



February 27, 1979

Duquesne Light Company  
Post Office Box 4  
Shippingport, Pennsylvania 15077

Attention: Mr. Tom Slavic

Subject: Seismic Measurement Equipment for  
Beaver Valley Power Station Unit 1

Gentlemen:

Enclosed is a copy of the Installation Test Report for  
Beaver Valley Power Station Unit 1.

Very truly yours,

KINEMATRICS, INC.

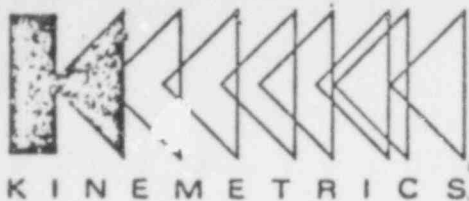
*Tommy D. Brand*  
Tommy D. Brand  
Associate Engineer

TDB:sh

Enclosure

324 030

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INSTALLATION TEST REPORT

FOR

KINEMATICS SMA-3, S/N 170 RECORDING SYSTEM  
WITH 3 TELEDYNE FB-103B ACCELEROMETERS,  
1 TELEDYNE 36180 TRIGGER,  
AND KINEMATICS SMP-1, S/N 181 (PLAYBACK UNIT)

FOR

BEAVER VALLEY POWER STATION UNIT 1

Prepared by:

Tommy D. Brand  
Tommy D. Brand

Approved:

William Rihn  
William Rihn  
Vice President/Engineering

26 Feb 1979  
Date

KINEMATICS, INC.  
222 Vista Avenue  
Pasadena, California 91107

On February 20 and 21, 1979, Kinematics installation engineer was at Beaver Valley Power Station to oversee the installation and checkout of the Kinematics' SMA-3 Strong Motion Accelerograph System, Serial Number 170. This system is a nine channel system, having three  $\pm 1$  g Force Balance Accelerometers, Teledyne Model FB-103B, and one trigger package Teledyne Model 36180. The system also has a magnetic tape playback unit, Model SMP-1, Serial Number 181.

At the completion of the visit, the SMA-3 and SMP-1 were operating properly and within specification.

The Teledyne Force Balance Accelerometers Model FB-103B and trigger package model 36180 appear to be working properly. Records showing calibration and noise are attached hereto. The calibration and noise was played at 10 x scale of the SMP-1.

NOTE: If an event were to occur, the accelerometers would have to be calibrated for the correct sensitivity.



	<u>Initial</u>	<u>Final</u>
3.3 Battery voltage, no load, +12V	<u>12.7</u>	<u>13.4</u>
-12V	<u>12.7</u>	<u>13.4</u>
3.4 Battery voltage, loaded, +12V	<u>11.8</u>	<u>12.5</u>
-12V	<u>12.1</u>	<u>12.9</u>

\*4.0 SMA-3 Recorder Status

4.1 Vertical trigger actuates recorder (sec)	<u>3</u>	<u>1.3</u>
4.2 Horizontal trigger actuates recorder (sec)	<u>3</u>	<u>1.3</u>
4.3 T-slide function (yes, no) #1	<u>Yes</u>	<u>Yes</u>
#2	<u>Yes</u>	<u>Yes</u>
#3	<u>Yes</u>	<u>Yes</u>
#4	<u>_____</u>	<u>_____</u>
#5	<u>_____</u>	<u>_____</u>
#6	<u>_____</u>	<u>_____</u>

5.0 Trigger Acceleration Status

5.1 Sensitivity (g); Trigger #1	<u>+</u>	<u>+</u>
Trigger #2	<u>-</u>	<u>-</u>
Trigger #3	<u>+</u>	<u>+</u>
	<u>-</u>	<u>-</u>

\*6.0 Balance Accelerometer Status

	<u>Long</u>	<u>Trans</u>	<u>Vert</u>
6.1 DC Offset (V); Package #1	<u>-.012</u>	<u>-.018</u>	<u>-.027</u>
Package #2	<u>-.014</u>	<u>-.070</u>	<u>-.049</u>
Package #3	<u>-.035</u>	<u>+.173</u>	<u>.077</u>
Package #4	<u>_____</u>	<u>_____</u>	<u>_____</u>
Package #5	<u>_____</u>	<u>_____</u>	<u>_____</u>
Package #6	<u>_____</u>	<u>_____</u>	<u>_____</u>

7.0 Run final calibration sequence. Playout complete set of records on SMP-1 and attach records hereto.

8.0 Reset Event Indicator, turn key to OPERATE, remove key.

9.0 Comments (notes, parts replaced, etc.)

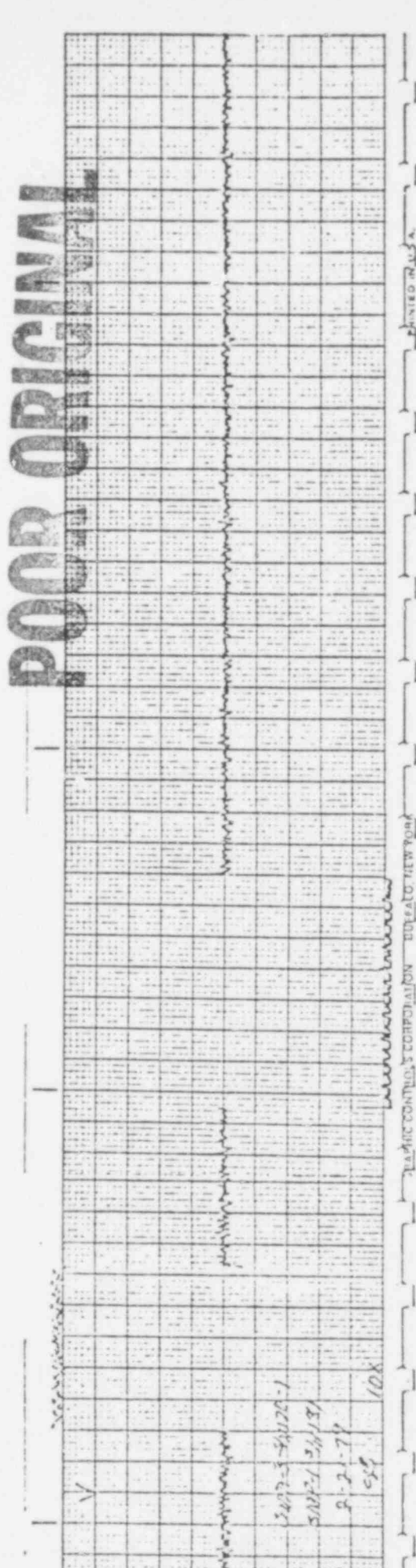
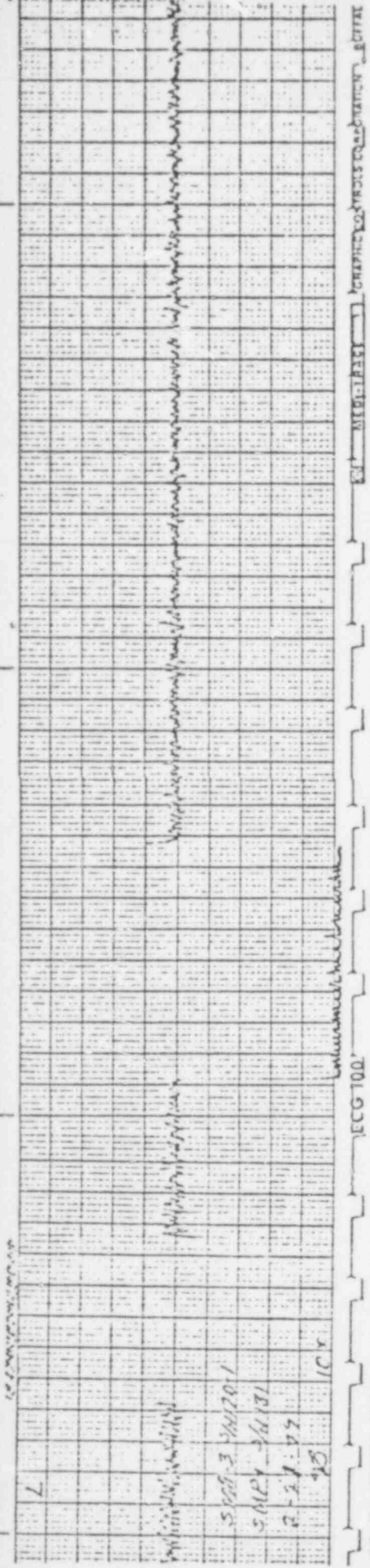
11.98V input on cali

\* Trigger (Model 36180) and Accelerometer (Model FB-1033)  
are Teledyne

Serviced by: Amack

Date: 2-21-79

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**POOR ORIGINAL**

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No. ECG 100

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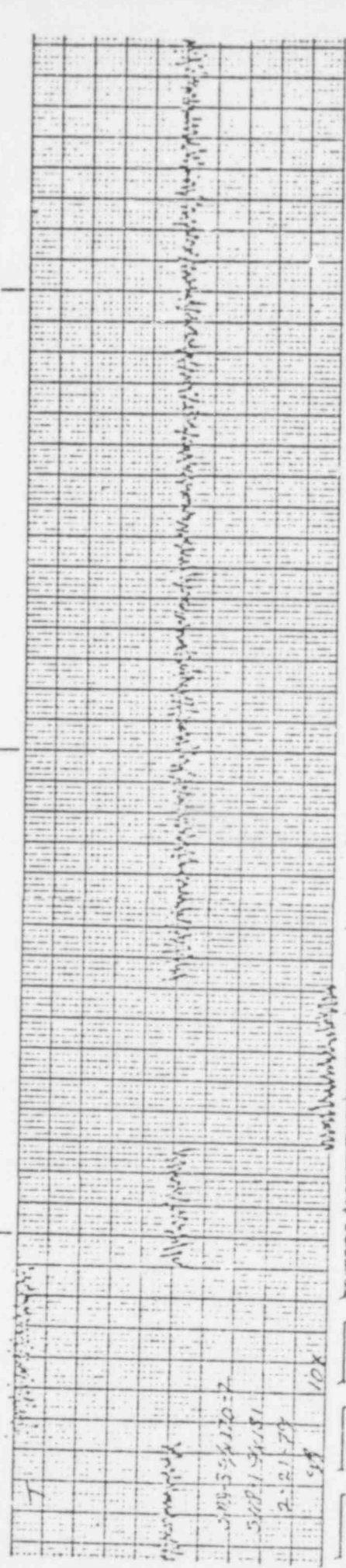
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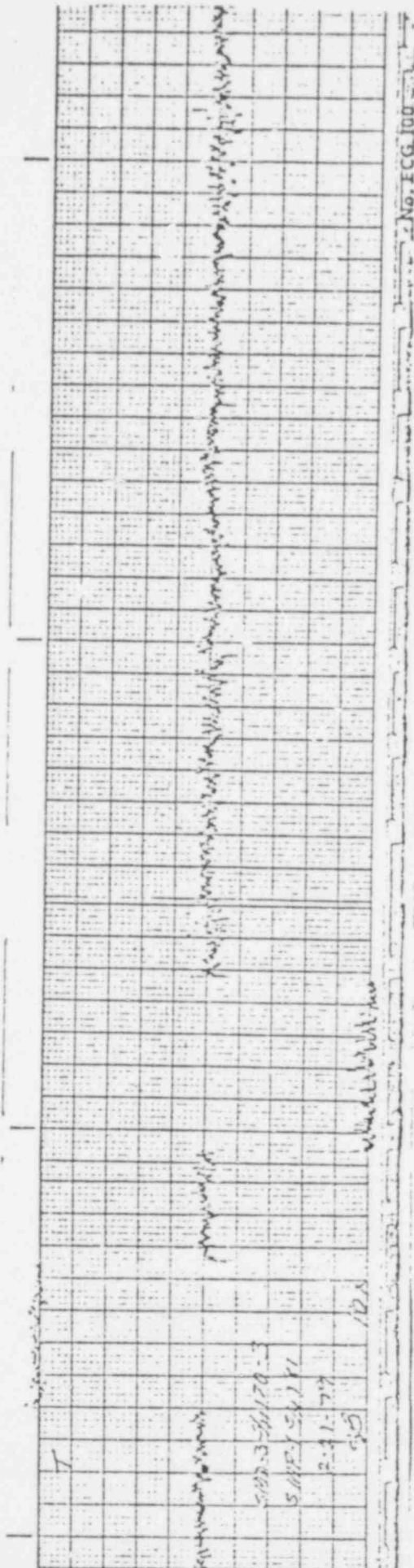
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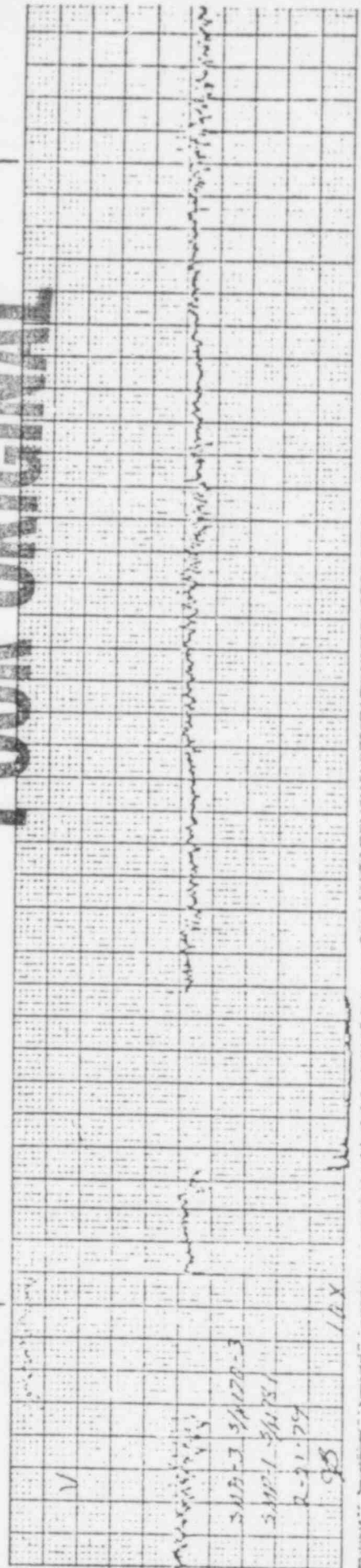


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