



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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November 2, 1981

MEMORANDUM

To: NRC . *Attn Robert Jackson*

From: Gerald Brady, USGS *G. Brady*

Of the more than 50 triggers of the accelerographs at Monticello Dam, SC, through 8-4-81, there were 13 that recorded 0.10 g or greater peak acceleration as listed in Table 1. All 13 records are from the instrument on the shared abutment, between the two largest sections of the dam. Of these 13 records, 4 have been processed and the results published in USGS Open File reports 81-0448 and 81-1214. Numerical data is available from NOAA in Colorado.

Seven of the nine remaining records owe their peak reading to a pulse greater than 0.1 g at triggering; the pulse, often the only one greater than 0.1 g, is therefore incompletely recorded. In my opinion, this is sufficient reason to discard these records as far as processing is concerned.

The two remaining records having the possibility of useful results after processing are amongst the unidentified (See Table 1):

1. First triggering of the 24-27 Feb 1978 record.
5. Fifth triggering (of 8) of the 31 Aug-6 Nov 1978 record.

We are currently making preparations for placing these two into our digitizing and processing stream. Copies of these two records are attached.

A word about unidentified records. In our experience with small events close to recording stations, it is impossible to be certain of an identification based on peak values, record appearance, and known nearby events. Such is the case for records 1 and 2, and the set 4-8 (See Table 1). The identification of some of the events on the list of Table 1 has been possible because of large events (magnitude 2.5 - 3 is large in this context) and manual observation of additional triggering signals.

The only records from the instrument at the nuclear plant, described as Abutment (Office), occurred early in 1978. Between 24-27 Feb there were two triggers; between 27 Feb and 16 March, 1978 there was one trigger. All amplitudes are less than .07 g. During the same intervals, the instrument described as Abutment (shared crest), (the one supplying the 4 analyzed records to date), had two triggers (between 24-27 Feb, See Table 1) and another two triggers (between 27 Feb and 16 March). Without identification, one can only guess at the correspondence or simultaneity, if any, between triggers at different stations.

Table 1

Peak Accelerations  $\geq 0.1$  g at Monticello Dam, SC, through 8-4-81.

	Scaled peak acceleration			Recovered film dates, or event data	Trigger
	180°	11p	90°		
1.	.15	.10	.07	24-27 Feb 1978; 2 unidentified events	1 of 2
2.	.14	.06	.07	"	2 of 2
3.	.25	.08	.20	27 Aug 1978; 1023 UTC; 34.31 N, 81.33 W, M = 2.7	
4.	.11	.03	.06	31 Aug-6 Nov 1978; 8 unidentified events	1 of 8
5.	.07	.03	.12	"	5 of 8
6.	.05	.05	.09	"	6 of 8
7.	.22	.11	.16	"	7 of 8
8.	.13	.17	.24	"	8 of 8
9.	.07	.06	.16	7 Oct 1979; 0854 UTC	2 of 10
10.	.04	.06	.10	8 Oct 1979; 2320 UTC; 34°18.11' N, 81°20.42' W; M = 2.6	5 of 10
11.	.10	.03	.07	14 Oct 1979, 0824 UTC; 34°18.35' N, 81°20.29' W; M = 2.5	8 of 10
12.	.08	.05	.11	14 Oct 1979; 1206 UTC; 34°18.43' N, 81°19.91' W; M = 2.3	9 of 10
13.	.34	.15	.31	16 Oct 1979; 0706 UTC; 34°16.67' N, 81°19.76' W; M = 2.8	

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Trig 5 of 8  
31 Aug - 6 Nov 78