UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	
SOUTH CAROLINA ELECTRIC & GAS COMPANY, et al.	)	Docket 50-395 OL
	)	
(Virgil C. Summer Nuclear Station, Unit 1)	)	

APPLICANTS' RESPONSE TO ORDER TO SHOW CAUSE WHY THEIR EXCEPTIONS SHOULD NOT BE DISMISSED

I. INTRODUCTION

On August 20, 1982, Applicants herein filed their exceptions to the initial decision. On August 24, the Appeal Board directed Applicants to show cause why those exceptions should be considered in light of the decisions indicating the limited circumstances in which appeals will be heard when the outcome is not challenged by the excepting party.[1]

---

1 Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-459, 7 NRC 179, 202 (1978); Toledo Edison Co. (Davis-Besse Nuclear Power Station), ALAB-157, 6 AEC 858, 859 (1973); see Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-252, 8 AEC 1175, 1177, affirmed, CLI-75-1, 1 NRC 1 (1975); cf. Carolina Power and Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), ALAB-577, 11 NRC 18, 23-25, reversed in part on other grounds, CLI-80-12, 11 NRC 514 (1980) (extraordinary circumstances shown); Prairie Island, ALAB-252, supra, 8 AEC at 1177-78 (no extraordinary circumstances shown). See also Duke Power Co. (Cherokee Nuclear Station, Units 1, 2, and 3), ALAB-478, 7 NRC 772, 773 (1978); Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-282, 2 NRC 9, 10 n. 1 (1975).

Applicants' exceptions followed 10 C.F.R. §2.762 literally, being confined to individual assignments of error and references to the portions of the decision where that error is found, "without supporting argumentation." It appeared to us that argument as to why exceptions should be entertained even though the overall result was favorable (i.e., authorization of license issuance) was not appropriate or even permitted in the exceptions, but was for the brief. Since there are good reasons to address the question before briefing, we are quite willing to explain the rationale of our appeal at this time, as directed.

II. THE LEGAL PRINCIPLES

As a general rule, a party may appeal the initial decision of a licensing board only if the appellant is "aggrieved by, or dissatisfied with, the action taken below,"[2] has suffered a "discernible injury", or has been "prejudiced" as a consequence of the ruling below.[3] If an appellant fails to show he is aggrieved, injured, or prejudiced, an appeal may be taken only if extraordinary circumstances are present, such as a legal issue of clear recurring importance.[4] Applicants do not contend that the present case involves extraordinary circumstances justifying a departure from the general rule; rather, we argue that the general rule is satisfied because the Applicants are in fact aggrieved by the initial decision of the licensing board (though

---

2 Marble Hill, supra, 7 NRC at 202.

3 Davis-Besse, supra, 6 AEC at 858; see Prairie Island, supra, 8 AEC at 1176-77.

4 Shearon Harris, supra, 11 NRC at 24; see Prairie Island, supra, 8 AEC at 1177.

the immediate result was in their favor) and have suffered and will suffer discernible injury as a consequence of certain findings and conclusions which will constrain future evaluation of past and future earthquakes, including comparisons between and among events. Perhaps the most significant constraint would be limitations on use of data, models, and theories in future analyses.

III. SUMMARY

Applicants have no objection to the seismic license conditions themselves. Nor do we object to the findings which are incorporated by reference in the second of those license conditions (as they apply to that condition and to events which have already been analyzed), even though they may be incorrect in some respects. This is so because we do not interpret the "guidelines" to constrain performance of the confirmatory program in a way which is unacceptable.[5] But quite apart from the license conditions, the collateral estoppel or res judicata effect of some of the erroneous findings of fact will unduly constrain Applicants in future submissions to the agency unless some vehicle is provided for correction of errors.[6] The impact of res

---

5 See p. 5, infra.

6 The effect of the doctrine of res judicata is that a final judgment on the merits is an absolute bar to a subsequent action between the same parties or their privies involving the same cause of action. The effect of collateral estoppel is that a judgment constitutes an estoppel precluding relitigation between the same parties or their privies as to matters litigated and determined although the cause of action in the subsequent action is different. See Parklane Hosiery Co. v. Shore, 439 U.S. 322, 326-333, n.5 (1979); Blondertongue Laboratories, Inc. v. University of Illinois Found., 402 U.S. 313, 328-29 (1971); Lawlor v. National

(footnote continued)

judicata here is that Applicants cannot delay their attempt to correct errors in the initial decision until a problem arises. If Applicants do not directly attack the initial decision by appeal, they have no further recourse. The initial decision cannot be collaterally attacked later. The impact of collateral estoppel is that adverse factual determinations in the initial decision may bar future reliance on data, methods, or models rejected in that decision. In these regards, Applicants are injured and prejudiced by the initial decision. This appeal is the proper -- and only -- vehicle provided in the rules for correction of the errors identified in our exceptions.

IV. DISCUSSION

At page 74 of the July 20, 1982 Partial Initial Decision on seismic issues, under the heading "VI. Licensing Conditions," the Licensing Board set forth two conditions, of which only the second is relevant here:

> "2. That Applicants successfully complete during the first year of operation the confirmatory program on plant equipment and components, within the guidelines established in the findings, to demonstrate to Staff's

---

(footnote continued from previous page)
Screen Service Co., 349 U.S. 322, 326 (1955); Commissioner v. Sunnen, 333 U.S. 591, 597 (1948); Southern Pacific Railroad Co. v. United States, 168 U.S. 1. 48-49 (1897); Cromwell v. County of Sac, 94 U.S. 351, 352 (1877); see also 1B Moore's Federal Practice ¶0.405 pp. 621-624 (2d ed. 1974). Both doctrines are applicable in administrative proceedings, see United States v. Utah Construction & Mining Co., 384 U.S. 394, 421-22 (1966); Pacific Seafarers, Inc. v. Pacific Far East Line, Inc., 404 F.2d 804 (D.C. Cir. 1968), cert. denied, 393 U.S. 1093 (1969), and have been applied in NRC proceedings. Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), ALAB-182, 7 AEC 210, 216 (1974); see Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978); Public Service of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 70 (1977); Toledo Edison Co. (Davis-Besse Nuclear Station, Units 1-3), ALAB-578, 5 NRC 557, 561 (1977).

> satisfaction that explicit safety margins exist for each component necessary for shutdown and continued heat removal in the event of the maximum potential shallow earthquake." (emphasis supplied).

The potential problem with this license condition was whether errors in the findings, incorporated by reference via the underscored language, might operate to constrain Applicants in the confirmatory program. Applicants are satisfied that even though there may be errors in the incorporated findings, they do not prejudice the confirmatory program which is the subject of Condition 2 insofar as that program is based on an envelope of records to date and provided that no significant new data requiring analysis becomes available during, and is made a part of, the program. If analyses of such new data were construed to be a part of the confirmatory program, then Applicants would of course be prejudiced by any constraints on such analyses considered to arise out of the findings incorporated by reference in License Condition 2. In summary, the findings to which we take exception prejudice future evaluations for submission to NRC of past and future earthquakes. Applicants contend this injury is sufficient to invoke the appellate jurisdiction of the Appeal Board under its decisions in Marble Hill, supra and Davis-Besse, supra.

The most important practical reason for entertaining many of our exceptions is that there is reason to expect that there will be further microearthquakes in the vicinity of Monticello Reservoir (see License Condition 1). Applicants will no doubt be called upon by the NRC staff in the performance of duties to analyze any significant such earthquakes. It is possible that such earthquakes may occur during the period established for

satisfaction of Condition 2 (one year). If so, it is likely that the NRC Staff will consider analysis of such events to be required in conjunction with the confirmatory program. If the initial decision was incorrect in the respects noted in our exceptions (as discussed next), if those errors go uncorrected, and if the initial decision is given conclusive effect[7], then Applicants would be severely handicapped in performing those analyses as well as comparisons to earlier events, in regard to ground motion, models of earthquake motions and sources, and response spectra.

Exceptions 1 through 8 concern the Licensing Board's failure to recognize and distinguish recorded ground motion on soil and design ground motion. Applicants may be prejudiced by these erroneous findings because of possible misinterpretation in future evaluations as to what the record of strong motion data represents--i.e., it does not represent motion on rock, but rather motion at the soil surface on a concrete instrument pad.

Exception 9 involves the Board's conclusion that no amplification was shown in the Monticello strong motion records without distinguishing various frequencies. Although in the present instance we are concerned primarily with higher frequencies, Applicants may be prejudiced if they are precluded, by this

---

[7] We of course recognize that Applicants could argue, at that time, that the unfavorable findings were not necessary to the favorable decision. We do not think that we should be left to uncertain relief given the absence of assurance that there will be an adjudicatory forum in which to raise it, when (1) there is a real possibility that Applicants will need to draw upon models or data rejected by the Licensing Board, and (2) that rejection was incorrect.

conclusion, from explaining (without performing future studies) possible future observations of amplification of motion at low frequencies--which was undisputed in the record.[8]

In Exception 10, we note that the Board failed to consider all of the expert opinion evidence concerning amplification of motion in the Monticello records in concluding that no amplification was shown because of soil, topography, or pad-soil interaction effects. Applicants will be prejudiced in their evaluation of future earthquake ground motion if they are effectively precluded from the use of theoretical studies and all experimental data to evaluate these effects.

Exception 11 concerns the failure of the Licensing Board to consider the observations of lack of damage to the hydroelectric generating facility near the strong motion instrument on the dam abutment. From a purely phenomenological and functional point of view, the lack of damage is the most important uncontroverted and uncontrovertible fact of the mater, and is one of two critical observations for each reservoir-induced microearthquake. The critical observations are: (1) the instrumental data, i.e., accelerograph recording (or lack thereof) at the USGS instrument site on the dam abutment along with seismological data on source-site geometry, and (2) observation of damage (or lack thereof) to

---

8 We have not excepted to that much of the initial decision which finds that amplification at higher frequencies was not demonstrated unequivocally (so as to permit quantification) in the record through empirical data, and in effect precludes credit for such amplification on an empirical basis in the confirmatory program without new studies. But the finding, perhaps inadvertently, has the effect of precluding credit for amplification at low frequencies (which was uncontroverted) without further studies.

hydroelectric plant and equipment. The Applicants are aggrieved and prejudiced by the omission of the second set of observations, even though they were not expressly rejected. At the only places in the initial decision where any reference is made to observations (or lack thereof) of damage (Finding 50 at 61, Opinion at 15), site-specific observations of lack of damage are not mentioned. If the Licensing Board's omission of the evidence of lack of damage should be interpreted as precluding use of this valuable data (which admittedly should not occur since the evidence was not expressly rejected), Applicants will be prejudiced by the inability to use such data to fully analyze the significance of possible future microearthquakes.

Exceptions 12, and 14 through 16 concern the Board's treatment of ground motion and source models used by the Applicants. If the Board's findings and conclusions as to these matters go uncorrected, the Applicants may be handicapped in estimating source parameters, such as stress drops, for future earthquakes at Monticello. Exception 17 is related to Exceptions 12 and 14-16. The Board's finding as to source dimension may limit the Applicants' future use of geologic and geophysical data in estimating source dimensions of future earthquakes.

Exceptions 18 through 20 concern response spectra and Applicants' use of direct scaling. Should the Board's findings regarding scaling stand uncorrected, the Applicants will be constrained as to methods of assessing the significance of and otherwise analyzing future earthquakes.

We turn now to Exception 21. In an order [9] received subsequent to the filing of our exceptions, the Licensing Board denied Applicants' motion for reconsideration dated July 30, 1982. The initial decision implies that SCE&G knew of the acceleration values for an M_L = 2.8 event which occurred on October 16, 1979 for some extended period of time (rather than a few days) before notifying the Staff and the Licensing Board. Applicants continue to believe that such implication is unwarranted, does not fairly reflect on SCE&G's fulfillment of its obligations as a party and is based on a misperception of the facts as we understand them. Applicants further believe that, if nothing else, fairness requires that SCE&G be afforded an opportunity to correct the impression that it was not diligent in advising the Licensing Board of the accelerations associated with the October 16, 1979 M_L = 2.8 earthquake. As Applicants advised the Licensing Board, we stand ready to provide affidavits in regard to this matter.

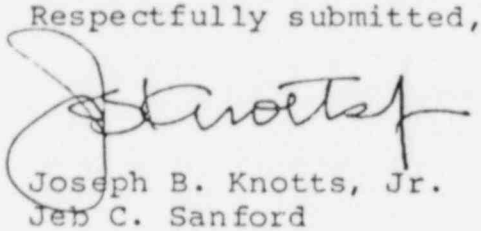
---

9 "Memorandum and Order (Denying Applicants' Motion for Reconsideration)", August 20, 1982.

V. CONCLUSION

For the foregoing reasons, Applicants maintain that there is good cause for the Appeal Board to consider their exceptions.

Respectfully submitted,



Joseph B. Knotts, Jr.
Jeb C. Sanford

Debevoise & Liberman
1200 Seventeenth Street, N.W.
Washington, D.C. 20036
(202) 857-9800

Attorneys for Applicants

Of Counsel:

Randolph R. Mahan

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	
South Carolina Electric & Gas Company, et al.	)	Docket No. 50-395 OL
	)	
(Virgil C. Summer Nuclear Station, Unit 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Response To Order To Show Cause Why Their Exceptions Should Not Be Dismissed" in the above captioned matter, were served upon the following persons by deposit in the United States mail, first class postage prepaid this 7th day of September 1982, or by hand delivery as indicated by an asterisk ("*").

Alan S. Rosenthal, Chairman*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Howard A. Wilber*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Christine N. Kohl*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Herbert Grossman, Esq.
Chairman, Atomic Safety and
Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Frank F. Hooper
School of Natural Resources
University of Michigan
Ann Arbor, Michigan 48109

Mr. Gustave A. Linenberger
Member, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

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

George Fischer, Esq.
Vice President and Group
Executive - Legal Affairs
South Carolina Electric &
Gas Company
P.O. Box 764

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

Mr. Brett Allen Bursey
Route 1, Box 93-C
Little Mountain, S.C. 29076

Barbara Hamilton, Esq.
Assistant Attorney General
South Carolina Attorney
General's Office
P.O. Box 11549
Columbia, South Carolina 29211

Steven C. Goldberg, Esq.
Office of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Joseph B. Knotts, Jr.