

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

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In the Matter of

SOUTH CAROLINA ELECTRIC AND
GAS COMPANY, ET AL.

(Virgil C. Summer Nuclear Station,
Unit 1)

Docket No. 50-395-OL

August 20, 1982

MEMORANDUM AND ORDER
(Denying Applicants' Motion for Reconsideration)

MEMORANDUM

In a motion dated July 30, 1982, Applicants request the Board to reconsider and amend portions of its Partial Initial Decision of July 20, 1982 on seismic matters. The portions objected to give the "impression that the parties were not diligent and reasonably prompt in bringing . . . information to the Board's attention" concerning peak recorded accelerations associated with an October 16, 1979 seismic event. Motion at 1. Applicants distinguish between (1) seismograph data used to derive earthquake locations, depths, origin times, and magnitudes, which were available to Applicants immediately, and (2) accelerograph data recorded on photographic film which registers acceleration as a function of time. Id. at 3-4. Applicants indicate that the accelerograph photographic film records were collected by U.S. Government personnel at intervals of about six months and sent to Menlo Park for storage

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and, eventually, processing by USGS. Id. at 4. Consequently, Applicants claim that, while the magnitude, location, and depth of the October 16, 1979 event could be determined immediately on the basis of the seismograph data, accelerations "could not be derived until photographic film accelerograph records were processed by USGS." Id. at 4-5. Under those circumstances, Applicants conclude that their notification of October 9, 1981 and Staff's notification of October 20, 1981 of the peak accelerations for the October 16, 1979 event were timely. Id. at 5.

Staff supports Applicants' motion. NRC Staff response, August 11, 1982.

Applicants' motion makes it appear that an unprocessed photographic film containing acceleration data was stored by USGS until the film was "processed" and accelerations derived. The Board's understanding of the procedure is different. As we understand it, after the photographic film from the accelerograph is collected, it is developed and scanned by USGS personnel to determine peak accelerations. If the record of ground motion is determined to have seismologically significant information, it will be digitized and further processed to correct and refine the acceleration readings. The records might also be consigned to storage with or without the prospect of further processing. In this case, the "unprocessed" accelerograph records of the October 16, 1979 event disclosed peak acceleration values for the two horizontal and one vertical components of 0.35g, 0.33g and 0.15g. See Board Notification (BN-81-32) and attachments. After the records were "processed",

the refined figures indicated peak accelerations of 0.35g, 0.36g and 0.18g for the two horizontal and one vertical components. Ibid.; Staff Updated Testimony, ff. Tr. 5758, at 59. The Board would have been interested in the acceleration data on the unprocessed film record, even without further processing by USGS.

Applicants say little about their and the Staff's obligations to have pursued ground motion records once they had been apprised of the October 16, 1979 event. Contrary to Staff's representation (Staff Response at 2), the October 1979 event had a higher magnitude than the August 1978 event which had yielded a peak acceleration of 0.25g. For the October 1979 event, $M_L = 2.8$ or 2.85, moment magnitude = 3.1; for the August 1978 event, $M_L = 2.8$, moment magnitude = 2.8. Tr. 4815, 5201-03; McGuire affidavit, ff. Tr. 5562, at Table 1; Applicants' Ex. 43 at Tables 3, 4. Even if the October 1979 event had originally been considered a magnitude 2.6-2.7 event (for some undisclosed reason), the difference between that magnitude and that of the August 1978 event which produced the 0.25g reading is not significant. See Tr. 5202. Staff recognized that an event of magnitude 2.5 or greater could be significant and required Applicants to inform Staff of such earthquakes. Applicants' Motion at fn. 2. Staff was notified by Applicants of the October 1979 event within one to three days of its occurrence. Ibid. Why Applicants and Staff, both charged with ensuring the public health and safety at the Summer site, did not specifically request the unprocessed acceleration data from USGS with regard to that event is unexplained.

Beyond that, we have reviewed the portion of the transcript in which the Board sought Applicants' information regarding the highest peak accelerations already recorded at the Monticello reservoir. Tr. 758-764. We are not fully satisfied with Applicants' effort to bring the information before the Board--even the 0.25g peak acceleration recorded during the August 1978 event.

Staff alleges that the "Board's intimation" that the acceleration information for the October 1979 event "was known by and available to the Staff beforehand is incorrect." Staff Response at 2. We see nothing in our Initial Decision which intimates that Staff knew about the acceleration figures.^{*/} Whether anyone on Staff had actual knowledge of the unprocessed acceleration figures for the October 16, 1979 event is a matter that Staff may wish to pursue; the Board did not. As to whether the information was available to Staff, we see nothing in Applicants' motion or Staff's response that indicates that the unprocessed information was not available for the asking.

The main point made by the Board in the portions of the Partial Initial Decision referenced by Applicants and Staff was that the FSAR, including the hearing record of June 22-24, 1981, was incomplete because, in part, the most significant seismic event, which occurred in October 1979, was not analyzed. Whether or not fault can be ascribed, we do not see how that

^{*/} See Board's Find. 2 at 17-18 which states, inter alia.: "The largest earthquake at the Monticello reservoir known to NRC Staff at the date of its February 1981 SER was the magnitude (M_L) 2.8 event that occurred on August 27, 1978."

fact of incompleteness can be seriously questioned. Any further implication, that the matter could have been brought before the Board before or during the June hearing sessions had Applicants and Staff exercised more diligence, arises from the facts themselves, not the Board's opinion. We see nothing in the Initial Decision that requires correction.

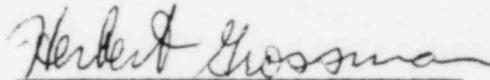
ORDER

For all the foregoing reasons and based upon a consideration of the entire record in this matter, it is, this 20th day of August 1982

ORDERED

That Applicants' motion for reconsideration of July 30, 1982 is denied.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD



Herbert Grossman, Chairman
Administrative Judge