

CHUGGING
REQUIRED RESPONSE SPECTRA (RRS)
FOR THE REACTOR BUILDING

RIVER BEND STATION - UNIT 1
GULF STATES UTILITIES COMPANY
WEST FELICIANA PARISH, LOUISIANA

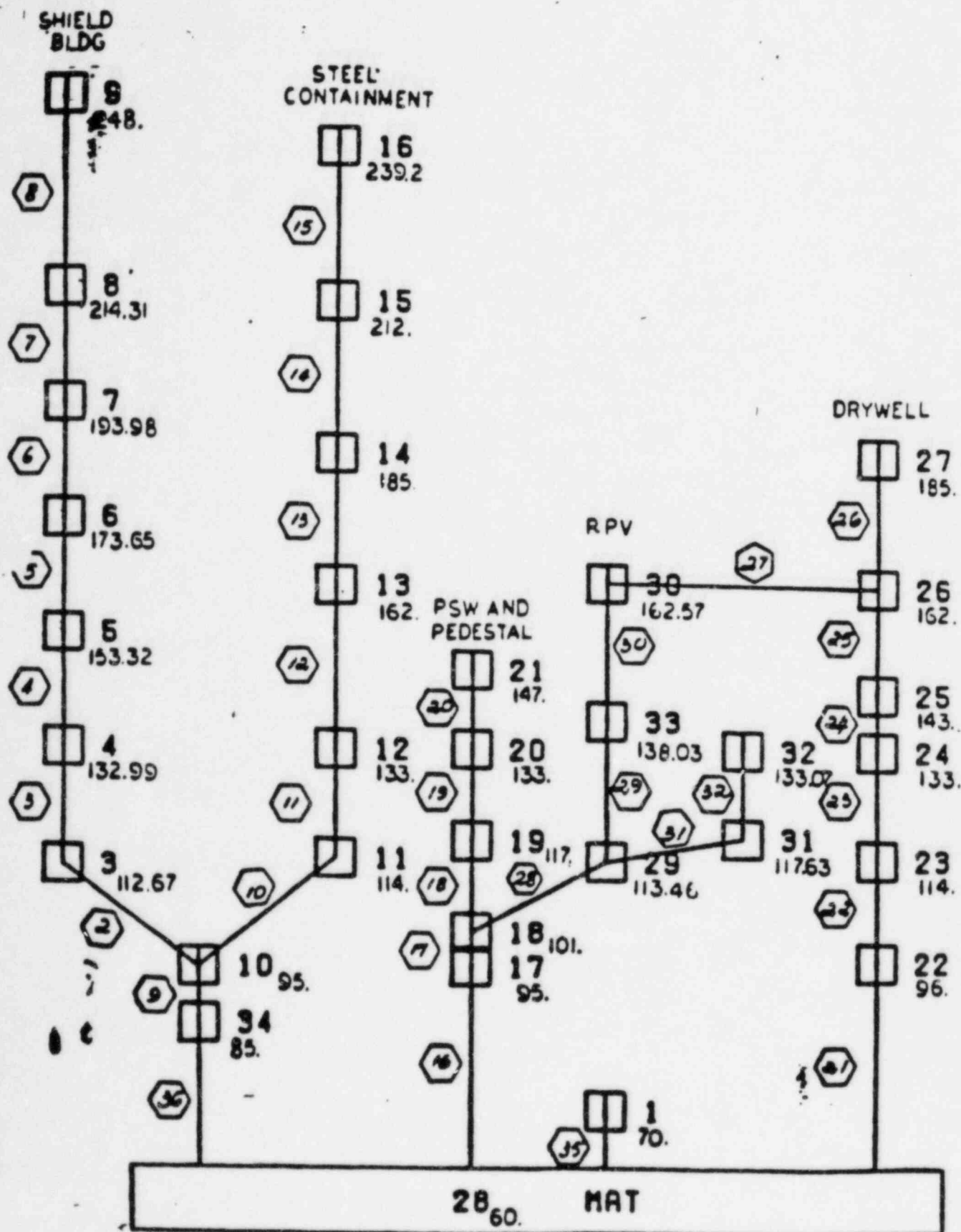
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL OPERATIONS CENTER
CHERRY HILL, NEW JERSEY

TABLE OF CONTENTS
REQUIRED RESPONSE SPECTRA (RRS)

<u>Mass Point - Location</u>	<u>Elevation (ft)</u>	<u>Reference No.*</u>
28 - Mat	60.00	135
1 - Top of Mat	70.00	136
3 - Shield Building	112.67	137
4 -	132.99	138
5 -	153.32	139
6 -	173.65	140
7 -	193.98	141
8 -	214.31	142
9 -	248.00	143
10 - Comp. Shield Building	95.00	144
34 -	85.00	145
11 - Steel Containment	114.00	146
12 -	133.00	147
13 -	162.00	148
14 -	185.00	149
15 -	212.00	150
16 -	239.20	151
17 - PSW Pedestal	95.00	152
18 -	101.00	153
19 - Primary Shield Wall (PSW)	117.00	154
20 -	133.00	155
21 -	147.00	156
22 - Drywell	96.00	157
23 -	114.00	158
24 -	133.00	159
25 -	143.00	160
26 -	162.00	161
27 -	185.00	162
29 - RPV	113.46	163
30 -	162.57	164
31 and 32 - RPV (Internal)	117.63	165
33 - RPV	138.03	166
None - Weir Wall	91.25	167

*Each reference number includes Chugging for horizontal and vertical direction at 3 percent damping.

G.S.U - R.B.1 - J.O 12210 CALC 201.130.124 - A.K.LE
SEISMIC ANALYSIS OF REACTOR BUILDING W/CONCRETE FIX



1524A

14 MAR 1983

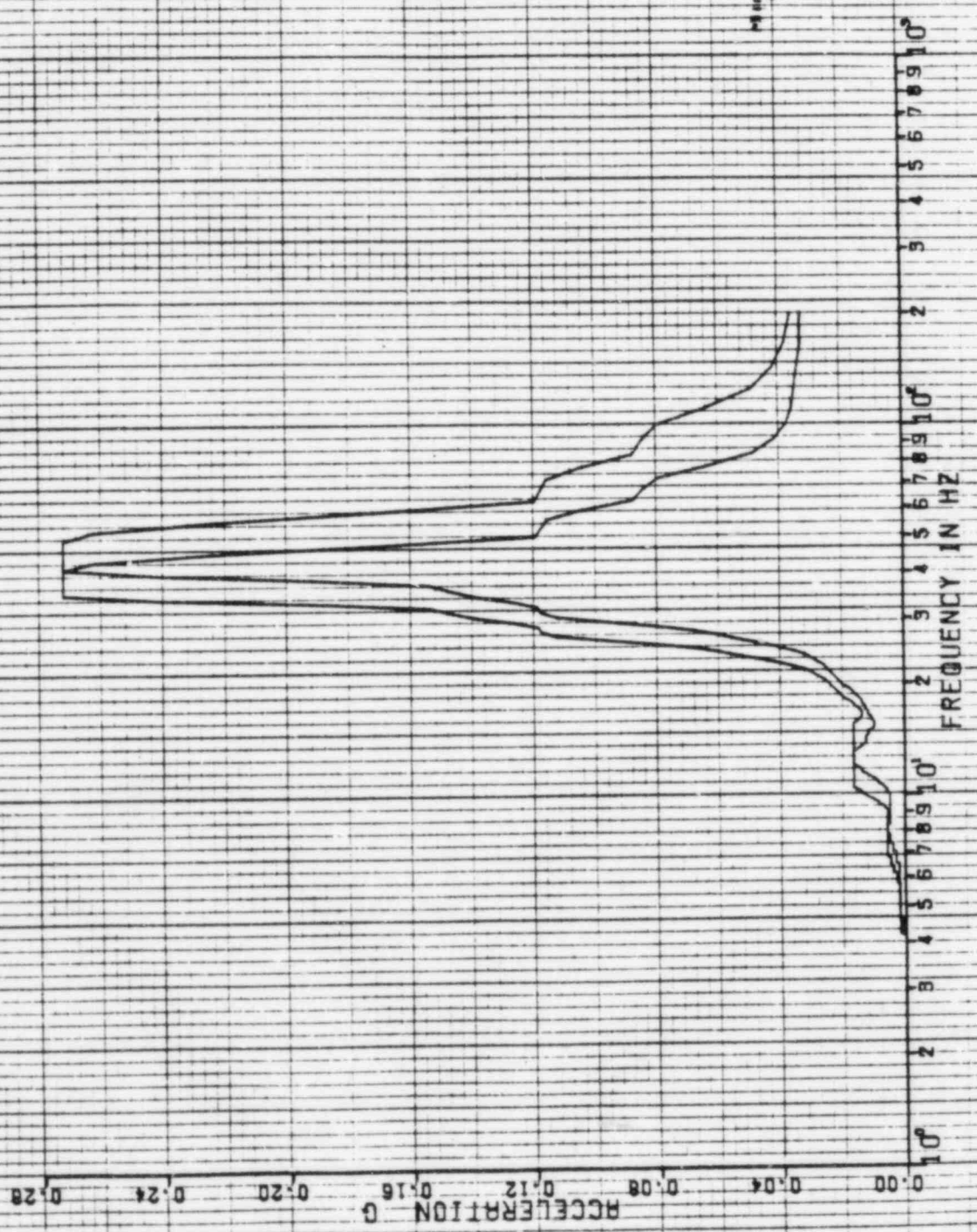
CHUDDING

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA(C)-50E-1903 REV(1)
 RRS OF ACC.-REACTOR BLOC., EL=60.000, MASS=20 SEIS MODEL- MAT
 CHUDDING ENVELOPE--PK. SPNO. 1152

HOR DIRECTION

DAMPING VALUE = 0.030

DISK CURVE SET NO.27



REF 135

151519

14 MAR 1983

CHUDDING

PSPECTAR VER 01 LEV 08

QULF STATES UTILITIES-RBS UNIT 1-CALC12210-WA(CI)-S0E-1983 REV11)
RRE OF ACC.-REACTOR 8L00-EL-60.000 MASS-26 SETS MODEL- MAT
CHUDDING ENVELOPE--PK. SPD. --152

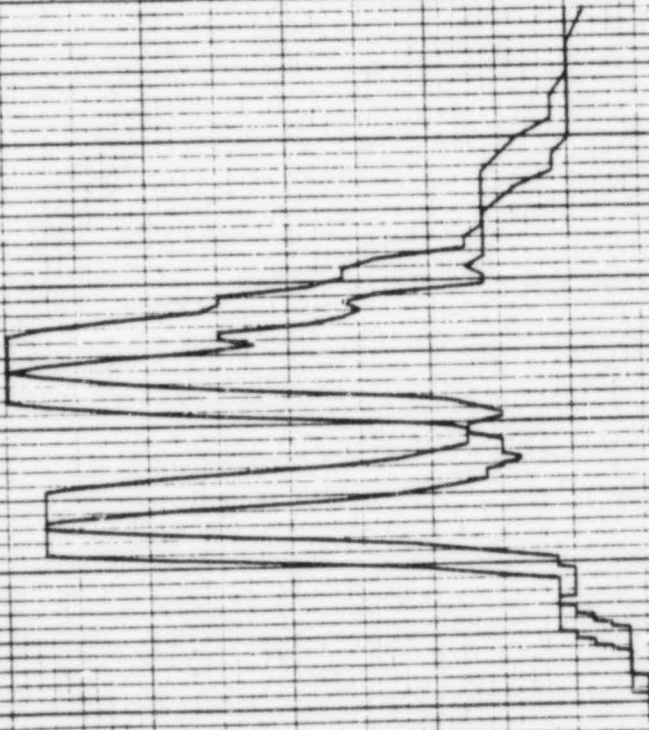
VER DIRECTION

DISK CURVE SET NO.27

DAMPING VALUE = 0.030

ACCELERATION $\times 10^{-1}$
0.56 0.48 0.40 0.32 0.24 0.16 0.08 0.00

FREQUENCY IN HZ
10⁰ 2 3 4 5 6 7 8 9 10¹



REF 136

14 MAR 1983

DAMPING VALUE = 0.050

CHUCCING

PSPECTRA VER 01 LEV 08

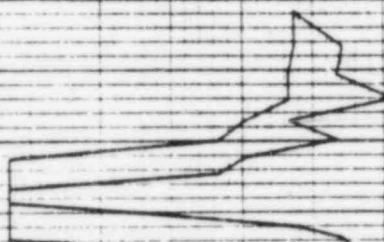
DULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM(C)-59E-1905 REV(1)
RBS OF ACC-REACTOR BLDG-FL-70.000, MASS=01 SEIS MODEL-TOP OF MAT
CHUCCING ENVELOPE-PK-1SPRD. +-15Z

HDR DIRECTION

DISK CURVE SET NO. 1

ACCELERATION 0 0.20 0.40 0.60 0.80 1.00 1.20 1.40

FREQUENCY IN HZ 10⁰ 2 3 4 5 6 7 8 9 10¹



PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA(C)-SBE-1903 REV(1)
RBS OF ACC.-REACTOR BLDG.-EL-70.000 MASS-01 SEIS MODEL-TOP OF MAT
CHUGGONO ENVELOPE--PK. SPND. --15Z

DISK CURVE SET NO.1

VER DIRECTION

DAMPING VALUE = 0.080

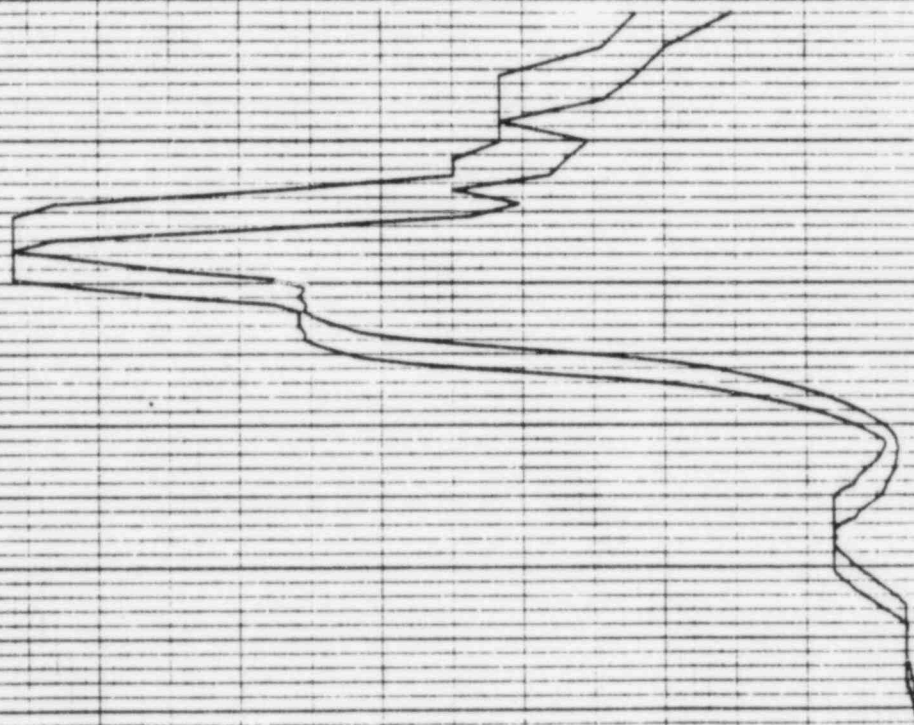
14 MAR 1983

4123A

REF 136

ACCELERATION G
0.00 0.08 0.16 0.24 0.32 0.40 0.48 0.56

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³
FREQUENCY IN HZ



REF 137

1671A

14 MAR 1983

CHUDDING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NN(C)-SDE-1903 NEV111
RBS OF ACC.-REACTOR BLDG.-FL-112.67, MASS-03 SEIS MODEL-SHIELD 0608
CHUDDING ENVELOPE--PK. SPD. 1-152

HOR DIRECTION

DISK CURVE SET NO.2

DAMPING VALUE = 0.030

ACCELERATION G

FREQUENCY IN HZ

0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³



47501

14 MAR 1985

CHUDDING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-ARAC1-5QE-1903 REV11)
RBS OF ACC.-REACTOR BLDG.-EL-112.67, MASS-03 SET16 MODEL-6SHIELD 8LD0
CHUDDING ENVELOPE--PK. SPRD. --15Z

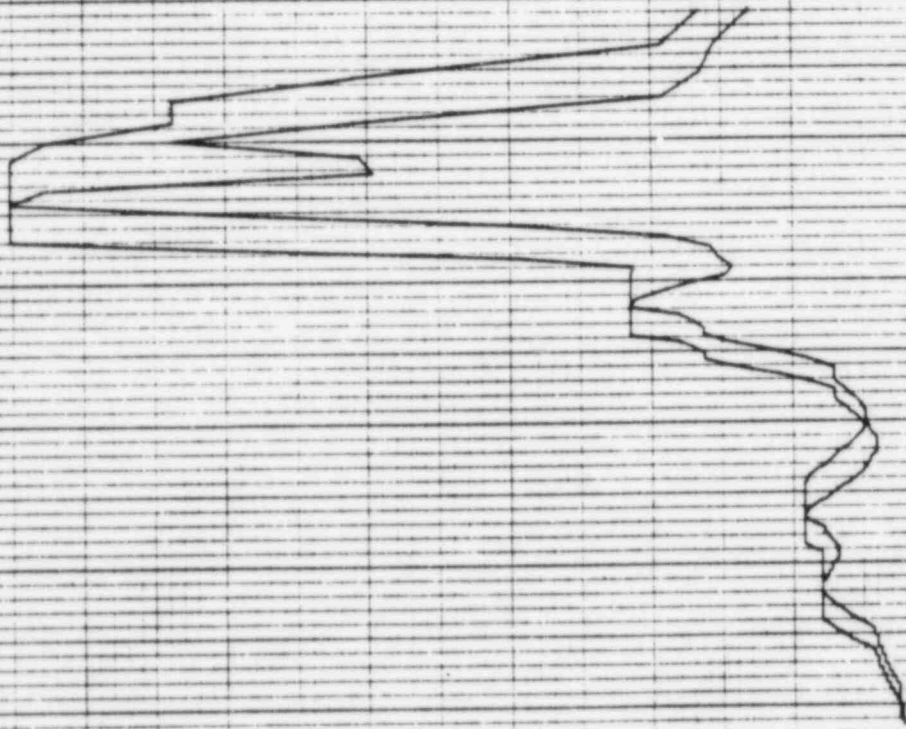
DISK CURVE SET NO.2

VER DIRECTION

DAMPING VALUE = 0.050

ACCELERATION G

FREQUENCY IN HZ



REF 138

1476A

14 MAR 1983

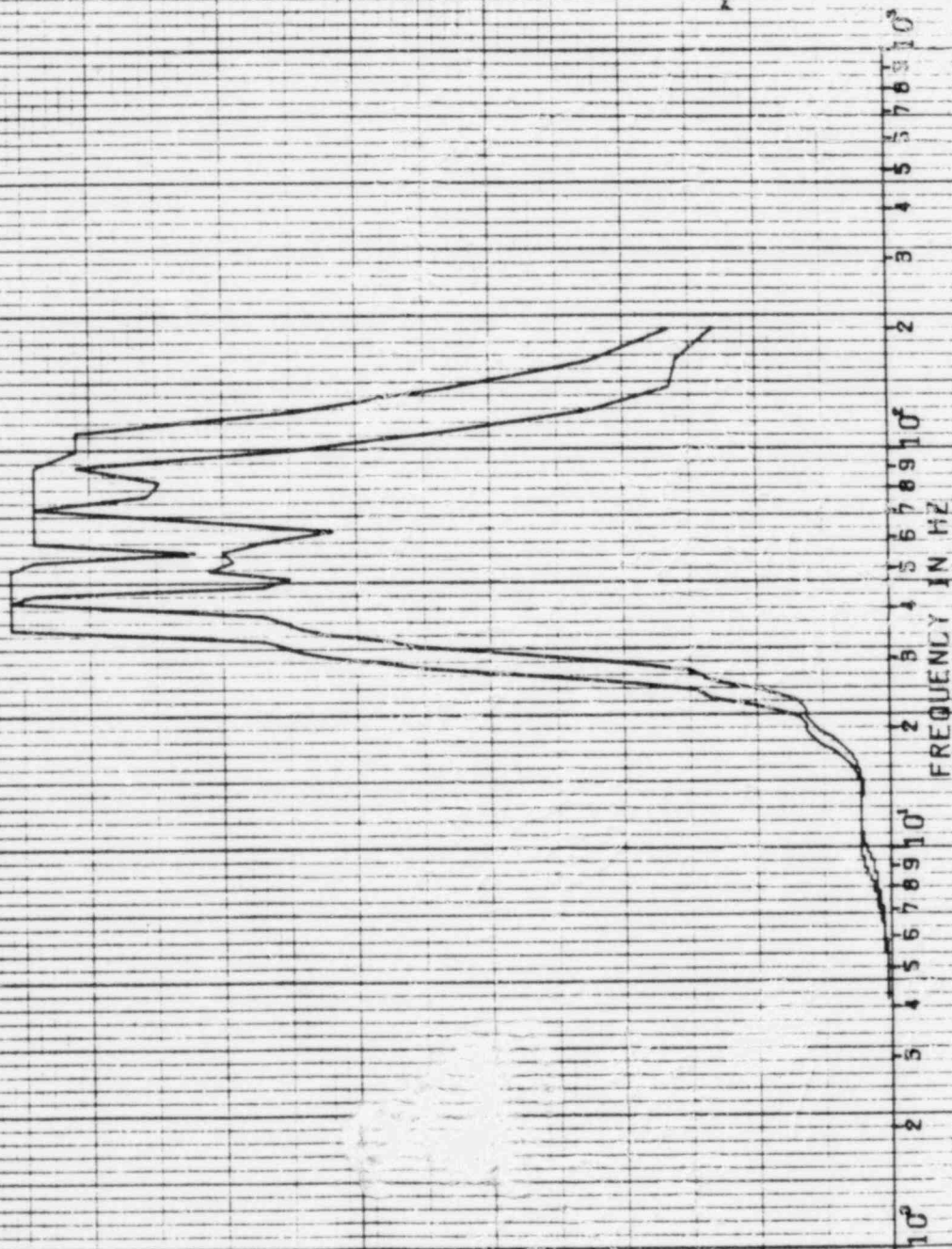
PSPECTRA VER 01 LEV 08
 DULF STATES UTILITIES-RBS UNIT 1-CALC12210-KA(C)-SDE-1903 REV(1)
 RRS OF ACC.-REACTOR BLDG.-EL-132.99, MASS-04 SEIS MODEL-6MIELD BLOC
 CHUOING NO. ENVELOPE--PK. SPED. --152

HOR DIRECTION

DAMPING VALUE = 0.050

DISK CURVE SET NO. 3

ACCELERATION 0 0.04 0.08 0.12 0.16 0.20 0.24 0.28



REF 138

14 MAR 1983

CHUDDIKO

PSPECTRA VER 01 LEV 08

CULF STATES UTILITIES-RBS UNIT 1-CALC(12210-NM1C)-60E-1903 REV111
RR5 OF ACC--REACTOR BLDG--EL=192.89, MASS=04 SE16 MODEL-SHIELD BLDG
CHUDDIND ENVELOPE--PK. SPRD. --15Z

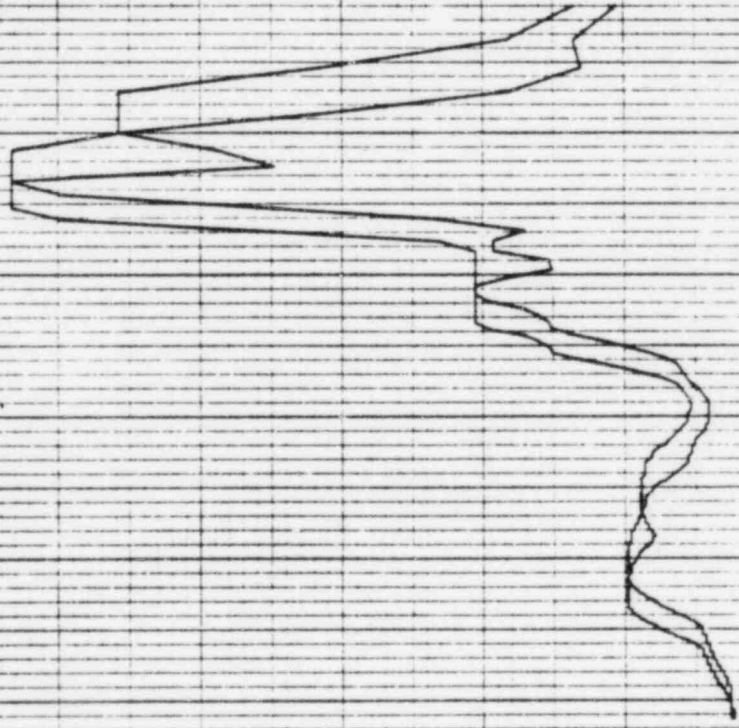
D16K CURVE SET NO.3

VER DIRECTION

DAMPING VALUE = 0.030

ACCELERATION G
0.28
0.24
0.20
0.16
0.12
0.08
0.04
0.00

10⁰
2 3 4 5 6 7 8 9 10¹
2 3 4 5 6 7 8 9 10²
2 3 4 5 6 7 8 9 10³
FREQUENCY IN HZ



REF 139

1175 A

14 MAR 1983

CHUDDING

PSPECTRA VER DN LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NALCJ-6DE-1909 REV113
 RBS DF ACC-REACTOR BLOC-EL-159-92-MASS-05 SETS MODEL-SHIELD BLOC
 CHUDDING ENVELOPE-PK-SPRD-152

DAMPING VALUE = 0.030

HOR DIRECTION

DISK CURVE SET NO. 4

ACCELERATION G

10

2

3

4

5

6

7

8

9

10

10¹

10²

10³

10⁴

10⁵

10⁶

10⁷

10⁸

10⁹

10¹⁰

10¹¹

10¹²

10¹³

10¹⁴

10¹⁵

10¹⁶

10¹⁷

10¹⁸

10¹⁹

10²⁰

10²¹

10²²

10²³

10²⁴

10²⁵

10²⁶

10²⁷

10²⁸

10²⁹

10³⁰

10³¹

10³²

10³³

10³⁴

10³⁵

10³⁶

10³⁷

10³⁸

10³⁹

10⁴⁰

10⁴¹

10⁴²

10⁴³

10⁴⁴

10⁴⁵

10⁴⁶

10⁴⁷

10⁴⁸

10⁴⁹

10⁵⁰

10⁵¹

10⁵²

10⁵³

10⁵⁴

10⁵⁵

10⁵⁶

10⁵⁷

10⁵⁸

10⁵⁹

10⁶⁰

10⁶¹

10⁶²

10⁶³

10⁶⁴

10⁶⁵

10⁶⁶

10⁶⁷

10⁶⁸

10⁶⁹

10⁷⁰

10⁷¹

10⁷²

10⁷³

10⁷⁴

10⁷⁵

10⁷⁶

10⁷⁷

10⁷⁸

10⁷⁹

10⁸⁰

10⁸¹

10⁸²

10⁸³

10⁸⁴

10⁸⁵

10⁸⁶

10⁸⁷

10⁸⁸

10⁸⁹

10⁹⁰

10⁹¹

10⁹²

10⁹³

10⁹⁴

10⁹⁵

10⁹⁶

10⁹⁷

10⁹⁸

10⁹⁹

10¹⁰⁰

10¹⁰¹

10¹⁰²

10¹⁰³

10¹⁰⁴

10¹⁰⁵

10¹⁰⁶

10¹⁰⁷

10¹⁰⁸

10¹⁰⁹

10¹¹⁰

10¹¹¹

10¹¹²

10¹¹³

10¹¹⁴

10¹¹⁵

10¹¹⁶

10¹¹⁷

10¹¹⁸

10¹¹⁹

10¹²⁰

10¹²¹

10¹²²

10¹²³

10¹²⁴

10¹²⁵

10¹²⁶

10¹²⁷

10¹²⁸

10¹²⁹

10¹³⁰

10¹³¹

10¹³²

10¹³³

10¹³⁴

10¹³⁵

10¹³⁶

10¹³⁷

10¹³⁸

10¹³⁹

10¹⁴⁰

10¹⁴¹

10¹⁴²

10¹⁴³

10¹⁴⁴

10¹⁴⁵

10¹⁴⁶

10¹⁴⁷

10¹⁴⁸

10¹⁴⁹

10¹⁵⁰

10¹⁵¹

10¹⁵²

10¹⁵³

10¹⁵⁴

10¹⁵⁵

10¹⁵⁶

10¹⁵⁷

10¹⁵⁸

10¹⁵⁹

10¹⁶⁰

10¹⁶¹

10¹⁶²

10¹⁶³

10¹⁶⁴

10¹⁶⁵

10¹⁶⁶

10¹⁶⁷

10¹⁶⁸

10¹⁶⁹

10¹⁷⁰

10¹⁷¹

10¹⁷²

10¹⁷³

10¹⁷⁴

10¹⁷⁵

10¹⁷⁶

10¹⁷⁷

10¹⁷⁸

10¹⁷⁹

10¹⁸⁰

10¹⁸¹

10¹⁸²

10¹⁸³

10¹⁸⁴

10¹⁸⁵

10¹⁸⁶

10¹⁸⁷

10¹⁸⁸

10¹⁸⁹

10¹⁹⁰

10¹⁹¹

10¹⁹²

10¹⁹³

10¹⁹⁴

10¹⁹⁵

10¹⁹⁶

10¹⁹⁷

10¹⁹⁸

10¹⁹⁹

10²⁰⁰

10²⁰¹

10²⁰²

10²⁰³

10²⁰⁴

10²⁰⁵

10²⁰⁶

10²⁰⁷

10²⁰⁸

10²⁰⁹

10²¹⁰

10²¹¹

10²¹²

10²¹³

10²¹⁴

10²¹⁵

10²¹⁶

10²¹⁷

10²¹⁸

10²¹⁹

10²²⁰

10²²¹

10²²²

10²²³

10²²⁴

10²²⁵

10²²⁶

10²²⁷

10²²⁸

10²²⁹

10²³⁰

10²³¹

10²³²

10²³³

10²³⁴

10²³⁵

10²³⁶

10²³⁷

10²³⁸

10²³⁹

14 MAR 1989

CHUGGING

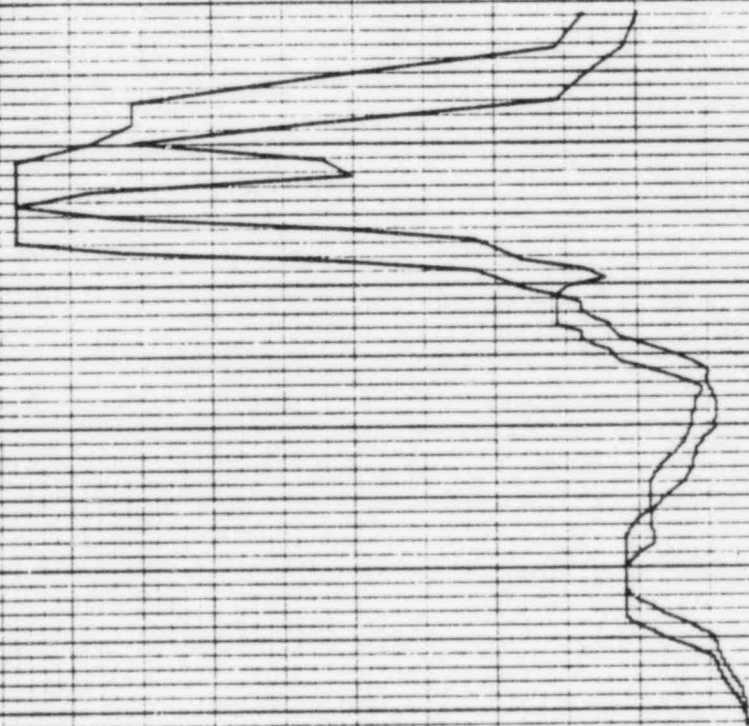
PGSPECTRA VER 01 LEV DB
DULF STATES UTILITIES-RBS UNIT 1-CALCIP210-NHCTJ-SDE-1909 REV111
RRS OF ACC.-REACTOR BLDG.-EL-159.92-MHSS-05 SEIS MODEL-SHIELD BLOC
CHUGGING ENVELOPE--PK-SPRD--15%
DISK CURVE SET NO.4

DAMPING VALUE = 0.050

VER DIRECTION

ACCELERATION G

FREQUENCY IN HZ



REF 139

REF 140

14 MAR 1983

1430H

CHUCCING
 P6SPECTRA VER 01 LEV DB
 GULF STATES UTILITIES-RBS UNIT 1-CALCIP210-NHICJ-50E-1983 REV11
 RRS OF ACC.-REACTOR BLDG.-EL-179.65-MASSE-05 SEIS MODEL-SHIELD BLDG
 CHUCCING ENVELOPE--PK.-SPRD.-152
 DISK CURVE SET NO.5

DAMPING VALUE = 0.050

NOR DIRECTION

ACCELERATION 0 0.04 0.08 0.12 0.16 0.20 0.24 0.28

FREQUENCY IN HZ
 10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 3 4 5 6 7 8 9 10³



REF 140

14 MAR 1983

CHUGGING

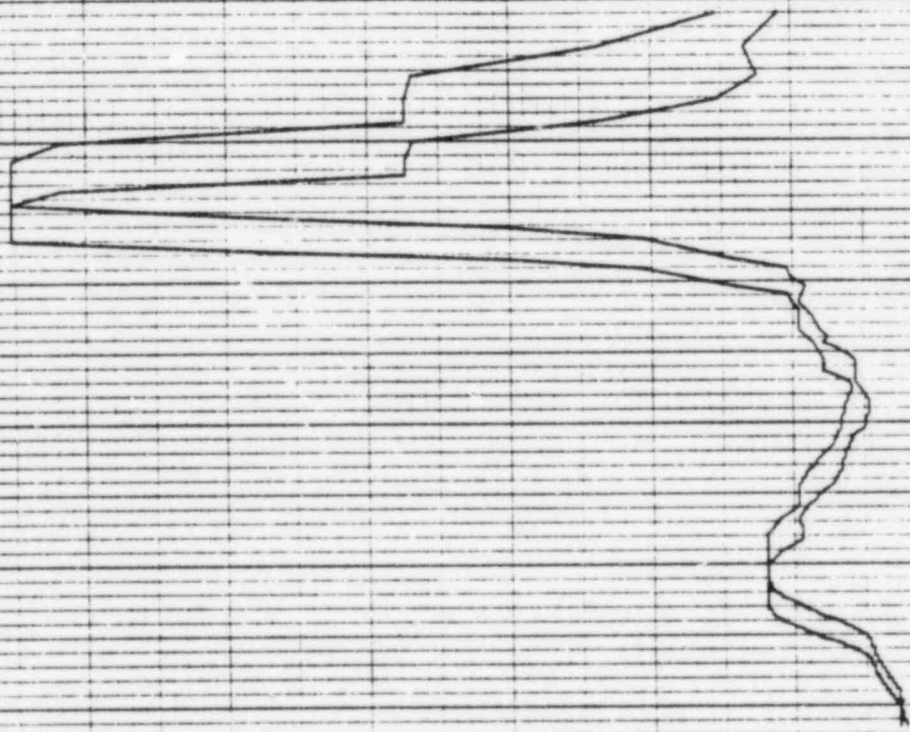
PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH(C)-6QE-1903 REV(1)
 MRS OF ACC.-REACTOR BLDG.-EL-179.65, MASS=06 SETS MODEL-SHIELD BLDG
 CHUGGING ENVELOPE--PK. SPRD--152
 DISK CURVE SET NO.5

DAMPING VALUE = 0.090

VER DIRECTION

ACCELERATION G
 0.00 0.04 0.08 0.12 0.16 0.20 0.24 0.28

FREQUENCY IN HZ
 10⁰ 2 3 4 5 6 7 8 9 10¹



REF 141

14 MAR 1983

14 MAR 1983

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC122.0-NAIC-50E-1903 REV11
 RRS OF ACC.-REACTOR BLOC, EL=193.98, MASS=07 SETS MODEL-SHIELD BLOC
 CHUCCING ENVELOPE-PK. SPD. +-15%
 DISK CURVE SET NO. 6

CHUCCING

HOR DIRECTION

DAMPING VALUE = 0.030

0.28

0.24

0.20

0.16

0.12

0.08

0.04

0.00

0.00

ACCELERATION G

10⁰

2

3

4

5

6

7

8

9

10¹

2

3

4

5

6

7

8

9

10²

FREQUENCY IN HZ



REF 141

14 MAR 1983

CHUGGING

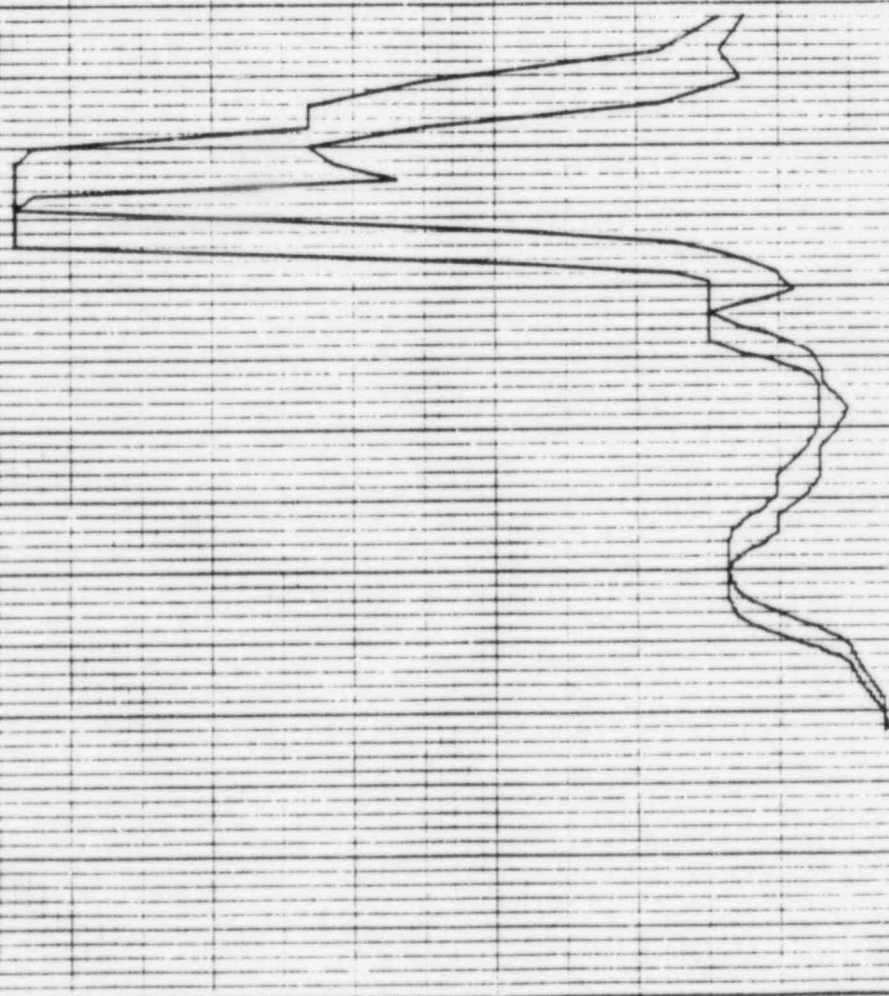
PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH(C)-SDE-190C REV(1)
 RRS OF ACC.-REACTOR BLOC..EL=193.98.WASS=07 SEIS MODEL-SHIELD 8LOG
 CHUGGING ENVELOPE--PK..SPRD..+15Z
 DISK CURVE SET NO.6

DAMPING VALUE = 0.080

VER DIRECTION

ACCELERATION G

FREQUENCY IN HZ



44A

14 MAR 1983

CHUGGINO

PEPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NMIC-50E-1903 REV11
 RRS OF ACC.-REACTOR BLDG.-EL-214.91, MASS-08 SETS MODEL-SHIELD BLDG
 CHUGGINO ENVELOPE--PK. SPED. --152

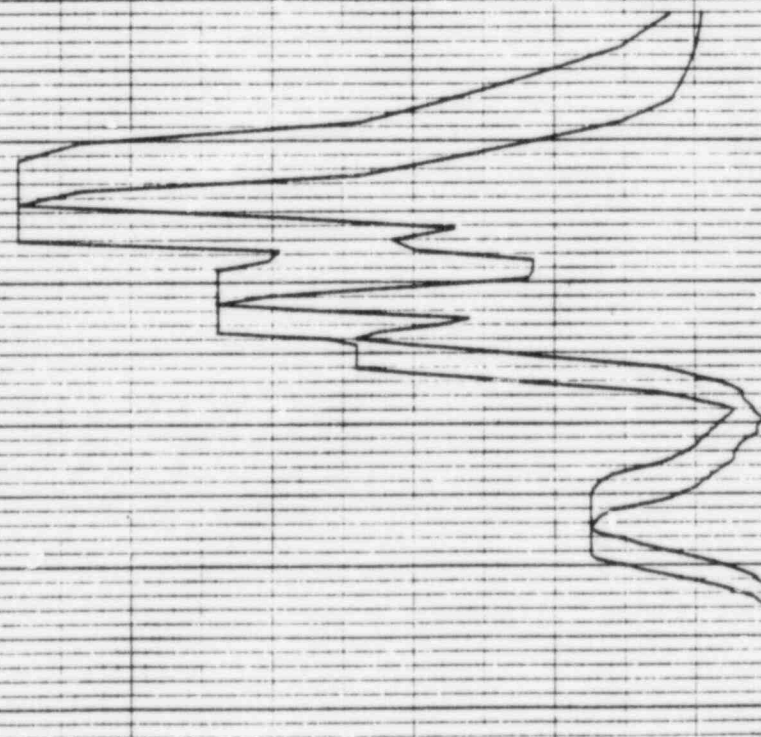
DAMPING VALUE = 0.080

HOR DIRECTION

DISK CURVE SET NO.7

ACCELERATION G

FREQUENCY IN HZ



REF 142

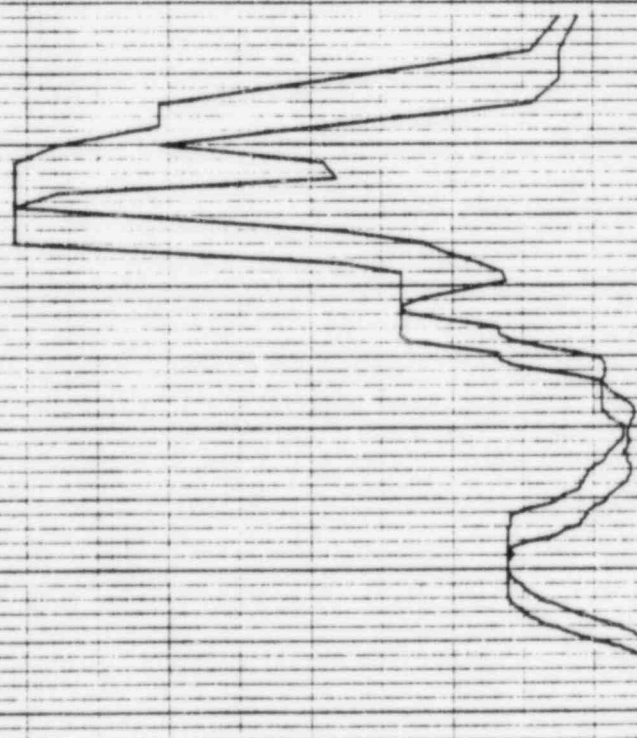
1435A

14 MAR 1983

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NAIC1-SOE-1903 REV(1)
 RRS OF ACC.-PEACTOR BLDG.-EL-214.91, MASS:08 SET6 MODEL-SHIELD BLDG
 CHUCCING ENVELOPE--PK. SPRD. +-152
 DISK CURVE SET NO.7
 CHUCCING
 VER DIRECTION
 DAMPING VALUE = 0.030

ACCELERATION

FREQUENCY IN HZ

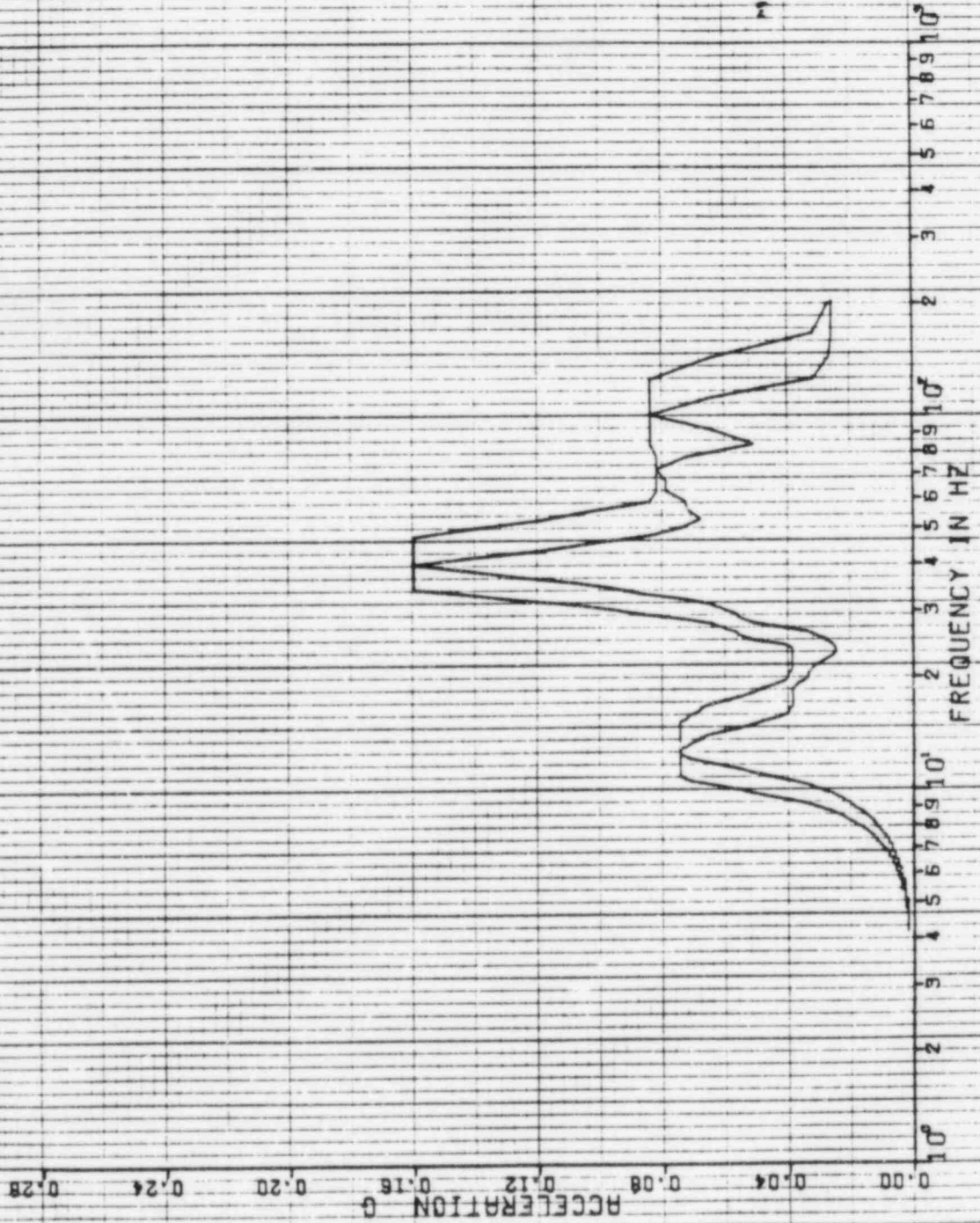


REF 143

1480A

14 MAR 1983

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-WH(C)-50E-1903 REV(1)
 RRS OF ACC.-REACTOR BLOC., EL-248.00, MASS-09 SETS MODEL-SHIELD BLOC
 CHUCCING ENVELOPE--PK. SPD. +-15Z
 CHUCCING
 HRR DIRECTION
 DAMPING VALUE = 0.080
 DISK CURVE SET NO.8



REF 143

14279

14 MAR 1983

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC(2210-NA(C)-SDE-1903 REV11)
 RRS OF ACC.-REACTOR BLDG.-EL-218.00 MASS=09 SEIS MODEL-SHIELD BLDG
 CHUDDING ENVELOPE--PK. SPRD. +-15%
 DISK CURVE SET NO.8

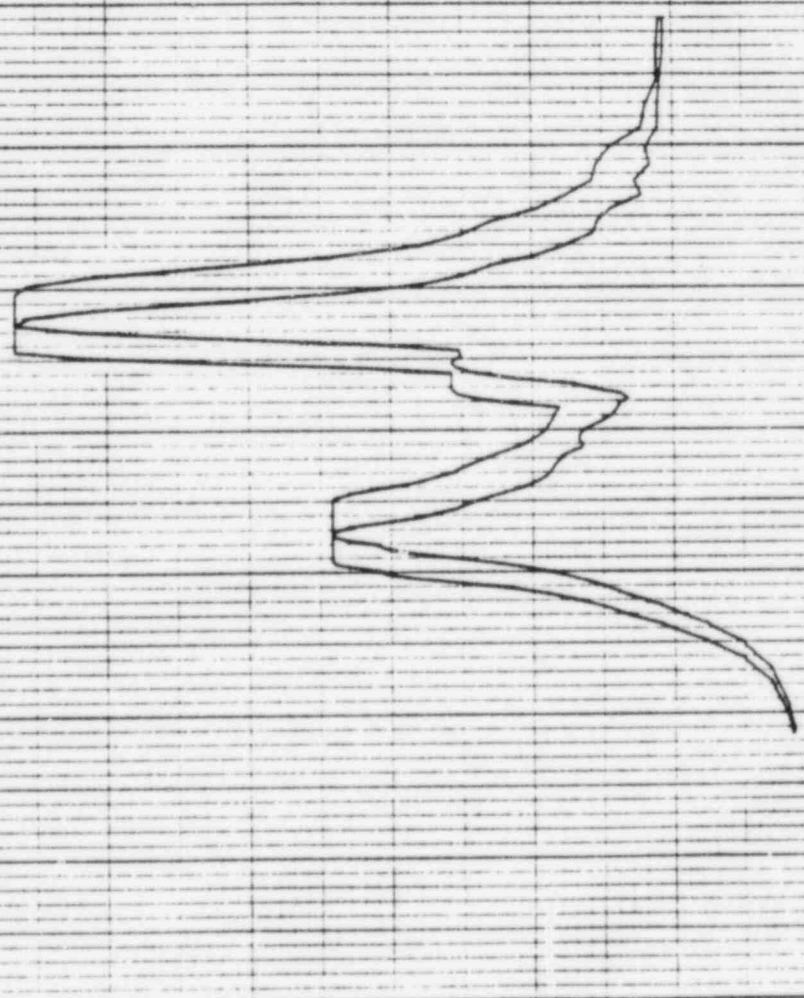
CHUDDING

DAMPING VALUE = 0.030

VER DIRECTION

ACCELERATION G

FREQUENCY IN HZ



REF 144

14 MAR 1983

CHUGGING

PSPECTRA VER 01 LEV 08
CULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM C1-60E-1903 REV11
RRS OF ACC.-REACTOR BLDG.-EL-95.000, MASS-10 SETS MODEL-COMP.SHO.800
CHUGGING ENVELOPE--PK-SPRO-+-15%

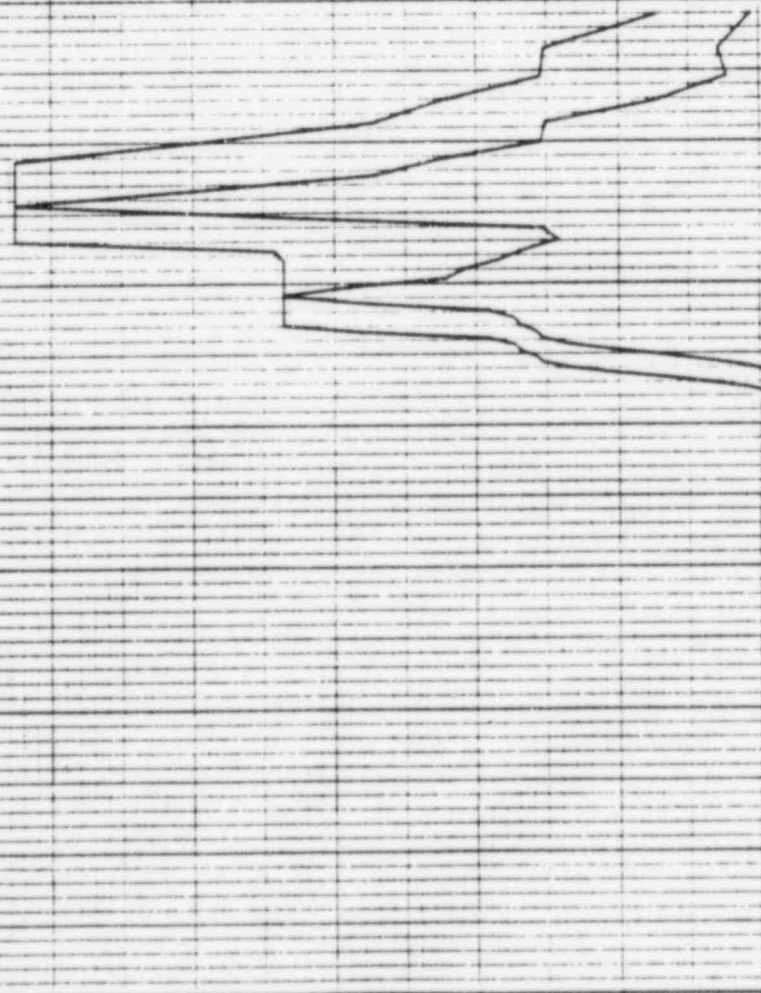
HOR DIRECTION

DAMPING VALUE = 0.030

DISK CURVE SET NO.9

ACCELERATION G

FREQUENCY IN HZ



REF 144

14 MAR 1983

CHUCCING

PSPECTRA VER 01 LEV 08
 CULF STATES UTILITIES-RBS UNIT 1-CALC(2210-NM(C)-50E-1903 REV(1))
 RRS OF ACC.-REACTOR BLOC., EL=95.000, MASS=10 SEIS MODEL-COMP. SHD.800
 CHUCCING ENVELOPE--PK. SPRO. --152

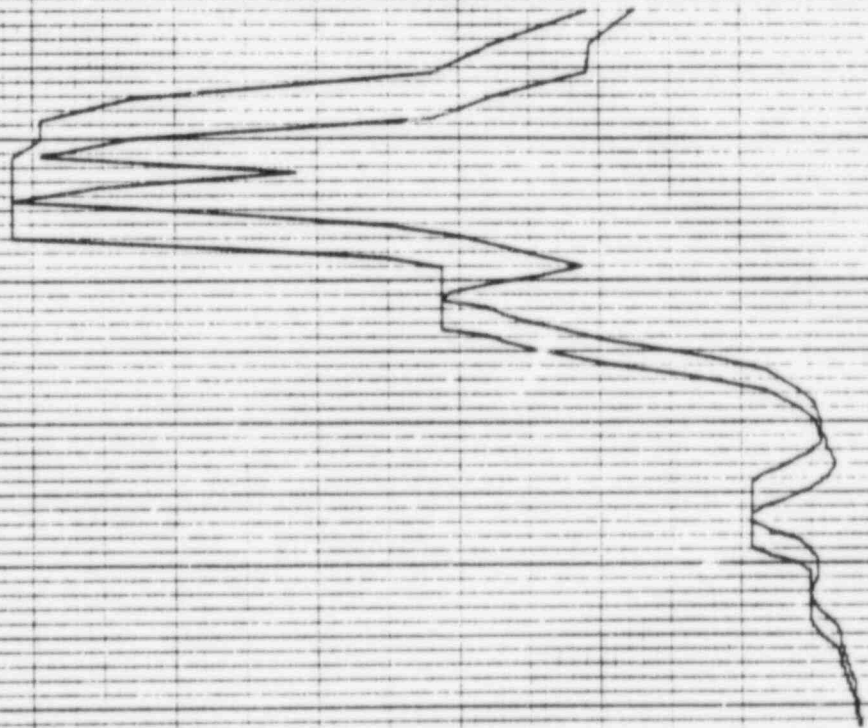
DAMPING VALUE = 0.080

VER DIRECTION

TISK CURVE SET NO.9

ACCELERATION G

FREQUENCY IN HZ



PSPECTRA VER 01 LEV 08

CHUDDING

14 MAR 1983

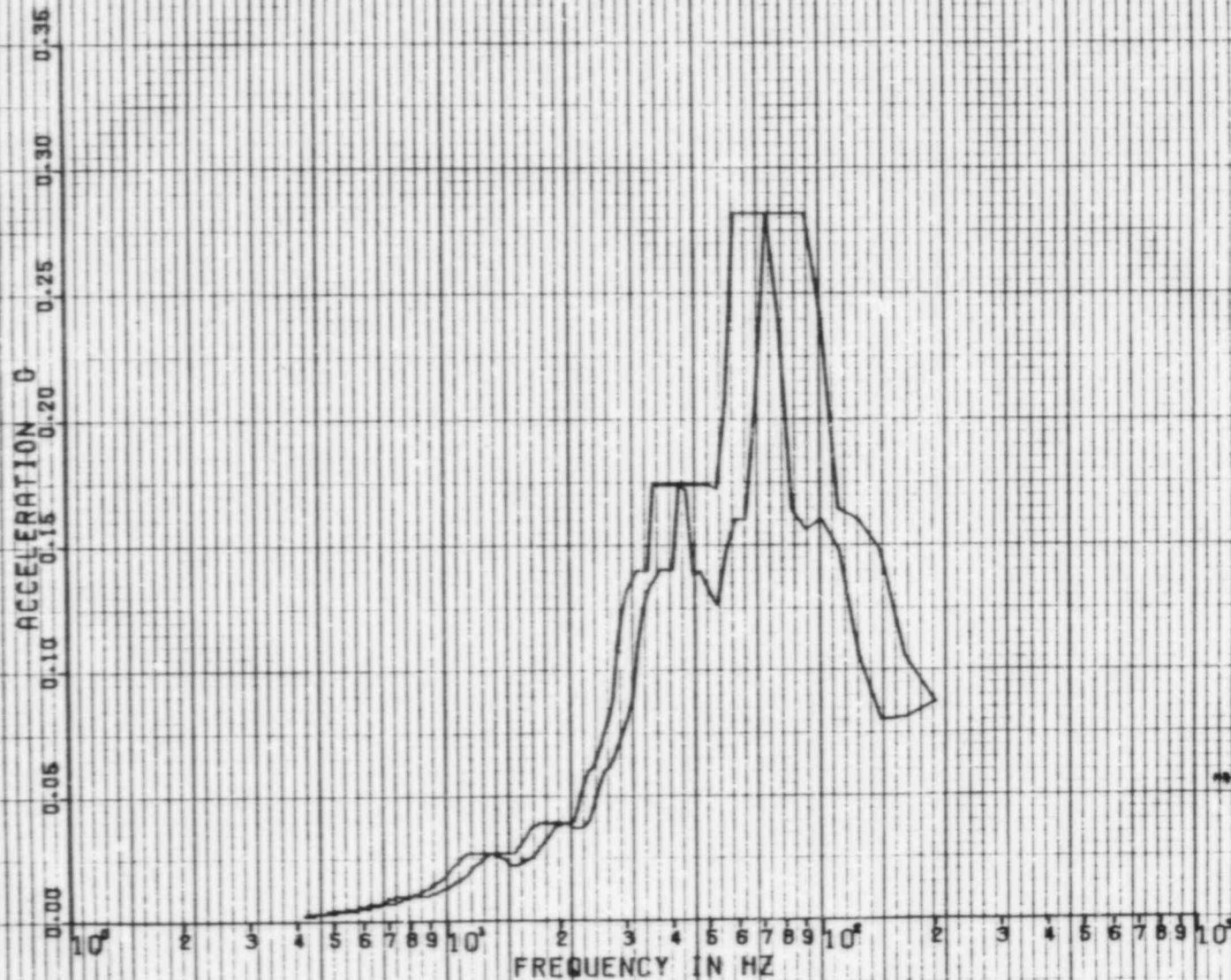
1541

GULF STATES UTILITIES-RBS UNIT 1-CALC(2210-NMIC)-SQE-1903 REV11
RRS OF ACC--REACTOR BLDG..EL=85.000.MASS=94 SEIS MODEL-COMP.SHO.BLDG
CHUDDING ENVELOPE--PK. SPRD. --15Z

DISK CURVE SET NO.32

HOR DIRECTION

DAMPING VALUE = 0.030



REF 145

REF 145

1534

14 MAR 1983

CHUGOINO

PSPECTRA VER 01 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALC12210-MM1C1-50E-1903 REV(1)
 RMS OF REC.-REACTOR BLDG.-EL-85.000, MASS=54 SE16 MODEL-COMP-6MO.0100
 CHUGOINO ENVELOPE--PK. SPRD. 4-15Z

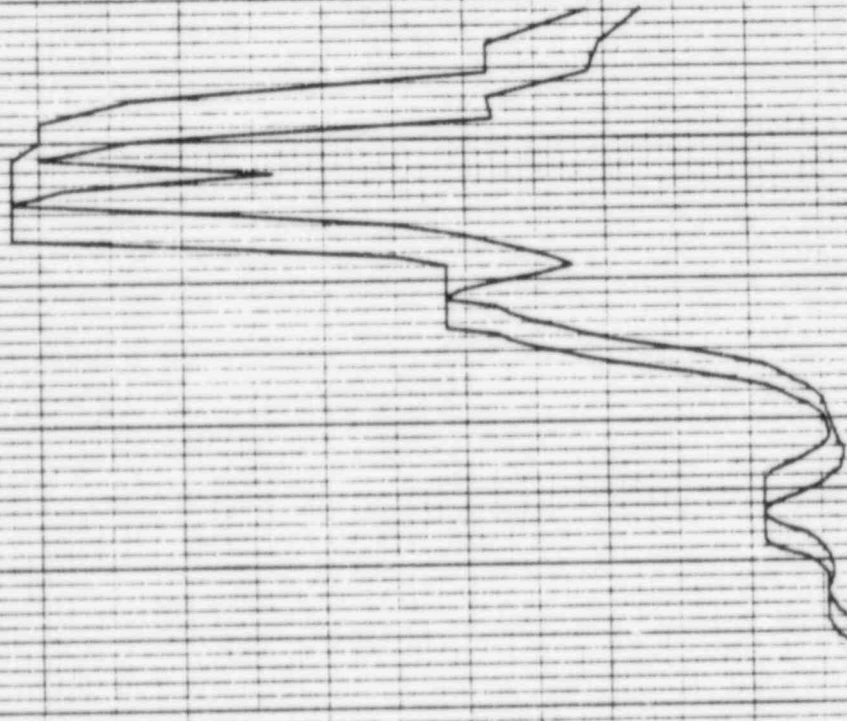
DISK CURVE SET NO.32

VER. DIRECTION

DAMPING VALUE = 0.080

ACCELERATION G

FREQUENCY IN HZ



REF 146

144A

14 MAR 1963

CHUDDING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-MN(C)-SDE-1963 REV11;
RRS OF ACC.-REACTOR BLDG.-EL-114.00 MASS=11 SEIS MODEL-STEEL CONT
CHUDDING ENVELOPE-PA. SPRD. --152

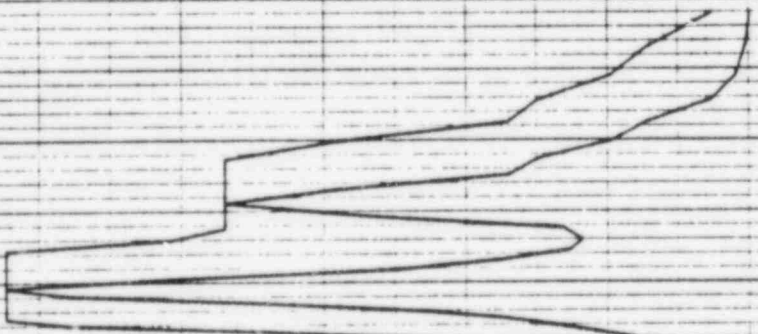
DISK CURVE SET NO.10

HOR DIRECTION

DAMPING VALUE = 0.050

ACCELERATION 0 0.08 0.16 0.24 0.32 0.40 0.48 0.56

FREQUENCY IN HZ
10 2 3 4 5 6 7 8 9 10



REF 146

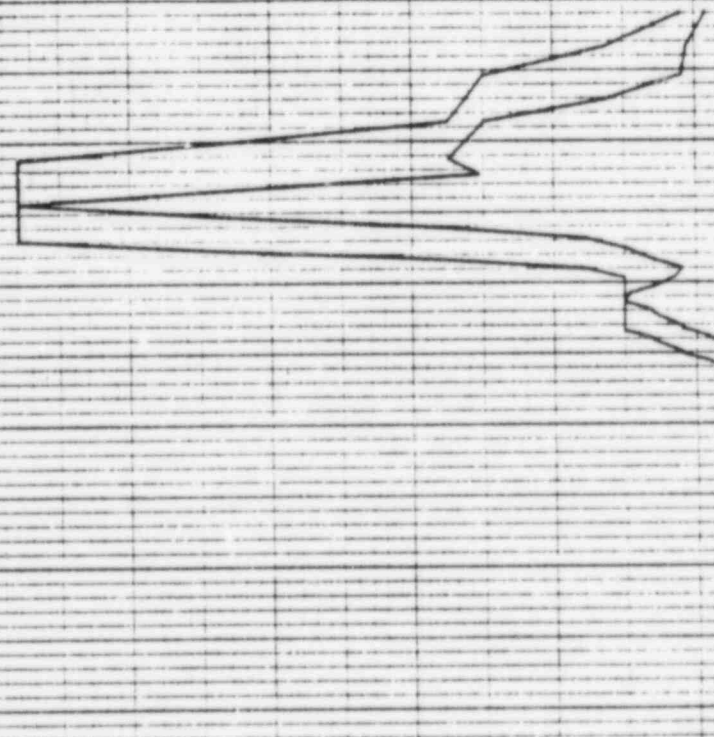
14 MAR 1983

14 MAR 1983

PSPECTRA VER 01 LEV 08
 CULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH(C)-SDE-1905 REV(1)
 RRS OF ACC.-REACTOR BLDG.-EL=114.00,HRSS=11 SEIS MODEL-STEEL CONT
 CHUCCINO ENVELOPE--PK. SPDR. --152
 DISK CURVE SET NO.10
 VER DIRECTION
 DAMPING VALUE = 0.090

ACCELERATION G

FREQUENCY IN HZ



REF 147

14 MAR 1983

CHUGGING

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-WH1C1-SOE-1903 REV(1)
 RPS OF ACC.-REACTOR BLDG. EL=193.00, MASS=12 SEIS MODEL-STEEL CONT
 CHUGGING ENVELOPE--PK-SPRO--152

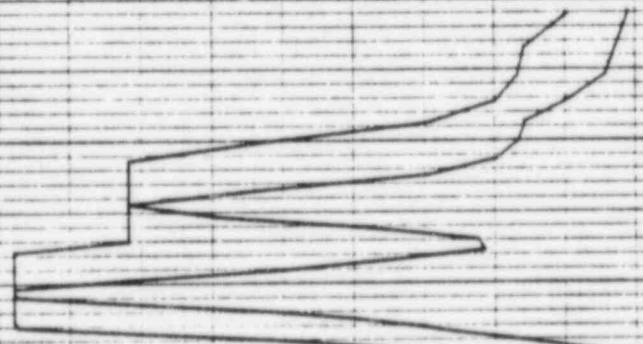
HOR DIRECTION

DISK CURVE SET NO.11

DAMPING VALUE = 0.050

ACCELERATION 0 0.08 0.16 0.24 0.32 0.40 0.48 0.56

FREQUENCY IN HZ 10 2 3 4 5 6 7 8 9 10



12-97-A

14 MAR 1983

CHUGGING

PSPECTRA VER 01 LEV 08
CULF STAVES UTILITIES-RBS UNIT 1-CALC12210-NM(C1)-SQE-1903 REV11
RBS OF REC-REACTOR BLDG.-FL-193-00, MASS=12 SETS MODEL-STEEL COM
CHUGGING ENVELOPE--PK. SPRD.--152

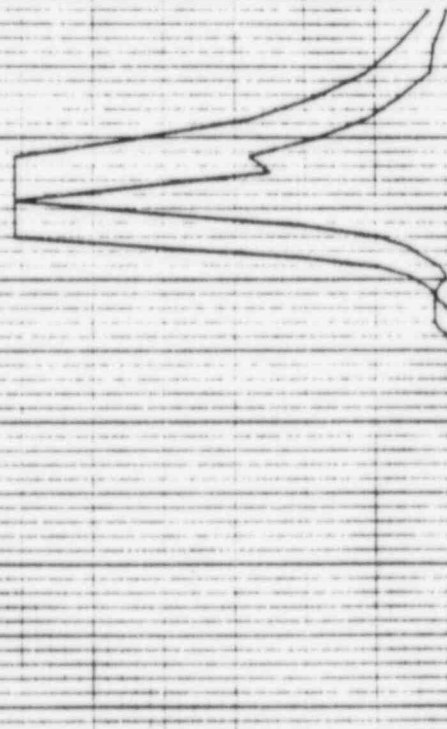
VER DIRECTION

DISK CURVE SET NO. 11

DAMPING VALUE = 0.030

ACCELERATION G

FREQUENCY IN HZ



REF 148

11-1-1-1

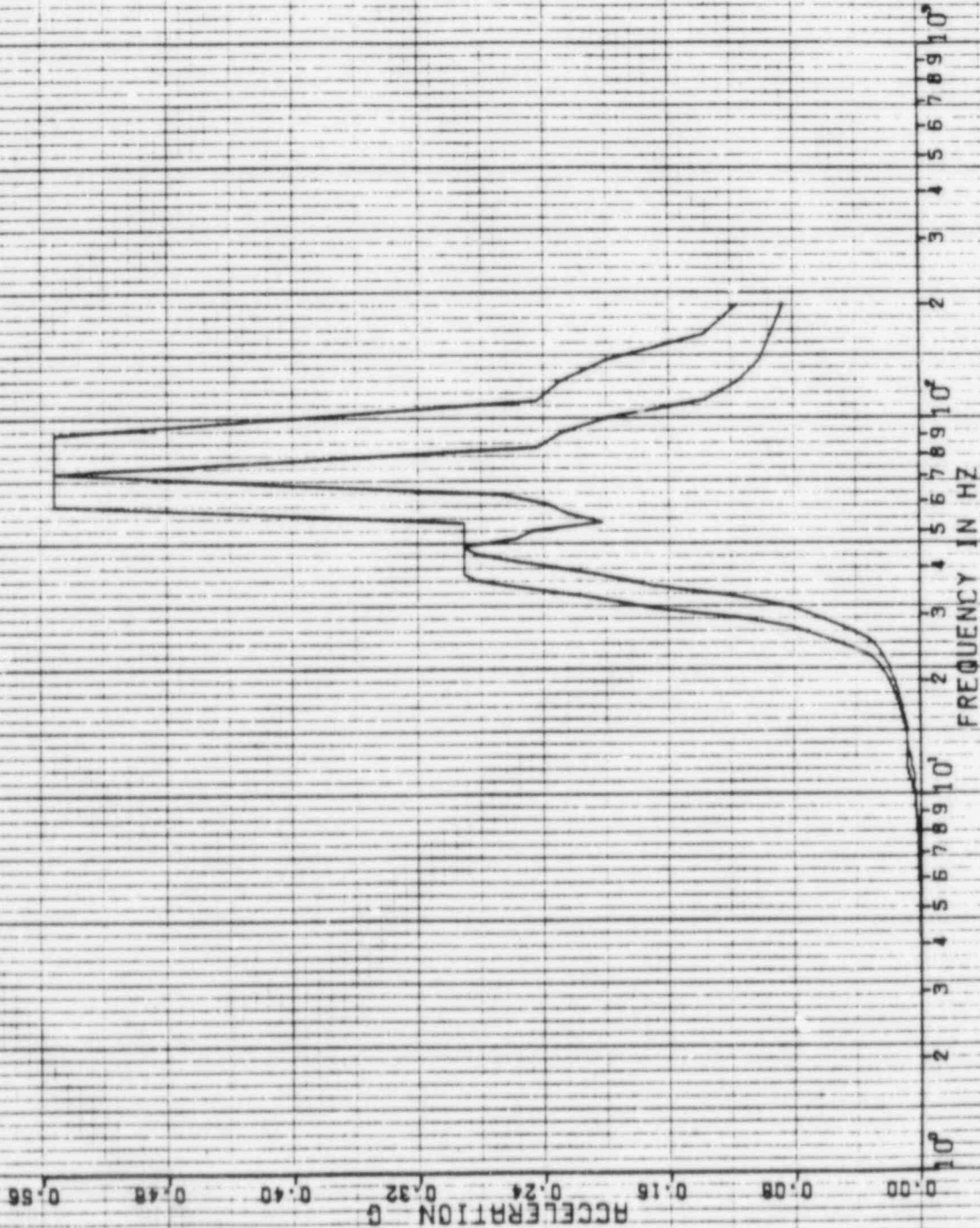
14 MAR 1985

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-WHIC1)-602-1903 REV(1)
 RRS OF ACC.-REACTOR BLDG.-FL-162.00 MASS=13 SETS MODEL-6STEEL CONT
 CHUDDING ENVELOPE--PK. SPED. +-15%
 DISK CURVE SET NO. 12

CHUDDING

DAMPING VALUE = 0.030

HOR DIRECTION



14 MAR 1963

CHUCCING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM(C)-SDE-1963 REV(1)

RBS OF REC.-REACTOR BLOC.-EL=162.00, MASS=13 SEIS MODEL-STEEL CONT

CHUCCING ENVELOPE--PK. SPAD. --15X

DISK CURVE SET NO. 12

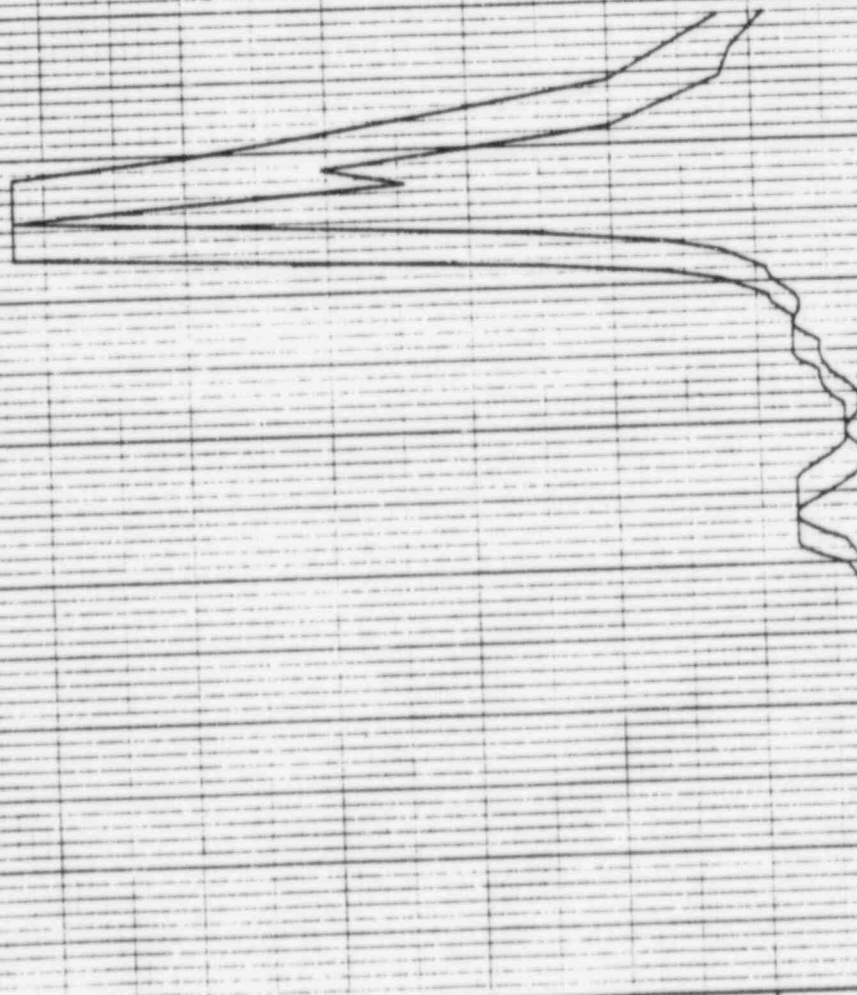
VER DIRECTION

DAMPING VALUE = 0.030

REF 148

ACCELERATION G

FREQUENCY IN HZ



PSPECTRA VER 01 LEV 08

CHUGGING

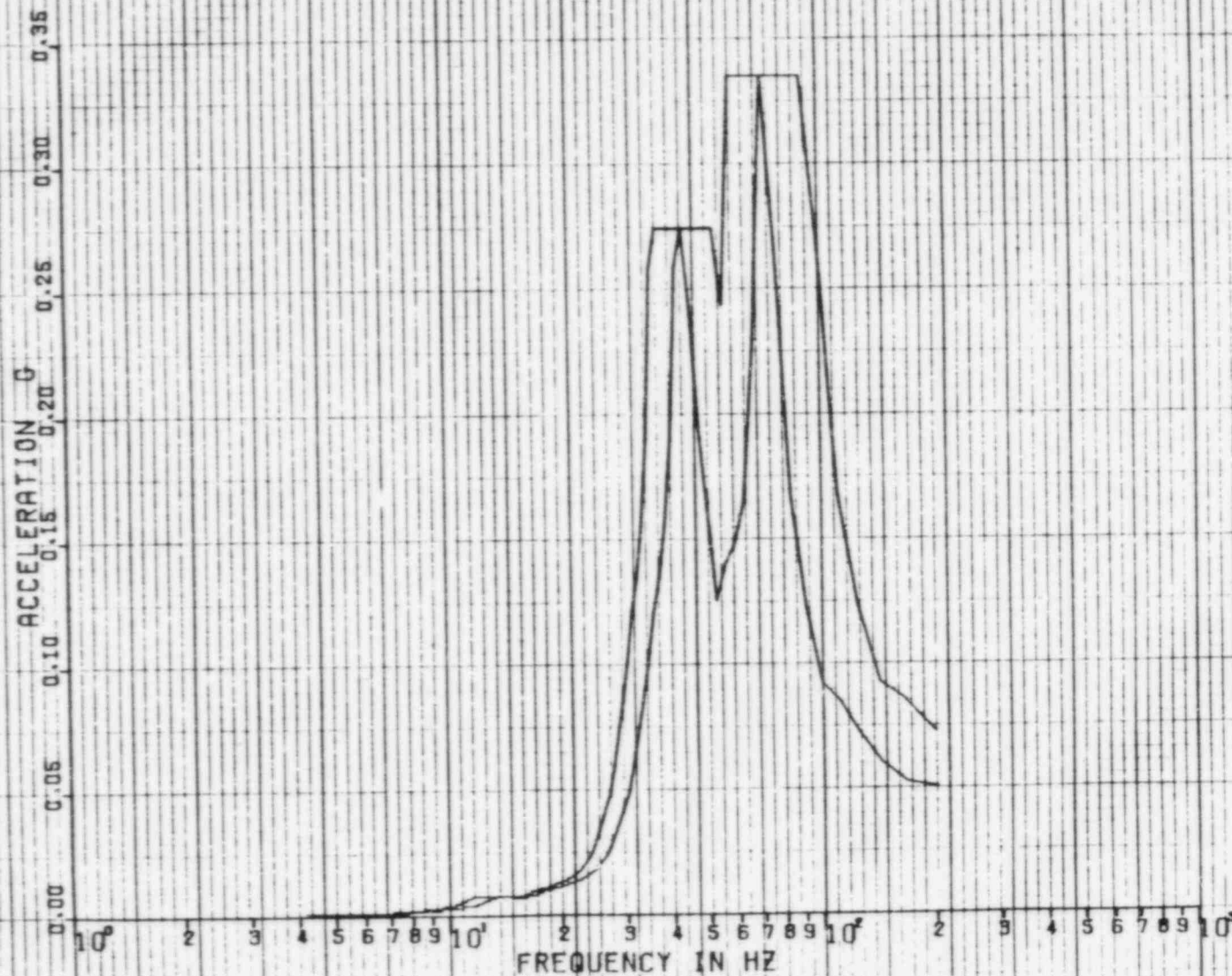
14 MAR 1983

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH(C)-SDE-1983 REV(1)
RRS OF ACC.-REACTOR BLDG.,EL=105.00,MASS=14 SEIS MODEL-STEEL CONT
CHUGGING ENVELOPE--PK. SPRD. +-15%

DISK CURVE SET NO.19

HDR DIRECTION

DAMPING VALUE = 0.090



REF 149

PSPECTRA VER 01 LEV 08

CHUDDING

14 MAR 1983

11 24 7 A

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-MAIC1-50E-1903 REV(1)
RMS OF ACC.-REACTOR BLDG. EL=195.00, MASS=14 SEIS MODEL-STEEL CONT
CHUDDING ENVELOPE--PK SPRO--15Z

DISK CURVE SET NO.13

VER DIRECTION

DAMPING VALUE = 0.090

ACCELERATION G

10

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

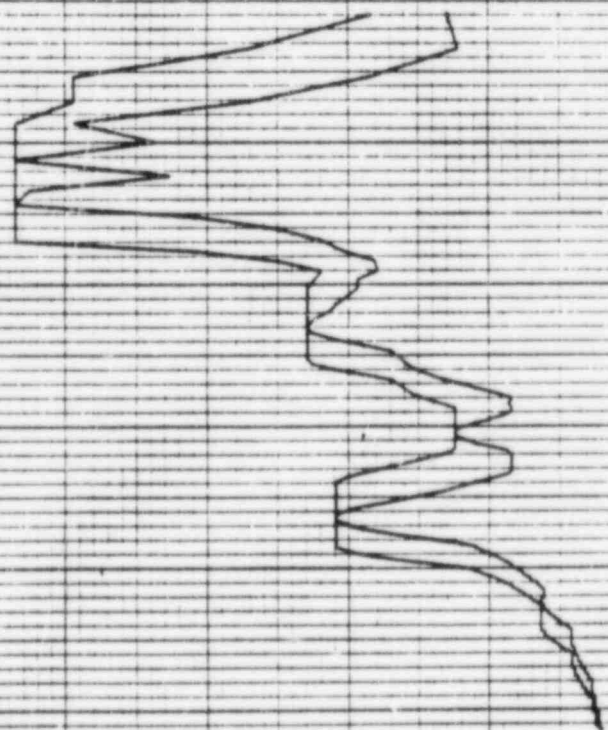
22

23

24

FREQUENCY IN HZ

REF 149



REF 150

14 MAR 1983

CHUGGING

14 MAR 1983

14 MAR 1983

14 MAR 1983

PSPECTRA VER 01 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NAIC1-SGE-1903 REV111
RRS OF ACC--REACTOR BLOC--EL-212.00 MASS+15 SEIS MODEL-STEEL CONT
CHUGGING ENVELOPE--PA. SPD. --152

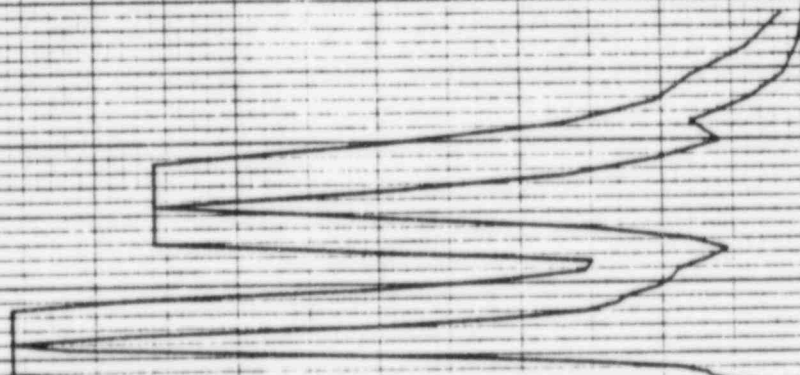
HOR DIRECTION

DISK CURVE SET NO.14

DAMPING VALUE = 0.050

ACCELERATION 0 0.02 0.04 0.06 0.08 0.10 0.12 0.14

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³
FREQUENCY IN HZ



PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA(C1-80E-.903 REV(1))
 RRS OF ACC-REACTOR BLDG--EL-212-00 MASS=15 SEIS MODEL-STEEL CONT
 CHUDDING ENVELOPE--PA SPRD. --15%

CHUDDING

14 MAR 1983

A

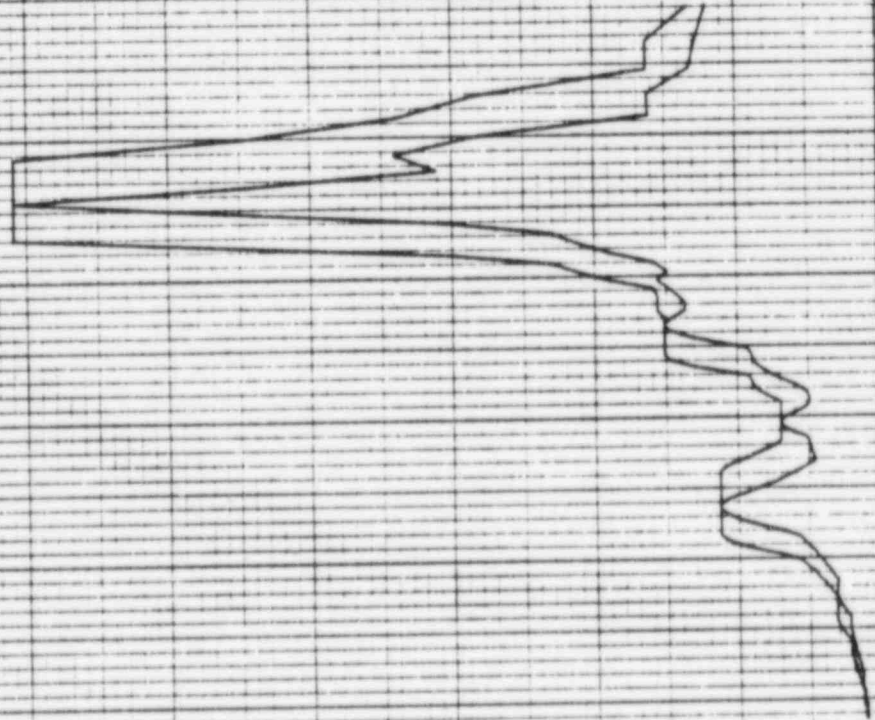
VER DIRECTION

DAMPING VALUE = 0.090

DISK CURVE SET NO. 14

ACCELERATION

FREQUENCY IN HZ



REF 151

1701A

14 MAR 1983

CHUDDING

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM(C)-50E-1983 REV(1)
 RRS OF ACC.-REACTOR BLDG., EL-239.20, MASS-16 SEIS MODEL-STEEL CONT
 CHUDDING ENVELOPE--PK. SPRO. +-152

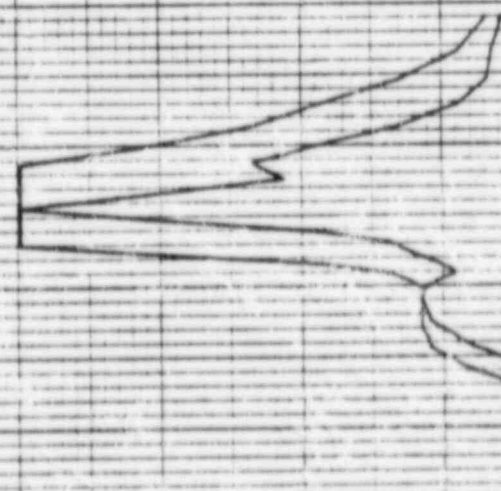
NOR DIRECTION

DISK CURVE SET NO. 15

DAMPING VALUE = 0.050

ACCELERATION

FREQUENCY IN HZ



PSPECTRA VER 01 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALC 12210-NNIC1-60E-1989 REV111
RRS OF ACC.-REACTOR BLDG.-FL-299-20 MASS-16 SETS MODEL-STEEL CONT
CHUCCING ENVELOPE--PK. SPRD. --152

DISK CURVE SET NO.15

CHUCCING

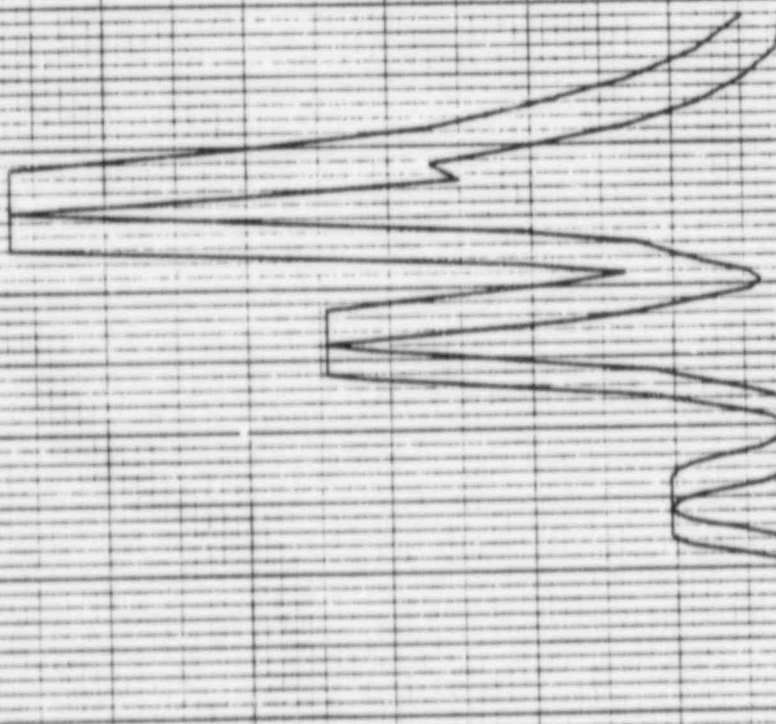
14 MAR 1983

250717

VER DIRECTION

DAMPING VALUE = 0.030

ACCELERATION



FREQUENCY IN HZ

REF 151

11-22-78

14 MAR 1983

PSPECTRA VER 01 LEV 08
CHUDDING
GULF STATES UTILITIES-RBS UNIT 1-CALCIC2210-NMCI-50E-1903 REV11
RRE OF ACC-REACTOR BLDG., EL-95.000, MASS-17 SEIS MODEL-PSM, PEDESTAL
CHUDDING ENVELOPE--PK. SPRD. --LSZ

HOR DIRECTION

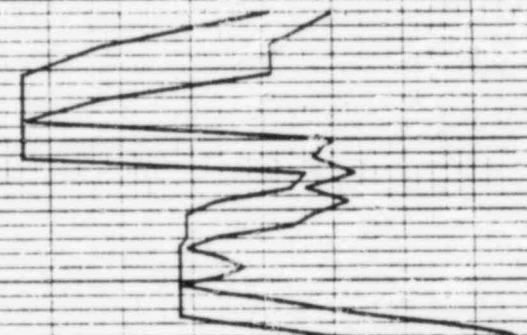
DISK CURVE SET NO.16

DAMPING VALUE = 0.030

REF 152

ACCELERATION G
0.14 0.12 0.10 0.08 0.06 0.04 0.02 0.01

10⁰ 2 3 4 5 2 3 4 5 2 3 4 5 2 3 4 5 10¹
FREQUENCY IN HZ



115011A

14 MAR 1983

PSPECTRA VER 01 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NAIC1-SOE-1983 REV(1)
RBS OF ACC.-REACTOR BLDG.-EL=95.000, MASS=17 SETS MODEL-PSM, PEDESTAL
CHUDDING ENVELOPE--PK. SPRD. +-15Z
DISK CURVE SET NO.16

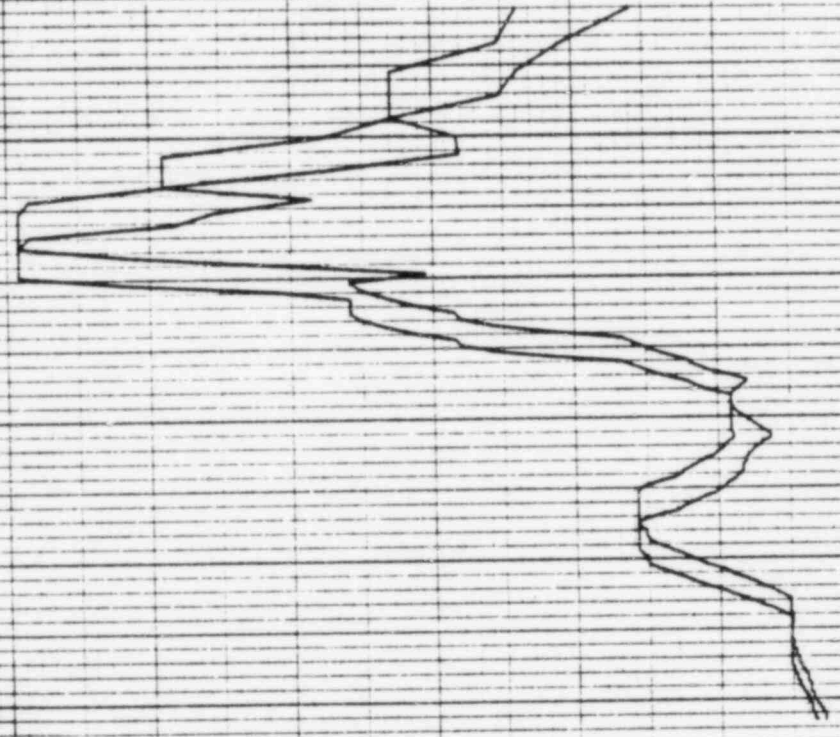
CHUDDING

DAMPING VALUE = 0.030

VER DIRECTION

ACCELERATION G

FREQUENCY IN HZ



REF 152

14 APR 1983

CHUDDING

PSPECTRA VER 01 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NR(C)-SDE-1903 REV(1)
RBS OF ACC-REACTOR BLDG.-EL=101.00, MASS=18 SEIS MODEL-PSM, PEDESTAL
CHUDDING ENVELOPE--PK-SPRDL--152
DISK CURVE SET NO. 17

DRAPING VALUE = 0.030

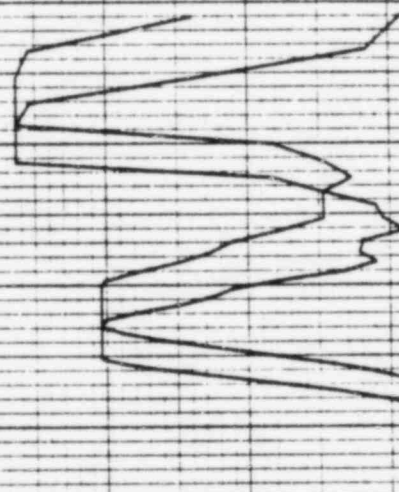
HOR DIRECTION

ACCELERATION 0 0.04 0.08 0.12 0.16 0.20 0.24 0.28

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³

FREQUENCY IN HZ

REF 153



16 MAR 1983

CHUGGING

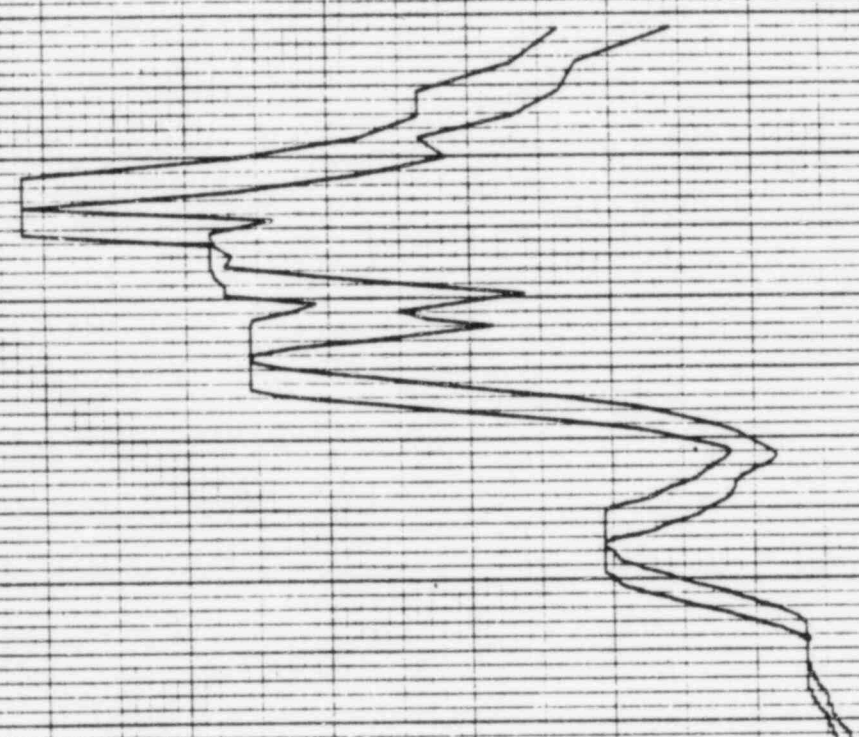
PSPECTRA VER 01 LEY 08
GULF STATES UTILITIES-R66 UNIT 1-CALC12210-NR1C1-6QE-1983 REV111
NRS OF ACC.-REACTOR BLDG.-EL-101.00 MASS=18 SLIS MODEL-PSM.PEDESTAL
CHUGGING ENVELOPE--PK. SPRD. --152
DISK CURVE SET NO.17

DAMPING VALUE = 0.030

VER DIRECTION

ACCELERATION G

FREQUENCY IN HZ



REF 153

14 MAR 1983

CHUGGING

PEPECTRA VER 01 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC1210-WM(C)-50E-1983 REV(1)
RRS OF ACC.-REACTOR BLOO.-EL=117.00, MASS=19 SEIS MODEL-PSM
CHUGGING ENVELOPE--PK. SPD. --.15Z
DISK CURVE SET NO.18

DRAPING VALUE = 0.030

HOR DIRECTION

DISK CURVE SET NO.18

REF 154

ACCELERATION G

FREQUENCY 1/HZ



157A

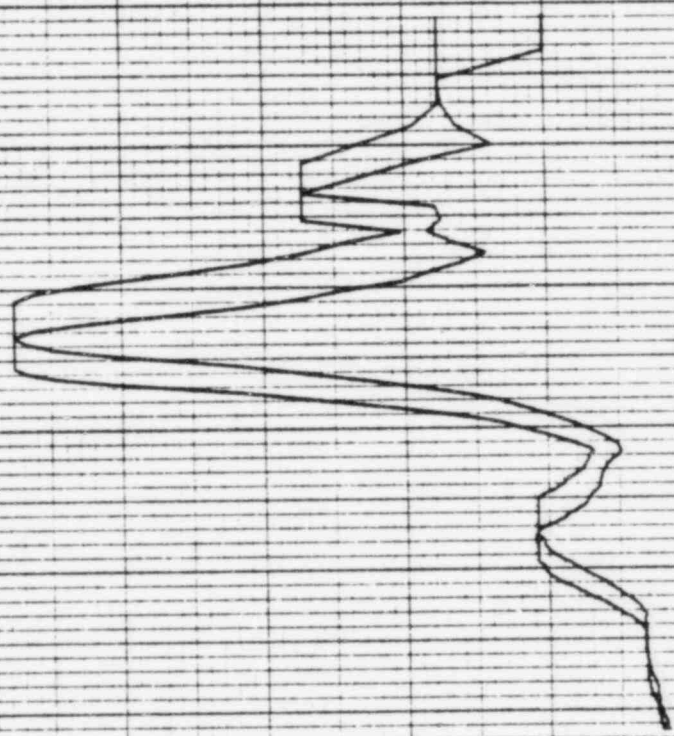
14 MAR 1965

PSPECTRA VER 01 LEV 08
CHUDDING
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA(C1-60E-1903 REV(1)
RRS OF ACC.-REACTOR BLDG., EL=117.00, MASS=19 SEIS MODEL-PSM
CHUDDING ENVELOPE--PK--SPRO--152
VER DIRECTION
DISK CURVE SET NO. 18
DAMPING VALUE = 0.050

REF 154

ACCELERATION G
0.56
0.48
0.40
0.32
0.24
0.16
0.08
0.00

FREQUENCY IN HZ
10
2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10

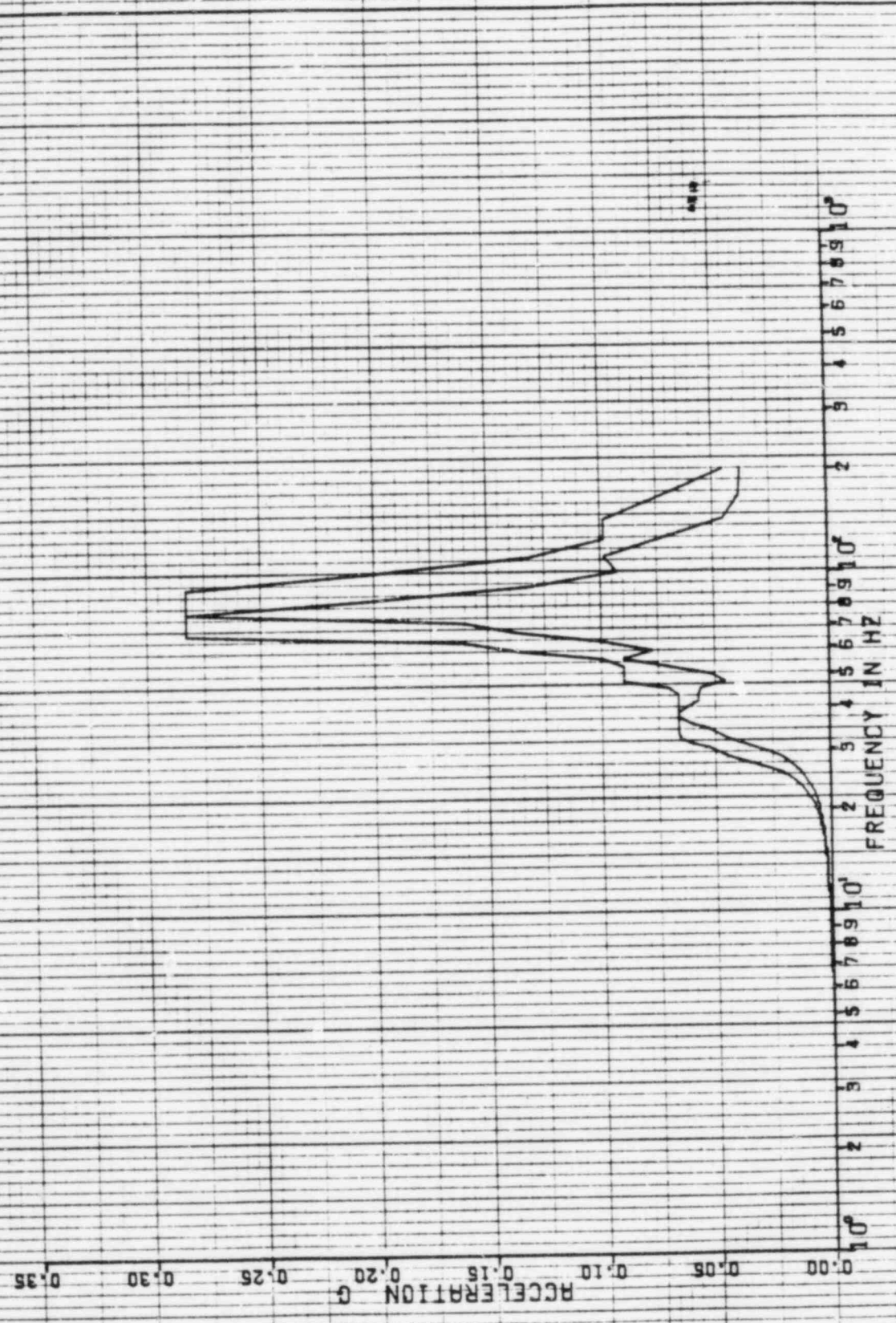


102A

14 MAR 1983

PSPECTRA VER 01 LEY 06
DULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM(CI)-SBE-1903 REV(1)
RBS OF ACC.-REACTOR BLDG., EL=133.00, MASS=20 SEIS MODEL-PSM
CHUOING ENVELOPE--PK. SPED. --15Z
DISK CURVE SET NO.19
CHUOING
HDR DIRECTION
DAMPING VALUE = 0.080

REF 155



PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA(C)-SDE-1903 REV(1)
 PWS OF ACC.-REACTOR BLDG.-EL=199.00, MASS=20 SEIS MODEL-PSM
 CHUDDING ENVELOPE--PK. SPED. 152
 DISK CURVE SET NO.19

14 MAR 1963

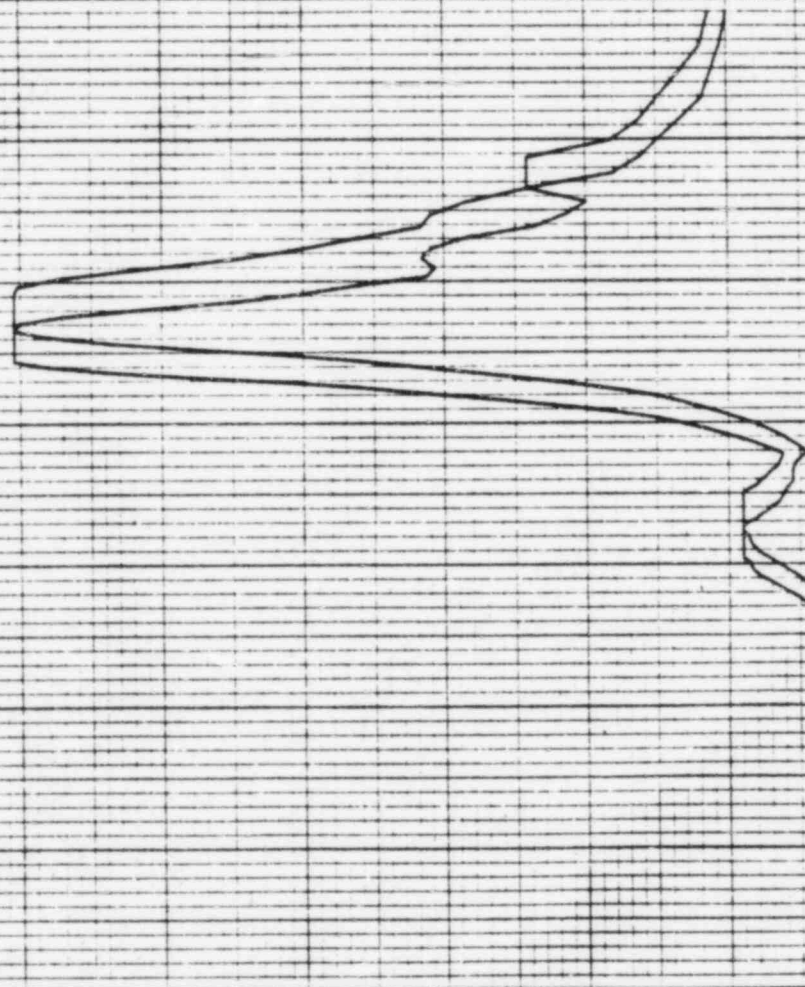
1301A

DAMPING VALUE = 0.030

VER DIRECTION

ACCELERATION 0 0.10 0.20 0.30 0.40 0.50 0.60 0.70

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² FREQUENCY IN HZ



REF 155

REF 156

14 MAR 1965

CHUCCING

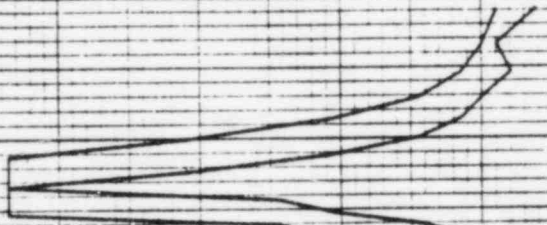
PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NR(C)-S02-1903 REV11
 RRS OF ACC.-REACTOR BLDG.-EL-117.00, MASS=21 SETS MODEL-PSW
 CHUCCING ENVELOPE--PK. SPRO--152
 DISK CURVE SET NO.20

DAMPING VALUE = 0.030

HOR DIRECTION

ACCELERATION 0 0.04 0.08 0.12 0.16 0.20 0.24 0.28

FREQUENCY IN HZ
 10⁰ 2 3 4 5 6 7 8 9 10¹



15111A

14 MAR 1983

CHUGGING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-WA C1-50E-1903 REV11
RRS OF ACC.-REACTOR BLDG., EL=147.00, MASE=21 S&S MODEL-PSW
CHUGGING ENVELOPE--PK. SPRO--15Z

DAMPING VALUE = 0.030

VER DIRECTION

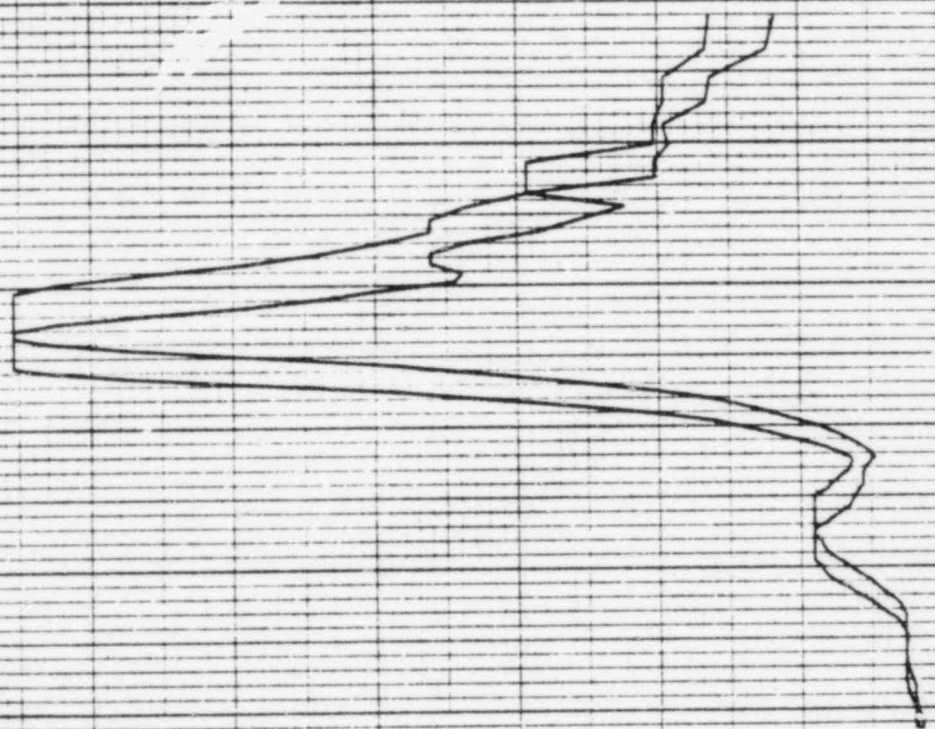
DISK CURVE SET NO.20

ACCELERATION G

FREQUENCY IN HZ

0.70 0.60 0.50 0.40 0.30 0.20 0.10 0.00

10



112A

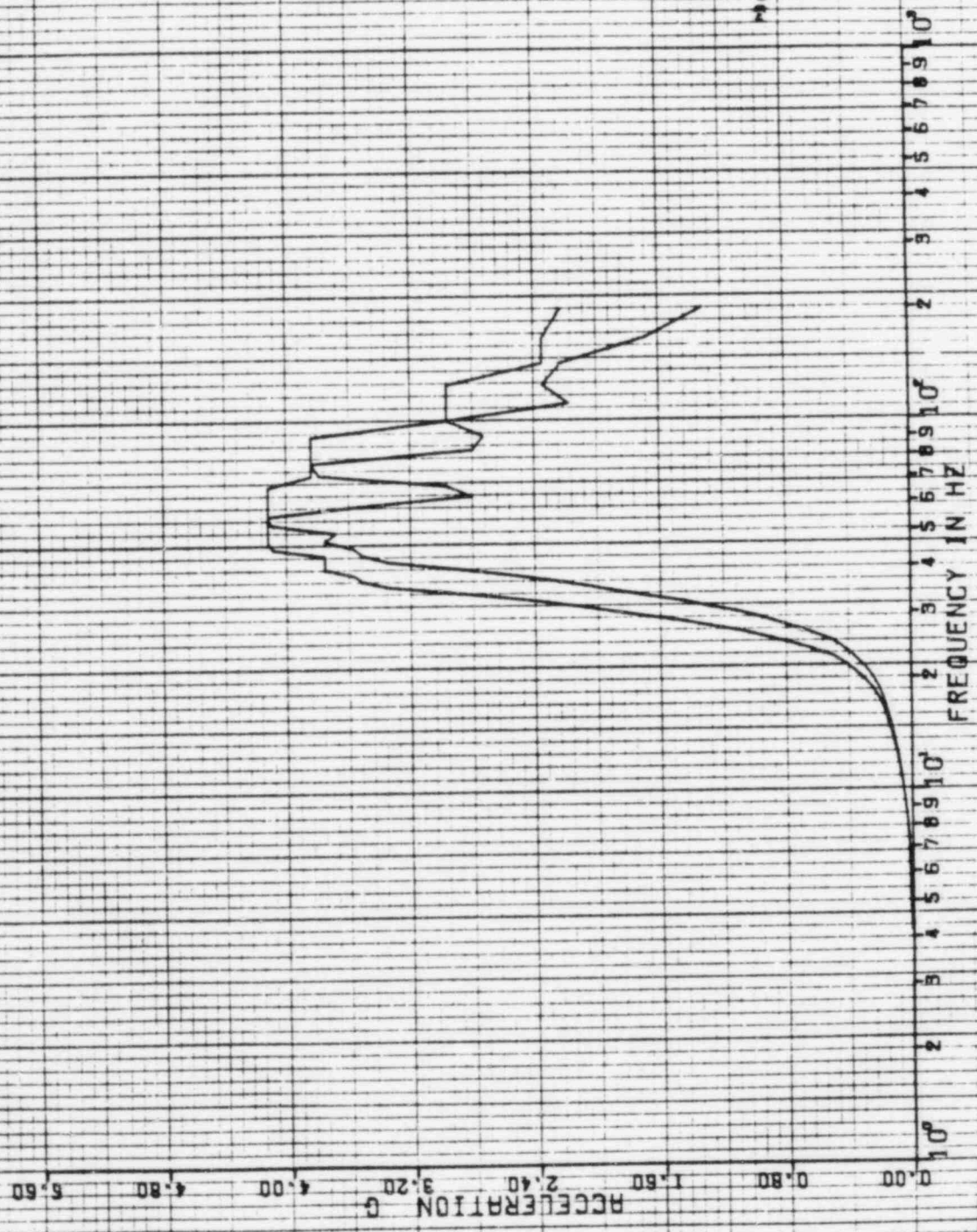
14 MAR 1969

PSPECTRA VER 01 LEV 08
 GULF STATES UTILITIES-R86 UNIT 1-CALC 12-10-NM CI-SQE-1969 REV 11
 RRS OF ACC.-REACTOR BLDG.-EL-96-000, MASS-22 SEIS MODEL-DRYWELL
 CHUDDING ENVELOPE--PK-SPRD--152
 DISK CURVE SET NO. 21

CHUDDING

DAMPING VALUE = 0.090

HDR DIRECTION



PSPECTRA VER 01 LEV 00

GULF STATES UTILITIES-RBS UNIT 1-CALC 12210-WHIC 1-50E-1905 REV 11
RBS OF ACC.-REACTOR BLOC. FL-96.000, MASS-22 SEIS MODEL-ORWELL
CHUDDING ENVELOPE--PK. SPD. .1152

DISK CURVE SET NO.21

CHUDDING

VER DIRECTION

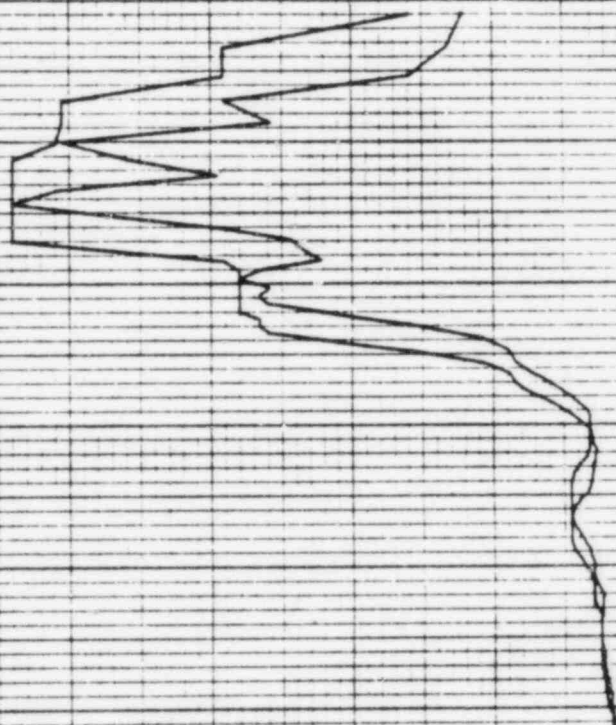
14 MAR 1985

DAMPING VALUE = 0.030

REF 157

ACCELERATION G

FREQUENCY IN HZ



PERECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-WA(C)-S0E-1903 REV(1)
RRS OF ACC.-REACTOR BLOC.-EL-114.00 MASS-25 SEIS MODEL-ORTNELL
CHUDDING ENVELOPE--PK. SPD. --152

DISK CURVE SET NO.22

CHUDDING

14 MAR 1993

HOR DIRECTION

DAMPING VALUE = 0.030

REF 158

ACCELERATION 0 0.80 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 8.80 9.60 10.40 11.20 12.00 12.80 13.60 14.40 15.20 16.00 16.80 17.60 18.40 19.20 20.00 20.80 21.60 22.40 23.20 24.00 24.80 25.60 26.40 27.20 28.00 28.80 29.60 30.40 31.20 32.00 32.80 33.60 34.40 35.20 36.00 36.80 37.60 38.40 39.20 40.00 40.80 41.60 42.40 43.20 44.00 44.80 45.60 46.40 47.20 48.00 48.80 49.60 50.40 51.20 52.00 52.80 53.60 54.40 55.20 56.00 56.80 57.60 58.40 59.20 60.00 60.80 61.60 62.40 63.20 64.00 64.80 65.60 66.40 67.20 68.00 68.80 69.60 70.40 71.20 72.00 72.80 73.60 74.40 75.20 76.00 76.80 77.60 78.40 79.20 80.00 80.80 81.60 82.40 83.20 84.00 84.80 85.60 86.40 87.20 88.00 88.80 89.60 90.40 91.20 92.00 92.80 93.60 94.40 95.20 96.00 96.80 97.60 98.40 99.20 100.00

FREQUENCY IN HZ 10 2 3 4 5 6 7 8 9 10 2 3 4 5 6 7 8 9 10



14 MAR 1983

CHUGGING

PSPECTRA VER 01 LEV 08

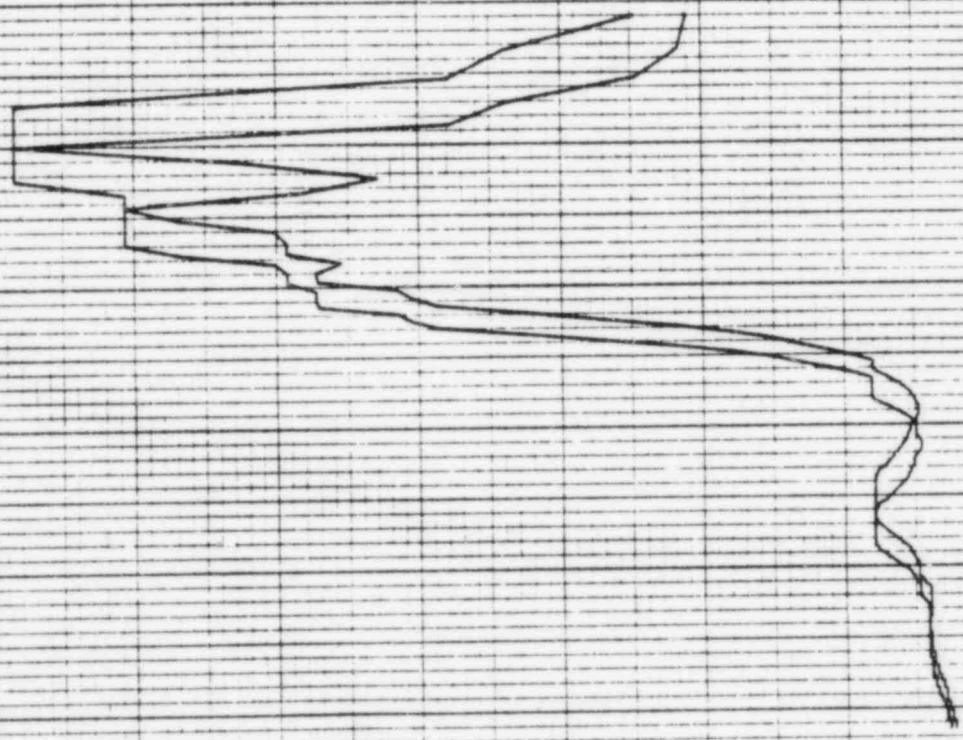
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH(C7-SQE-1903 REV11)
RBS OF ACC--REACTOR BLDG--FL-114.00 MASS-29 SEIS MODEL-DRYWELL
CHUGGING ENVELOPE--PK--SPND--152

DISK CURVE SET NO.22

VER DIRECTION

DAMPING VALUE = 0.030

ACCELERATION G

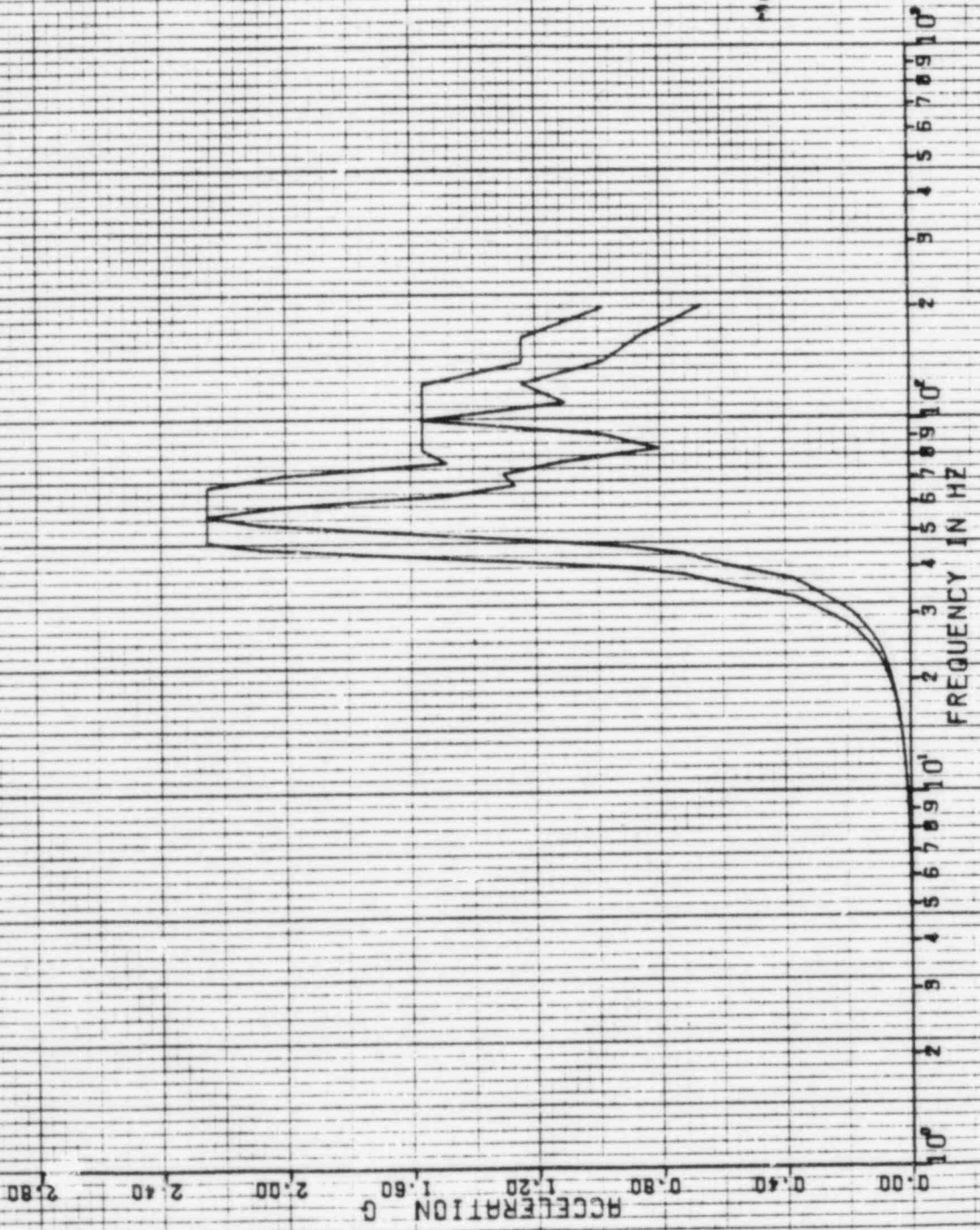


FREQUENCY IN HZ

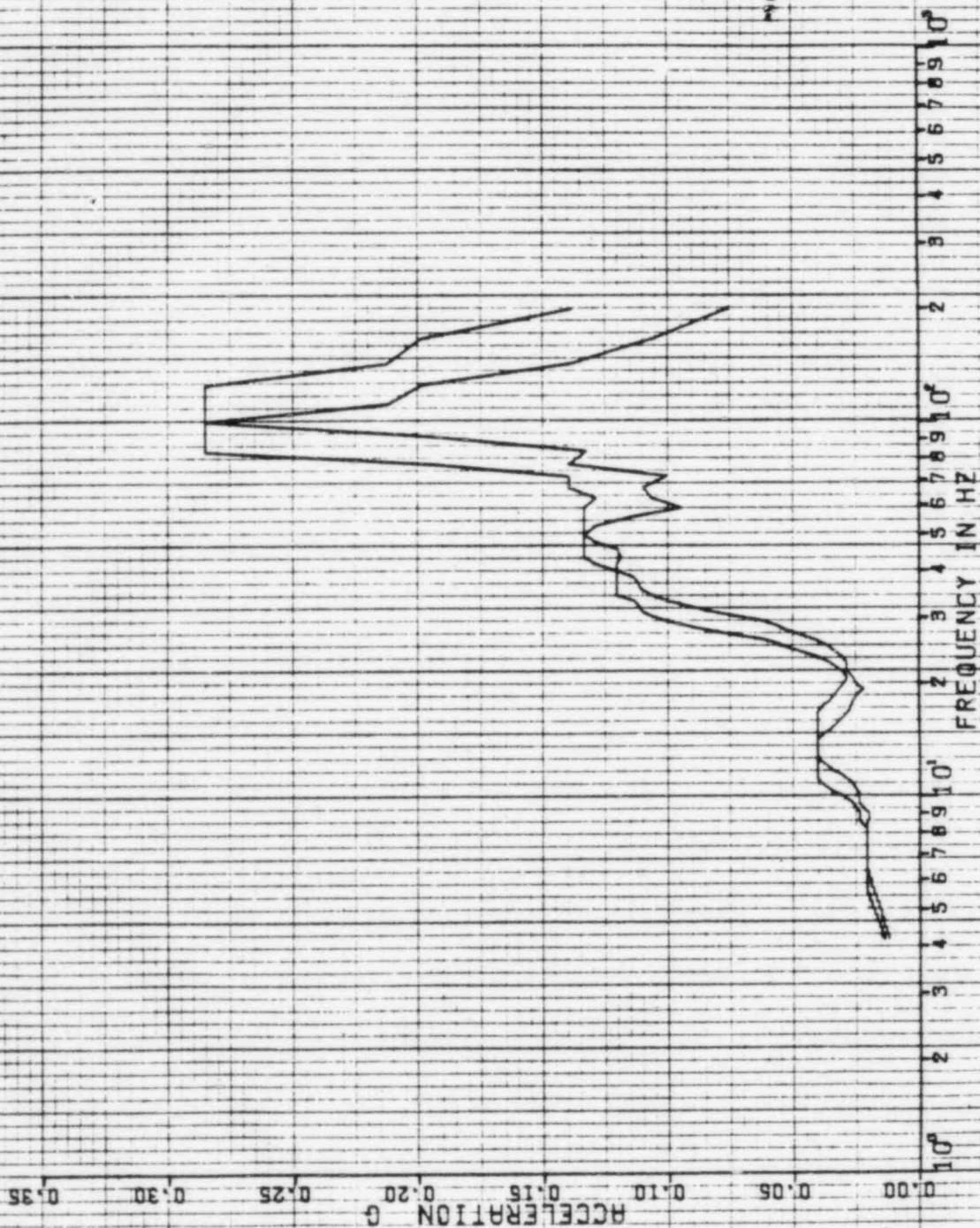
1574 A

14 MAR 1963

PSPECTRA VER 01 LEY 08
 GULF STATES UTILITIES-RBS UNIT 1-CALC 12210-NR(C)-602-1903 REV(1)
 RKS OF ACC.-REALTOR BLDG., EL=133.00, MASS=24 SEIS MODEL-DRYWELL
 CHUDDING ENVELOPE--PK. SPED. --152
 DISK CURVE SET NO. 23
 CHUDDING
 HOR DIRECTION
 DAMPING VALUE = 0.050



12 MAR 1963
CHUOING
VER DIRECTION
DAMPING VALUE = 0.030
PSECTRA VER 01 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NR(C1)-SBE-1963 REV(1)
RRS OF ACC-REACTOR BLDG.-EL-193.00 MASS-24 SEIS MODEL-DRYWELL
CHUOING ENVELOPE--PKL SPRD. --152
DISK CURVE SET NO.23



14 MAR 1983

CHUDDING

CHUDDING

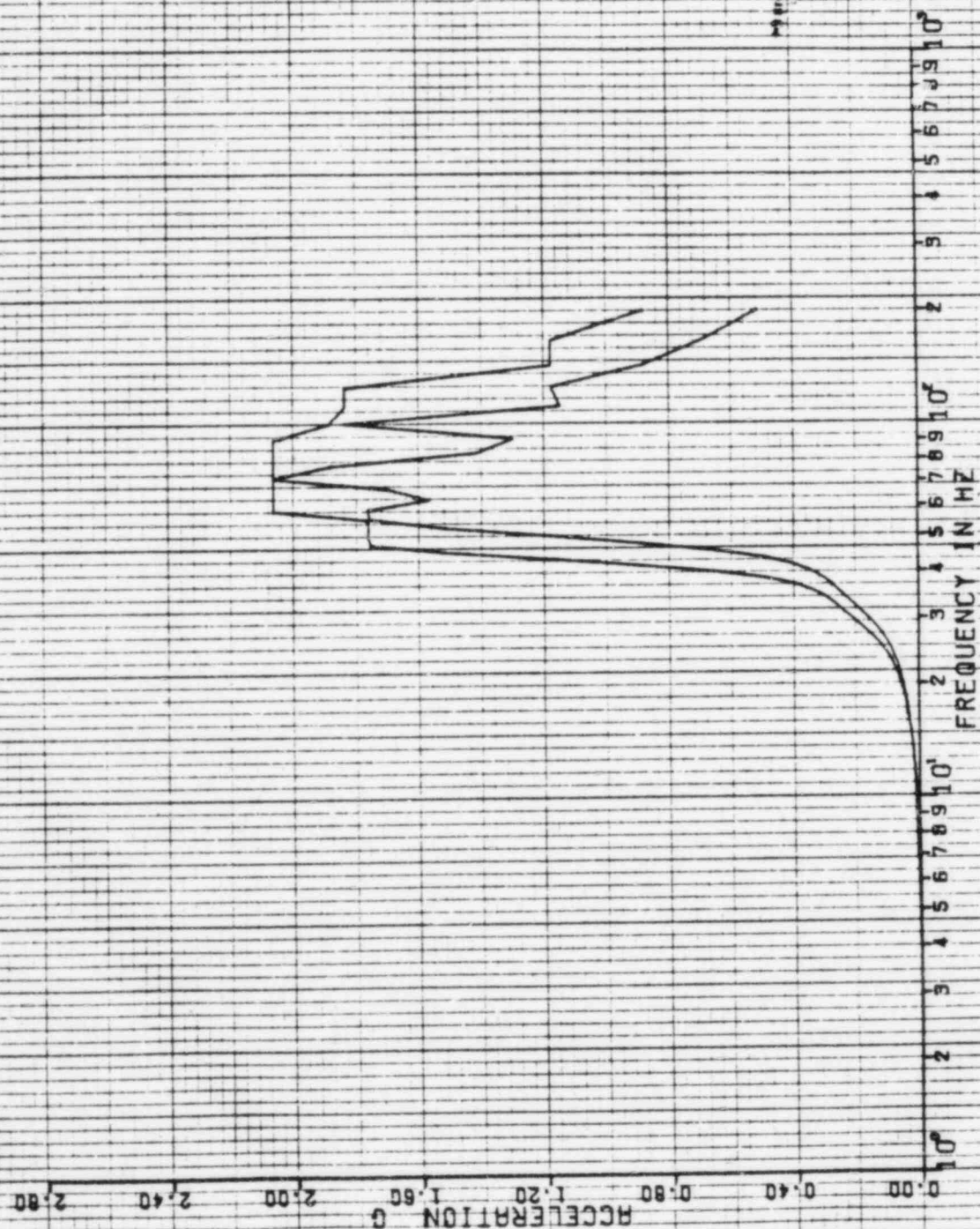
SPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NA/CJ-50E-1983 REV(1)
RBS OF ACC.-REACTOR BLDG., EL-143.00, MASS-25 SEIS MODEL-DRYWELL
CHUDDING ENVELOPE--PK. SPD. --15Z

DISK CURVE SET NO.24

HDR DIRECTION

DAMPING VALUE = 0.050



154A

14 MAR 1963

CHUDDING

PSPECTRA VER 01 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALC12210-WA(CI)-S&E-1903 REV(1)
RBS OF ACC.-REACTOR BLDG. FL.-43.00 MASS=25 S&E MODEL-ORWELL
CHUDDING ENVELOPE--PK. SPD. --152

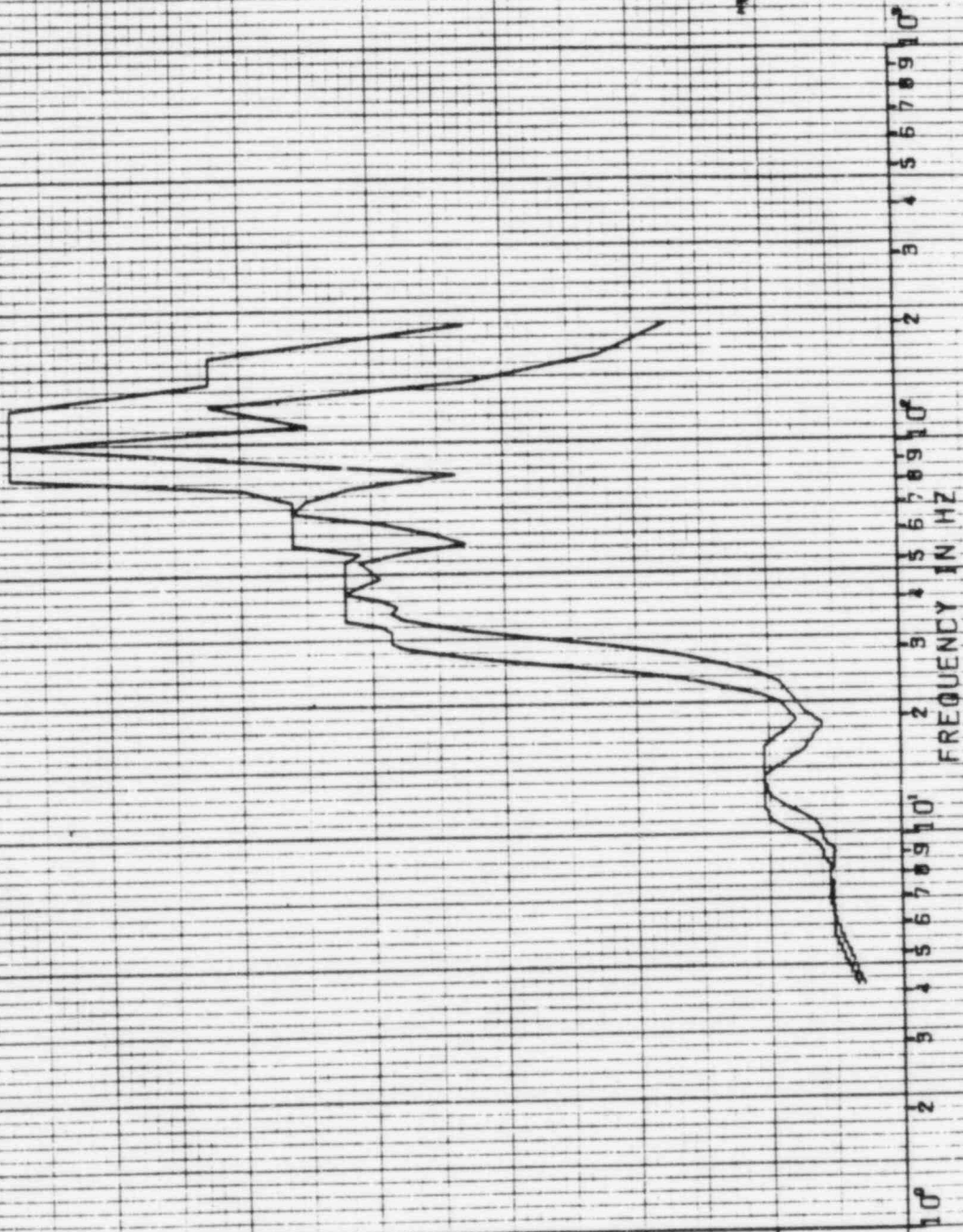
DISK CURVE SET NO.21

VER DIRECTION

DAMPING VALUE = 0.090

ACCELERATION

0.28 0.24 0.20 0.16 0.12 0.08 0.04 0.00



REF 160

PSPECTRA VER 01 LEV 08

CULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH C1-60E-1903 REV111
RRS OF ACC.-REACTOR BLDG.-EL-162.00, MASS-26 SEIS MODEL-GRYNELL
CHUDDING ENVELOPE-1PK-SPRD-152

DISK CURVE SET NO. 25

CHUDDING

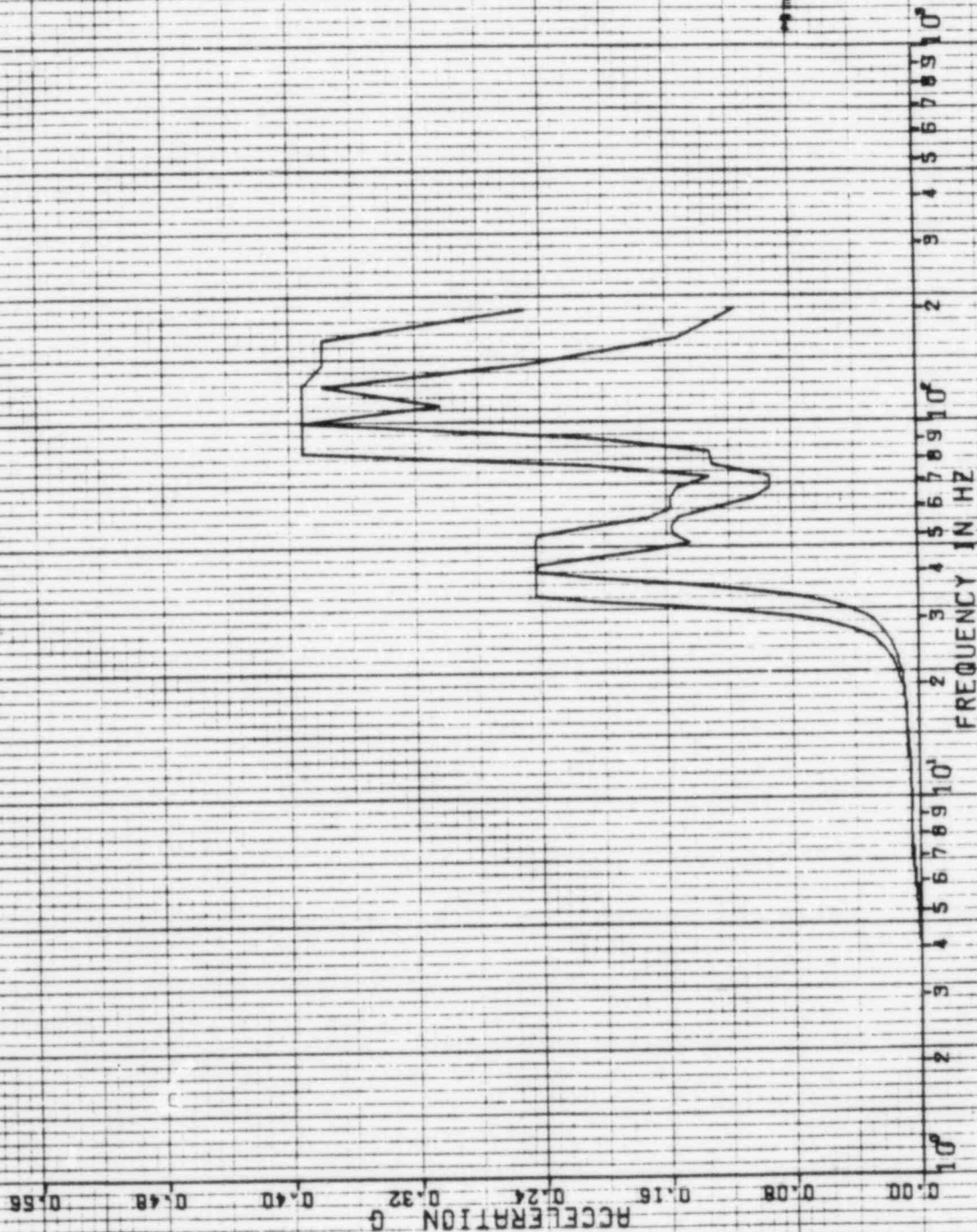
HOR DIRECTION

DAMPING VALUE = 0.050

14 MAR 1983

523A

REF 161



1574

14 MAR 1963

CHUCCINO

PSPECTRA VER 01 LEV 08

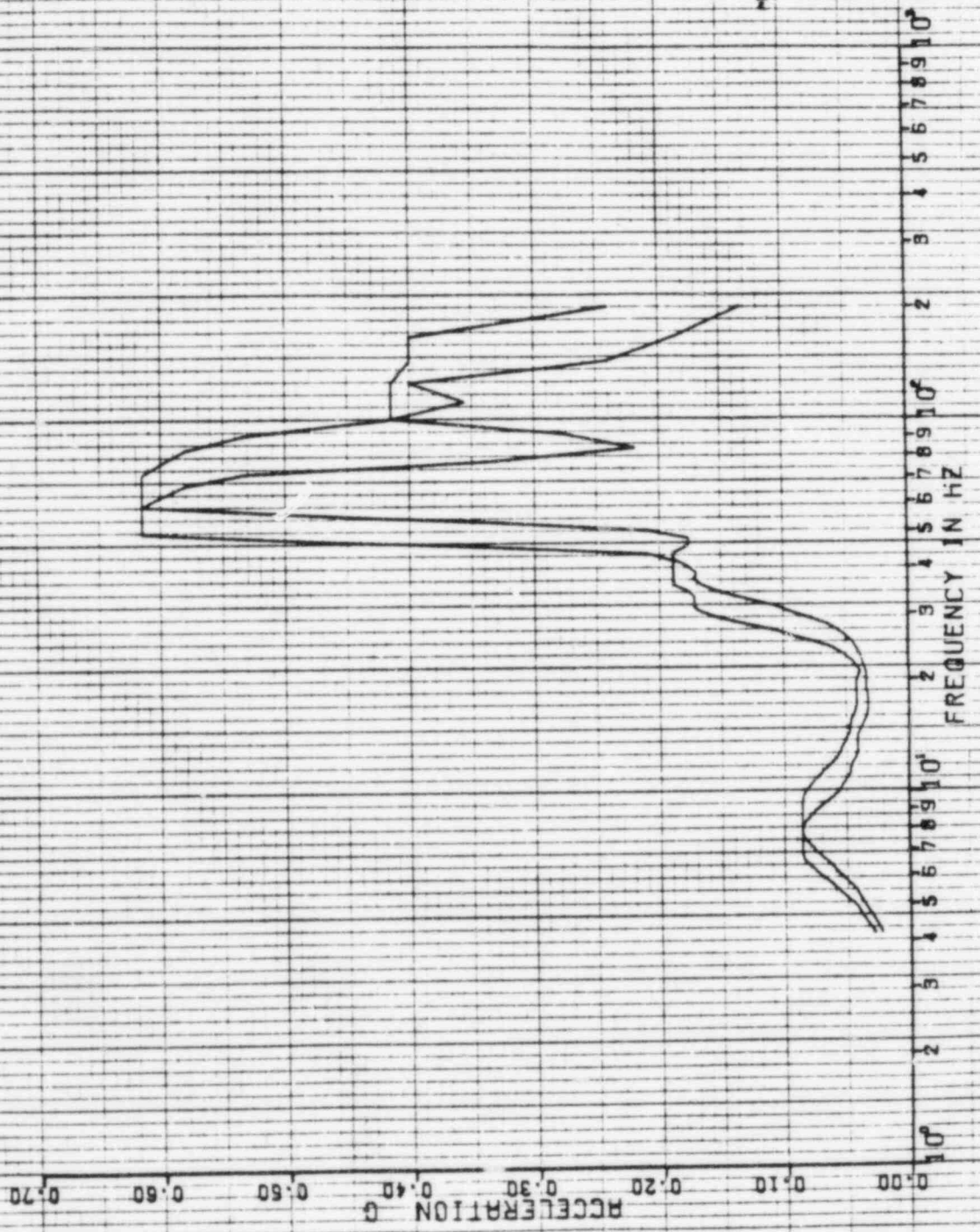
GULF STATES UTILITIES-RBS UNIT 1-CALC12210-AM(CI)-S0E-1963 REV11)
RBS OF ACC.-REACTOR BLOC.-EL-162.00 MASS-26 SETS MODEL-DRYWELL
CHUCCINO ENVELOPE--PK. SPAD. --152

DISK CURVE SET NO.25

VER DIRECTION

DAMPING VALUE = 0.030

REF 161



PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC 122.0-WH C1-50E-1903 REV(1)
RRS OF ACC.-REACTOR BLDG. EL-105.00, MASS-27 SETS MODEL-DRYWELL
CHUDDING ENVELOPE--PK--SPRO. --152

DISK CURVE SET NO.26

CHUDDING

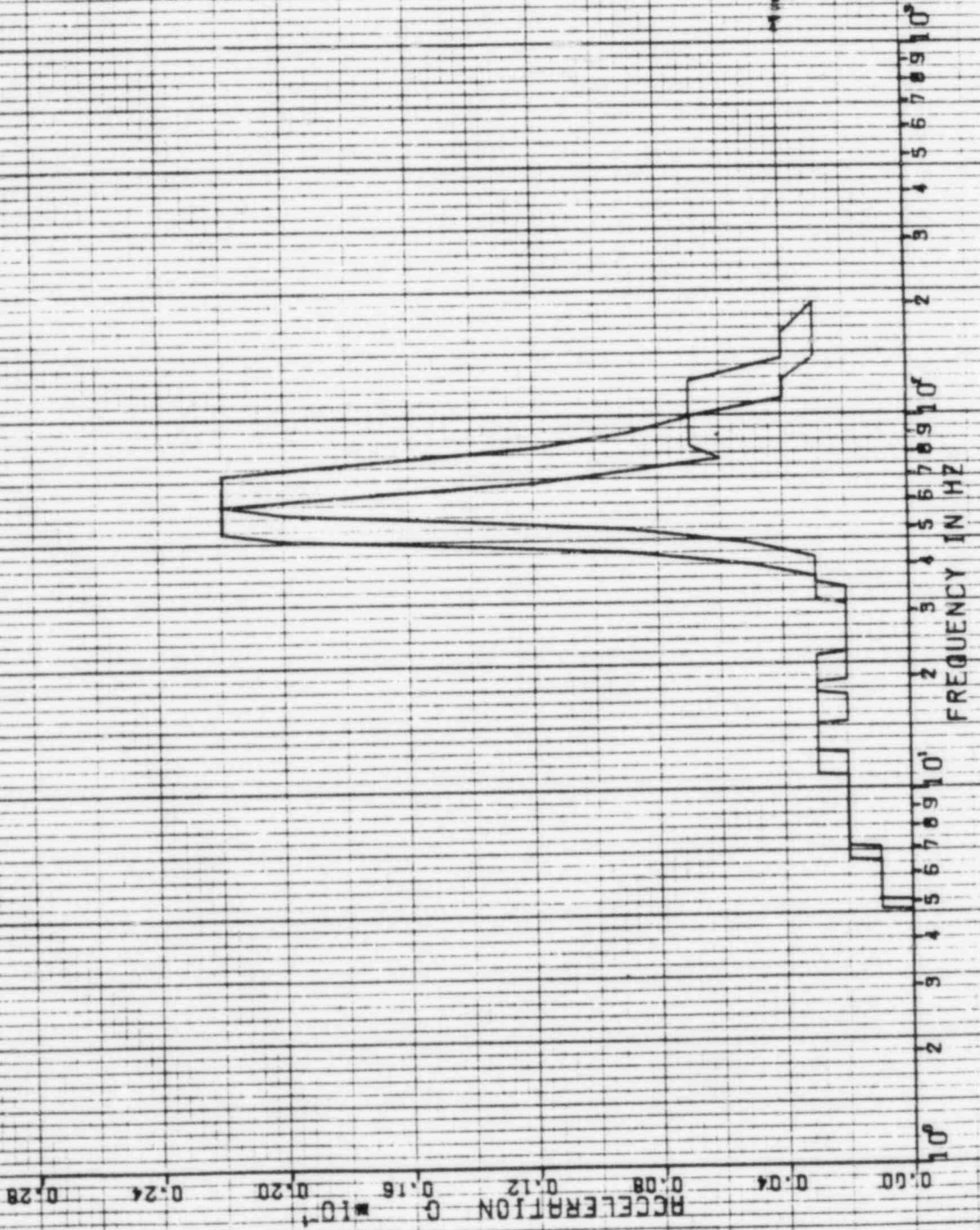
HOR DIRECTION

DAMPING VALUE = 0.030

14 MAR 1983

12.1

REF 162



14 MAR 1963

CHUDDING

PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC 12210-WH(C)-50E-1903 REV 11
RBS OF ACC.-REACTOR BLOC.-EL-105-001 MASS-27 SETS MODEL-DRYWELL
CHUDDING ENVELOPE-LPK. SPRD. --15X

DAMPING VALUE = 0.030

VER DIRECTION

DISK CURVE SET NO-26

REF 162

ACCELERATION G

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

5

6

7

8

9

10⁰

2

3

4

K26 A

14 MAR 1985

CHUDDING

PSPECTRA VER D1 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALC1221D-NH(C)-SDE-1905 REV113
 RRS OF REC.-REACTOR BLDG.-EL-119.45.MASS-29 SE16 MODEL-RPV
 CHUDDING ENVELOPE-PK-SPD-152

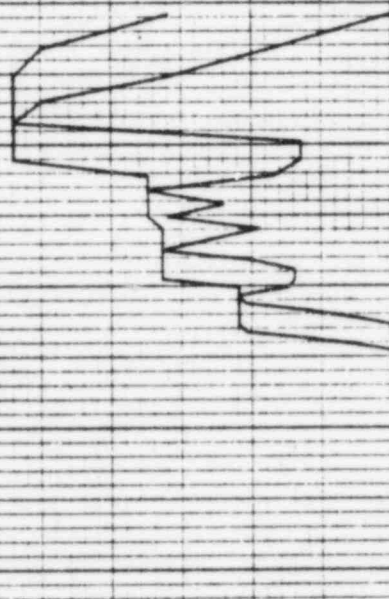
HOR DIRECTION

DISK CURVE SET NO.28

DAMPING VALUE = 0.030

ACCELERATION 0 0.02 0.04 0.06 0.08 0.10 0.12 0.14

10
 2 3 4 5 6 7 8 9 10
 FREQUENCY IN HZ



REF 163

1547A

14 MAR 1985

CHUDDING

PSPECTRA VER DI LEV DB

DULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM17-SQE-1905 REV(1)
RMS OF ACC.-REACTOR BLDG., EL=119.46, MASS=29 SETS MODEL-RPV
CHUDDING ENVELOPE--PK. SPRD. 4-15Z

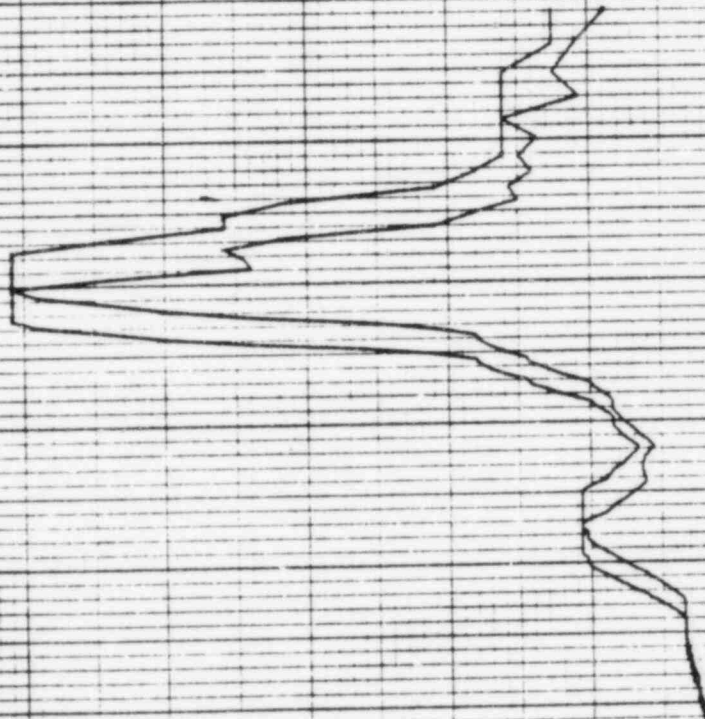
VER DIRECTION

DISK CURVE SET NO.28

DAMPING VALUE = 0.050

ACCELERATION G
0.00 0.08 0.16 0.24 0.32 0.40 0.48 0.56

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10²
FREQUENCY IN HZ



PSPECTRA VER 01 LEV DB

GULF STATES UTILITIES-RB6 UNIT 1-CALC12210-MH(C1-50E-1909 REV11)
RRS OF ACC.-REACTOR BLDG., EL-162.57, MASS=30 SEIS MODEL-RPV
CHUDDING ENVELOPE-PK. SPRD. 5-15Z

CHUDDING

14 MAR 1985

1128A

DISK CURVE SET NO.29

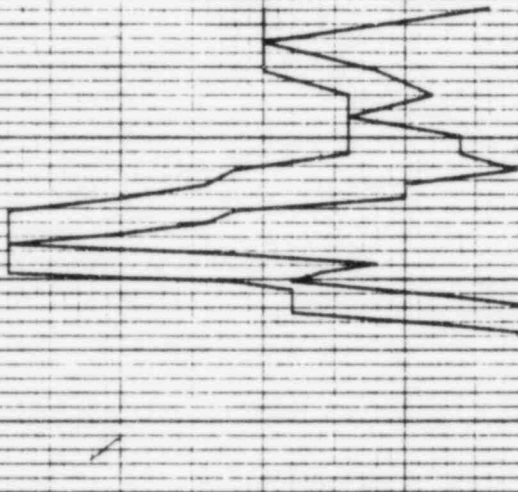
HOR DIRECTION

DAMPING VALUE = 0.050

ACCELERATION $\times 10^{-1}$

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³
FREQUENCY IN HZ

REF 164



REF 164

10724 A

14 MAR 1989

CHUDDING

PSPECIRA VER 01, LEV 08

GULF STATES UTILITIES-RBS UNIT 1-CALC12210-NH1C1-50E-1903 REV11)
 TR5 OF ACC.-REACTOR BLDG.-EL-152.57, MASS=50 SEIS MODEL-RPV
 CHUDDING ENVELOPE--PK. SPRD. +-15Z

VER DIRECTION

DISK CURVE SET NO.29

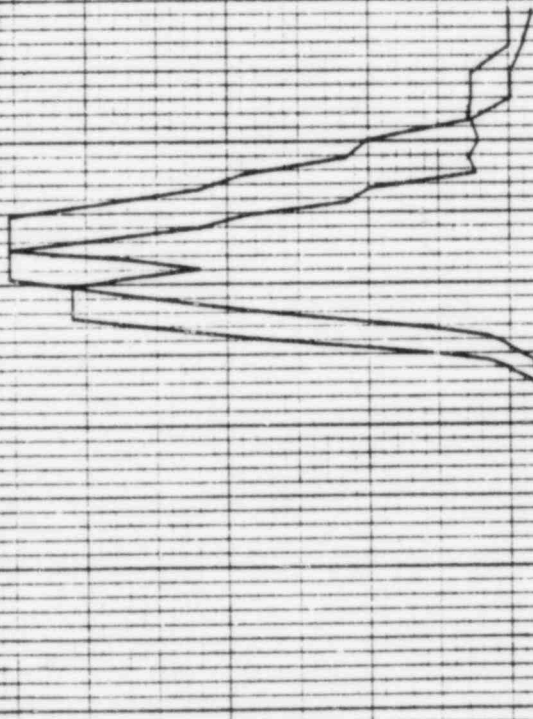
DAMPING VALUE = 0.090

ACCELERATION G

1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10²

FREQUENCY IN HZ



PSPECTRA VER 01 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALCIP210-NM(C)-SDE-1903 REV111
RRS OF ACC.-REACTOR BLDG.-EL-117.63, MASS-51+52 SE16 MODEL-RPV1INT1
CHUDDING ENVELOPE--PK. SPRD.-.15%

DISK CURVE SET NO.90

HOR DIRECTION

DAMPING VALUE = 0.050

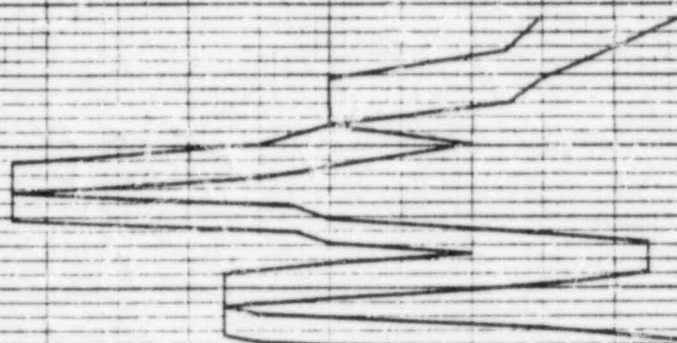
14 MAR 1985

CHUDDING

REF 165

ACCELERATION $\times 10^{-1}$
0.00 0.04 0.08 0.12 0.16 0.20 0.24 0.28

FREQUENCY IN HZ
10² 2 3 4 5 6 7 8 9 10³



14 MAR 1965

CHUGGING

PSPECTRA VER 01 LEV DB

GULF STATES UTILITIES-RBS UNIT 1-CALCIP210-NMICJ-6DE-1903 REV117
RRS OF ACC.-REACTOR BLDG.-EL-117-63.MR66-91-92 5E16 MODEL-RPVINTD
CHUGGING ENVELOPE--PK. 5PRD..9.15Z

DISK CURVE SET NO.90

VER DIRECTION

DAMPING VALUE = 0.050

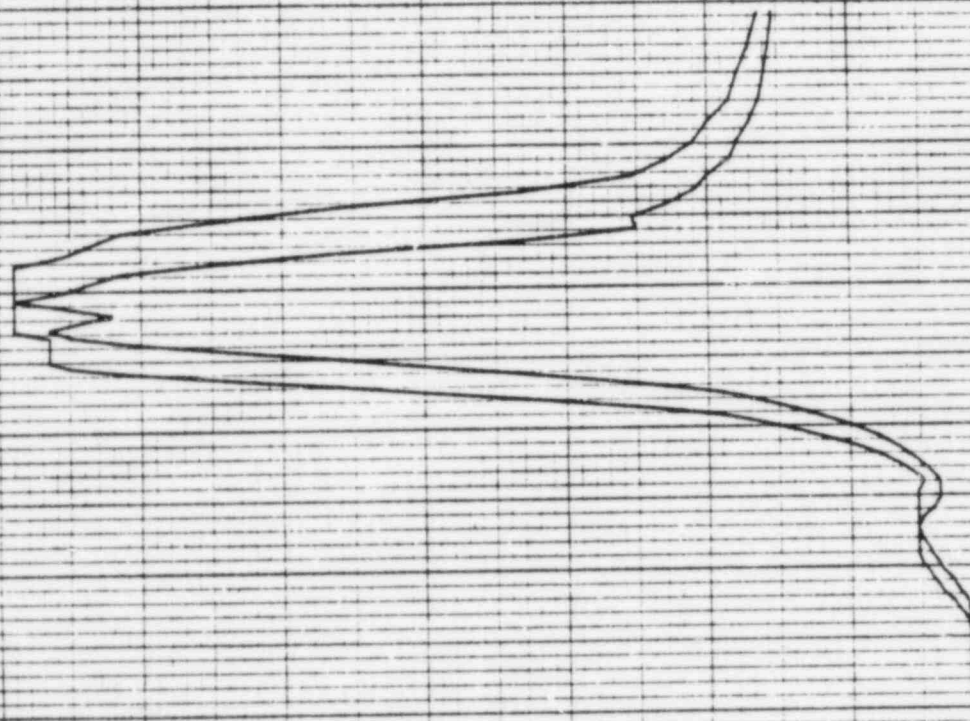
ACCELERATION

1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 3 4 5 6 7 8 9 10³

FREQUENCY IN HZ

REF 165



14 MAR 1985

PSPECTRA VER D1 LEV 08
GULF STATES UTILITIES-RBS UNIT 1-CALC1221D-WMICJ-SOE-1903 REV111
RBS OF ACC.-REACTOR BLDG.-EL=153.03, MASS=33 SE16 MODEL-RPV
CHUDDING ENVELOPE--PK. SPAD. --152
DISK CURVE SET WD.91

CHUDDING

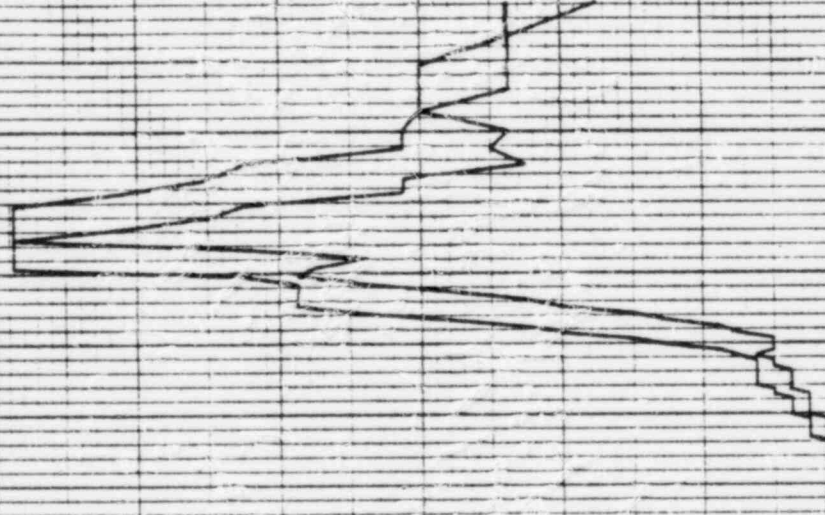
DAMPING VALUE = 0.050

HDR DIRECTION

REF 166

ACCELERATION $\times 10^{-1}$
0.00 0.08 0.16 0.24 0.32 0.40 0.48 0.56

FREQUENCY IN HZ
10⁰ 2 3 4 5 6 7 8 9 10¹



PSPECTRA VER 01 LEV 08

DULF STATES UTILITIES-RBS UNIT 1-CALC12210-NM1C1-SDE-1903 REV113
RBS OF ACC.-REACTOR BLDG.-EL-198.09, MASS-93 SE16 MODEL-RPV
CHUGGING ENVELOPE--PK. 5PRO. 3-15Z

DISK CURVE SET NO. 91

CHUGGING

VER DIRECTION

DAMPING VALUE = 0.030

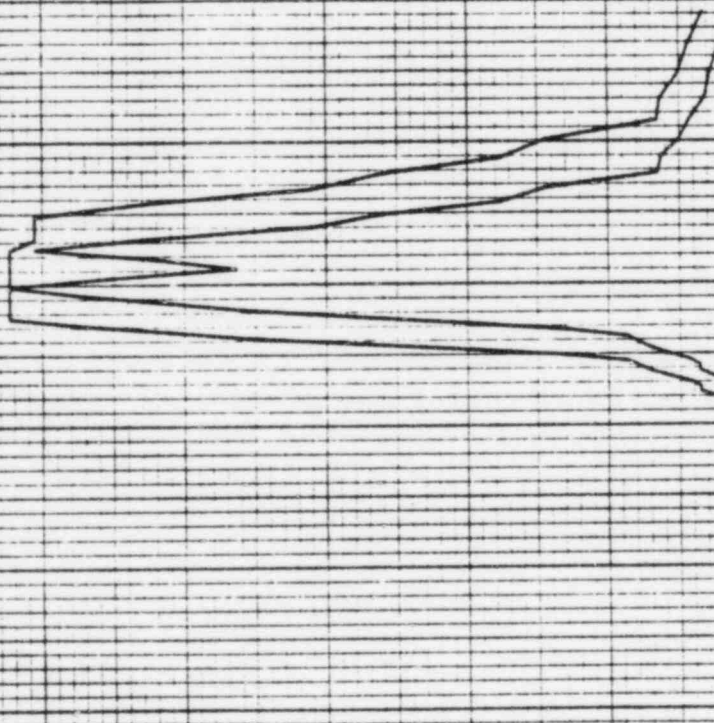
14 MAR 1985

1535A

REF 166

ACCELERATION 0 0.10 0.20 0.30 0.40 0.50 0.60 0.70

10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³
FREQUENCY IN HZ



14 MAR 1985

153A

PSPECTRA VER DN LEV DB
DULF STAVES UTILITIES-RBS UNIT 1-CALCIP210-NMICJ-SDE-1803 REV113
RRS OF ACC.-REACTOR BLDG.-EL=91.250, WEIR WALL
CHUGGING ENVELOPE--PK. SPAD. 4-152

D15K CURVE SET NO. 93

DRAPING VALUE = 0.090

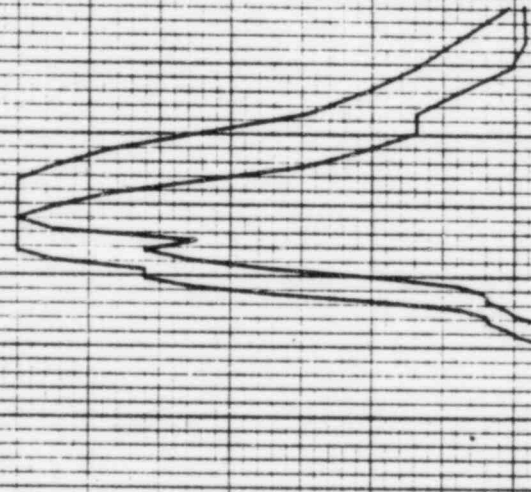
HDR DIRECTION

172

REF 167

ACCELERATION G
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00

FREQUENCY IN HZ
10⁰
2
3
4
5
6
7
8
9
10¹



PSPECTRA VER 01 LEV 08

GULF STATES UTILITIES-R85 UNIT 1-CALC12210-NM C1-SDE-1903 REV:1)
R85 OF ACC-REACTOR BLDG., EL-91.250, WEIR WALL
CHUDDING ENVELOPE--PK. 5PRD. 1-15Z

DISK CURVE SET NO.93

CHUDDING

14 MAR 1985

1727 R

VER DIRECTION

DAMPING VALUE = 0.090

REF 167

ACCELERATION 0 0.80 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 8.80 9.60 10.40 11.20 12.00 12.80 13.60 14.40 15.20 16.00 16.80 17.60 18.40 19.20 20.00 20.80 21.60 22.40 23.20 24.00 24.80 25.60 26.40 27.20 28.00 28.80 29.60 30.40 31.20 32.00 32.80 33.60 34.40 35.20 36.00 36.80 37.60 38.40 39.20 40.00 40.80 41.60 42.40 43.20 44.00 44.80 45.60 46.40 47.20 48.00 48.80 49.60 50.40 51.20 52.00 52.80 53.60 54.40 55.20 56.00 56.80 57.60 58.40 59.20 60.00 60.80 61.60 62.40 63.20 64.00 64.80 65.60 66.40 67.20 68.00 68.80 69.60 70.40 71.20 72.00 72.80 73.60 74.40 75.20 76.00 76.80 77.60 78.40 79.20 80.00 80.80 81.60 82.40 83.20 84.00 84.80 85.60 86.40 87.20 88.00 88.80 89.60 90.40 91.20 92.00 92.80 93.60 94.40 95.20 96.00 96.80 97.60 98.40 99.20 100.00

FREQUENCY IN HZ
10⁰ 2 3 4 5 6 7 8 9 10¹ 2 3 4 5 6 7 8 9 10² 2 3 4 5 6 7 8 9 10³

