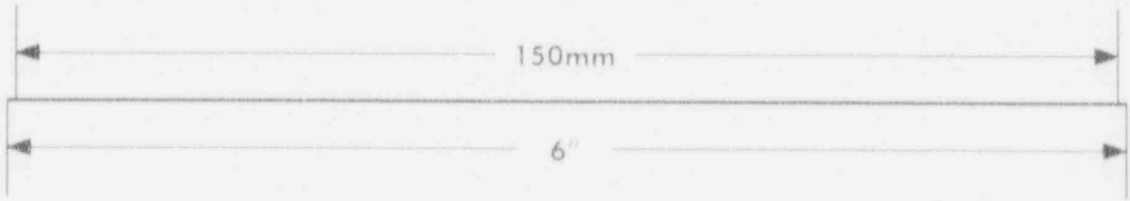
PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

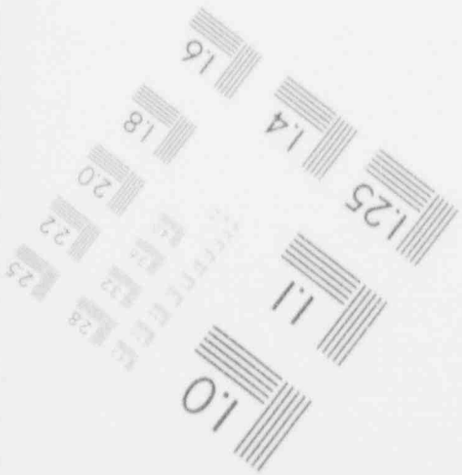
2

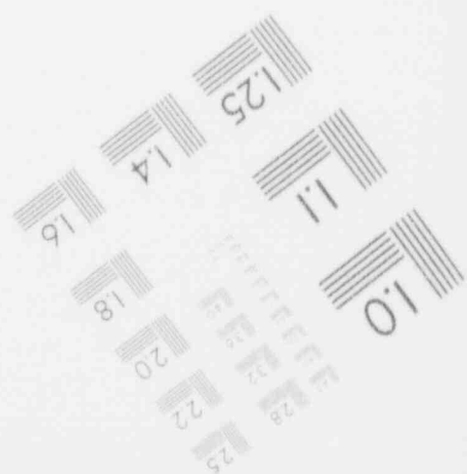
IMAGE EVALUATION TEST TARGET (MT-3)











PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

Spanjer Bros., Inc., 298 F.2d 928, 930 (2d Cir. 1962) (emphasis supplied).[18] Although the Licensing Board's research uncovered "no court cases * * * in which a trial court * * * was reversed in calling its own expert,[19] so too that research apparently disclosed no instance in which a court saw fit to invoke the Rule in circumstances even remotely approximating those present here. Our own canvass of the reported decisions under the Rule was equally unavailing. But it did bring to light an appellate decision which criticized a district court for appointing an expert to address an issue (the sanity of a criminal defendant) which had already been addressed by witnesses for both the Government and that defendant. United States v. Weathers, 618 F.2d 665 (10th Cir. 1980).[20] To be sure, the court's ultimate determination was that, because the trial judge had not actually relied on the reports of its independent expert, "any error in the sua

---

18/ In this connection, subsection (a) of Rule 706 requires the court to give the parties a prior opportunity "to show cause why expert witnesses should not be appointed" by it -- thus further belying any claim that the court's stated desire to obtain the aid of its own expert is to be invariably deemed the end of the matter.

19/ 14 NRC at ___ (slip opinion, p. 10).

20/ Although the Tenth Circuit's opinion did not so state, presumably those witnesses (unlike those of the staff and applicants here) had reached divergent conclusions on the sanity question.

sponte appointment of [that expert] was harmless." Id. at 664. Further, the basis of the criticism was the Tenth Circuit's "serious doubt" that, "in seeking additional expert testimony" after receipt of the evidence of the parties, the trial judge had acted in accord with the specific procedural requirements and design of Rule 706.[21] Notwithstanding these considerations, however, Weathers stands as stark refutation of the Licensing Board's belief that the "inherent" power of a trial tribunal to invoke the aid of an expert witness of its own is totally beyond appellate scrutiny.[22]

The recorded instances of the employment of independent expert witnesses by NRC adjudicatory boards likewise provide no precedential support for the Licensing Board's action. In Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), LBP-78-26, 8 NRC 102, stay denied, ALAB-505, 8 NRC 527

21/ 618 F.2d at 664 fn. 1. These requirements may or may not have equal application in our adjudicatory proceedings.

22/ We fail to see the relevance of the Licensing Board's stress upon the fact that our review had been undertaken on an interlocutory basis. See 14 NRC at ___ (slip opinion, p. 10). For one thing, to repeat, NRC practice allows the discretionary review of interlocutory rulings. Secondly, the appropriate time for appellate consideration of the matter at hand was before -- not after -- the Licensing Board followed through on its proposal. See fn. 12, supra.

(1978), one of the Board witnesses was an NRC staff geologist who, as reflected in prehearing filings, was in disagreement with the official position taken by the staff witnesses respecting the exact g value of the reference acceleration to which the facility was to be designed. Id. at 107-11. By contrast, in the instant case, the staff included on its own panel of witnesses Dr. Andrew Murphy, who disagreed with other staff members as to the magnitude of the maximum reservoir-induced earthquake. Dr. Murphy was thus readily available for Licensing Board questioning, obviating the Board's calling him as in Black Fox.[23/] The other Board witnesses in Black Fox were Oklahoma officials called to testify on the question whether they had taken certain state action which was a condition precedent to the issuance of a limited work authorization for the facility. See id. at 121-23.[24/] These officials were obviously the logical source for that information. Without their testimony, it would have been difficult for the Board to have reached an informed decision on the question.

23/ See Summer Safety Evaluation Report (NUREG-0717, February 1981) at 2-24 to 2-25; Tr. 1058, et seq.

24/ Those officials also testified on other matters which came within the ambit of their special regulatory jurisdiction. 8 NRC at 123-26.

In Public Service Electric and Gas Co. (Hope Creek Generating Station, Units 1 and 2), LBP-78-15, 7 NRC 642 (1978), Coast Guard officers testified as Board witnesses on several issues before the Licensing Board following our remand in ALAB-429, 6 NRC 229 (1977). Although the Licensing Board's opinion does not discuss the attendant circumstances, it appears from the record in that proceeding that the staff brought the officers to the attention of the Board and indicated that it contemplated calling them as staff witnesses on one of the issues. The Board decided, however, to have them testify instead as its witnesses because it had specific questions which it wished to address to them.[25/] Subsequently, one of the officers made another appearance after informally advising the Board that certain information previously supplied by the Coast Guard on a different issue was incorrect.[26/] Like Black Fox, this can hardly be equated to the situation which confronted us in this case.

As observed in note 5 of our August 27 memorandum (see p. 44, infra), our calling of Dr. Trifunac and Dr. Luco as

---

25/ See Docket Nos. 50-354, 50-355, Tr. 3164, 3377-78 (November 2, 1977), Tr. 3435-36 (November 3, 1977).

26/ Id. at Tr. 3732, 3770 (January 10, 1978).

Board witnesses in Diablo Canyon and the former as a Board witness in Seabrook was prompted by circumstances totally foreign to those at hand. In Diablo Canyon, intervenors sought the testimony of the two seismologists. Because of their status as ACRS consultants, however, those experts were unwilling to accept compensation from or to become witnesses for those intervenors.[27/] For the same reason, Dr. Trifunac was disinclined to testify on behalf of the Seabrook intervenor at the hearing before us following the Commission's remand of certain seismic issues. One of those issues, however, directly involved testimony which he had given several years earlier before the Licensing Board as an intervenor's witness (prior to becoming an ACRS consultant).[28/] In sum, the experts were treated as Board witnesses as an accommodation to both the intervenors

---

27/ See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-519, 9 NRC 42 (1979), and ALAB-604, 12 NRC 149, 150-51 (1980).

28/ See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), Docket Nos. 50-443, 50-444 (November 6, 1980 unpublished order). Another expert who had similarly testified as an intervenor's witness before the Licensing Board was denied Board witness status at the hearing on remand because he had not become associated with the ACRS. Id. at p. 2.

and the experts themselves. Their Board witness status did not originate with the Licensing Board, as in the matter at hand.29/

In light of the foregoing, we are entirely satisfied that the standard for calling Board witnesses referred to in our August 27 memorandum represents neither a departure from accepted principles or practice nor the establishment of a "new policy." Our attention has not been directed to a single previous occasion upon which an adjudicatory tribunal has called upon experts of its own to pass independent judgment upon the uncontroverted testimony of witnesses for the parties who are acknowledged to be both "highly competent and credible."

29/ The reliance of the Board below on our decision in Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-382, 5 NRC 603 (1977), is equally misplaced. In that case, the intervenors sought directed certification of the denial by the Licensing Board of their request for Commission funds to pay, inter alia, the fees and expenses of an expert witness they wished to sponsor. Upholding that denial as mandated by existing Commission policy against funding intervenors, we noted that the Licensing Board had indicated that it might call the expert as its witness. In that connection, we observed that the Board was free to call witnesses of its own "where it finds a genuine need for their testimony," adding that this was a matter resting in the Board's "sound discretion." Id. at 607-08 (emphasis supplied). The question now before us is whether, in this case, the Board abused that discretion.

As for the Licensing Board's reference to San Onofre, we do not believe it appropriate to discuss the recent action

(FOOTNOTE CONTINUED ON NEXT PAGE)

2. In addition to asserting its "inherent right" to call independent witnesses, the Licensing Board attempted to justify its action on the ground that, without their testimony, it could not satisfy its safety concerns and thus would be unable to perform its adjudicatory function. 14 NRC at ___ (slip opinion, p. 12). The Board conceded (ibid.) that it had not "demonstrated beyond question" that it could not "otherwise reach an informed decision," as required by our August 27 memorandum (p. 45, infra). We noted above that the Board chose to challenge that standard as an inappropriate new policy, rather than to attempt to comply with it.

There is irony in that criticism of our standard, for it is the Licensing Board that has injected a novel -- and troublesome -- element into the Commission's adjudicatory process. The Board's proposed use of independent consultants for the purpose of appraising the staff's evidence in this case conflicts with the basic structure of NRC licensing proceedings, as

---

29/ (FOOTNOTE CONTINUED FROM PREVIOUS PAGE)
of that Licensing Board in calling Dr. Luco as its witness because the proceeding is still in progress below. We simply note that it, too, was prompted by an intervenor's request for his testimony. See Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), Docket Nos. 50-361 and 50-362, Tr. 1801-02 (June 26, 1981), Tr. 2602-06 (July 1, 1981), Tr. 4973-74 (July 27, 1981).

reflected in the Commission's Rules of Practice, 10 CFR Part 2, and the guidance found in Appendix A to those rules.[30/] That framework gives the staff, as a representative of the public interest, a dominant role in assessing the radiological health and safety aspects of the involved facilities.[31/] The Licensing Board would undermine that role by adding, in effect, another party to audit, and duplicate perhaps, the staff's work.

In fact, the Licensing Boards are intended to perform that auditing function. By statute and implementing regulation, the boards contain two technical members, who by training and experience are equipped to make scientific judgments without resort to independent experts. See 42 U.S.C. 2241a; 10 CFR 2.721(a).

30/ This is the fundamental reason that we were willing to entertain the staff's motion for directed certification. See fn. 12, supra.

31/ Indeed, at the operating license stage, the staff generally has the final word on all safety matters not placed into controversy by the parties. 10 CFR 2.760a, 2.105(e), 50.57. And at the construction permit stage, where an adjudicatory hearing is mandatory, "[a]s 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 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 party." 10 CFR Part 2, Appendix A, Section V(f)(1). See also id., Section V(f)(2). This role reserved for the staff reflects the Commission's general confidence in the staff's review process.

Thus, unlike the courts and most other administrative tribunals, the NRC licensing boards, by their very composition, take account of, and in large measure are intended to satisfy, the need for scientific expertise in deciding the cases that come before them.

We certainly do not suggest that a licensing board should ignore deficiencies in the staff's analysis and testimony or play no role in the development of a complete record. The protection of the public health and safety is a paramount concern. Thus, as we have noted previously, it is a licensing board's right and obligation "to satisfy itself that the conclusions expressed by expert witnesses on significant safety or environmental questions have a solid foundation." See p. 44, infra. Our point is simply that the adjudicatory boards should give the staff every opportunity to explain, correct, or supplement its testimony before resorting to outside experts of their own. Moreover, the boards' use of such consultants should be based on more than intuition and vague doubts about the reliability of the staff's presentation: the boards must articulate good reason to suspect the validity and completeness of the staff's work. That is what we meant in requiring a demonstration "beyond question that a board simply cannot otherwise reach an informed decision on the issue involved." See p. 45, infra.[32/]

32/ This effects no gloss on the standard set out in our August 27 memorandum. We explained there that the
(FOOTNOTE CONTINUED ON NEXT PAGE)

The Licensing Board stated that it did "not see how that standard can ever be satisfied." 14 NRC at ___ (slip opinion, p. 12). We, of course, disagree. If the staff is unable or unwilling to clarify its testimony on a significant safety issue and the other evidence of record is similarly unresponsive to a licensing board's articulated concerns, the board is free under our standard to seek outside testimony in an effort to resolve the matter. Perhaps what the Licensing Board meant was that it could not satisfy that standard vis-a-vis its calling independent consultants on the seismic issues in this case. We observed in our August 27 memorandum (p. 46, infra) that the Board's concerns "appear[ed] to be at least amenable to resolution through further staff review and testimony." See pp. 4-7, supra. Nothing the Board said in its October 15 memorandum alters this conclusion.[33/] Moreover, the Board cast no doubt on the abilities or work product of the staff witnesses, characterizing them as "highly competent and credible experts."[34/]

32/ (FOOTNOTE CONTINUED FROM PREVIOUS PAGE) staff should be "given a fair opportunity to resolve the Board's concerns," and that if the Board could still not resolve the issue on the basis of the evidence adduced by the parties themselves, it should "provide its reasons in some detail." See p. 46, infra.

33/ For example, it fails to detail why the Board needs outside experts to explain what the staff "ha[d] in mind" in arriving at its earthquake magnitude value. See Tr. 3796.

34/ The staff witnesses, as is often the case, included outside experts from the USGS and the Los Alamos National Laboratory.

14 NRC at ___ (slip opinion, p. 2). The staff volunteered to supplement its prior work, further demonstrating its desire to explore fully the Board's expressed seismic concerns.35/

The Licensing Board thus does not appear to have given the staff the optimum opportunity to resolve the Board's concerns before embarking on its path to independent consultants. On this record, we see no valid justification for the Board's extraordinary action of sponsoring its own witnesses.

C. Having arrived at the above conclusions, the question remained as to what disposition should be made of the staff's petition for directed certification. We had essentially three choices.

The first available option was to grant the petition and to assume jurisdiction ourselves over the merits of the seismic issue. In view of the professed inability of the Licensing Board to decide the issue within the bounds of our standard, that alternative had a decided attractiveness. We would have pursued such a course except that, as noted in our October 19

35/ The staff's efforts in this regard continue. Just recently, the staff brought certain new seismic information to the Board's attention and indicated that it is undertaking additional evaluation. Board Notification-New Seismology Information, BN No. 81-32 (October 20, 1981).

order, we ultimately ruled it out because it would bring about unacceptable delay not only in this proceeding but also (in view of the state of our appellate docket) in other proceedings now before us as well. See p. 49, infra.

The second possible course was a grant of the petition coupled with a direction to the Licensing Board to refrain from calling its own witnesses. Given, however, the unmistakable tenor of the Board's October 15 memorandum and order, we entertained some doubt respecting whether the result would be a fair appraisal of the evidence which has been presented to it by the parties. This concern was heightened by the Board's statement that, in its view, the standard for calling Board witnesses which we enunciated in our August 27 memorandum both required a presumption that the operating license should issue and imposed an affirmative obligation on the Board to seek evidence that would support that issuance. 14 NRC at ___ (slip opinion, pp. 12-13). Although we cannot apprehend the Board's reasoning in that regard, so long as it holds such an opinion, the prudent course was not to force the standard upon the Board in this proceeding.

That left the third option -- the denial of the staff's petition notwithstanding its merit. That option, reluctantly adopted in our October 19 order, cleared the way for the Board

to call its own witnesses despite our conviction that, on the record before us, that action is entirely unjustified.

III.

As we have stated on numerous occasions in the past, our desire is not to second-guess the licensing boards on their day-to-day evidentiary rulings. When a board calls upon independent consultants, however, its action is more than routine and signals the possible need for further scrutiny. Thus, a serious request for our intercession will receive careful consideration. So as to obviate our involvement and minimize delay, we have gone to some length in this opinion in providing the boards with guidance as to the proper circumstances in which to seek outside testimony. We trust that our efforts will not prove to have been futile and that future action will be taken in recognition of the views expressed here.

FOR THE APPEAL BOARD

C. Jean Shoemaker
Secretary to the
Appeal Board

APPENDIX

The following three memoranda and two orders were previously issued by this Board in connection with our consideration of the NRC staff's petition for directed certification. Each is discussed in the foregoing opinion. Their full text is reproduced here; only the captions have been omitted.

MEMORANDUM

August 10, 1981

The NRC staff has filed a "Motion for Directed Certification of Licensing Board Action Regarding Retention of Independent Consultants". Before receiving responses to that motion from the other parties, we desire to have a full explanation of the reasons why the Board believes it necessary to invoke the assistance of independent consultants on the seismic issues presented in this proceeding (which assistance we understand will include the testimony of some or all of those consultants as Board witnesses). Because the staff's motion obviously should be acted upon expeditiously, we would like that explanation in our hands by Monday,

August 17, 1981.[1/] As soon as it has been received, we will fix the time for the filing of further papers by the parties.

FOR THE APPEAL BOARD

C. Jean Bishop
Secretary to the
Appeal Board

Ms. Kohl did not participate in this memorandum.

1/ The Licensing Board is requested simultaneously to mail copies of the explanation directly to the parties by express mail.

ORDER

August 25, 1981

We have in hand the most recent (August 21, 1981) filings of the NRC staff and the applicant in connection with the pending staff "Motion for Directed Certification of Licensing Board Action Regarding Retention of Independent Consultants". Upon examination of all of the papers before us, as well as the particularly relevant portions of the record below (most especially Tr. 3790-3817 to which the Licensing Board made direct reference in its August 13, 1981 memorandum), it appears -- though we do not now decide -- that a grant of directed certification may be warranted under the prevailing standard discussed in, e.g., Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190, 1192 (1977).

In its August 21, 1981 submission (at p. 10), the staff informed us that, on or about September 15, 1981, it intends to file supplemental testimony addressing the concerns which prompted the Board below to seek the assistance of independent consultants. As we understand it, the staff proposes to follow this course irrespective of any action we might take in the interim on its directed certification motion.

In the circumstances, we deem it advisable to stay our hand to abide the event of the filing of the supplemental testimony and its consideration by the Board below. Among other things, it is at least possible that, following such consideration, the Board will no longer find it necessary to resort to the independent consultants. Should that contingency materialize, the pending staff motion will, of course, become moot.

We will issue a further memorandum elaborating on the foregoing. The purpose of this summary order is to put the staff on immediate notice that its supplemental testimony is to be filed with the Licensing Board no later than September 15. We assume that that testimony will address, inter alia, certain fundamental principles of seismology and other aspects of the seismic testimony previously adduced.

It is so ORDERED.

FOR THE APPEAL BOARD

C. Jean Bishop
Secretary to the
Appeal Board

MEMORANDUM

August 27, 1981

1. In this operating license proceeding, the Licensing Board received the testimony of applicant and NRC staff witnesses on, inter alia, a seismic issue raised by the only intervenor, Brett Allen Bursey. That testimony focused in part upon the seismic consequences which might be occasioned by the impoundment of water in the Monticello reservoir, located adjacent to the facility. According to applicant and the staff,[1/] the conclusion of the witnesses was that, as now designed, the facility is capable of withstanding the maximum seismic event which might be induced by the reservoir impoundment. For his part, Mr. Bursey offered no evidence to the contrary.

The entire proceeding, including the seismic issue, remains in an interlocutory posture below. The staff, however, asks us to review now a Licensing Board determination to invoke the assistance of several "independent consultants", at least some of whom would be called upon to testify as

---

1/ In view of the present status of this matter before us, we have not undertaken a review of the testimony ourselves.

Board witnesses at a further hearing which the Board proposes to hold on the seismic issue.[2/] In a motion for directed certification, the staff challenges the justification for such a step and maintains that sufficient cause exists for our intercession.

Upon receipt of the staff's motion, we invited the Licensing Board to provide a full written explanation of the reasons why it believed it necessary to resort to independent consultants. In an August 13, 1981 memorandum, the Board referred us to oral remarks of its Chairman at the July 17, 1981 session (Tr. 3790-3817). The memorandum asserted (at p. 2) that those remarks reflected the Board's dissatisfaction, not with the staff's testimony, but rather with "the [s]taff's review as disclosed by the testimony -- a matter that does not lend itself to correction merely by further [s]taff testimony" (emphasis added). Hence, as the Board saw

---

2/ The Board is considering at least five individuals -- two occasional consultants to the Commission's Advisory Committee on Reactor Safeguards (Drs. Enrique Luco and Mihailo Trifunac) and three employees of the United States Geological Survey.

it, the appropriate course was "to attempt to arrange for independent consultants and further hearings with all deliberate speed". Ibid. Still further, the Board emphasized that the parties would be given the opportunity to respond to the positions taken by the independent consultants and encouraged to make full use of that opportunity. Ibid.

As authorized by us, on August 21 the staff responded to the Licensing Board's memorandum.[3/] At the conclusion of the response, it stated that, on or about September 15, 1981, it proposed to file supplemental testimony addressing the concerns which prompted the Board to seek the assistance of independent consultants. Taking note of that representation, we entered an order on August 25 in which we, inter alia, (1) directed the staff to file the supplemental testimony no later than September 15; (2) announced that the motion for directed certification would be held in abeyance pending the Licensing Board's receipt and consideration of that testimony; and (3) stated that a further explanation would be provided in a subsequent memorandum.

2. "[T]he grant of a request for directed certification is an exception to the Commission's general rule against interlocutory appeals (10 CFR §2.730(f)) and, as such, is

---

3/ Applicant also responded.

to be resorted to only in 'exceptional circumstances'". Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-382, 5 NRC 603, 606 (1977), citing Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-271, 1 NRC 478, 486 (1975).[4/] Thus, "[a]lmost without exception in recent times, we have undertaken discretionary interlocutory review only where the ruling below either (1) threatened the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated by a later appeal or (2) affected the basic structure of the proceeding in a pervasive or unusual manner". Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190, 1192 (1977).

As we suggested without elaboration in our August 25 order, the matter at hand may meet that standard. Although a definite conclusion in that regard need not be reached now, there is little room for serious question that the course upon which the Licensing Board has embarked is highly unusual,

---

4/ Seabrook was the first decision to the effect that a party might seek discretionary review of a non-appealable interlocutory ruling by means of a petition for directed certification under 10 CFR 2.718(i).

if not entirely unprecedented.[5/] To be sure, it does not perforce follow that, as the staff insists, the Board's action is both wrong and fit for interlocutory reversal. But, in the totality of circumstances, its novelty and potential effect upon the basic structure of the proceeding clearly foreclose a summary rejection of the staff's motion -- the customary outcome of endeavors by parties to cast us in the ongoing role of monitor of the day-to-day conduct of licensing proceedings.

The usual expectation is that, in construction permit and operating license proceedings alike, the issues in litigation will be decided by the Board in the context of the evidence adduced by the parties on those issues. This does not mean, of course, that the Board is required to accept uncritically all testimony placed before it unless it has been specifically controverted by other evidence of record. To the contrary, in all circumstances the Board has the right, indeed the duty, to satisfy itself that the conclusions expressed by expert witnesses on significant safety or environmental questions have a solid foundation. To this end,

---

5/ Although ACRS consultants recently testified as Board witnesses in the Diablo Canyon and Seabrook seismic proceedings, this was brought about by circumstances unlike those in the case now before us. See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-519, 9 NRC 42 (1979) and ALAB-604, 12 NRC 149, 150-51 (1980); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), Docket Nos. 50-443, 50-444 (November 6, 1980 unpublished order).

Board members are free to examine the witnesses themselves respecting the basis for opinions which they express -- including the methodology or assumptions underlying the analyses which led to those opinions. And, if persuaded following such interrogation that, for one reason or another, certain of the evidence is unreliable, the Board has several options readily available to it short of calling its own witnesses to address the perceived deficiencies. Among other things, the Board can (1) simply reject that evidence and decide the issue without regard to it (i.e., on the basis of the other evidence of record); or (2) require the sponsoring party to produce supplemental testimony which is not subject to the same infirmities.[6/]

The foregoing considerations notwithstanding, a licensing board may well have the latitude to call upon independent consultants itself for the purpose of supplementing what it deems to be an unsatisfactory record. Such an undertaking, however, should be reserved for that most extraordinary situation in which it is demonstrated beyond question that a board simply cannot otherwise reach an informed decision on the issue involved. We are thus far not convinced by either

---

6/ In this regard, a board can invoke the procedure available under 10 CFR 2.720(h)(2) for soliciting the testimony of NRC staff not already identified as witnesses.

the Licensing Board Chairman's remarks at Tr. 3790-3817 or the Board's August 13 memorandum that the staff has been given a fair opportunity to resolve the Board's concerns respecting the sufficiency of its seismic review. In fact, the dichotomy drawn by the Board between the staff's testimony and the staff's review (August 13 memorandum, p. 2) is a distinction without a difference. Scrutiny of the referenced transcript pages confirms this. The evidentiary deficiencies, as identified there by the Board Chairman, would appear to be at least amenable to resolution through further staff review and testimony. See, e.g., Tr. 3792, 3793, 3794, 3796, 3812-13.

The staff's supplemental testimony to be filed by September 15 will enable the Board to review the record more carefully and focus its concerns more precisely. In the event that, upon full consideration of the original and supplemental testimony, the Board still is of the view that it cannot resolve the seismic issue on the basis of the evidence adduced by the parties themselves, we shall expect it to provide its reasons in some detail. With those reasons in hand, we will then act on the directed certification motion.

FOR THE APPEAL BOARD

C. Jean Bishop
Secretary to the
Appeal Board

MEMORANDUM

October 2, 1981

In accordance with our August 25, 1981 order, the staff filed its supplemental seismic testimony on September 15. As expressly stated in our August 27 memorandum in further explanation of the August 25 order, the Licensing Board was thereupon to reconsider its prior determination to seek the assistance of independent consultants on the seismic issue. That memorandum went on to provide (p. 7) that:

> In the event that, upon full consideration of the original and supplemental testimony, the Board still is of the view that it cannot resolve the seismic issue on the basis of the evidence adduced by the parties themselves, we shall expect it to provide its reasons in some detail. With those reasons in hand, we will then act on the directed certification motion.

As of this date, the Licensing Board has not supplied us with a written statement of the reasons why it still believes "that it cannot resolve the seismic issue on the basis of the evidence adduced by the parties themselves". This may be because the Board has now concluded that it no longer requires the assistance of independent consultants. In any event, to avoid any possible misunderstanding, the Board is not to call

any independent consultants as Board witnesses unless and until (1) it has furnished to us its detailed statement of reasons; and (2) the pending directed certification motion is thereafter acted upon by us.

FOR THE APPEAL BOARD

C. Jean Bishop
Secretary to the
Appeal Board

ORDER

October 19, 1981

We have closely examined the Licensing Board's October 15, 1981 memorandum and order. LBP-81-47, 14 NRC ___. That examination discloses a total failure on the part of that Board to explicate the reasons why it cannot resolve the seismic issue before it on the basis of the evidence adduced by the parties themselves. See our memorandum (unpublished) of August 27, 1981 at p. 7. Beyond that, the Board below devoted a significant part of its October 15 issuance to a critique of the content of the August 27 memorandum. That critique was neither invited nor appropriate.

In the circumstances, there is clear warrant for directing the certification to us forthwith of the merits of the seismic issue. See 10 CFR 2.718(i). Doing so, however, would entail unacceptable delay in this proceeding, as well as in other proceedings currently before the members of this Board. We are thus left with no practical alternative to allowing the Licensing Board to pursue its proposed course notwithstanding (1) our conviction that that course has not been adequately justified, and (2) that Board's open and flagrant disregard of

our instructions. Accordingly, although not without merit, the staff's petition for directed certification must be denied.[1]

In the interest of minimizing further delay in the progress of this proceeding, we are announcing our result at this time. A full explanation will be set forth in a subsequent memorandum.

It is so ORDERED.

FOR THE APPEAL BOARD

C. Jean Bishop
Secretary to the
Appeal Board

1/ That petition did not ask us to assume jurisdiction over the merits of the seismic issue but, rather, merely sought review of the Licensing Board's proposed use of independent consultants as Board witnesses. As indicated in the text above, it was the Licensing Board's October 15 memorandum and order which suggested the warrant for granting broader relief sua sponte.

ATTACHMENT 2

LBP-81-44

DOCKETED USNRC Release

'81 OCT 16 A11:41

OFFICE OF SECRETARY DOCKETING & SERVICE BRANCH

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Herbert Grossman, Chairman
Dr. Frank F. Hooper
Gustave A. Linenberger

SERVED OCT 16 1981

In the Matter of:	)	Docket No. 50-395-OL
SOUTH CAROLINA ELECTRIC AND GAS COMPANY, ET AL.	)	
(Virgil C. Summer Nuclear Station, Unit 1)	)	
	)	October 15, 1981

MEMORANDUM AND ORDER
(Reaffirming Board's Intention of Calling Independent Experts, and Requiring Further Prefiled Staff Testimony)

MEMORANDUM

Statement

On June 22, 1981, the evidentiary hearing in this operating license proceeding began with the introduction of testimony on the seismic issues. The Board had already been alerted to the sensitivity of this issue by a discussion in the Safety Evaluation Report, which indicated that the facility had been designed to withstand ground motions of 0.15g for a safe shutdown earthquake (SSE) and 0.10g for operating basis earthquake (OBE); and that a ground acceleration from a recent seismic event in the vicinity of the plant had been recorded at 0.25g. In addition, the SER reported that: the frequency of seismic occurrences in the area had increased greatly due to the impoundment of the Monticello reservoir needed to provide cooling water; the ground motion already encountered, of greater than design

basis, resulted from a magnitude 2.8 earthquake; and, there were differing opinions by the Applicants, Staff, ACRS, and a dissenting Staff member as to the maximum earthquake that might be expected from the reservoir induced seismicity, varying from a magnitude 4.0 to a magnitude 5.3 (each of these projected magnitudes being far in excess of the magnitude 2.8 which had already produced ground motion in excess of the design basis).

The Board received the Applicants' and Staff's testimony on seismicity from June 22, 1981 through June 24, 1981. Intervenor had no seismic witnesses and indicated at the outset that he was not well equipped to cross-examine on this issue, not knowing the distinction between magnitudes of earthquakes and ground accelerations. Tr. 755-757. The Board's concern for the seismic safety of the facility was further heightened by the presentation of Applicants' and Staff's testimony which indicated that their respective analyses of the seismic design basis did not depend upon traditional methods of estimating magnitude and ground motion parameters on the basis of empirical data but, rather, upon certain state-of-the-art modelling techniques. While the Staff reviewers appeared to the Board to be highly competent and credible experts in the fields of geology, seismology, geophysics, and structural engineering, none of them was established to be in the forefront (as opposed to being merely highly competent) in the formulation of the highly complex modelling required to arrive at maximum magnitudes and ground motion, and the application

of response spectra, in this unique situation involving extremely shallow reservoir-induced seismicity in the Eastern United States.

After prolonged discussion and with the unanimous agreement of its members,[1/] the Board decided to seek out those persons in the forefront of the various disciplines to review the record and give their opinions. From the U.S. Geological Survey (USGS), we were successful in acquiring the assistance of Drs. William B. Joyner, David M. Boore and J. P. Fletcher. Drs. Boore and Joyner are recognized as outstanding authorities in estimating ground motion, and were co-authors of two USGS circulars (672 and 795) which supplied much of the foundation for the Appeal Board's decision in Pacific Gas and Electric Co.(Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-644, 13 NRC __, (June 16, 1981). They have recently updated the subject of those circulars to include strong motion records from 1979 Imperial Valley, California earthquake. USGS Open File Report 81-365. Dr. Fletcher was responsible for stress drop calculations at the Monticello reservoir which were the subject of differing professional

---

1/ We are aware of the Appeal Board Panel's practice of requesting additional evidence where only one of the board members believes that the additional information will assist in the discharge of his adjudicatory functions. See unpublished Memorandum and Order (March 3, 1980), concurring opinion (Chairman Rosenthal), p. 5, Virginia Electric and Power Company (North Anna Nuclear Power Station, Units 1 and 2), Docket Nos. 50-338-OL, 50-339-OL. Because of the unanimous agreement of our members that the testimony of independent Board experts would be desirable, we did not have to resort to such a practice.

opinion among the Staff experts regarding the estimates of earthquake magnitude and ground acceleration. He also co-authored USGS Open File Report 81-0448 containing an analysis of accelerograms that recorded ground motions of 0.25g, 0.22g, and 0.24g at the Monticello reservoir.

The Board was also fortunate in acquiring the assistance of Drs. Enrique Luco and Mihailo Trifunac, who are seismic consultants to the ACRS and who had previously been called by Licensing and Appeal Boards as Board experts. Some of Dr. Trifunac's state-of-the-art work has been utilized by Drs. Boore and Joyner in their formulations. In addition to his other qualifications, Dr. Luco is a colleague of Dr. J. M. Brune at the University of Southern California whose model (the Brune model) was a large factor in the Applicants' and Staff's formulations in this case. We expect that Dr. Luco will have great familiarity with applying the results of the Brune formula to physical structures.

In a conference call during the week of July 6, 1981, the Board indicated to the parties that it was considering retaining Board experts. We formally announced that decision when the hearing recommenced on July 13, 1981. On July 17, 1981, we fully explained what it was that we intended the experts to do and why we had decided to retain them. At a conference call held the next week, we reaffirmed that decision and gave the parties the names of our potential witnesses.

On August 7, 1981, the NRC Staff filed a motion seeking directed certification of the Licensing Board's determination to call independent experts. A substantial portion of that motion concerned itself with the allegation that the Licensing Board had failed to explain the reasons for seeking the assistance of independent consultants. On August 10, 1981, the Appeal Board requested our full explanation. On August 13, 1981, this Board issued a memorandum which indicated, inter alia, that a full explanation had been contained in the transcript of the hearing on July 17, 1981 at Tr. 3790-3817. Later that same day, the Appeal Board issued an order requiring responses to the Staff motion and providing the Staff with an opportunity to file a supplement to its motion.

The Staff filed that supplement on August 21, 1981 in which it shifted its focus from the allegation of its August 7, 1981 memorandum that the Board had failed to give a thorough explanation for its determination to retain Board witnesses to an allegation that the Board's action was based upon the Board Chairman's supposedly pejorative thoughts and accusations. The Board Chairman remarked at Tr. 3792 that the Staff should recognize that an applicant should be expected to present information and experts primarily in support of its position, and that the Staff should review Applicants' information critically before making a final determination. The Staff read into that discussion (NRC Staff Supplement August 21, 1981, p. 4) a "clear

implication * * * that Staff cannot be trusted to present independent, unbiased information for the Board's decision;" a "conclusion * * * that the Staff would ignore pertinent data or information which is potentially adverse to the Staff's position;" and "a prejudgment without good cause * * * 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." None of these implications, conclusions, or prejudgments (even the phrase in quotations) are to be found in the record of the case. Staff's memorandum also indicated that it would present further prefiled testimony of its seismic panel by September 15, 1981.

On August 25, 1981, the Appeal Board ordered that the Staff file that supplemental testimony no later than September 15. The Appeal Board conjectured that, following the Licensing Board's consideration of that supplemental testimony, the Licensing Board might no longer find it necessary to call the independent experts. The Appeal Board's order indicated that it would issue a further memorandum elaborating upon the matter.

On August 27, 1981, the Appeal Board issued an unpublished memorandum elaborating on its thinking. With a view towards the Licensing Board's reviewing the expected Staff prefiled testimony due on September 15, 1981, the Appeal Board suggested a standard to be applied to the calling of Board experts. The Appeal Board opined (p. 6) that "such an undertaking * * * [the calling of Board experts]

(p. 7) should be reserved for that most extraordinary situation in which it is demonstrated beyond question that a Board simply cannot otherwise reach an informed decision on the issue involved."

Moreover, even before reaching the point at which that suggested general rule might be applied to determine whether Board witnesses could be called, the Appeal Board suggested options that must be explored if the Licensing Board has been persuaded for one reason or another that certain of the evidence is unreliable. As stated by the Appeal Board, "among other things, the [Licensing] Board can (1) simply reject that evidence and decide the issue without regard to it (i.e., on the basis of the other evidence of record); or (2) require the sponsoring party to produce supplemental testimony which is not subject to the same infirmities."

In its August 10, August 25 and August 27, 1981 issuances, the Appeal Board had not acted on the Staff's motion for directed certification and, consequently, had not ordered us to take any specific action. Nonetheless, on the Appeal Board's suggestion that we review the Staff's September 15, 1981 prefiled testimony, which we have now received, we decided to delay any further proceedings on the seismic issue to reconsider our position in light of Staff's testimony. On October 2, 1981, the Appeal Board issued a further "Memorandum," which appeared to order us "not to call any independent consultants as Board witnesses" until we have supplied our reasons to the Appeal Board and that Board has had a chance to act. We have now

read the further Staff testimony and, for the reasons that follow, have concluded that our decision of July 17, 1981 to call Board experts was correct, was desirable under the circumstances, and finds further support in the Staff's September 15 testimony. Although the Board witnesses have completed their written reports and, like Staff's and Applicants' seismic witnesses, are prepared to testify, we are staying our hand in the matter of further scheduling until the Appeal Board has had an opportunity to decide whether it wishes to act on the motion for directed certification.[2/]

The Legal Basis for Calling Board Witnesses

Rule 706 of the Federal Rules of Evidence, which became effective on July 1, 1975, permits a Federal Court to appoint expert witnesses of its own selection. The Rule did not confer new powers upon the trial court, but merely codified existing law and established specific

---

2/ The Licensing Board had originally established a schedule of requiring the Board experts' reports by September 10, 1981 and holding the further hearing on seismicity during the week of September 21, 1981. We note that 10 C.F.R. § 2.730(g) provides that the filing of a motion for directed certification shall not stay the proceeding unless otherwise ordered. We interpret the Appeal Board's direction to us to consider the further staff testimony before calling the experts as equivalent to an "order," even though the direction was contained in "Memorand[a]" dated August 27, 1981 and October 2, 1981. Consequently, we did not hear the seismicity experts during the week of September 21, 1981 and have left the further hearing dates open until the Appeal Board acts, even though we do not wish to delay the proceeding.

procedures by which expert witnesses would be appointed, compensated, and examined. As stated in the Advisory Committee's note to Rule 706 with regard to existing law, "the inherent power of a trial judge to appoint an expert of his own choosing is virtually unquestioned."

The Advisory Committee cited the two principal cases in the area, Scott v. Spanjer Bros., Inc., 298 F.2d 928 (2d Cir., 1962) and Danville Tobacco Association v. Bryant-Buckner Associates, Inc., 333 F.2d 202 (4th Cir. 1964). In Scott v. Spanjer, p. 930, the 2nd Circuit indicated its understanding that "appellate courts no longer question the inherent power of a trial court to appoint an expert under proper circumstances to aid in the just disposition of a case." It further quoted (Ibid.) McCormick on Evidence that "the existence of the judge's power to call witnesses generally and expert witnesses particularly seems fairly well recognized in this country," and that cases have been recorded as early as the 14th century on the summoning of experts by the judges to aid them in deciding scientific issues.

Not only have trial courts claimed this inherent right to call experts of their own choosing, but so have Federal administrative judges.[3/] See e.g., 1) Federal Power Commission--Permian Basin

---

3/ Court cases generally involve only private parties. Where the public interest is involved, the reasons are stronger for permitting the presiding officer to call his own witnesses, especially where the matters involve the public health and safety.

Area Rate Case, 34 F.P.C. 17, 238 (1965); 2) Civil Aeronautics Board--Continental-Western Merger Proceeding, Docket No. 38733; 3) Postal Rate Commission-Docket No. MC73-1; Docket No. R74-1; 4) Federal Communications Commission-AT&T Rate Matter, Docket No. 19129; 5) Federal Energy Regulatory Commission--Pacific Power & Light Co., Docket Nos. E7777, E7296.

We have found no court cases or administrative board proceedings in which a trial court or board was reversed in calling its own expert, or even one in which the matter has been given interlocutory review by an appellate tribunal. We doubt that any such case or proceeding exists: the inherent power of a trial court to call its own experts when it deems that procedure desirable is too firmly ingrained in the common law to be successfully challenged at this late date, especially after the adoption of Rule 706 of the Federal Rules of Evidence.

Nor do we have to look beyond the Nuclear Regulatory Commission to find authority for a licensing board's calling its own experts. In addition to the two cases cited in the Appeal Board's unpublished memorandum of August 27, 1981, fn. 5, Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2) ALAB-519, 9 NRC 42 (1979), ALAB-604, 12 NRC 149, 150-151 (1980) and Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), Docket Nos. 50-443 and 50-444 (November 6, 1980 unpublished order), there are other cases in which board experts were called, e.g., Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3),

Docket Nos. 50-361-OL and 50-362-OL; Public Service Electric Gas Co. (Hope Creek Generating Station, Units 1 and 2), LBP-78-15, 7 NRC 642 (1978); and Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), LBP-78-26, 8 NRC 102 (1978). See also Consumers Power Company (Mid'and Plant, Units 1 and 2), ALAB-382, 5 NRC 603-608 (1977), in which the Appeal Board indicated that "the decision to call or not to call a witness for the Board must rest and does rest ultimately in the sound discretion of the tribunal alone."

The Licensing Board's Present Position

We have reviewed the Staff's further prefiled testimony submitted on September 15, 1981. We have also received and issued to the parties the written reports from the independent consultants, although we do not consider the substance of those reports in re-evaluating our July 17, 1981 ruling. Staff, however, has reviewed the USGS experts' reports in their September 15, 1981 further testimony, and has concluded (p. 46) that the report contains "implicit support of the Staff's methodology in deriving the maximum reservoir-induced earthquake" and that any Staff differences with those experts' estimate of ground motion relate to high frequencies that would not cause damage to the Summer plant. If Staff's conclusion is correct that the report corroborates the Staff's position, and that corroboration can be established by those witnesses appearing at further hearing, in our opinion our decision to call independent witnesses has been justified. If the testimony of the independent

consultants allays the safety concerns of the Board that prompted the retention of those experts, it will further our ability to make recommendations on the issuance of the operating license. If the other reports also corroborate the Staff's position on the other aspects of seismicity, they will supply added support to the record; if they do not, we would want to explore the reasons why.

Taking into account the established precedents, which unanimously support the power of the trial tribunal to retain independent witnesses, and Staff's representations that the report of at least one group of experts will serve to satisfy our safety concerns, we believe that the correctness of our decision of July 17, 1981 to retain these experts is beyond question. We cannot, however, claim to have satisfied the new standard that the Appeal Board has suggested for calling Board experts, that this is "that most extraordinary situation in which it is demonstrated beyond question that a Board simply cannot otherwise reach an informed decision on the issue involved." In view of the fact that the burden is on the parties to establish that the safety issues can be resolved in favor of plant operation, we do not see how that standard can ever be satisfied; if the safety of the plant is not established in the record, the Board's informed decision must be to deny the license. The suggested standard, as we see it, becomes appropriate only if we presume that the operating license

should issue and that we must affirmatively seek evidence that would support the issuance--a licensing standard that we think would be improper and contrary to the public interest.

Furthermore, as we have established previously, the standard for calling Board experts suggested by the Appeal Board is not a reflection of established precedent. All authorities of which we are aware are unanimous in upholding the power of the trial tribunal, even when the public interest is not present, to call its own independent witnesses and in treating that action as an interlocutory one which can only be reviewed in the final appeal.[4/] For this Licensing

---

4/ The Appeal Board's August 27, 1981 memorandum was the third in a series of recent Appeal Board issuances in this proceeding which have an unintended effect of denigrating the role of the Licensing Board to that of an adversary party in the proceeding. In its June 1, 1981 Decision (ALAB-642), reversing the Licensing Board's admission of the Fairfield United Action petitioner into the proceeding, the Appeal Board indicated (Op. 17, 20-21) its preference for having the Licensing Board assume the role of cross-examiner over that of the late-filing petitioner, without apparently considering the attendent consequence of the Licensing Board's sacrificing some of its appearance of impartiality.

Similarly, the Appeal Board's issuances of August 10, 1981 and August 27, 1981, requiring the Licensing Board's "explanations," invite the Licensing Board into an adversary relationship with the Staff and Applicant in a brief-writing contest to the Appeal Board.

We do not raise this matter to imply an intentional denigration of licensing board authority or to question the Appeal Board's authority to reverse this Licensing Board on discretionary matters. We raise it only to point out a dimension to the process of reviewing matters of trial management that is not always apparent to appellate tribunals.

Board to voluntarily adopt the suggested standard, in derogation of the unanimously-accepted powers of a trial tribunal, in order to moot the pending motion for directed certification, would constitute a policy decision on our part rather than the application of an established legal standard. We have some question as to whether even the Commission would consider adopting such a policy standard in derogation of the commonly accepted powers of a hearing tribunal, which might violate at least the spirit of § 191 of the Atomic Energy Act, as amended, which established the Licensing Boards as independent tribunals, and the Administrative Procedure Act, as amended (5 U.S.C. §§ 551, et seq.), under which they function.

Moreover, even if we could agree with that suggested new policy, we lack the power to adopt it. In Offshore Power Systems (Floating Nuclear Power Plants), CLI-79-9, 10 NRC 257, 261 (1979), the Commission indicated that only it, and not the licensing boards (in that case an appeal board), was "empowered to make policy as well as to apply it."

We do not mean to appear as disobeying an Appeal Board order. We acknowledge that the Appeal Board has the authority to review our acts and to reverse our position even on the basis of what we consider to be the adoption of a new policy. What we consider to be a matter of policy may be determined by the Appeal Board to be a reflection of legal precedents and, between the two boards, the Appeal Board's decision would be controlling. It is only the Commission that could then question the Appeal Board's ruling, regardless of how strongly we might feel.

However, as we read the issuances of the Appeal Board in this proceeding, we do not find any order to us that requires the application of the suggested standard. The Appeal Board has made it clear that it has not yet even decided to accept for consideration and decide on the merits the Staff's motion for directed certification. Moreover, in its August 27, 1981 Memorandum, which suggested the new standard, the Appeal Board indicated (Op. 1, fn. 1) that it had not yet reviewed the testimony in the proceeding, seemingly a prerequisite to deciding the Staff's motion on the merits. We have no doubt that if the Appeal Board were to consider the Licensing Board's decision to call expert witnesses in the context of the live facts of this case, as would be disclosed by their reading the transcript of hearing, it would reconsider proposing that new standard and would affirm this Board.

In sum, we find the procedural context of the Appeal Board's issuances uncertain. We interpret them as directing us only with regard to reading the Staff's September 15, 1981 further testimony and stating our views on calling the Board witnesses. We view the standard enunciated in the August 27, 1981 Memorandum as a suggested standard that we might apply in considering the Staff's supplemental testimony if we wish to obviate an Appeal Board consideration on the merits of the Staff's motion for directed certification. In our opinion, however, we cannot voluntarily apply the standard proposed by the Appeal Board because we cannot accept that standard as reflecting applicable legal precedent. Were we to adopt that standard, we would

be establishing policy for the Commission in violation of the prohibition of Offshore Power Systems, supra. Furthermore, it is a policy which we believe might violate the statutorily imposed responsibilities of a licensing board under the Atomic Energy Act and the Administrative Procedure Act, and thus would have an undesirable effect upon licensing boards' responsibilities to the public health and safety. However, we recognize the authority of the Appeal Board to decide these matters contrary to how we view them and to reverse our actions. We do not claim the last word on these matters--only the first. We, therefore, reaffirm our ruling of July 17, 1981 to call the independent consultants as board witnesses to appear together with the Applicants' and Staff's seismic witnesses at a further hearing, but do not schedule such a hearing pending a further issuance by the Appeal Board.

ORDER

For all of the foregoing reasons, upon which the Board relies to proceed with calling its own expert witnesses, it is this 15th day of October, 1981

Ordered

That Staff file by October 26, 1981 further written testimony, to be presented at further hearing, responding in full to the Board experts' reports.

Judge Hooper joins in this Memorandum and Order, but is not available to sign it.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Herbert Grossman, Chairman
ADMINISTRATIVE JUDGE

Gustave A. Linenberger, Jr.
ADMINISTRATIVE JUDGE

ATTACHMENT 3

ATTACHMENT 4