

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
South Carolina Electric	)	
& Gas Company, <u>et al.</u>	)	Docket 50-395 OL
	)	
(Virgil C. Summer Nuclear	)	
Station, Unit 1)	)	

APPLICANTS' MOTION FOR RECONSIDERATION

At several points in the Licensing Board's Partial Initial Decision of July 20, 1982 on seismic matters, reference is made to the NRC Staff's October 20, 1981 notification to the Board of the peak recorded accelerations associated with an October 16, 1979 seismic event in such a way as to leave the reader with the impression that the parties were not diligent and reasonably prompt in bringing this information to the Board's attention. (See Opinion at 16, Finding 25 at 29, and Appendix at 84-86 and fn. 11 at 86; See also Opinion at 4, second paragraph, penultimate sentence and Finding 2 at 17-18).

Because we believe that the Board has misapprehended the circumstances and perhaps overlooked at least one document in forming the impression that it was not timely notified, we explain the matter below and ask that the Partial Initial Decision be reconsidered and amended insofar as the notification matter is concerned.

Counsel is informed and believes that Applicants' consultant Dr. Somerville was alerted on or about October 1, 1981 to the possible existence of such a record when a colleague reported that it had been mentioned by USGS personnel in the course of informal discussions on or about September 30, 1981 regarding other matters. Thereupon, Dr. Somerville initiated further inquiries and an unofficial xerographic image of the photographic film record was received by Dr. Somerville from Menlo Park USGS personnel on October 5, 1981. The Staff was notified at a meeting on October 9, 1981; and the notification was confirmed in writing by letter dated that same day. A copy of the confirming letter (Nichols to Denton, October 9, 1981, copy attached) was sent to the Licensing Board and the parties. That letter, in pertinent part, states as follows:

"No information regarding peak accelerations for any of the several events recorded by the SMA or by other instrumentation for that date had previously suggested such values [equal to or greater than accelerations for the August 27, 1978  $M_L = 2.8$  event]. Apparently, the USGS has not until very recently attached any particular urgency to processing the SMA records for 1979 and later, and it is for this reason that neither we, nor anyone else to our knowledge (outside USGS) learned of it until this week.

\* \* \*

Since this matter relates to the seismic issue under litigation at the ASLB hearings, copies of this letter are being distributed to the service list in that proceeding." (material in brackets added).

It may also be noted that the October 20, 1981 memorandum (Vollmer to Eisenhut) attached to the October 20, 1981 Board Notification (BN-81-32, Tedesco to ASLB and ALAB) states in pertinent part:

"During the week of October 4, 1981, the Applicants' consultants learned of the peak acceleration values derived by the USGS from the unprocessed Jenkinsville accelerometer records for an October 16, 1979 magnitude 2.6-2.7 event<sup>1</sup> . . . The Applicant and staff have only recently received Open File Report 81-1214, 'Processed Accelerogram from Monticello Dam, Jenkinsville, South Carolina, 16, October 1979 0706 UTC . . . .' The Staff had no reason to expect that the October 16, 1979 event would yield such high peak acceleration values since a prior event of larger magnitude yielded lower values."<sup>2</sup>

Parties are sensitive to any implication that their duty to keep the Board informed has not been met. Perhaps the Board simply overlooked the explanation in our October 9, 1981 notification. In any event, it seems clear that the Board failed to appreciate that, until early in October, 1981, only USGS had information in a form which would indicate abnormally high peak accelerations.

The Board made reference (at 85 and 86, n.11) to magnetic tape data (which is seismograph, not accelerograph data) being available to Applicants' experts through April of 1980 and implied that Applicants should have known of the contents of the accelerometer data for the October 16, 1979  $M_L = 2.8$  event. The Board was apparently confused between (1) seismograph data

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<sup>1</sup> Later determined to be  $M_L = 2.8$ .

<sup>2</sup> Contrary to the implication of opinion at 4, second paragraph, penultimate sentence and Finding 2 at 17-18, the Applicants duly kept the Staff informed. Shortly after the reservoir was filled, SCE&G informally committed to inform the Staff of earthquakes of  $M_L = 2.5$  or greater, (later formalized in FSAR §2.5.2.6.4) and did so for the August 27, 1978  $M_L = 2.8$  event, the October 16, 1979  $M_L = 2.8$  event, and numerous other earthquakes within one to three days of their occurrence.

recorded on magnetic tape<sup>3</sup> which is used to derive earthquake locations, depths, origin times, and magnitudes, and (2) accelerograph data recorded on photographic film which registers acceleration as a function of time.<sup>4</sup> Accelerograph data were not used in determining earthquake locations, etc. because the time registered on the accelerograms was time elapsed after a "trigger", not absolute time. Seismograph data were not used in determining accelerations because seismographs are not strong motion instruments. The photographic film records from the USGS accelerograph were collected by U.S. Government personnel at intervals of about six months and sent to Menlo Park for storage and, eventually, processing by USGS (whereas magnetic tape records from seismographs are processed at Golden, Colorado as explained at Tr. 3415-16).

The essential point is that while magnitude (as well as location and depth) could be and was estimated based on seismograph data recorded on paper charts almost immediately, and refined values (for magnitude, location, and depth) could be and

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<sup>3</sup> Seismograph data for the Summer site are recorded by a a ten station network. The ten stations consist of: one permanent USGS seismograph; a four-station SCE&G array; and five temporary USGS seismographs. The permanent USGS instrument and the four SCE&G instruments record data on both paper charts and magnetic tape. The five USGS temporary instruments record on magnetic tape only.

<sup>4</sup> At the time of the August 27, 1978 and October 16, 1979 earthquake, there was only one functioning strong motion accelerograph (SMA-I), which was located on the dam abutment adjacent to the intake structure of the Fairfield Pumped Storage Facility.

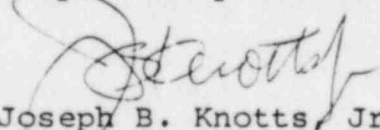
were assigned after seismograph magnetic tapes were processed, accelerations could not be derived until photographic film accelerograph records were processed by USGS.

Counsel is further informed that both Applicants and Staff urged USGS, without success, to process and release all the SMA records, including the 1979 records, throughout the latter stages of Staff review and prior to the hearings.

In the circumstances, we believe that the Applicants' October 9, 1981 notification of the Staff, Board and parties, and the Staff's October 20, 1981 notification were timely. Applicants respectfully request that the Board reconsider and modify the referenced portions of the Partial Initial Decision to reflect the October 9, 1981 notification and this explanation.

Although we do not wish to dwell overmuch on this matter, we stand ready to supply an appropriate affidavit or affidavits should the Board have doubt regarding the representations made herein.

Respectfully submitted,

  
Joseph B. Knotts, Jr.  
Debevoise & Liberman  
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(202) 857-9831

Attorney for Applicants

Of Counsel

Randolph R. Mahan

Attachment: October 9, 1981  
letter, Nichols to Denton

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE BOX 764

COLUMBIA, SOUTH CAROLINA 29218

T. C. NICHOLS, JR.  
VICE PRESIDENT AND GROUP EXECUTIVE  
NUCLEAR OPERATIONS

October 9, 1981

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Additional Seismic Information

Dear Mr. Denton:

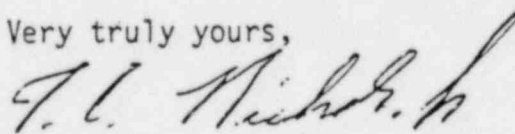
This confirms information provided to your Staff in a meeting earlier today.

In informal discussions with USGS personnel earlier in the week regarding another matter, one of our consultants learned that an unprocessed film record from the Jenkinsville strong motion accelerometer (SMA) for October 17, 1979, might yield peak accelerations equal to or possibly greater than those associated with the well-documented August 27, 1978  $M_L = 2.8$  event. No information regarding peak accelerations for any of the several events recorded by the SMA or by other instrumentation for that date had previously suggested such values. Apparently, the USGS has not until very recently attached any particular urgency to processing the SMA records for 1979 and later, and it is for this reason that neither we, nor anyone else to our knowledge (outside USGS) learned of it until this week.

We are attempting to obtain further, relevant information concerning this matter and will keep your Staff advised.

Since this matter relates to the seismic issue under litigation at the ASLB hearings, copies of this letter are being distributed to the service list in that proceeding.

Very truly yours,



T. C. Nichols, Jr.

RBW:TCN:rh

cc: V. C. Summer  
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NPCF

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CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Motion for Reconsideration" in the above captioned matter, were served upon the following persons by deposit in the United States mail, first class postage prepaid this 30th day of July 1982, or by hand delivery as indicated by an asterisk ("\*").

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U.S. Nuclear Regulatory  
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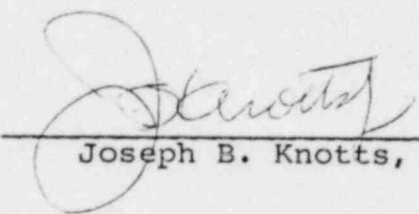
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