116
4/7

CYGNA	1/2
JOB NO :	84042
DATE LOGGED:	6/7/84
LOG NO. :	#116 (4/7)
FILE:	11.1 Tech. Files
CROSS REF. FILE	11.1 Tech. Files Log

FFB-3R

REFINED RESPONSE SPECTRA FOR

FUEL BUILDING

COMANCHE PEAK STEAM ELECTRIC STATION NUCLEAR POWER PLANT

GIBBS & HILL

DECEMBER '82

CPSES

REFINED RESPONSE SPECTRA FOR FUEL BUILDING

Presented herewith are the refined floor response spectra for the Fuel Building (references 2 and 3) based on existing response spectra (reference 1) and developed primarily for as-built piping analysis. These response spectra have been refined based upon improved curve smoothing techniques by use of computer, instead of by hand. Therefore, undue hand smoothing and digitizing have been eliminated. Also, improved interpolation has been used at lumped masses based on time history responses. The results are plotted in terms of accelerations versus frequencies for ease of use.

The results are presented in figures 433-B through 444-B and 409-B through 420-B which are summarized in Table nos.2 and 3. Also the digitized values of the same spectra are included at the end of the book.

Each figure refers to a specific floor of the building, and contains three curves labeled Ax, Ay and Az, which represent the spectral accelerations in the x, y and z orthogonal directions respectively due to the combined effect of three simultaneous earthquakes at the specified % damping. Please note that Ax and Az are in the east-west and the north-south directions respectively while Ay is in the vertical direction based upon the plant's general coordinate system.

All spectra presented in this report include the coupling effects of non-symmetric structure. The curves shown are for the most critical location of the floor, considering the combined effect of translation and rotation.

References:

1. "Instructure Response Spectra for Fuel Building," Gibbs & Hill report no. FFB-2R, October 1976.

2. "TUSI - Refined Response Spectra for Fuel Building," calculation book no. FFB-1C, Rev. 0

3. "TUSI - Computer Output for Fuel Building," computer output file no. FMI-1P Set 5, Rev. 0.

NOTE : ORIGIN OF COORDINATES IS AT ELEVATION 0'-0"

PLAN AT ELEV. 838'-9"

TUSI

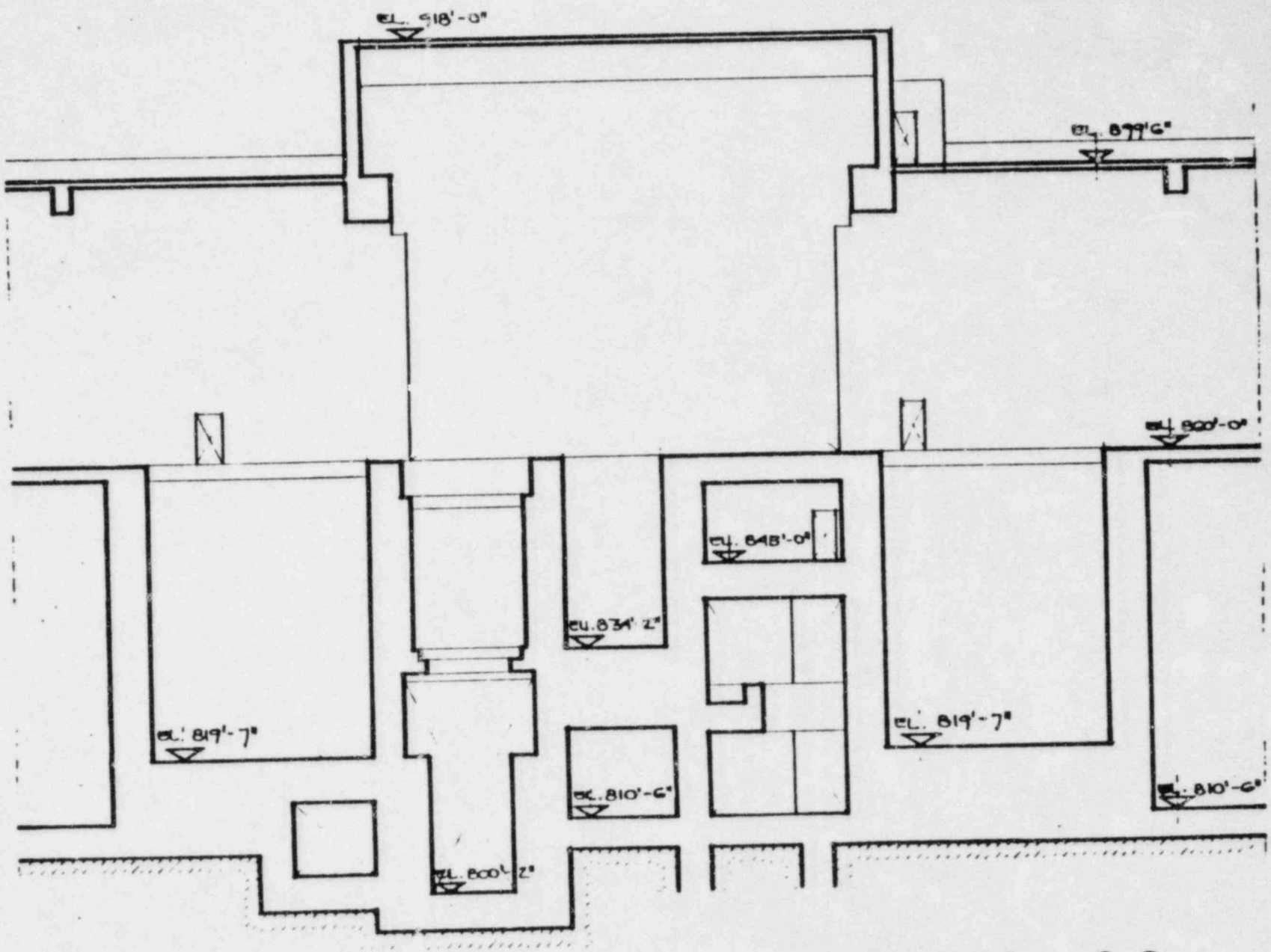
FUEL BUILDING

Gibbs & Hill Inc.

SCALE - 1/20" = 1'

SKETCH 1

JOB NO 2323-2



SECTION 2-2

TUSI
FUEL BUILDING

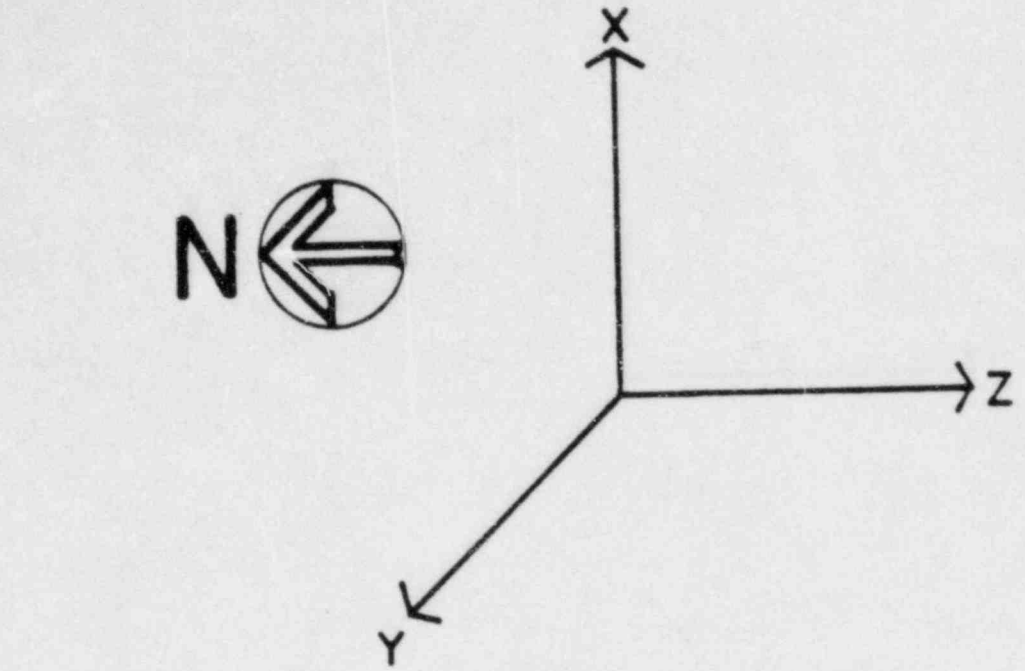
Gibbs & Hill Inc.

JOB NO. 7323-A

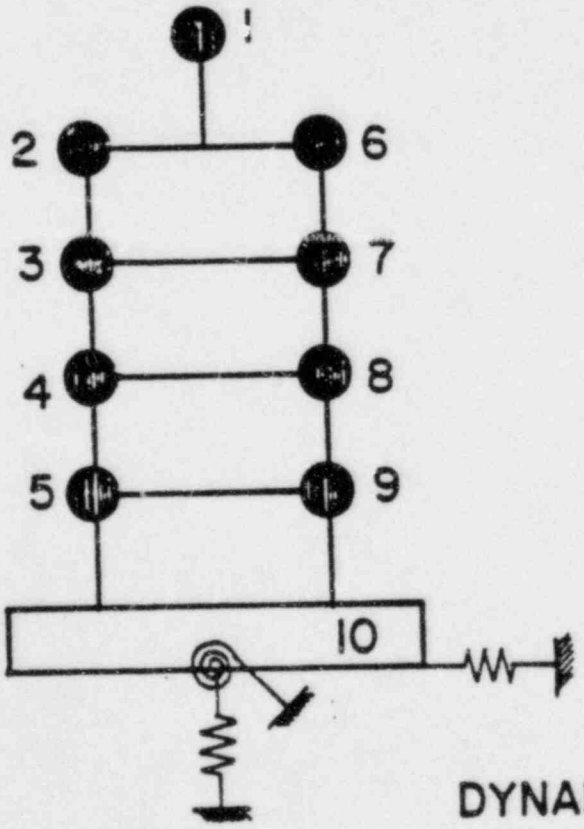
SCALE: 1/20" = 1'

SKETCH 2

3



COORDINATE SYSTEM



DYNAMIC MODEL

TUSI
FUEL BUILDING

Gibbs & Hill Inc.

SCALE -

SKETCH 3

JOB NO. 7525-1

NODAL COORDINATES

MASS POINT	X (FT)	Y (FT)	Z (FT)
1	68.33	916.17	0.00
2	68.21	894.27	-46.68
3	54.86	859.10	-41.12
4	55.91	840.06	-41.15
5	54.24	824.69	-40.52
6	65.72	891.67	48.60
7	60.53	859.37	41.54
8	52.83	840.41	38.59
9	52.07	824.65	40.55
10	51.09	812.53	6.47

TUSI
FUEL BUILDING

Gibbs & Hill Inc.
ENGINEERS, ARCHITECTS, CONSTRUCTORS
NEW YORK

JOB NO. 2323-A

SCALE -

TABLE 1

APPROVALS

ISSUED FOR

SUMMARY OF REFINED FLOOR RESPONSE SPECTRA

FIGURE NO.	FLOOR ELEVATION	DAMPING %	EARTHQUAKE	TYPE OF MOTION
433-B	918.00 FT.	1	1/2 SSE	TRANSL. & ROT.
434-B	899.50 FT.	1	1/2 SSE	TRANSL. & ROT.
435-B	860.00 FT.	1	1/2 SSE	TRANSL. & ROT.
436-B	841.00 FT.	1	1/2 SSE	TRANSL. & ROT.
437-B	825.00 FT.	1	1/2 SSE	TRANSL. & ROT.
438-B	810.50 FT.	1	1/2 SSE	TRANSL. & ROT.
439-B	918.00 FT.	2	1/2 SSE	TRANSL. & ROT.
440-B	899.50 FT.	2	1/2 SSE	TRANSL. & ROT.
441-B	860.00 FT.	2	1/2 SSE	TRANSL. & ROT.
442-B	841.00 FT.	2	1/2 SSE	TRANSL. & ROT.
443-B	825.00 FT.	2	1/2 SSE	TRANSL. & ROT.
444-B	810.50 FT.	2	1/2 SSE	TRANSL. & ROT.

TUSI

FUEL BUILDING

TABLE 2

SUMMARY OF REFINED FLOOR RESPONSE SPECTRA

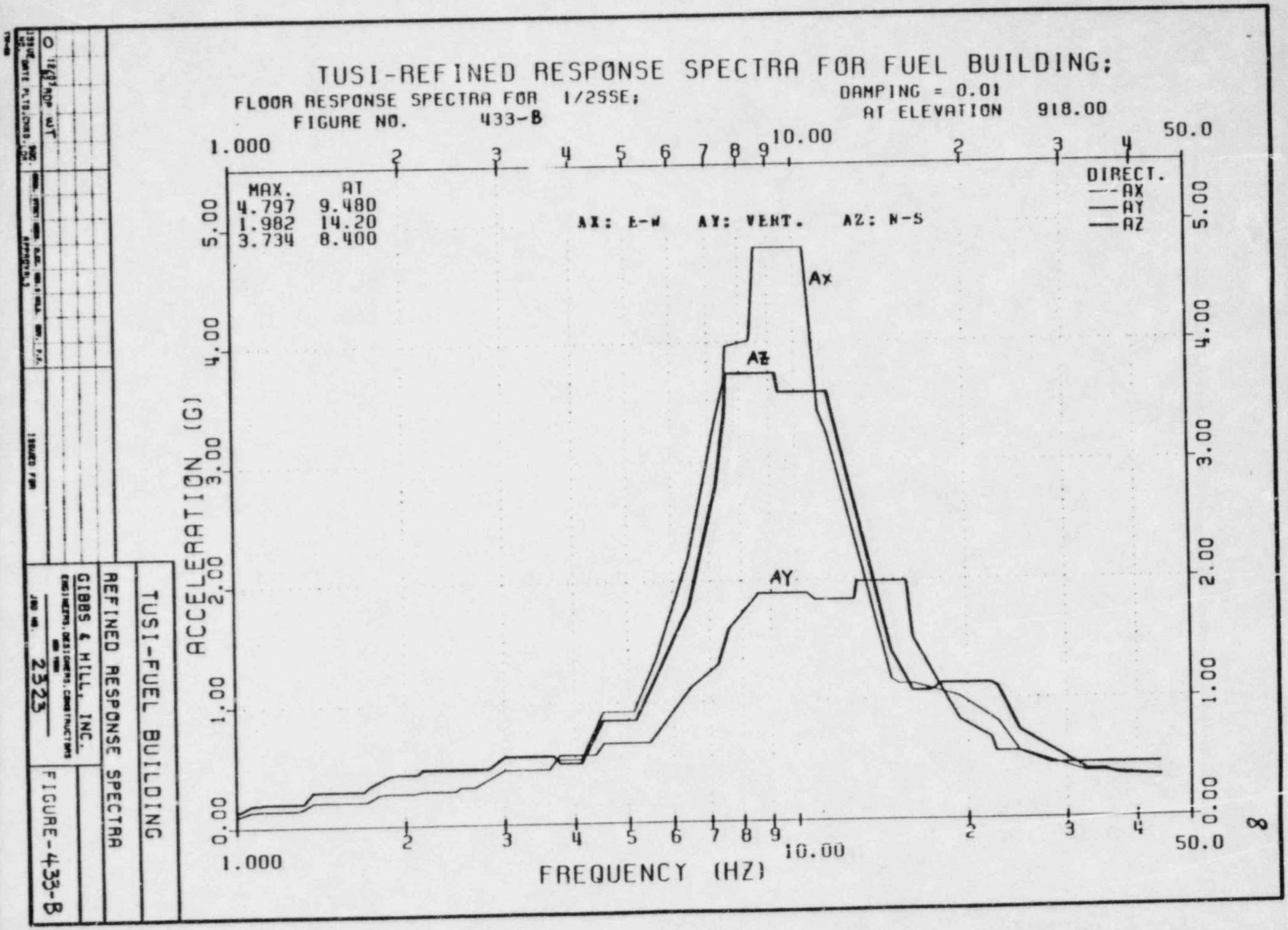
FIGURE NO.	FLOOR ELEVATION	DAMPING %	EARTHQUAKE	TYPE OF MOTION
409-B	918.00 FT.	2	SSE	TRANSL. & ROT.
410-B	899.50 FT.	2	SSE	TRANSL. & ROT.
411-B	860.00 FT.	2	SSE	TRANSL. & ROT.
412-B	841.00 FT.	2	SSE	TRANSL. & ROT.
413-B	825.00 FT.	2	SSE	TRANSL. & ROT.
414-B	810.50 FT.	2	SSE	TRANSL. & ROT.
415-B	918.00 FT.	3	SSE	TRANSL. & ROT.
416-B	899.50 FT.	3	SSE	TRANSL. & ROT.
417-B	860.00 FT.	3	SSE	TRANSL. & ROT.
418-B	841.00 FT.	3	SSE	TRANSL. & ROT.
419-B	825.00 FT.	3	SSE	TRANSL. & ROT.
420-B	810.50 FT.	3	SSE	TRANSL. & ROT.

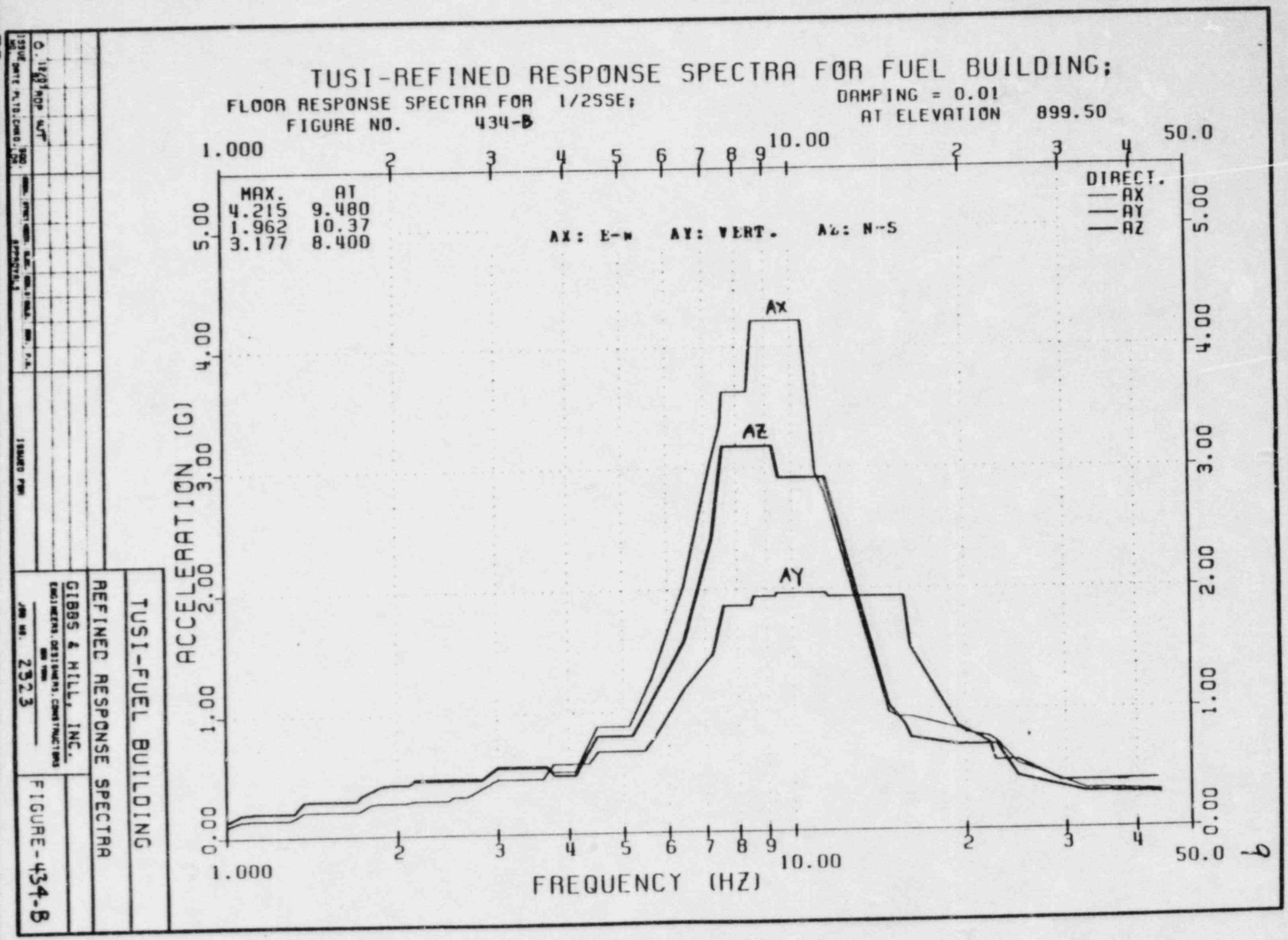
TUSI

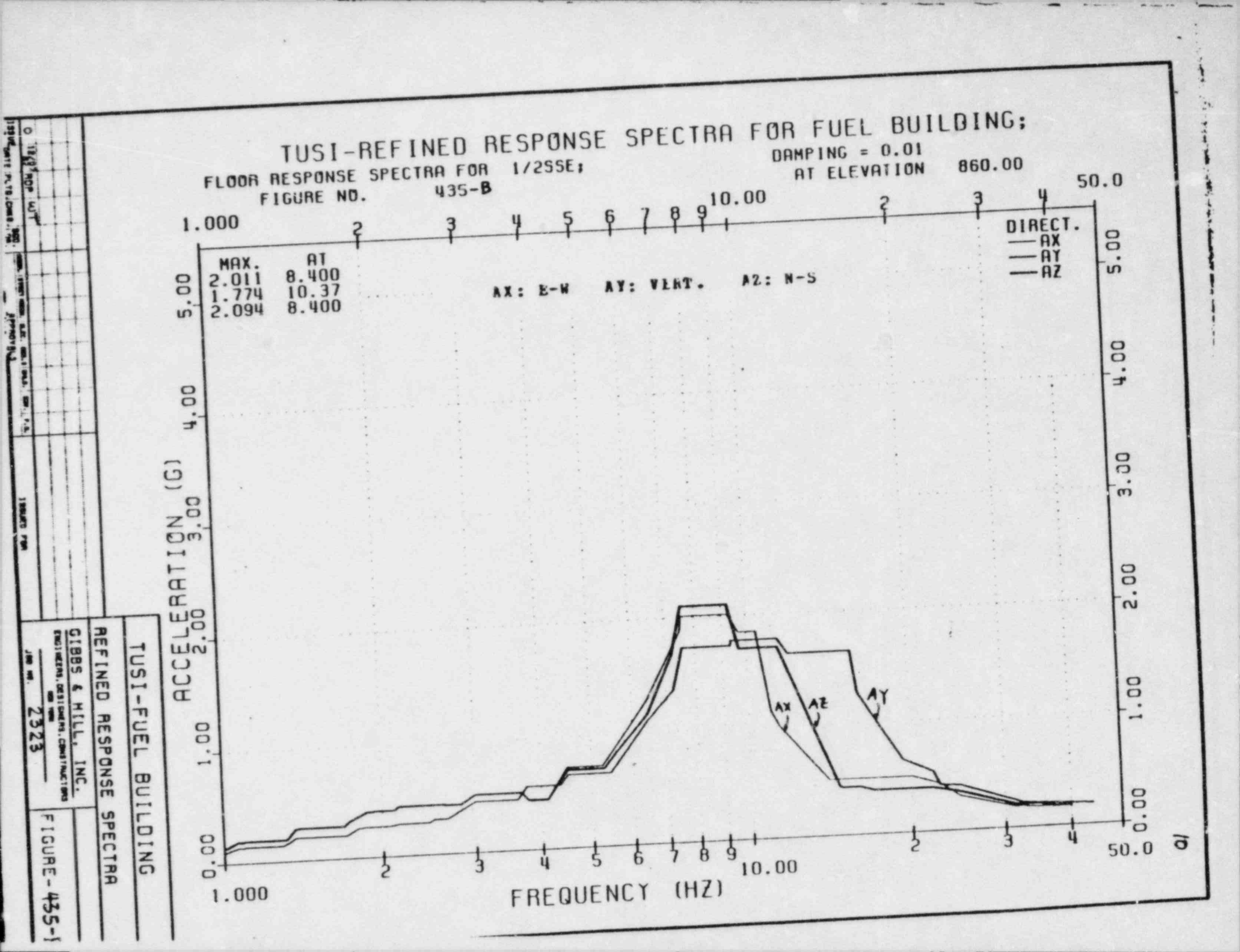
FUEL BUILDING

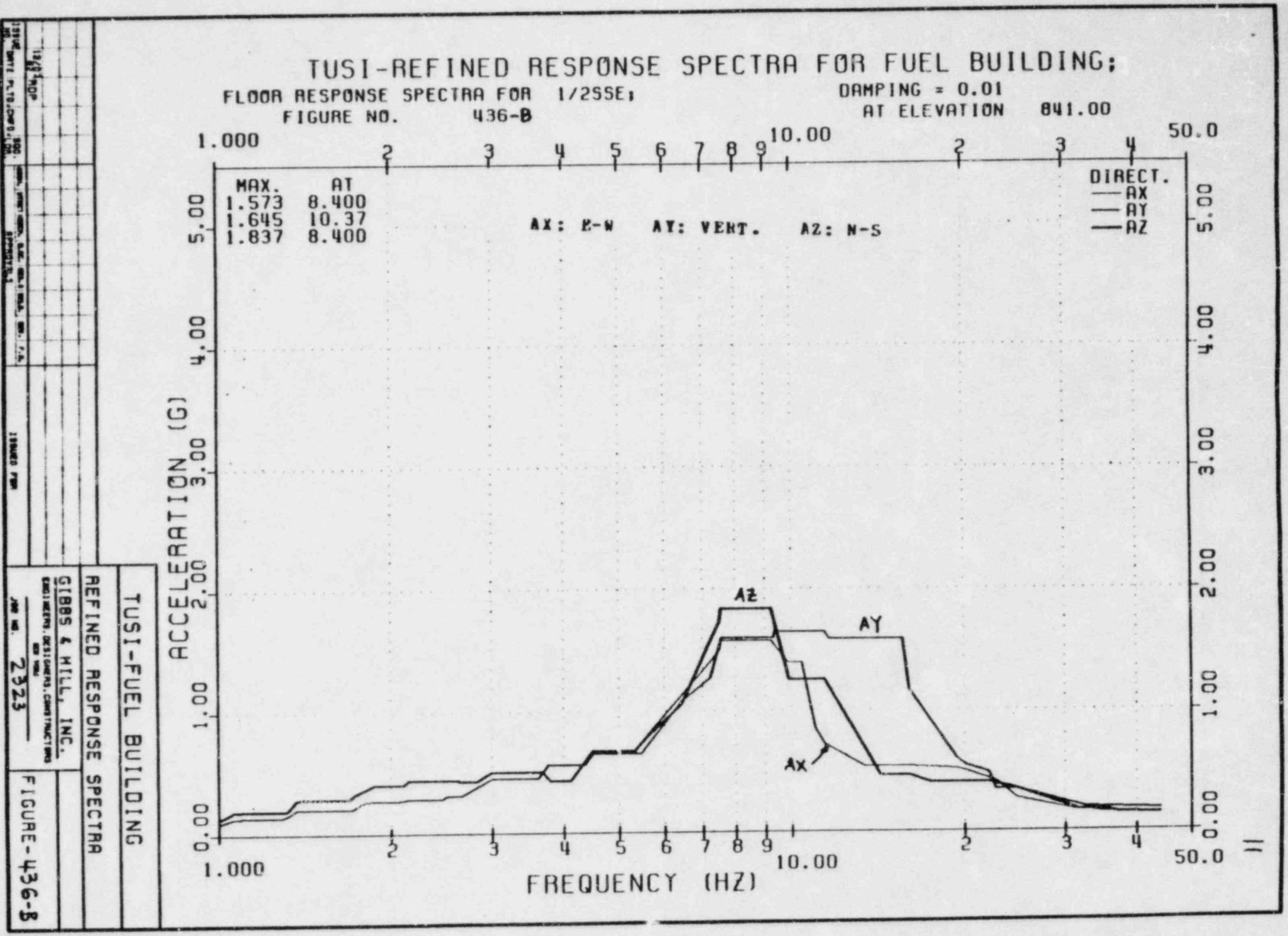
Gibbs & Hill, Inc.

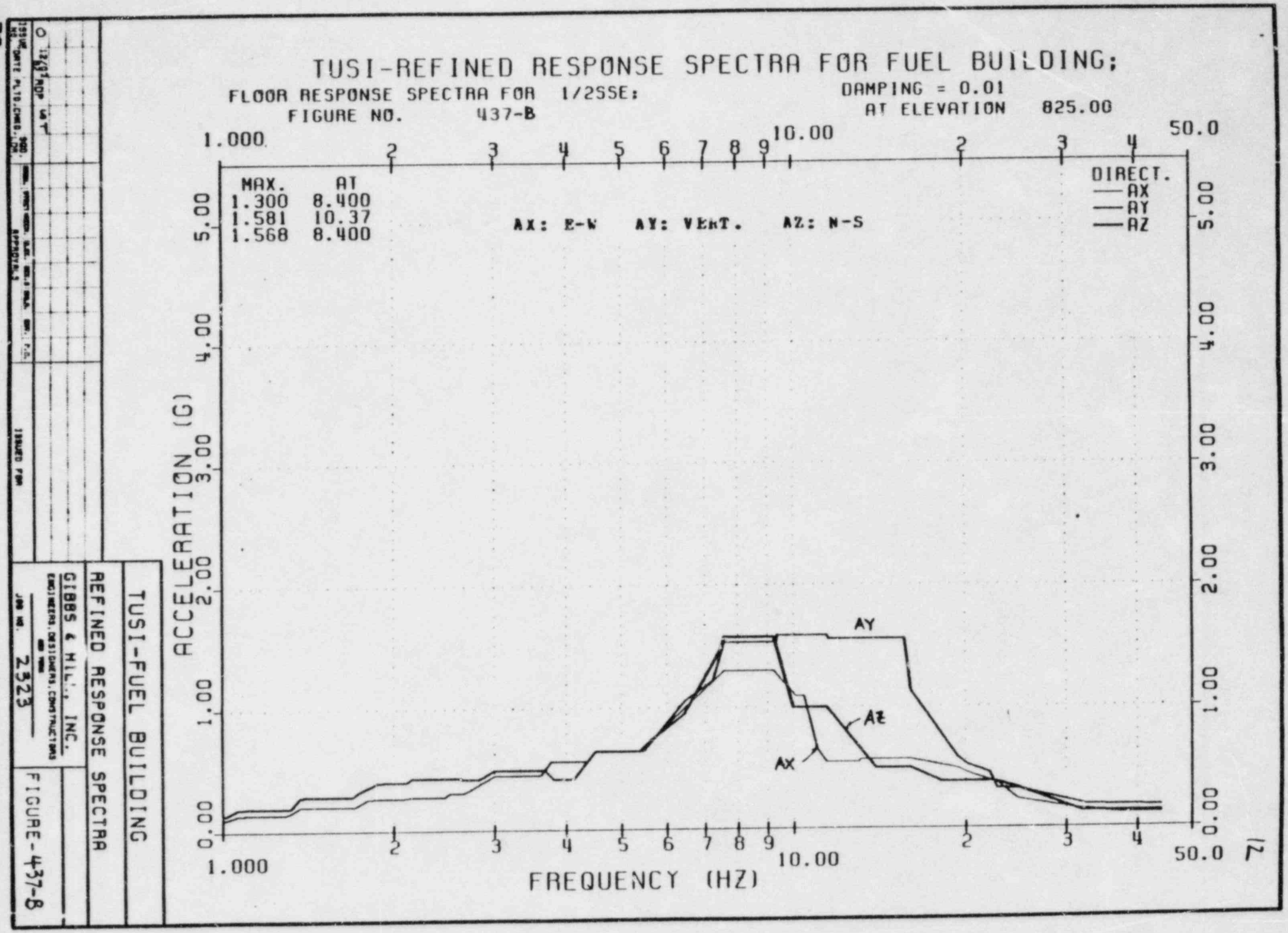
TABLE 3

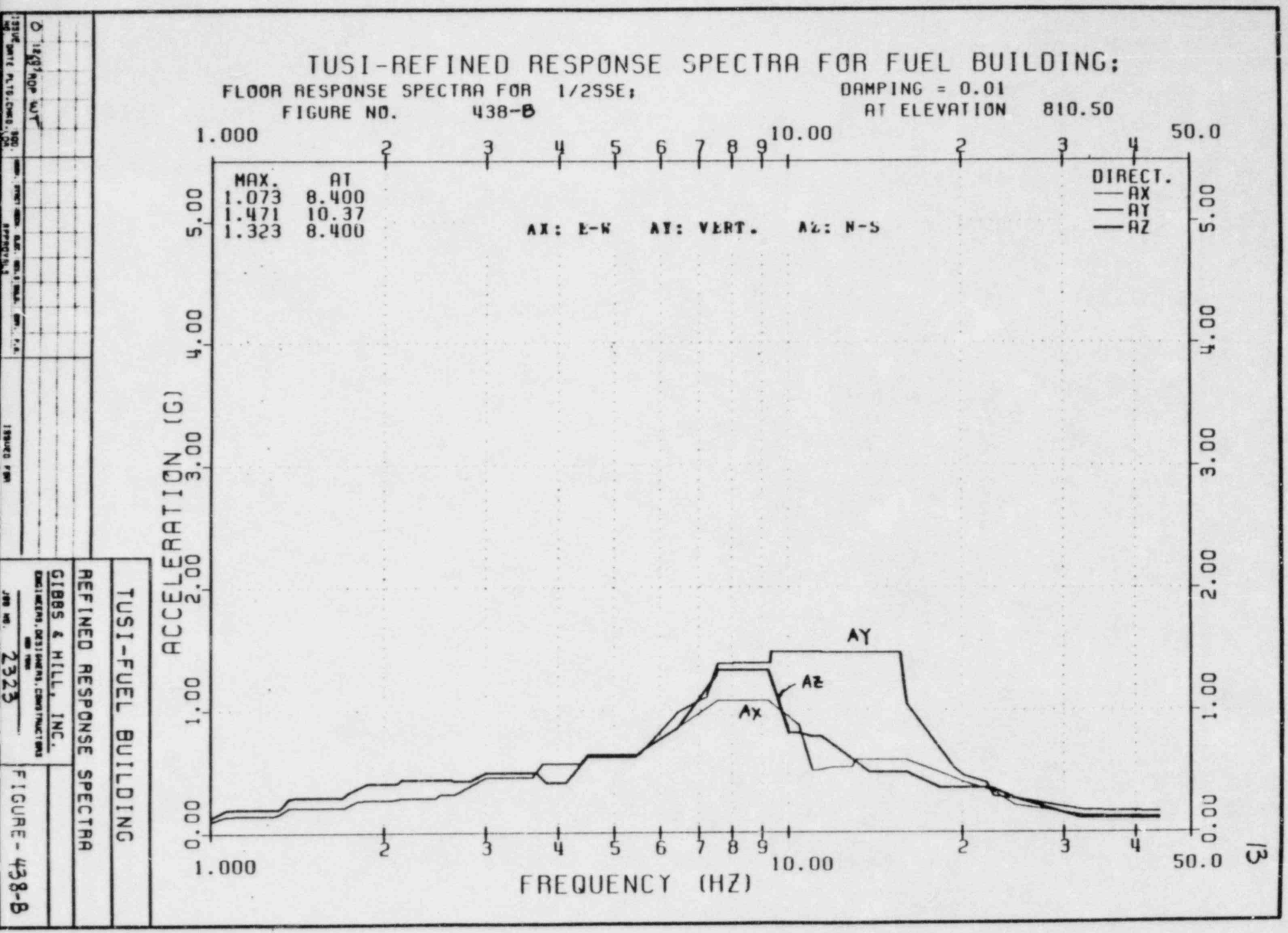

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 433-B
DAMPING = 0.01
AT ELEVATION 918.00
MAX. AT
4.797 9.480
1.982 14.20
3.734 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
0.0
0.1
2.0
3.0
4.0
5.0
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE-433-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 434-B
DAMPING = 0.01
AT ELEVATION 899.50
MAX. AT
4.215 9.480
1.962 10.37
3.177 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-434-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 435-B
DAMPING = 0.01
AT ELEVATION 860.00
MAX. AT
2.011 8.400
1.774 10.37
2.094 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-435-1


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 436-B
DAMPING = 0.01
AT ELEVATION 841.00
MAX. AT
1.573 8.400
1.645 10.37
1.837 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AZ
AY
AX
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-436-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE:
FIGURE NO. 437-B
DAMPING = 0.01
AT ELEVATION 825.00
MAX. AT
1.300 8.400
1.581 10.37
1.568 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AY
AZ
AX
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-437-8
12



TUSI-FUEL BUILDING

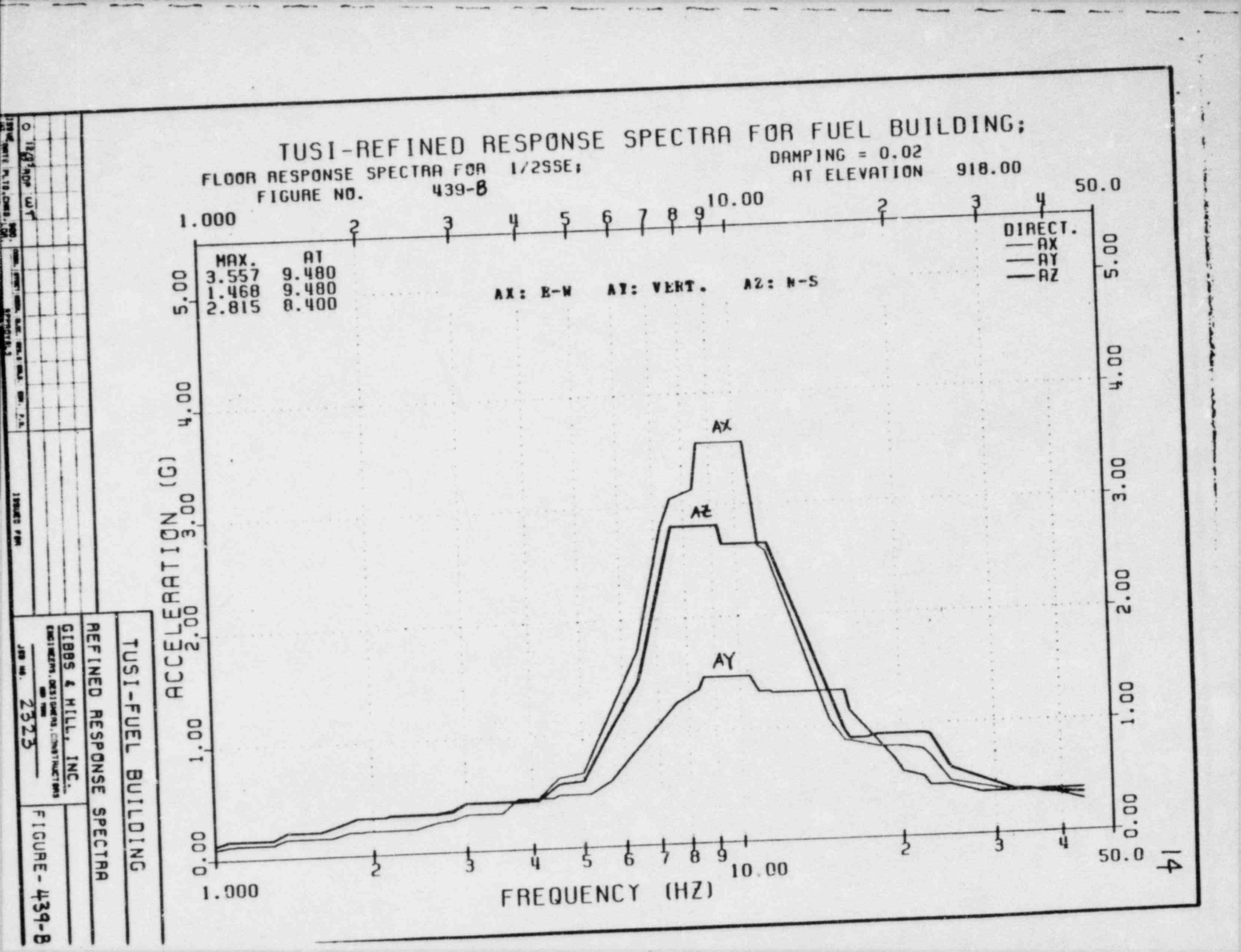
REFINED RESPONSE SPECTRA

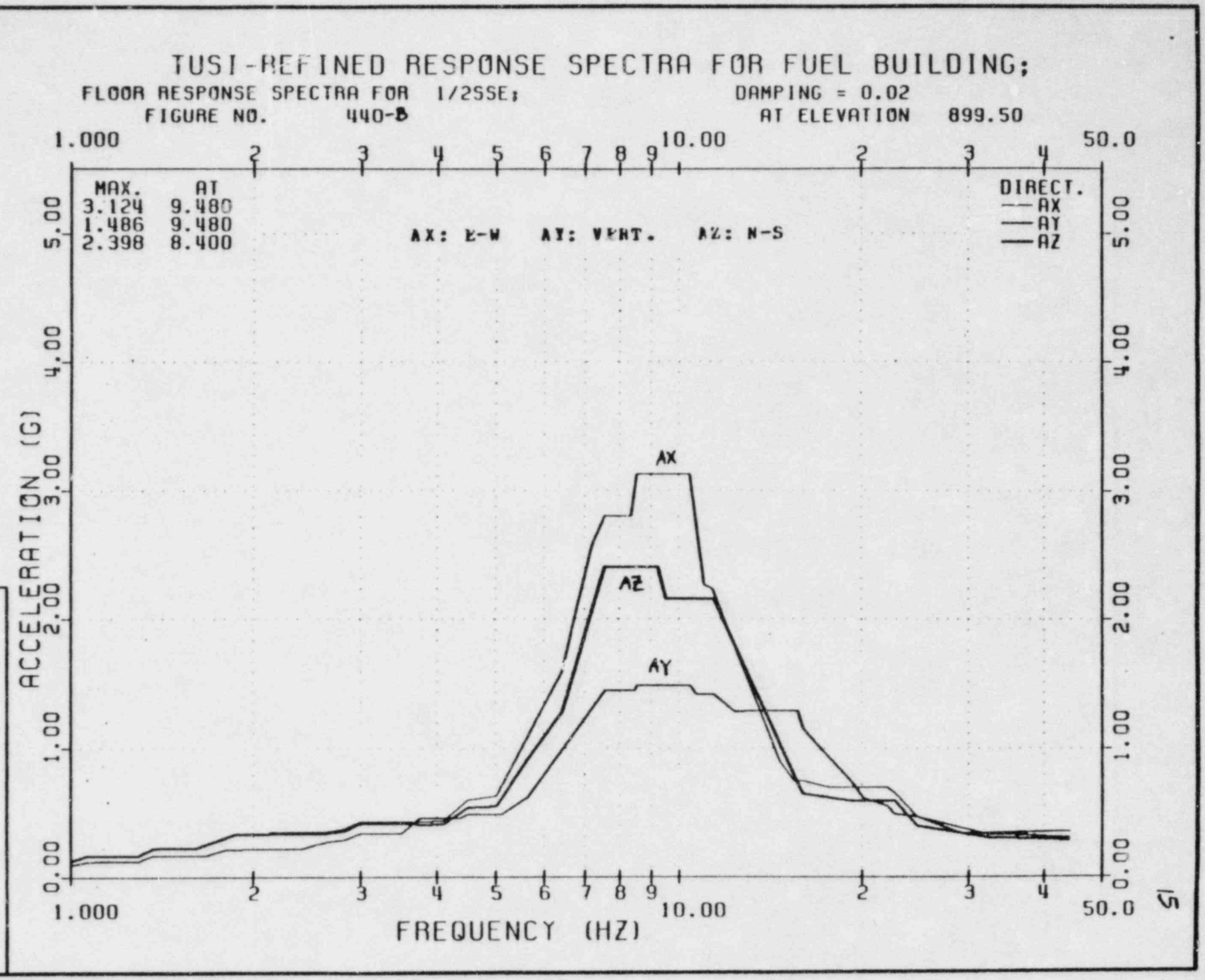
GIBBS & HILL, INC.

JOB NO. 2323

FIGURE-438-B

13


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 439-B
DAMPING = 0.02
AT ELEVATION 918.00
MAX. AT
3.557 9.480
1.468 9.480
2.815 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AX
AZ
AY
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-439-B



TUSI-FUEL BUILDING

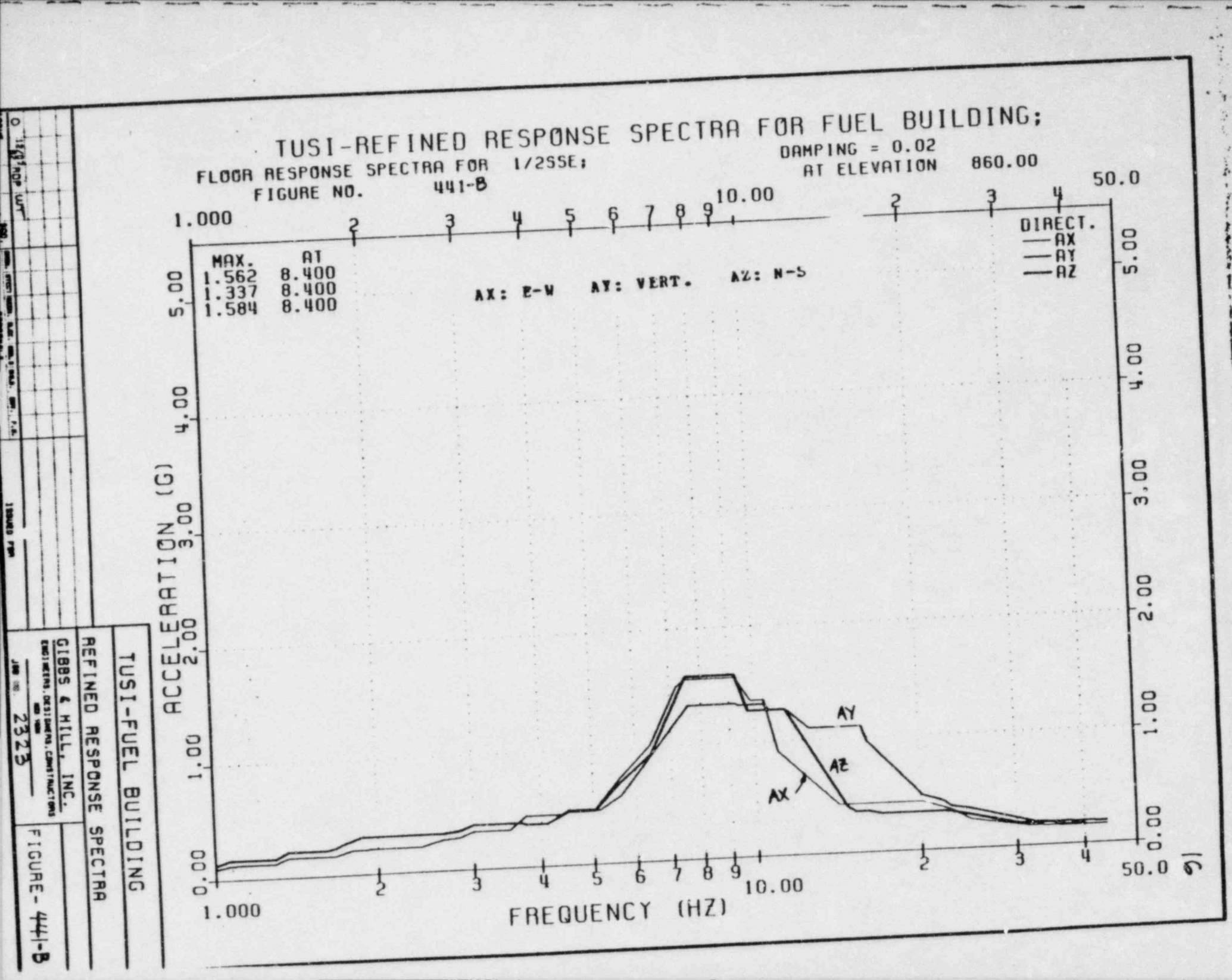
REFINED RESPONSE SPECTRA

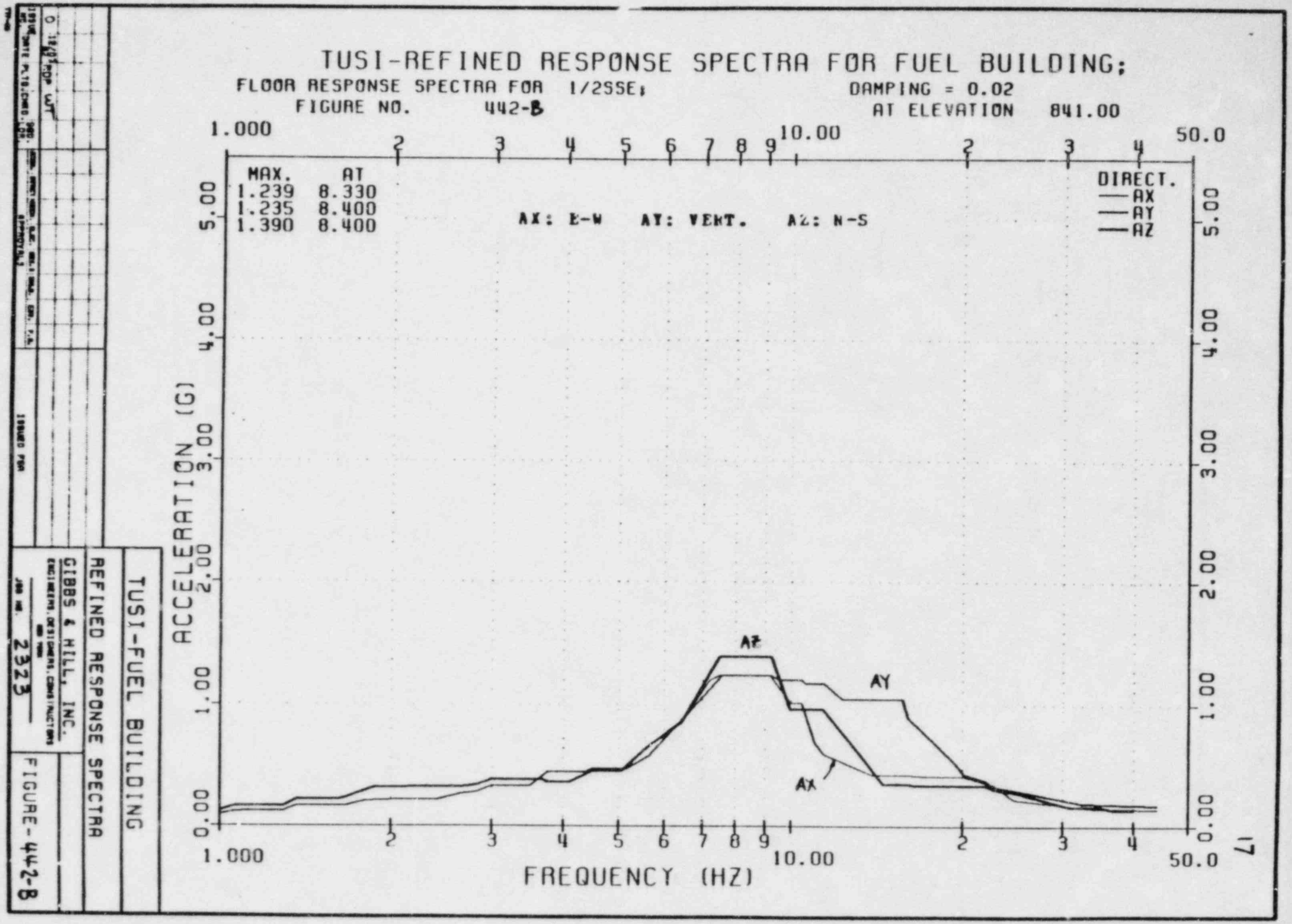
GIBBS & HILL, INC.

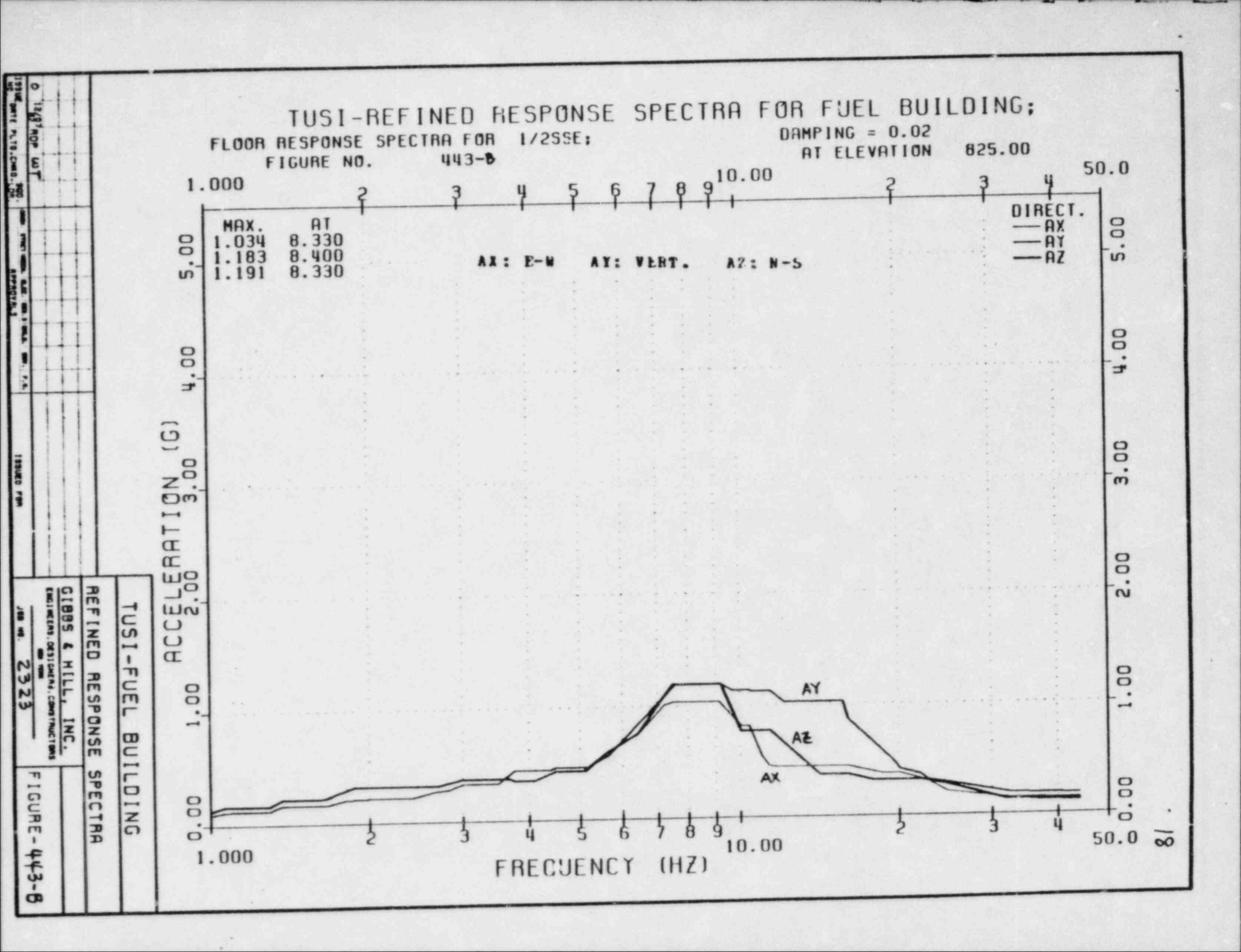
JOB NO. 2323

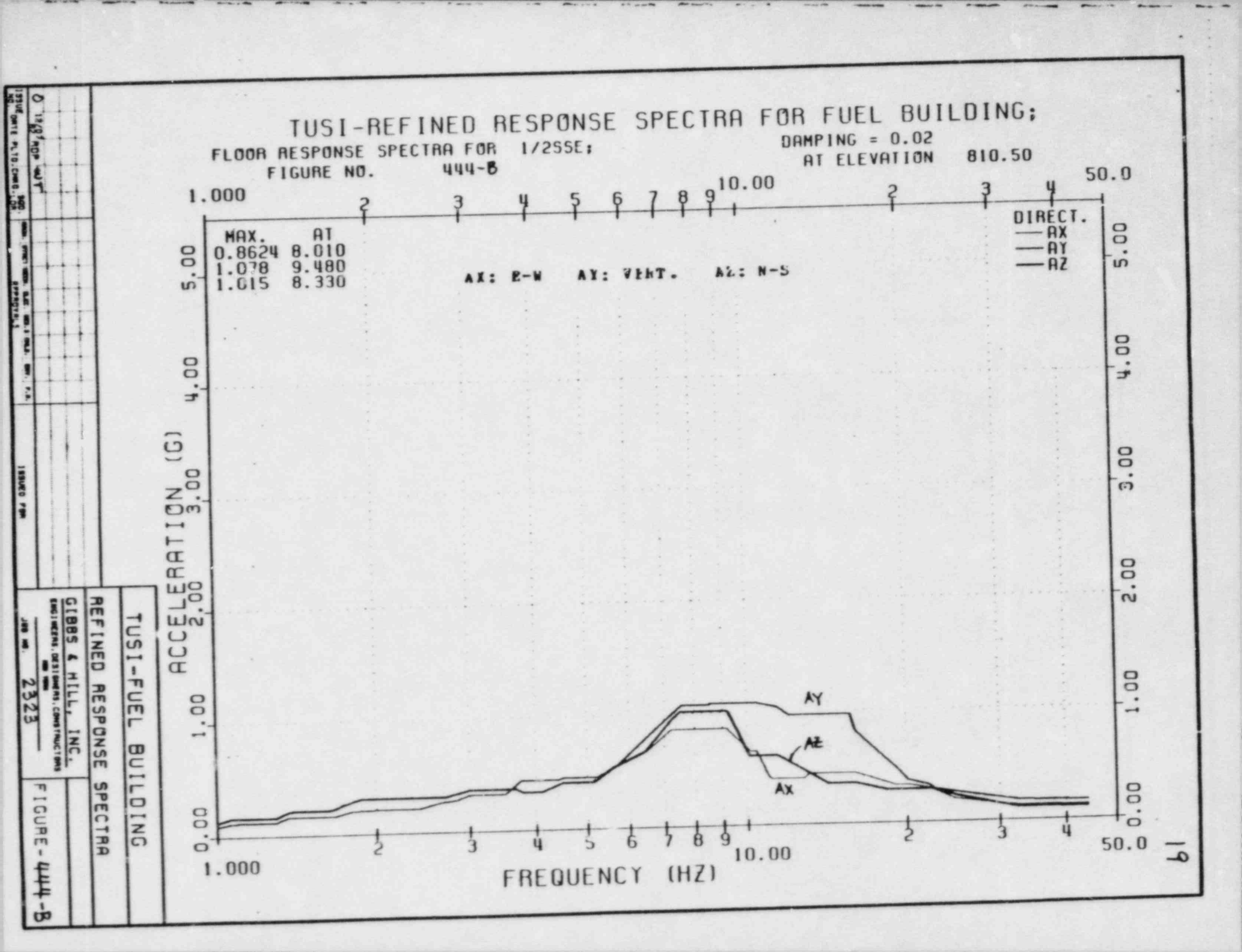
FIGURE-440-B

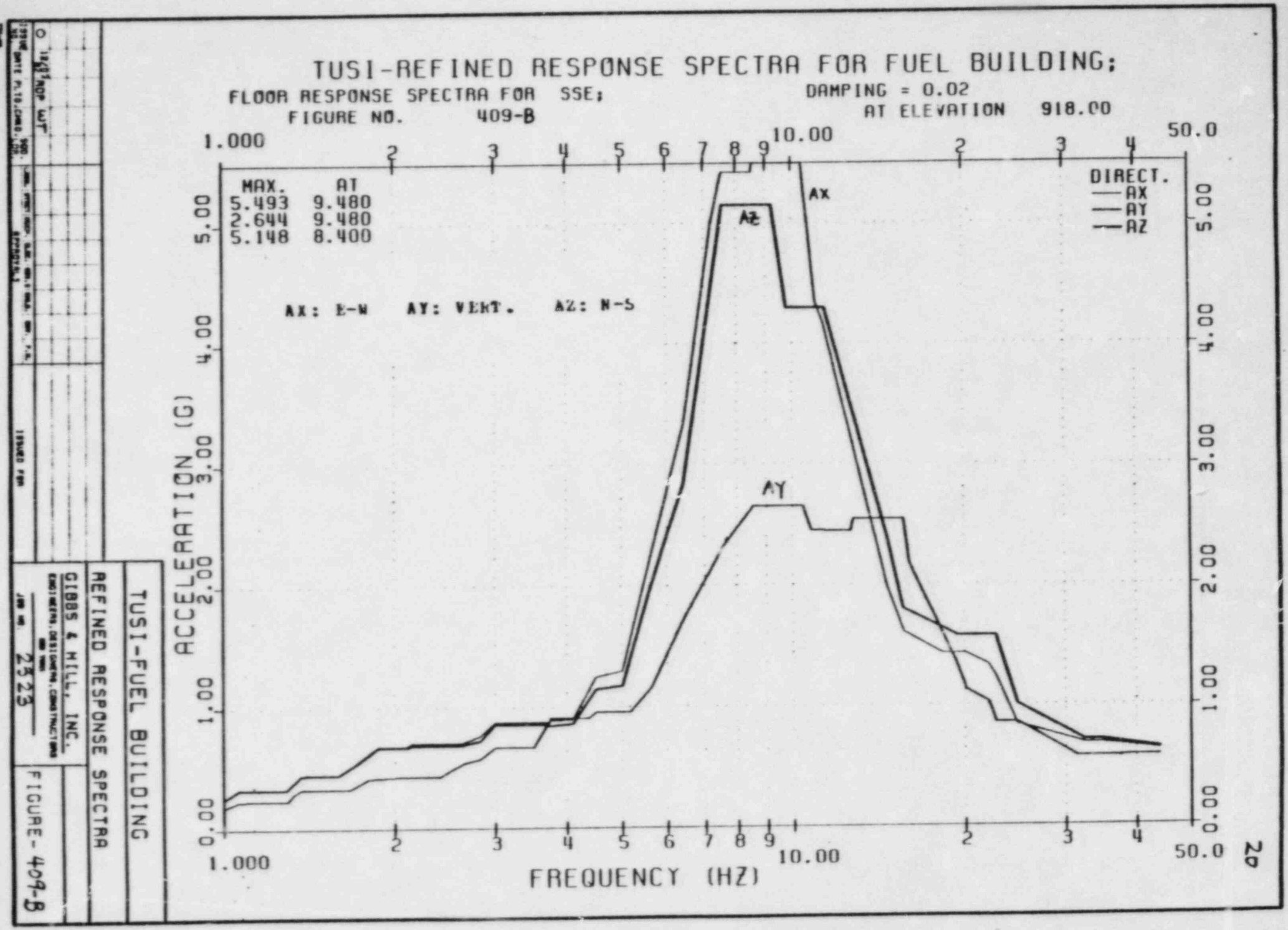
15

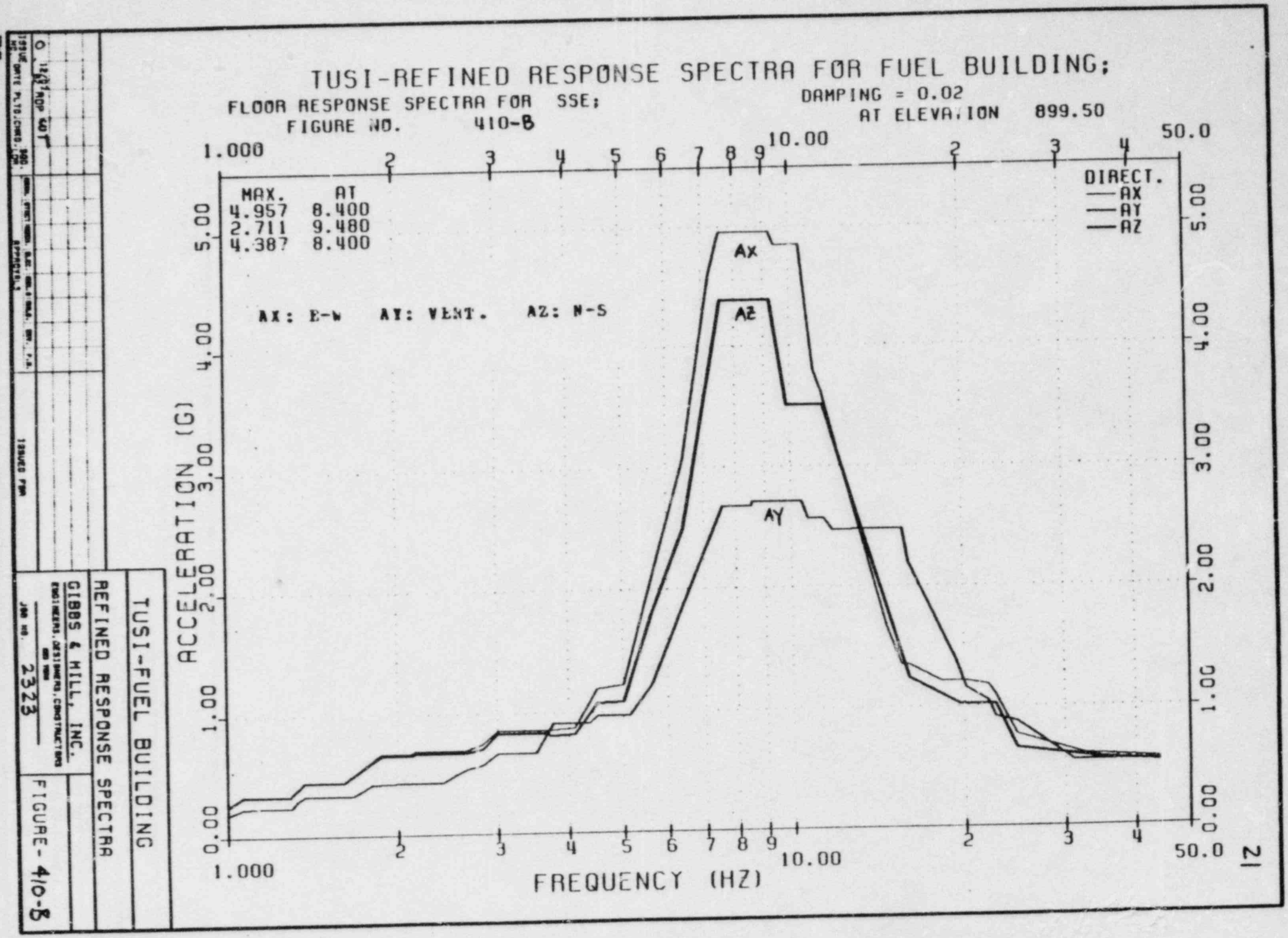

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 441-B
DAMPING = 0.02
AT ELEVATION 860.00
MAX. AT
1.562 8.400
1.337 8.400
1.584 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE- 441-B

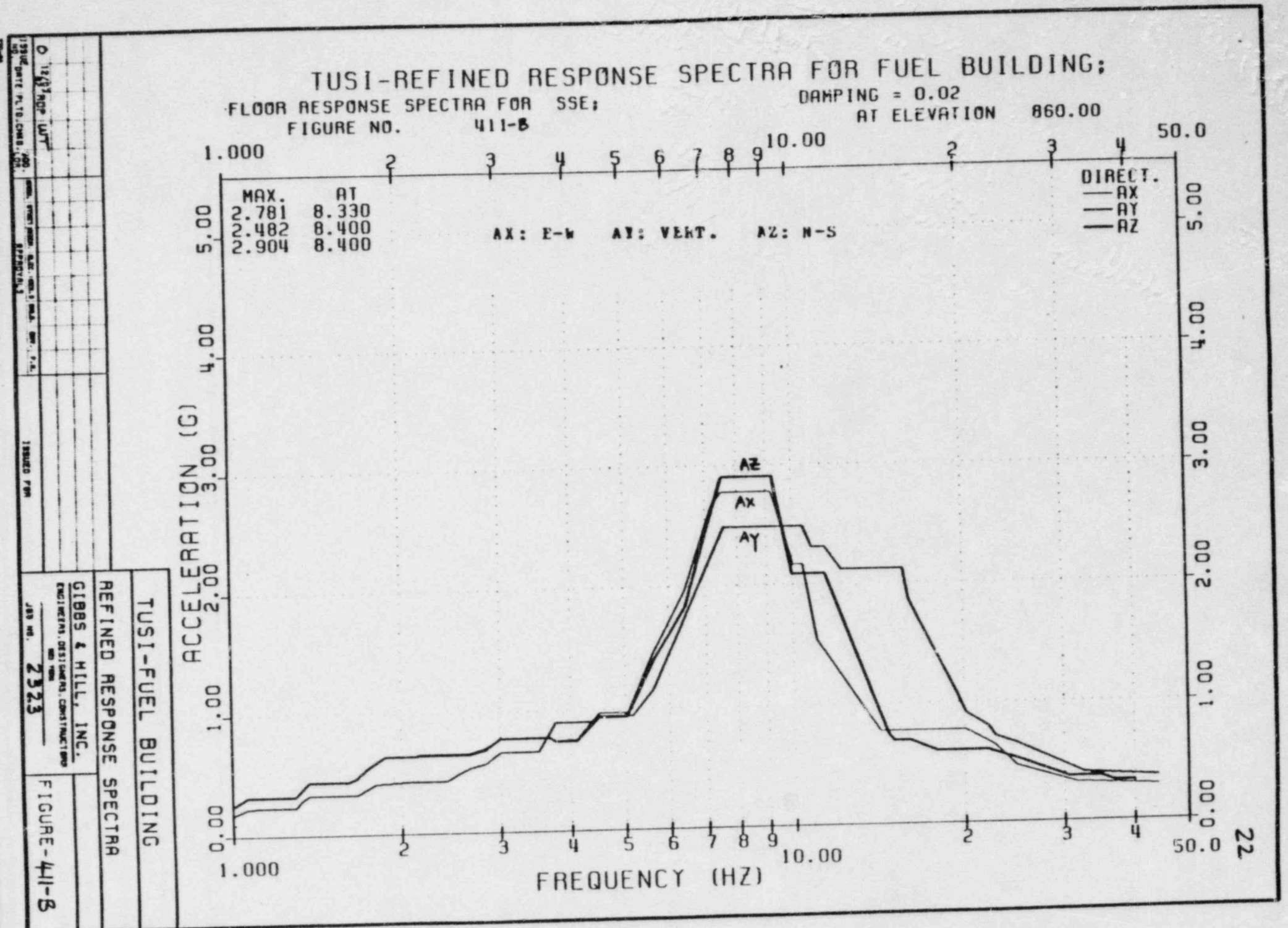

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 442-B
DAMPING = 0.02
AT ELEVATION 841.00
MAX. AT
1.239 8.330
1.235 8.400
1.390 8.400
AX: E-W AT: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-442-B

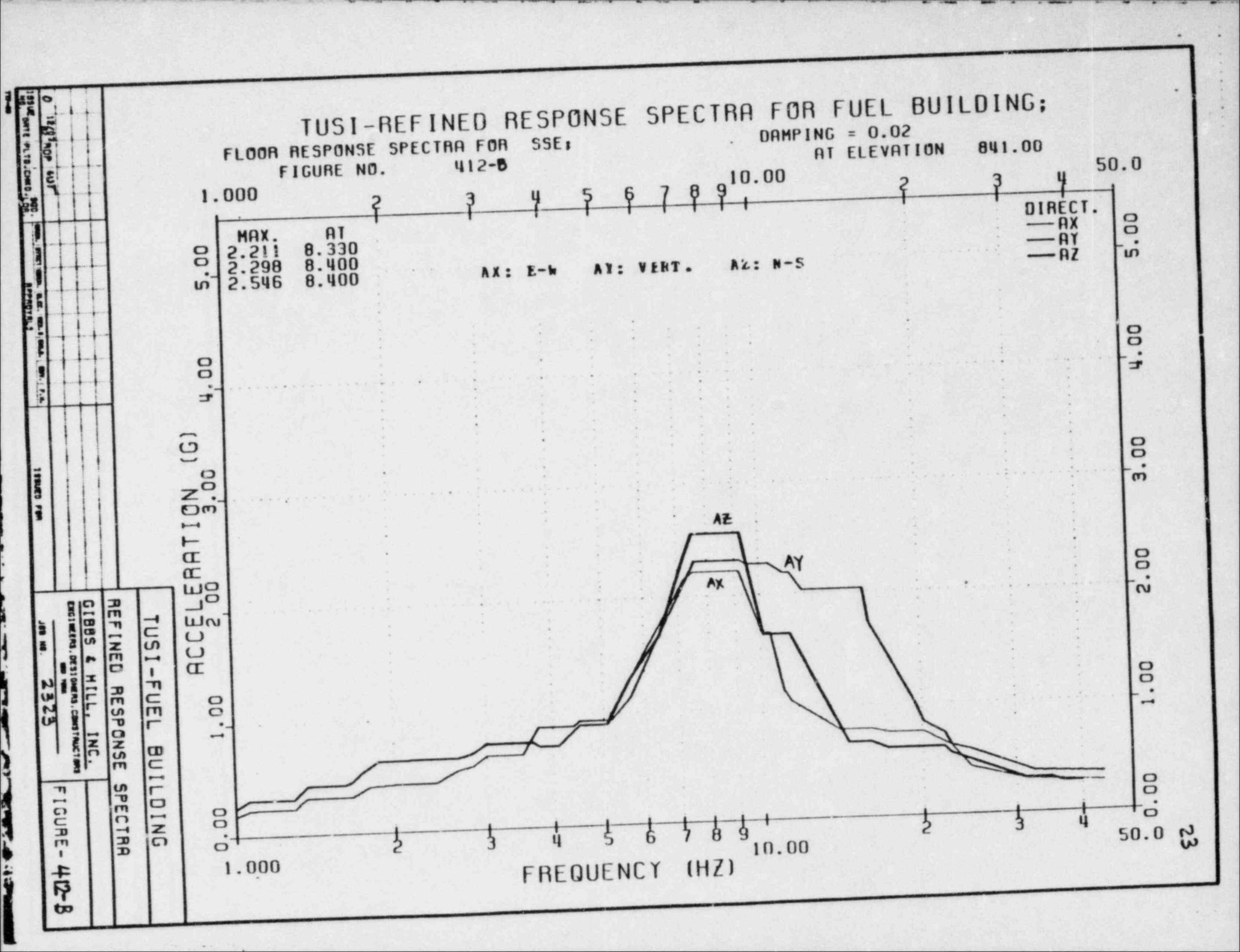

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 443-B
DAMPING = 0.02
AT ELEVATION 825.00
MAX. AT
1.034 8.330
1.183 8.400
1.191 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AY
AZ
AX
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-443-B

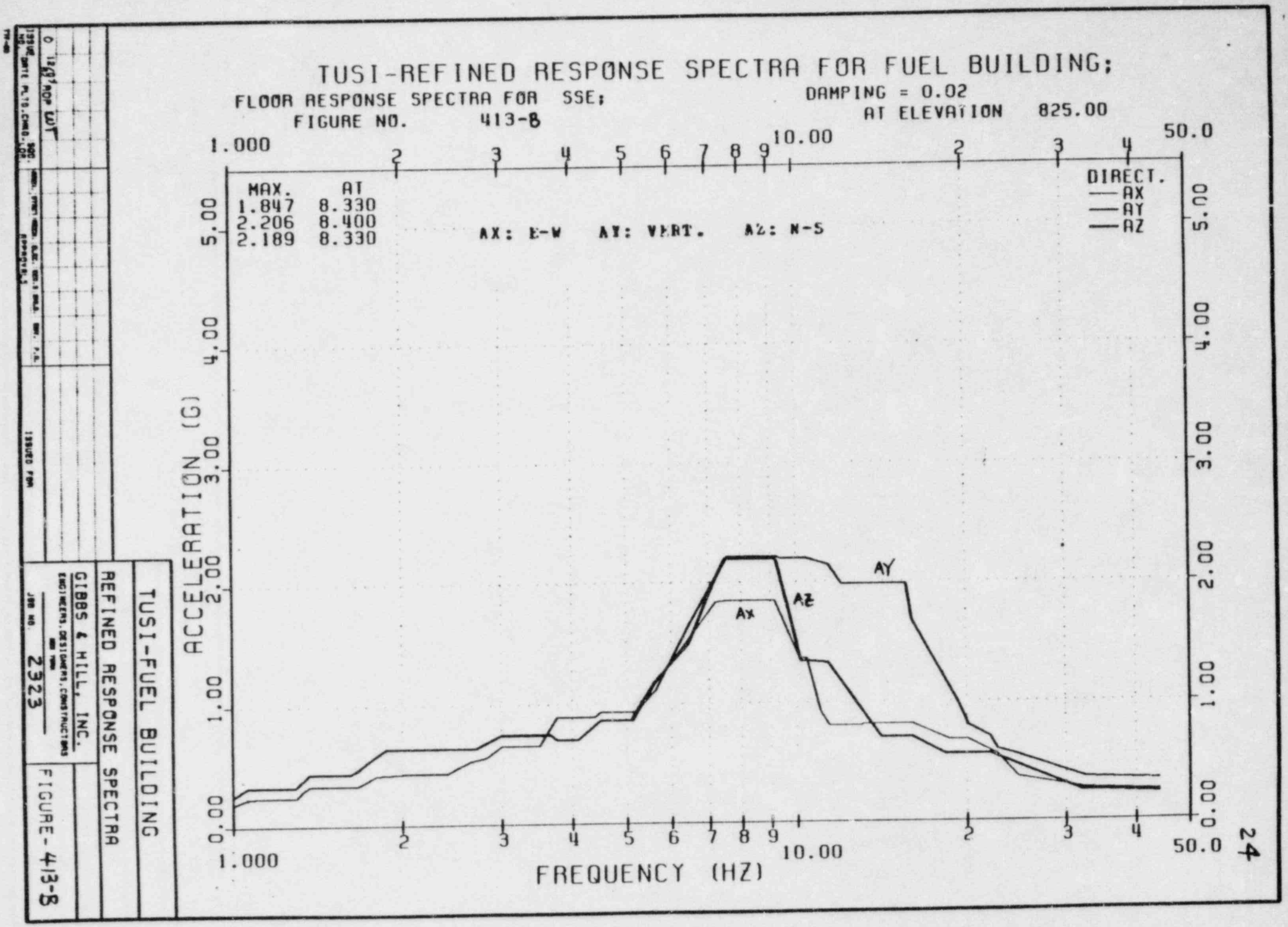

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE;
FIGURE NO. 444-B
DAMPING = 0.02
AT ELEVATION 810.50
MAX. AT
0.8624 8.010
1.078 9.480
1.015 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-444-B
19

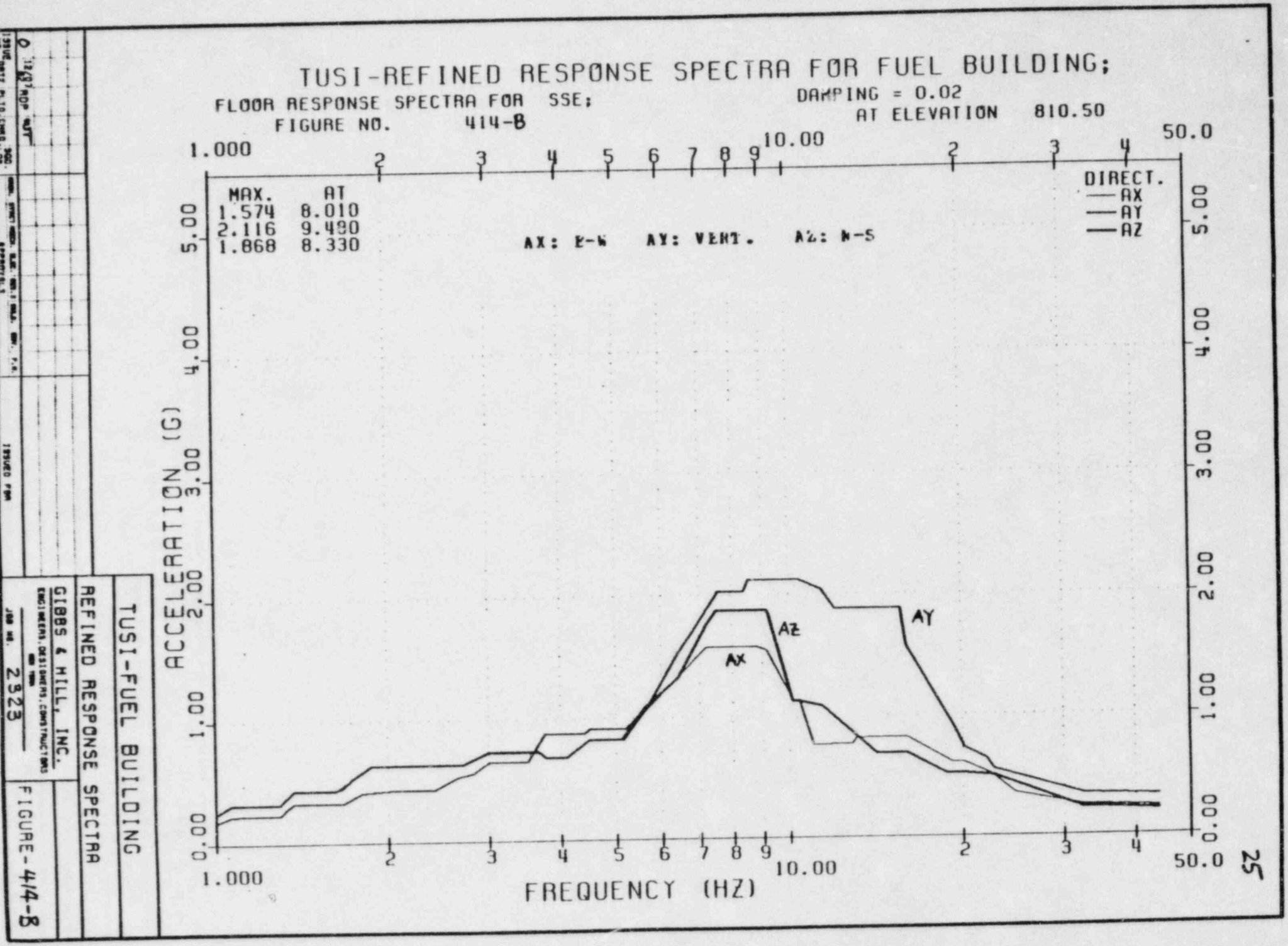

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 409-B
DAMPING = 0.02
AT ELEVATION 918.00
MAX. AT
5.493 9.480
2.644 9.480
5.148 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE-409-B

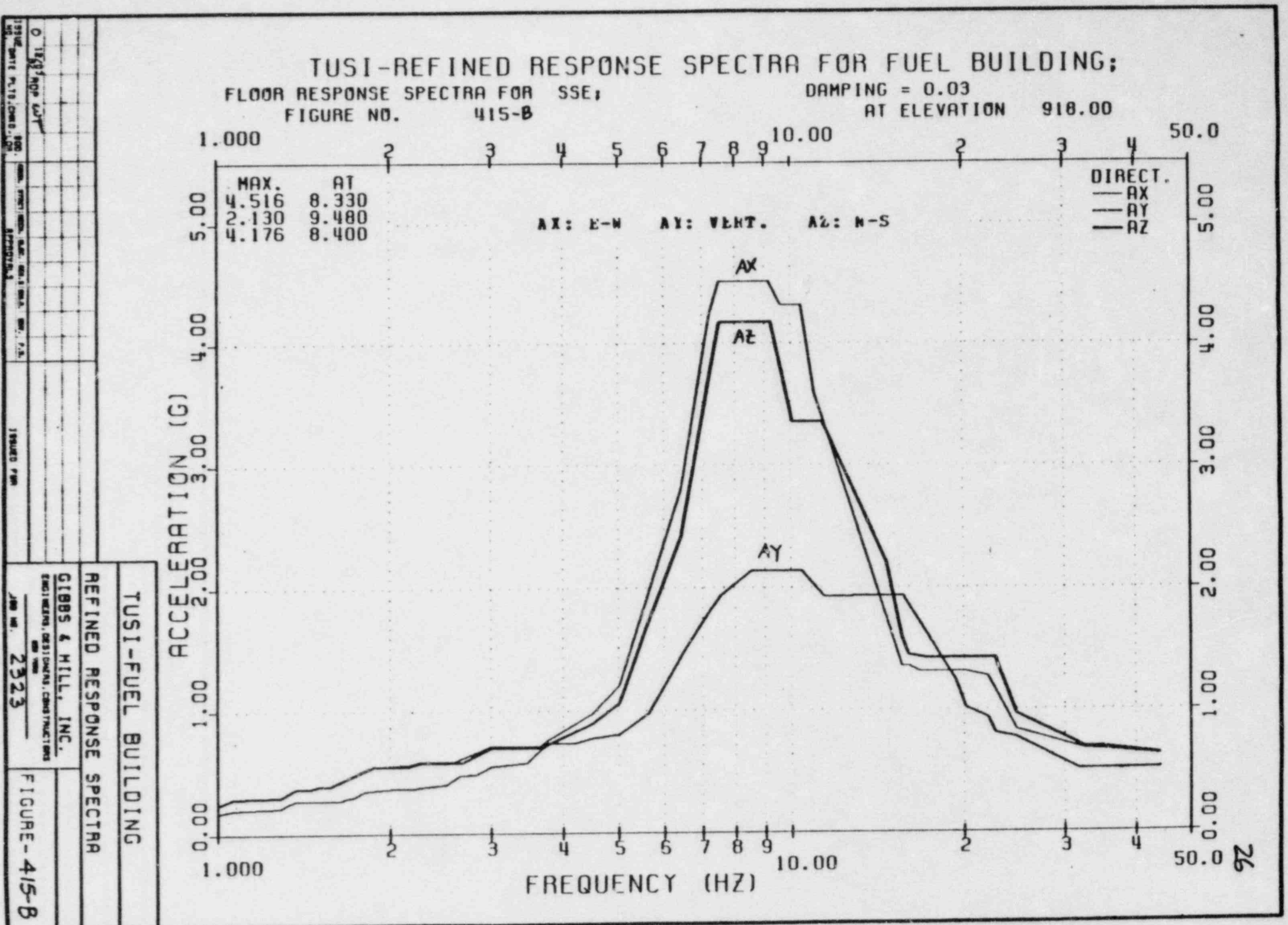

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 410-B
DAMPING = 0.02
AT ELEVATION 899.50
MAX. AT
4.957 8.400
2.711 9.480
4.387 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-410-B
21

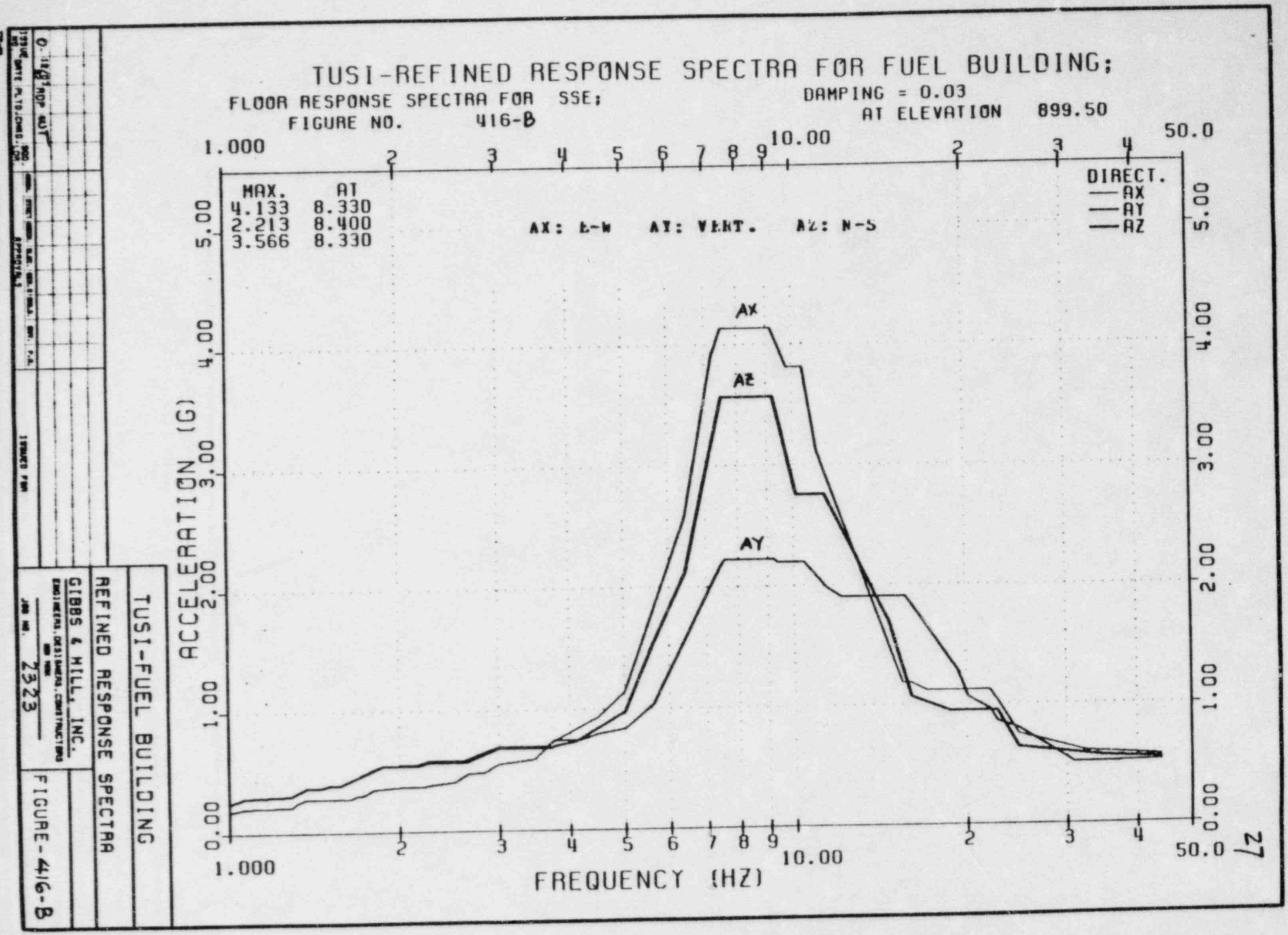

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 411-B
DAMPING = 0.02
AT ELEVATION 860.00
MAX. AT
2.781 8.330
2.482 8.400
2.904 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AZ
AX
AY
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE-411-B
22

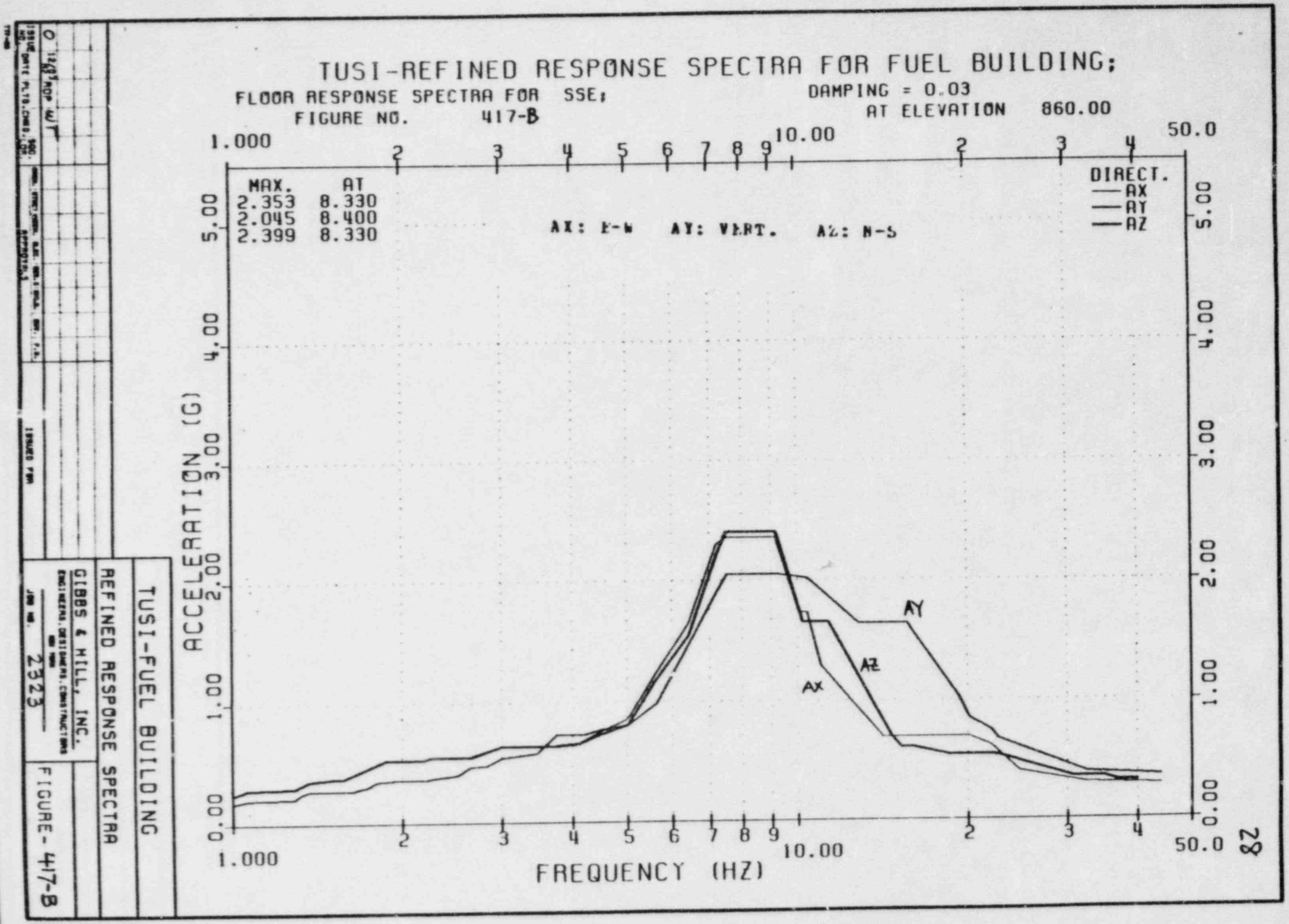

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 412-B
DAMPING = 0.02
AT ELEVATION 841.00
MAX. AT
2.211 8.330
2.298 8.400
2.546 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
0.0
0.1
0.2
0.3
0.4
0.5
AZ
AY
AX
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-412-B
23

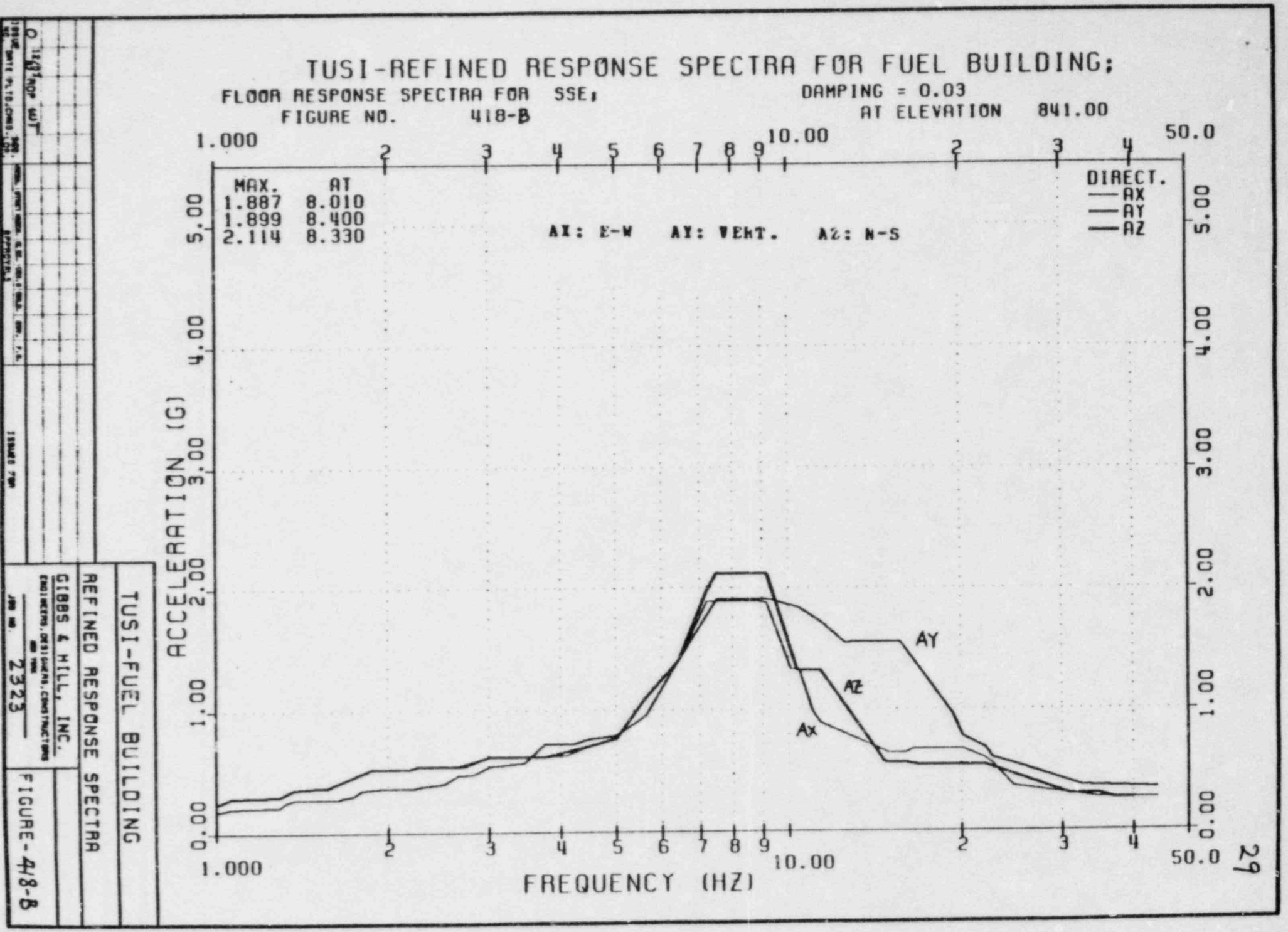

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 413-B
DAMPING = 0.02
AT ELEVATION 825.00
MAX. AT
1.847 8.330
2.206 8.400
2.189 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
Ax
AZ
AY
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-413-B

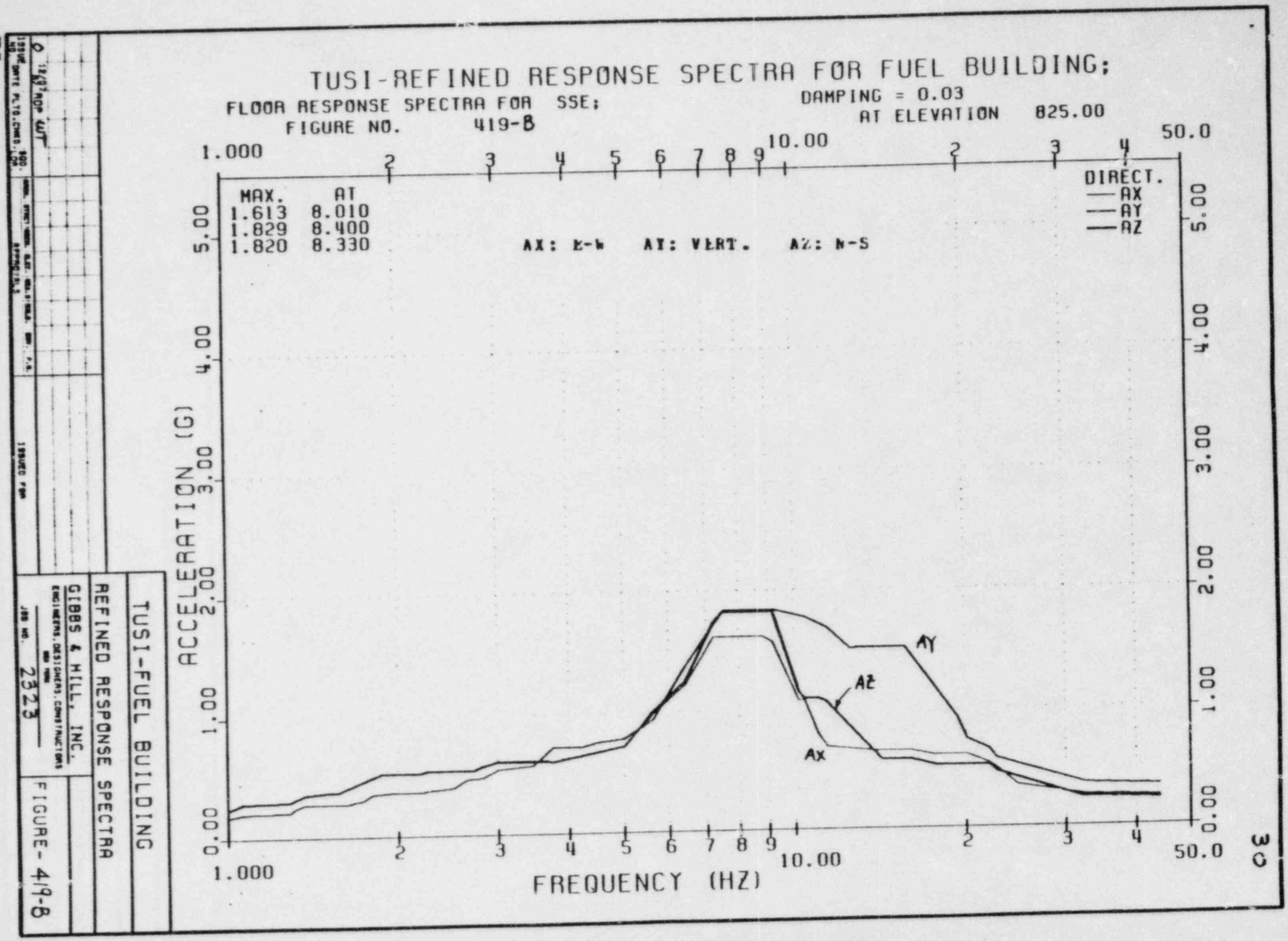

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 414-B
DAMPING = 0.02
AT ELEVATION 810.50
MAX. AT
1.574 8.010
2.116 9.490
1.868 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AX
AZ
AY
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2923
FIGURE-414-B
25

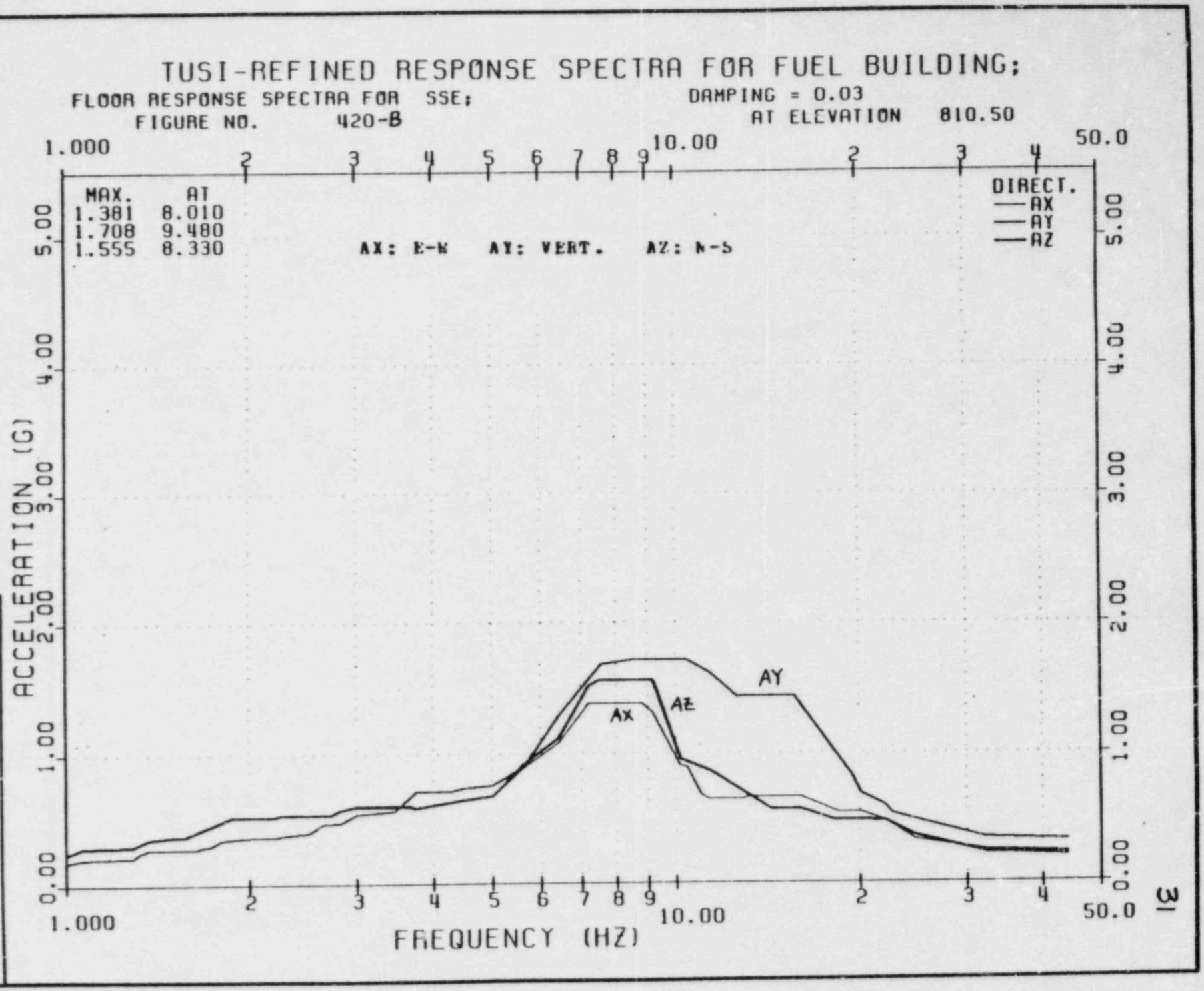

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 415-B
DAMPING = 0.03
AT ELEVATION 918.00
MAX. AT
4.516 8.330
2.130 9.480
4.176 8.400
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-415-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 416-B
DAMPING = 0.03
AT ELEVATION 899.50
MAX. AT
4.133 8.330
2.213 8.400
3.566 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-416-B
27


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 417-B
DAMPING = 0.03
AT ELEVATION 860.00
MAX. AT
2.353 8.330
2.045 8.400
2.399 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AX
AY
AZ
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE- 417-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 418-B
DAMPING = 0.03
AT ELEVATION 841.00
MAX. AT
1.887 8.010
1.899 8.400
2.114 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
AY
AZ
AX
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
2323
FIGURE-418-B


TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE;
FIGURE NO. 419-B
DAMPING = 0.03
AT ELEVATION 825.00
MAX. AT
1.613 8.010
1.829 8.400
1.820 8.330
AX: E-W AY: VERT. AZ: N-S
DIRECT.
AX
AY
AZ
ACCELERATION (G)
FREQUENCY (HZ)
1.000
10.00
50.0
0.00
1.00
2.00
3.00
4.00
5.00
TUSI-FUEL BUILDING
REFINED RESPONSE SPECTRA
GIBBS & HILL, INC.
JOB NO. 2323
FIGURE-419-B
30



TUSI-FUEL BUILDING

REFINED RESPONSE SPECTRA

GIBBS & HILL, INC.

JOB NO. 2323

FIGURE-420-B

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 1
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01
FIGURE NO. 433-B DIRECTION 1 AT ELEVATION 918.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 433 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 42 DAMPING VALUE = 0.010

1	0.9000	0.13370	2	0.9450	0.14010	3	1.0100	0.14010	4	1.0620	0.19120
5	1.1250	0.20050	6	1.3120	0.20050	7	1.3230	0.21260	8	1.3680	0.29170
9	1.4040	0.29710	10	1.6872	0.29710	11	1.7280	0.34490	12	1.8720	0.42400
13	1.9530	0.43330	14	2.0961	0.43330	15	2.1420	0.47510	16	2.7841	0.47510
17	2.8170	0.48070	18	2.9970	0.57660	19	3.6630	0.57660	20	3.7382	0.53390
21	4.1086	0.53390	22	4.5000	0.92570	23	5.1066	0.92570	24	5.6250	1.37840
25	6.4260	2.19970	26	7.2090	3.34010	27	7.4970	3.67150	28	7.5600	3.96420
29	8.3340	4.01190	30	8.5320	4.79660	31	10.4280	4.79660	32	11.0000	3.42010
33	11.4070	3.22590	34	14.6630	1.16990	35	15.1085	1.13160	36	16.0160	1.13160
37	19.2940	1.01770	38	22.6380	0.80340	39	24.6620	0.55820	40	32.4349	0.37840
41	34.8150	0.37840	42	44.0000	0.34630						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 4
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01
FIGURE NO. 434-B DIRECTION 1 AT ELEVATION 899.50 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 434 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 44 DAMPING VALUE = 0.010

1	0.9000	0.13320	2	0.9450	0.13950	3	1.0099	0.13950	4	1.0620	0.19070
5	1.1250	0.19950	6	1.3122	0.19950	7	1.3230	0.21130	8	1.3680	0.29020
9	1.4040	0.29550	10	1.6881	0.29550	11	1.7280	0.34190	12	1.8720	0.42010
13	1.9530	0.42850	14	2.0966	0.42850	15	2.1420	0.46910	16	2.8001	0.46910
17	2.8170	0.47190	18	2.9970	0.56370	19	3.6630	0.56370	20	3.7460	0.51680
21	4.1100	0.51680	22	4.5000	0.88620	23	5.1243	0.88620	24	5.6250	1.28540
25	6.4260	2.03190	26	7.2090	3.06530	27	7.4970	3.36250	28	7.5600	3.62730
29	8.3589	3.62730	30	8.5320	4.21490	31	10.4280	4.21490	32	11.0000	2.95350
33	11.4070	2.78400	34	14.6630	0.98070	35	15.1219	0.94190	36	16.0160	0.94190
37	19.2940	0.84220	38	20.0750	0.80030	39	22.0000	0.76410	40	22.6380	0.72630
41	24.6620	0.53680	42	32.4848	0.32660	43	34.8150	0.32660	44	44.0000	0.30330

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 7
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01
FIGURE NO. 435-B DIRECTION 1 AT ELEVATION 860.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 435 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.010

1	0.9000	0.13170	2	0.9450	0.13770	3	1.0104	0.13770	4	1.0620	0.18910
5	1.1250	0.19630	6	1.3131	0.19630	7	1.3230	0.20660	8	1.3680	0.28490
9	1.4040	0.29070	10	1.6911	0.29070	11	1.7280	0.33120	12	1.8720	0.40620
13	1.9530	0.41080	14	2.0990	0.41080	15	2.1420	0.44590	16	2.6180	0.44590
17	2.6261	0.43860	18	2.8170	0.43860	19	2.9970	0.51390	20	3.6630	0.51390
21	3.7808	0.45040	22	4.1158	0.45040	23	4.5000	0.72280	24	5.2484	0.72280
25	6.4260	1.28260	26	7.4970	1.87690	27	7.5600	2.01120	28	9.2400	2.01120
29	9.6711	1.85180	30	10.4280	1.85180	31	11.0000	1.14220	32	11.4070	1.00050
33	14.0091	0.50050	34	20.0750	0.50050	35	22.6380	0.42540	36	24.6620	0.30650
37	31.3535	0.18450	38	32.5490	0.18450	39	34.5648	0.17493	40	40.0000	0.17493

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 10
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01

FIGURE NO. 436-B DIRECTION 1 AT ELEVATION 841.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 436 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 42 DAMPING VALUE = 0.010

1	0.9000	0.13130	2	0.9450	0.13730	3	1.0103	0.13730	4	1.0620	0.18870
5	1.1250	0.19540	6	1.3131	0.19540	7	1.3230	0.20540	8	1.3680	0.28350
9	1.4040	0.28950	10	1.6920	0.28950	11	1.7280	0.32830	12	1.8720	0.40240
13	1.9530	0.40600	14	2.0999	0.40600	15	2.1420	0.43940	16	2.6180	0.43940
17	2.6292	0.42950	18	2.8170	0.42950	19	2.9970	0.50000	20	3.6630	0.50000
21	3.7923	0.43150	22	4.1176	0.43150	23	4.5000	0.67680	24	5.3090	0.67680
25	7.4970	1.49100	26	7.5600	1.57260	27	9.2400	1.57260	28	9.8510	1.39280
29	10.4280	1.39280	30	11.0000	0.84430	31	11.4070	0.72040	32	13.3830	0.53430
33	16.0160	0.53430	34	19.2940	0.51330	35	20.0750	0.49490	36	22.6380	0.41190
37	24.6620	0.27150	38	31.0865	0.16840	39	32.5490	0.16840	40	34.7376	0.14790
41	37.1580	0.14790	42	44.0000	0.14620						

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 13
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01
FIGURE NO. 437-B DIRECTION 1 AT ELEVATION 825.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 437 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 43 DAMPING VALUE = 0.010

1	0.9000	0.13100	2	0.9450	0.13700	3	1.0102	0.13700	4	1.0620	0.18840
5	1.1250	0.19490	6	1.3133	0.19490	7	1.3230	0.20460	8	1.3680	0.28250
9	1.4040	0.28860	10	1.6928	0.28860	11	1.7280	0.32610	12	1.8720	0.39960
13	1.9530	0.40250	14	2.1006	0.40250	15	2.1420	0.43470	16	2.6180	0.43470
17	2.6317	0.42270	18	2.8170	0.42270	19	2.9970	0.48940	20	3.6630	0.48940
21	3.8019	0.41710	22	4.1188	0.41710	23	4.5000	0.64300	24	5.3786	0.64300
25	5.6250	0.73250	26	7.5600	1.29980	27	9.2400	1.29980	28	10.0725	1.09190
29	10.4280	1.09190	30	11.0000	0.64970	31	11.4070	0.54360	32	13.0144	0.54360
33	13.1040	0.56610	34	16.0160	0.56610	35	19.2940	0.48830	36	20.0750	0.45250
37	22.6380	0.36900	38	24.6620	0.23710	39	31.5149	0.14780	40	32.5490	0.14780
41	34.5232	0.13730	42	37.1580	0.13730	43	44.0000	0.13320			

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 16
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.01
FIGURE NO. 438-B DIRECTION 1 AT ELEVATION 810.50 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 438 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.010

1	0.9000	0.13080	2	0.9450	0.13680	3	1.0102	0.13680	4	1.0620	0.18820
5	1.1250	0.19430	6	1.3132	0.19430	7	1.3230	0.20380	8	1.3680	0.28170
9	1.4040	0.28780	10	1.6935	0.28780	11	1.7280	0.32420	12	1.8720	0.39690
13	1.9530	0.39940	14	2.1014	0.39940	15	2.1420	0.43040	16	2.6180	0.43040
17	2.6342	0.41630	18	2.8170	0.41630	19	2.9970	0.48000	20	3.6630	0.48000
21	3.8109	0.40410	22	4.1203	0.40410	23	4.5000	0.61260	24	5.4464	0.61260
25	5.6250	0.66890	26	7.5600	1.07310	27	9.2400	1.07310	28	10.4280	0.87340
29	11.0000	0.50160	30	11.2233	0.50160	31	11.9970	0.52520	32	12.8961	0.52520
33	13.1040	0.58720	34	16.0160	0.58720	35	19.2940	0.44110	36	20.0750	0.40260
37	22.0000	0.34840	38	22.6380	0.32900	39	24.6620	0.21880	40	32.5490	0.13310
41	44.0000	0.12700									

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 2
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 433-B DIRECTION 2 AT ELEVATION 918.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 433 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.010

1	0.9000	0.09650	2	0.9450	0.09670	3	1.0034	0.09670	4	1.0620	0.13630
5	1.1250	0.13940	6	1.2903	0.13940	7	1.3230	0.15870	8	1.3680	0.20500
9	1.7073	0.20500	10	1.8000	0.26430	11	1.8720	0.26900	12	2.0640	0.26900
13	2.1420	0.28390	14	2.4526	0.28390	15	2.5020	0.31380	16	2.6497	0.31380

17	2.9970	0.45380	18	3.5952	0.45380	19	3.7530	0.57000	20	4.3418	0.57000
21	4.5000	0.66390	22	5.4275	0.66390	23	6.4260	1.11160	24	7.2090	1.30690
25	7.5600	1.60250	26	8.5320	1.89170	27	10.4280	1.89170	28	10.7697	1.83430
29	12.6276	1.83430	30	12.7800	1.98170	31	15.6200	1.98170	32	15.6420	1.95610
33	16.0160	1.51020	34	19.2940	0.82460	35	22.0000	0.67750	36	22.3985	0.55410
37	24.6620	0.55410	38	28.0316	0.44930	39	37.1580	0.44930	40	44.0000	0.44930

1

SET NO. = 5

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 434-B DIRECTION 2 AT ELEVATION 899.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 434 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 42 DAMPING VALUE = 0.010

1	0.9000	0.09640	2	0.9450	0.09670	3	1.0036	0.09670	4	1.0620	0.13600
5	1.1250	0.13940	6	1.2906	0.13940	7	1.3230	0.15880	8	1.3680	0.20500
9	1.7070	0.20500	10	1.8000	0.26470	11	1.8720	0.26950	12	2.0627	0.26950
13	2.1420	0.28470	14	2.4524	0.28470	15	2.5020	0.31490	16	2.6476	0.31490
17	2.9970	0.45740	18	3.5951	0.45740	19	3.7530	0.57440	20	4.3340	0.57440
21	4.5000	0.67510	22	5.4292	0.67510	23	5.6250	0.76670	24	6.4260	1.19490
25	7.2090	1.46815	26	7.5600	1.85770	27	8.4262	1.85770	28	8.5320	1.93470
29	9.3261	1.93470	30	9.3330	1.96250	31	11.4070	1.96250	32	11.5379	1.92800
33	15.6200	1.92800	34	15.6420	1.90550	35	16.0160	1.51320	36	19.2940	0.86030
37	22.0000	0.71610	38	22.5518	0.56270	39	24.6620	0.56270	40	29.3193	0.39110
41	37.1580	0.39110	42	44.0000	0.39110						

1

SET NO. = 8

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 435-B DIRECTION 2 AT ELEVATION 860.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 435 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.010

1	0.9000	0.09640	2	0.9450	0.09660	3	1.0036	0.09660	4	1.0620	0.13610
5	1.1250	0.13960	6	1.2912	0.13960	7	1.3230	0.15850	8	1.3680	0.20470
9	1.7077	0.20470	10	1.8000	0.26380	11	1.8720	0.26820	12	2.0628	0.26820
13	2.1420	0.28320	14	2.4533	0.28320	15	2.5020	0.31250	16	2.6500	0.31250
17	2.9970	0.45160	18	3.5981	0.45160	19	3.7530	0.56330	20	4.3421	0.56330
21	4.5000	0.65540	22	5.4141	0.65540	23	6.4260	1.11060	24	7.2090	1.35600
25	7.5600	1.73010	26	9.3217	1.73010	27	9.3330	1.77380	28	11.4070	1.77380
29	11.9263	1.64030	30	15.6200	1.64030	31	16.0160	1.26300	32	19.2940	0.65640
33	22.0000	0.53370	34	22.6380	0.40900	35	24.6620	0.40180	36	32.5490	0.21270
37	34.8150	0.20720	38	44.0000	0.18710						

1

SET NO. = 11

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 436-B DIRECTION 2 AT ELEVATION 841.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 436 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.010

1	0.9000	0.09640	2	0.9450	0.09650	3	1.0034	0.09650	4	1.0620	0.13610
5	1.1250	0.13930	6	1.2908	0.13930	7	1.3230	0.15830	8	1.3680	0.20450
9	1.7077	0.20450	10	1.8000	0.26340	11	1.8720	0.26780	12	2.0635	0.26780
13	2.1420	0.28260	14	2.4533	0.28260	15	2.5020	0.31190	16	2.6507	0.31190
17	2.9970	0.45030	18	3.5985	0.45030	19	3.7530	0.56160	20	4.3458	0.56160
21	4.5000	0.65060	22	5.4394	0.65060	23	6.4260	1.07330	24	7.2090	1.26660
25	7.5600	1.59400	26	9.3188	1.59400	27	9.3330	1.64510	28	11.4070	1.64510
29	11.6486	1.58570	30	15.6200	1.58570	31	16.0160	1.17130	32	19.2940	0.59910
33	20.1080	0.54040	34	22.0000	0.47840	35	22.6323	0.34230	36	24.6620	0.34230
37	32.5490	0.18920	38	44.0000	0.17670						

1

SET NO. = 14

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 437-B DIRECTION 2 AT ELEVATION 825.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 437

1	0.9000	0.09640	2	0.9450	0.09650	3	1.0036	0.09650	4	1.0620	0.13600
5	1.1250	0.13930	6	1.2909	0.13930	7	1.3230	0.15820	8	1.3680	0.20440
9	1.7078	0.20440	10	1.8000	0.26330	11	1.8720	0.26760	12	2.0643	0.26760
13	2.1420	0.28220	14	2.4534	0.28220	15	2.5020	0.31130	16	2.6507	0.31130
17	2.9970	0.44910	18	3.5987	0.44910	19	3.7530	0.55990	20	4.3485	0.55990
21	4.5000	0.64650	22	5.4572	0.64650	23	6.4260	1.04670	24	7.2090	1.21340
25	7.5600	1.52560	26	9.3174	1.52560	27	9.3330	1.58060	28	11.4070	1.58060
29	11.5392	1.54950	30	15.6260	1.54950	31	16.0160	1.13220	32	19.2940	0.57830
33	20.1080	0.51530	34	22.0000	0.44920	35	22.6380	0.31780	36	24.6620	0.31380
37	32.5490	0.18360	38	44.0000	0.17320						

SET NO. = 17

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.01
FIGURE NO. 438-B DIRECTION 2 AT ELEVATION 810.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 438

1	0.9000	0.09630	2	0.9450	0.09640	3	1.0034	0.09640	4	1.0620	0.13600
5	1.1250	0.13920	6	1.2909	0.13920	7	1.3230	0.15780	8	1.3680	0.20400
9	1.7083	0.20400	10	1.8000	0.26230	11	1.8720	0.26650	12	2.0650	0.26650
13	2.1420	0.28080	14	2.4539	0.28080	15	2.5020	0.30940	16	2.6527	0.30940
17	2.9970	0.44460	18	3.5999	0.44460	19	3.7530	0.55260	20	4.3564	0.55260
21	4.5000	0.63220	22	5.5070	0.63220	23	6.4260	0.97510	24	7.2090	1.09870
25	7.5600	1.37260	26	8.5329	1.37830	27	9.3060	1.38190	28	9.3330	1.47090
29	11.4070	1.47090	30	11.4262	1.46680	31	15.6200	1.46680	32	16.0160	1.04860
33	19.2940	0.52120	34	20.1080	0.45700	35	22.0000	0.39900	36	22.6380	0.29220
37	24.6620	0.27060	38	32.5490	0.17400	39	44.0000	0.16570			

SET NO. = 3

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 433-B DIRECTION 3 AT ELEVATION 918.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 433

1	0.9000	0.13310	2	0.9450	0.14010	3	1.0112	0.14010	4	1.0620	0.19040
5	1.1250	0.19970	6	1.3119	0.19970	7	1.3230	0.21160	8	1.3680	0.28980
9	1.4040	0.29750	10	1.6888	0.29750	11	1.7280	0.34170	12	1.8720	0.42140
13	1.9530	0.42810	14	2.0990	0.42810	15	2.1420	0.46320	16	2.7747	0.46320
17	2.8170	0.47040	18	2.9970	0.56450	19	3.6630	0.56450	20	3.7646	0.50630
21	4.1061	0.50630	22	4.5000	0.85270	23	5.1505	0.85270	24	6.4260	1.79720
25	7.2090	2.79200	26	7.4970	3.39890	27	7.5600	3.73390	28	9.2400	3.73390
29	9.3720	3.57530	30	11.4070	3.57530	31	14.6630	1.39860	32	15.6200	1.16310
33	15.9479	1.07230	34	17.2070	1.07230	35	18.0000	1.13080	36	22.0000	1.13080
37	22.6380	1.09330	38	24.6620	0.73660	39	32.0650	0.41630	40	32.4833	0.39440
41	34.8150	0.39440	42	37.1580	0.35470	43	44.0000	0.33770			

SET NO. = 6

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 434-B DIRECTION 3 AT ELEVATION 899.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 434

1	0.9000	0.13280	2	0.9450	0.13960	3	1.0110	0.13960	4	1.0620	0.19010
5	1.1250	0.19880	6	1.3120	0.19880	7	1.3230	0.21030	8	1.3680	0.28850
9	1.4040	0.29600	10	1.6901	0.29600	11	1.7280	0.33850	12	1.8720	0.41700
13	1.9530	0.42280	14	2.0998	0.42280	15	2.1420	0.45660	16	2.7954	0.45660
17	2.8170	0.46020	18	2.9970	0.54820	19	3.6630	0.54820	20	3.7725	0.48590

21	4.1080	0.48590	22	4.5000	0.80280	23	5.1830	0.80280	24	6.4260	1.58060
25	7.2090	2.41220	26	7.5600	3.17690	27	9.2400	3.17690	28	9.4772	2.91500
29	11.4070	2.91500	30	14.6630	1.03700	31	15.6200	0.88090	32	16.0160	0.76460
33	19.3515	0.69810	34	22.6380	0.69810	35	24.6620	0.43500	36	32.5155	0.30010
37	34.8150	0.30010	38	44.0000	0.28590						

SET NO. = 9

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 435-B DIRECTION 3 AT ELEVATION 860.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 435 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.010

1	0.9000	0.13160	2	0.9450	0.13800	3	1.0109	0.13800	4	1.0620	0.18870
5	1.1250	0.19620	6	1.3127	0.19620	7	1.3230	0.20670	8	1.3680	0.28450
9	1.4040	0.29150	10	1.6921	0.29150	11	1.7280	0.33060	12	1.8720	0.40640
13	1.9530	0.41020	14	2.1010	0.41020	15	2.1420	0.44180	16	2.6180	0.44180
17	2.6229	0.43750	18	2.8170	0.43750	19	2.9970	0.51320	20	3.6630	0.51320
21	3.7901	0.44240	22	4.1126	0.44240	23	4.5000	0.69980	24	5.2828	0.69980
25	5.6250	0.85490	26	6.4260	1.15770	27	7.2090	1.67010	28	7.5600	2.09450
29	9.2400	2.09450	30	9.6678	1.70660	31	11.4070	1.70660	32	14.6630	0.43750
33	14.8059	0.42550	34	16.0160	0.42550	35	16.9998	0.38910	36	22.0000	0.38910
37	24.6620	0.34380	38	31.3900	0.20430	39	34.8150	0.20430	40	37.0852	0.17287
41	40.0000	0.17287									

SET NO. = 12

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 436-B DIRECTION 3 AT ELEVATION 841.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 436 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.010

1	0.9000	0.13130	2	0.9450	0.13760	3	1.0108	0.13760	4	1.0620	0.18850
5	1.1250	0.19560	6	1.3128	0.19560	7	1.3230	0.20580	8	1.3680	0.28360
9	1.4040	0.29050	10	1.6926	0.29050	11	1.7280	0.32870	12	1.8720	0.40370
13	1.9530	0.40710	14	2.1013	0.40710	15	2.1420	0.43810	16	2.6180	0.43810
17	2.6253	0.43170	18	2.8170	0.43170	19	2.9970	0.50420	20	3.6630	0.50420
21	3.7946	0.43130	22	4.1141	0.43130	23	4.5000	0.67370	24	5.3225	0.67370
25	5.6250	0.79540	26	6.4260	1.05110	27	7.4970	1.72940	28	7.5600	1.83740
29	9.2400	1.83740	30	9.9207	1.25600	31	11.4070	1.25600	32	14.2552	0.46020
33	16.0160	0.46020	34	17.4109	0.39970	35	22.0000	0.39970	36	24.6620	0.34540
37	31.6454	0.16930	38	34.8150	0.16930	39	37.1580	0.14330	40	44.0000	0.14040

SET NO. = 15

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 437-B DIRECTION 3 AT ELEVATION 825.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 437 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.010

1	0.9000	0.13110	2	0.9450	0.13730	3	1.0106	0.13730	4	1.0620	0.18830
5	1.1250	0.19520	6	1.3131	0.19520	7	1.3230	0.20500	8	1.3680	0.28280
9	1.4040	0.28970	10	1.6932	0.28970	11	1.7280	0.32680	12	1.8720	0.40100
13	1.9530	0.40400	14	2.1018	0.40400	15	2.1420	0.43430	16	2.6180	0.43430
17	2.6280	0.42560	18	2.8170	0.42560	19	2.9970	0.49470	20	3.6630	0.49470
21	3.8018	0.41890	22	4.1157	0.41890	23	4.5000	0.64500	24	5.3759	0.64500
25	5.6250	0.73200	26	6.4260	0.94260	27	7.4970	1.48970	28	7.5600	1.56770
29	9.2400	1.56770	30	9.9853	0.99650	31	11.4070	0.99650	32	13.9189	0.49620
33	16.0160	0.49620	34	18.1449	0.37830	35	22.0000	0.37830	36	22.6380	0.37510
37	24.6620	0.32470	38	31.8748	0.13470	39	34.8150	0.13470	40	37.1580	0.12150
41	44.0000	0.11840									

SET NO. = 18

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;

FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.01
FIGURE NO. 438-8 DIRECTION 3 AT ELEVATION 810.50 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 438 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 42 DAMPING VALUE = 0.010

1	0.9000	0.13100	2	0.9450	0.13710	3	1.0105	0.13710	4	1.0620	0.18820
5	1.1250	0.19480	6	1.3132	0.19480	7	1.3230	0.20440	8	1.3680	0.28220
9	1.4040	0.28900	10	1.6939	0.28900	11	1.7280	0.32510	12	1.8720	0.39840
13	1.9530	0.40120	14	2.1023	0.40120	15	2.1420	0.43080	16	2.6180	0.43080
17	2.6309	0.41960	18	2.8170	0.41960	19	2.9970	0.48560	20	3.6630	0.48560
21	3.8100	0.40690	22	4.1175	0.40690	23	4.5000	0.61740	24	5.4408	0.61740
25	5.6250	0.67270	26	6.4260	0.84960	27	7.4970	1.27240	28	7.5600	1.32330
29	9.2400	1.32330	30	10.0366	0.80780	31	10.4280	0.80780	32	10.9893	0.78080
33	11.4070	0.78080	34	13.7990	0.48330	35	16.0160	0.48330	36	18.2860	0.35830
37	22.0000	0.35830	38	22.6380	0.35080	39	24.6620	0.27740	40	32.0650	0.11750
41	34.8150	0.11710	42	44.0000	0.10860						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 1
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 439-B DIRECTION 1 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 439 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.020

1	0.9000	0.12530	2	0.9450	0.13130	3	1.0046	0.13130	4	1.0620	0.16540
5	1.2910	0.16540	6	1.3680	0.22440	7	1.5937	0.22440	8	1.6110	0.23020
9	1.8720	0.34120	10	2.1029	0.34120	11	2.1420	0.35350	12	2.6258	0.35350
13	2.8170	0.38000	14	2.9970	0.43930	15	3.7334	0.43930	16	3.7530	0.44620
17	4.0950	0.44900	18	4.5000	0.62810	19	5.0040	0.66560	20	6.4260	1.73250
21	7.2090	2.81140	22	7.5600	3.06110	23	8.3340	3.14220	24	8.5320	3.55660
25	10.4280	3.55660	26	11.0000	2.62490	27	11.3740	2.57400	28	14.6630	1.06270
29	15.6420	0.86770	30	16.0160	0.86510	31	18.2630	0.80270	32	20.0750	0.80270
33	22.0000	0.76780	34	22.6380	0.70930	35	24.6620	0.48590	36	32.5490	0.37310
37	34.8150	0.37310	38	44.0000	0.34400						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 4
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 440-B DIRECTION 1 AT ELEVATION 899.50

BROADENED SPECTRUM FOR NODE= 440 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.020

1	0.9000	0.12490	2	0.9450	0.13070	3	1.0047	0.13070	4	1.0620	0.16490
5	1.2915	0.16490	6	1.3680	0.22310	7	1.5966	0.22310	8	1.6110	0.22770
9	1.8720	0.33790	10	2.1073	0.33790	11	2.1420	0.34830	12	2.6315	0.34830
13	2.8170	0.37450	14	2.9970	0.42920	15	3.7452	0.42920	16	3.7530	0.43180
17	4.0950	0.43310	18	4.5000	0.60110	19	5.0040	0.62800	20	6.4260	1.59390
21	7.2090	2.58690	22	7.5600	2.80180	23	8.3525	2.80180	24	8.5320	3.12370
25	10.4280	3.12370	26	11.0000	2.26700	27	11.3740	2.22840	28	14.6630	0.89820
29	15.4792	0.74490	30	16.0160	0.74490	31	17.6844	0.69450	32	22.0000	0.69450
33	22.6380	0.65060	34	24.6620	0.46290	35	32.4049	0.32730	36	34.8150	0.32730
37	44.0000	0.30310									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 7
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 441-B DIRECTION 1 AT ELEVATION 860.00

BROADENED SPECTRUM FOR NODE= 441 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.020

1	0.9000	0.12350	2	0.9450	0.12900	3	1.0060	0.12900	4	1.0620	0.16340
5	1.2933	0.16340	6	1.3680	0.21940	7	1.6095	0.21940	8	1.6650	0.23430
9	1.7280	0.26960	10	1.8720	0.32510	11	2.1250	0.32510	12	2.1420	0.32920
13	2.6358	0.32920	14	2.8170	0.35040	15	2.9970	0.39010	16	3.6630	0.39010
17	3.7456	0.37590	18	3.7530	0.37590	19	4.0950	0.37740	20	4.5000	0.48740
21	5.0455	0.48740	22	5.6250	0.73850	23	6.4260	1.01750	24	7.2090	1.50100
25	7.4970	1.56110	26	7.5600	1.56220	27	9.2400	1.56220	28	9.8631	1.35920
29	10.4280	1.35920	30	11.0000	0.91080	31	14.1507	0.42710	32	20.0750	0.42710
33	22.6380	0.35110	34	24.6620	0.25680	35	31.7132	0.17470	36	32.5490	0.17470
37	37.1580	0.16410	38	44.0000	0.16360						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 10
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 442-B DIRECTION 1 AT ELEVATION 841.00

BROADENED SPECTRUM FOR NODE= 442 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.12310	2	0.9450	0.12850	3	1.0055	0.12850	4	1.0620	0.16300
5	1.2934	0.16300	6	1.3680	0.21850	7	1.6116	0.21850	8	1.6650	0.23260
9	1.7280	0.26710	10	1.8720	0.32170	11	2.1306	0.32170	12	2.1420	0.32430
13	2.6406	0.32430	14	2.8170	0.34370	15	2.9970	0.37900	16	3.6630	0.37900
17	3.7419	0.36120	18	3.7530	0.36120	19	4.0950	0.36140	20	4.5000	0.45560
21	5.0864	0.45560	22	5.6250	0.65100	23	6.4260	0.86290	24	7.2090	1.20110
25	7.4970	1.23880	26	9.1630	1.23880	27	9.2400	1.22610	28	9.9800	1.01720
29	10.4280	1.01720	30	11.0000	0.68750	31	11.4070	0.59160	32	13.8825	0.42570
33	16.0160	0.42570	34	17.1015	0.41450	35	20.0750	0.41450	36	22.6380	0.34280
37	24.6620	0.22340	38	32.5490	0.15960	39	34.2500	0.14870	40	37.1580	0.14870
41	44.0000	0.14620									

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 13
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 443-B DIRECTION 1 AT ELEVATION 825.00

BROADENED SPECTRUM FOR NODE= 443 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.020

1	0.9000	0.12290	2	0.9450	0.12830	3	1.0055	0.12830	4	1.0620	0.16280
5	1.2932	0.16280	6	1.3680	0.21790	7	1.6169	0.21790	8	1.7280	0.26520
9	1.8720	0.31920	10	2.1351	0.31920	11	2.1420	0.32070	12	2.7182	0.32070
13	2.8170	0.33940	14	2.9970	0.37080	15	3.6630	0.37080	16	3.7553	0.34980
17	4.0969	0.34980	18	4.5000	0.43240	19	5.1242	0.43240	20	5.6250	0.58880
21	6.4260	0.75630	22	7.2090	1.01000	23	7.4970	1.03360	24	9.1630	1.03360
25	9.2400	1.01500	26	10.0773	0.81530	27	10.4280	0.81530	28	11.0000	0.53970
29	11.3740	0.45440	30	11.7816	0.44500	31	16.0160	0.44500	32	18.6285	0.37310
33	20.0750	0.37310	34	22.6380	0.30750	35	24.6620	0.20530	36	32.5490	0.14200
37	44.0000	0.13380									

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 16
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 444-B DIRECTION 1 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 444 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.12270	2	0.9450	0.12800	3	1.0052	0.12800	4	1.0620	0.16260
5	1.2929	0.16260	6	1.3680	0.21730	7	1.6188	0.21730	8	1.7280	0.26350
9	1.8720	0.31690	10	2.1392	0.31690	11	2.1420	0.31750	12	2.7224	0.31750
13	2.8170	0.33540	14	2.9970	0.36340	15	3.6630	0.36340	16	3.7675	0.33950
17	4.1003	0.33950	18	4.5000	0.41160	19	5.1637	0.41160	20	5.6250	0.53470
21	6.4260	0.66530	22	7.2090	0.86240	23	8.8110	0.86240	24	9.1630	0.86200
25	10.1596	0.65500	26	10.4280	0.65500	27	11.0000	0.41790	28	11.1106	0.40410
29	12.8025	0.40410	30	13.1040	0.44640	31	16.0160	0.44640	32	19.0143	0.33120
33	20.0750	0.33120	34	22.0000	0.29900	35	22.6380	0.27540	36	24.6620	0.19830
37	32.5490	0.13240	38	34.8150	0.13150	39	44.0000	0.12520			

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 2
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 439-B DIRECTION 2 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 439 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 43 DAMPING VALUE = 0.020

1	0.9000	0.08920	2	0.9450	0.08960	3	0.9990	0.08970	4	1.0620	0.11450
5	1.1250	0.11840	6	1.2920	0.11840	7	1.3230	0.14160	8	1.3680	0.16560
9	1.6674	0.16560	10	1.8000	0.20830	11	2.0430	0.21620	12	2.4013	0.21620
13	2.5020	0.23900	14	2.6460	0.26960	15	2.8170	0.28400	16	2.9970	0.33180
17	3.4972	0.33180	18	3.7530	0.45220	19	4.3762	0.45220	20	4.5000	0.47740
21	5.1547	0.47740	22	5.6250	0.58100	23	6.4260	0.88420	24	7.5600	1.24670
25	8.3340	1.36010	26	8.5320	1.46820	27	10.4280	1.46820	28	10.8478	1.32940
29	11.3740	1.32940	30	11.4070	1.32650	31	11.5046	1.31430	32	12.7800	1.31430

33	12.7980	1.31560	34	15.6420	1.31560	35	16.0160	1.13680	36	19.2940	0.69820
37	20.1080	0.58220	38	22.0000	0.52960	39	22.5947	0.45140	40	24.6620	0.45140
41	28.2678	0.37050	42	37.1580	0.37050	43	44.0000	0.37050			

SET NO. = 5

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 440-B DIRECTION 2 AT ELEVATION 899.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 440 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.08920	2	0.9450	0.08960	3	0.9990	0.08960	4	1.0620	0.11430
5	1.1250	0.11840	6	1.2924	0.11840	7	1.3230	0.14170	8	1.3680	0.16560
9	1.6661	0.16560	10	1.8000	0.20900	11	2.0430	0.21630	12	2.3987	0.21630
13	2.5020	0.24040	14	2.6460	0.27090	15	2.8170	0.28440	16	2.9970	0.33400
17	3.4973	0.33400	18	3.7530	0.45560	19	4.3567	0.45560	20	4.5000	0.48590
21	5.1132	0.48590	22	5.6250	0.61440	23	7.5600	1.44320	24	8.4565	1.44320
25	8.5320	1.48580	26	10.4280	1.48580	27	10.6976	1.41610	28	11.4070	1.41610
29	12.3478	1.27950	30	12.7800	1.27950	31	12.7980	1.28310	32	15.6420	1.28310
33	16.0160	1.14750	34	19.2940	0.72390	35	20.1080	0.60940	36	22.0000	0.55110
37	22.6380	0.48300	38	24.6620	0.46500	39	29.0218	0.33750	40	37.1580	0.33750
41	44.0000	0.33750									

SET NO. = 8

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 441-B DIRECTION 2 AT ELEVATION 860.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 441 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.020

1	0.9000	0.08920	2	0.9450	0.08960	3	0.9990	0.08960	4	1.0620	0.11430
5	1.1250	0.11850	6	1.2930	0.11850	7	1.3230	0.14130	8	1.3680	0.16530
9	1.6676	0.16530	10	1.8000	0.20780	11	2.0430	0.21550	12	2.4030	0.21550
13	2.5020	0.23800	14	2.6460	0.26770	15	2.8170	0.28210	16	2.9970	0.32970
17	3.4983	0.32970	18	3.7530	0.44670	19	4.3747	0.44670	20	4.5000	0.47170
21	5.1382	0.47170	22	5.6250	0.58420	23	7.5600	1.33740	24	9.2400	1.33740
25	9.3955	1.32100	26	10.4280	1.32100	27	10.6594	1.26720	28	11.4070	1.26720
29	12.5962	1.09370	30	12.7800	1.09370	31	12.7980	1.09520	32	15.6420	1.09520
33	16.0160	0.96470	34	19.2940	0.56840	35	20.1080	0.47880	36	22.0000	0.41790
37	22.6380	0.37520	38	24.6620	0.34500	39	32.5490	0.20640	40	44.0000	0.18760

SET NO. = 11

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 442-B DIRECTION 2 AT ELEVATION 841.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 442 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.020

1	0.9000	0.08910	2	0.9450	0.08950	3	0.9990	0.08950	4	1.0620	0.11430
5	1.1250	0.11830	6	1.2927	0.11830	7	1.3230	0.14120	8	1.3680	0.16520
9	1.6679	0.16520	10	1.8000	0.20740	11	2.0430	0.21520	12	2.4039	0.21520
13	2.5020	0.23740	14	2.6460	0.26700	15	2.8170	0.28150	16	2.9970	0.32870
17	3.4985	0.32870	18	3.7530	0.44530	19	4.3842	0.44530	20	4.5000	0.46800
21	5.1575	0.46800	22	5.6250	0.56850	23	7.5600	1.23540	24	9.2400	1.23540
25	9.5384	1.19790	26	10.4280	1.19790	27	10.5746	1.16940	28	11.4070	1.16940
29	12.2796	1.04470	30	12.7800	1.04470	31	12.7980	1.04580	32	15.6420	1.04580
33	16.0160	0.89410	34	19.2940	0.52420	35	20.1080	0.42890	36	22.0000	0.37670
37	22.6380	0.32260	38	24.6620	0.30210	39	32.5490	0.18830	40	44.0000	0 17690

SET NO. = 14

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 443-B DIRECTION 2 AT ELEVATION 825.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 443 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.020

1	0.9000	0.08910	2	0.9450	0.08950	3	0.9990	0.08950	4	1.0620	0.11420
5	1.1250	0.11830	6	1.2928	0.11830	7	1.3230	0.14110	8	1.3680	0.16510
9	1.6684	0.16510	10	1.8000	0.20720	11	2.0430	0.21500	12	2.4047	0.21500
13	2.5020	0.23680	14	2.6460	0.26640	15	2.8170	0.28100	16	2.9970	0.32800
17	3.4991	0.32800	18	3.7530	0.44400	19	4.3914	0.44400	20	4.5000	0.46490
21	5.1692	0.46490	22	5.6250	0.55830	23	7.5600	1.18290	24	9.2400	1.18290
25	9.6806	1.12770	26	10.4280	1.12770	27	10.4950	1.11930	28	11.4070	1.11930
29	12.1357	1.01900	30	12.7800	1.01900	31	12.7980	1.01980	32	15.6420	1.01980
33	16.0160	0.86690	34	19.2940	0.50670	35	20.1080	0.41190	36	22.0000	0.36170
37	22.6380	0.30920	38	24.6620	0.28470	39	32.5490	0.18370	40	44.0000	0.17340

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 17
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AY ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 444-B DIRECTION 2 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 444 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.08900	2	0.9450	0.08940	3	0.9990	0.08940	4	1.0620	0.11430
5	1.1250	0.11820	6	1.2927	0.11820	7	1.3230	0.14080	8	1.3680	0.16470
9	1.6692	0.16470	10	1.8000	0.20610	11	2.0430	0.21420	12	2.4074	0.21420
13	2.5020	0.23490	14	2.6460	0.26420	15	2.8170	0.27940	16	2.9970	0.32480
17	3.4997	0.32480	18	3.7530	0.43820	19	4.4098	0.43820	20	4.5000	0.45470
21	5.2079	0.45470	22	5.6250	0.53070	23	6.4260	0.77780	24	7.5600	1.07180
25	8.5133	1.07180	26	8.5320	1.07790	27	10.4280	1.07790	28	11.4070	1.04250
29	12.0096	0.96730	30	15.6200	0.96730	31	15.6420	0.96600	32	16.0160	0.81280
33	19.2940	0.46090	34	20.1080	0.37120	35	22.0000	0.32590	36	22.6380	0.28450
37	32.5490	0.17410	38	37.1580	0.17070	39	44.0000	0.16530			

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 3
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 439-B DIRECTION 3 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 439 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.12490	2	0.9450	0.13130	3	1.0068	0.13130	4	1.0620	0.16510
5	1.2905	0.16510	6	1.3680	0.22290	7	1.4040	0.22490	8	1.5896	0.22490
9	1.7280	0.27850	10	1.8720	0.33490	11	2.1060	0.33490	12	2.1420	0.34320
13	2.6120	0.34320	14	2.6460	0.34750	15	2.8170	0.36140	16	2.9970	0.43040
17	3.6630	0.43040	18	3.6993	0.42320	19	3.7530	0.42320	20	4.0950	0.43060
21	4.5000	0.57590	22	5.0040	0.59590	23	5.6250	1.00620	24	6.4260	1.45820
25	7.5600	2.81550	26	9.2400	2.81550	27	9.4232	2.64730	28	11.4070	2.64730
29	15.6200	0.96900	30	16.0160	0.89190	31	17.1998	0.89190	32	18.0000	0.91380
33	22.0000	0.91380	34	22.6380	0.90240	35	24.6620	0.59780	36	32.5018	0.38770
37	34.8150	0.38770	38	37.1580	0.35450	39	44.0000	0.34150			

1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 6
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 440-B DIRECTION 3 AT ELEVATION 899.50

BROADENED SPECTRUM FOR NODE= 440 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.020

1	0.9000	0.12450	2	0.9450	0.13080	3	1.0064	0.13080	4	1.0620	0.16480
5	1.2907	0.16480	6	1.3680	0.22190	7	1.4040	0.22370	8	1.6045	0.22370
9	1.6110	0.22570	10	1.7280	0.27580	11	1.8720	0.33160	12	2.1154	0.33160
13	2.1420	0.33730	14	2.6299	0.33730	15	2.6460	0.33910	16	2.8170	0.35470
17	2.9970	0.41740	18	3.6630	0.41740	19	3.7229	0.40590	20	3.7530	0.40590
21	4.0950	0.41230	22	4.5000	0.54150	23	5.0040	0.55070	24	5.6250	0.90430
25	6.4260	1.28120	26	7.4970	2.34360	27	7.5600	2.39810	28	9.2400	2.39810
29	9.5322	2.15750	30	11.4070	2.15750	31	15.6200	0.74370	32	16.0160	0.64690
33	19.2694	0.58880	34	22.6380	0.58880	35	24.6620	0.39280	36	32.5490	0.29880

37	34.8150	0.29770	38	44.0000	0.28570

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 9
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 441-B DIRECTION 3 AT ELEVATION 860.00

BROADENED SPECTRUM FOR NODE= 441 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.12330	2	0.9450	0.12920	3	1.0064	0.12920	4	1.0620	0.16340
5	1.2923	0.16340	6	1.3680	0.21880	7	1.4040	0.22020	8	1.6124	0.22020
9	1.6650	0.23510	10	1.7280	0.26920	11	1.8720	0.32330	12	2.1309	0.32330
13	2.1420	0.32550	14	2.6493	0.32550	15	2.8170	0.34140	16	2.9970	0.38970
17	3.6630	0.38970	18	3.7532	0.37350	19	4.0950	0.37350	20	4.5000	0.47070
21	5.0327	0.47070	22	5.6250	0.70230	23	6.4260	0.93630	24	7.2090	1.41520
25	7.4970	1.57270	26	7.5600	1.58440	27	9.2400	1.58440	28	9.7343	1.26810
29	11.3740	1.26810	30	11.4070	1.26090	31	14.6630	0.40330	32	15.1481	0.35810
33	16.0160	0.35810	34	16.9875	0.33710	35	22.0000	0.33710	36	22.6380	0.33190
37	24.6620	0.29530	38	30.3226	0.19950	39	34.8150	0.19950	40	36.8962	0.17017
41	40.0000	0.17017									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 12
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 442-B DIRECTION 3 AT ELEVATION 841.00

BROADENED SPECTRUM FOR NODE= 442 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.12310	2	0.9450	0.12890	3	1.0064	0.12890	4	1.0620	0.16310
5	1.2923	0.16310	6	1.3680	0.21820	7	1.4040	0.21930	8	1.6135	0.21930
9	1.6650	0.23380	10	1.7280	0.26750	11	1.8720	0.32120	12	2.1338	0.32120
13	2.1420	0.32280	14	2.6476	0.32280	15	2.8170	0.33880	16	2.9970	0.38280
17	3.6630	0.38280	18	3.7712	0.36370	19	4.0950	0.36370	20	4.5000	0.45270
21	5.0511	0.45270	22	5.6250	0.65140	23	6.4260	0.84930	24	7.2090	1.25620
25	7.4970	1.38470	26	7.5600	1.39030	27	9.2400	1.39030	28	9.9614	0.96540
29	11.3740	0.96540	30	14.5087	0.35080	31	16.0160	0.35080	32	16.5097	0.33950
33	22.0000	0.33950	34	22.6380	0.31190	35	24.6620	0.28640	36	30.8070	0.16520
37	34.8150	0.16520	38	36.9035	0.14042	39	40.0000	0.14042			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 15
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 443-B DIRECTION 3 AT ELEVATION 825.00

BROADENED SPECTRUM FOR NODE= 443 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.12290	2	0.9450	0.12860	3	1.0061	0.12860	4	1.0620	0.16290
5	1.2924	0.16290	6	1.3680	0.21770	7	1.4040	0.21860	8	1.6148	0.21860
9	1.6650	0.23250	10	1.7280	0.26590	11	1.8720	0.31920	12	2.1378	0.31920
13	2.1420	0.32000	14	2.6884	0.32000	15	2.9970	0.37530	16	3.6630	0.37530
17	3.7602	0.35280	18	4.0950	0.35280	19	4.5000	0.43320	20	5.0764	0.43320
21	5.6250	0.59740	22	6.4260	0.75910	23	7.2090	1.09160	24	7.4970	1.19050
25	9.1630	1.19050	26	9.2400	1.18750	27	10.0447	0.77140	28	11.3740	0.77140
29	11.4070	0.76780	30	14.1628	0.36870	31	16.0160	0.36870	32	17.8186	0.31440
33	22.0000	0.31440	34	22.6380	0.30370	35	24.6620	0.26950	36	31.9101	0.13170
37	34.8150	0.13170	38	37.1580	0.12090	39	44.0000	0.11710			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 18
FLOOR RESPONSE SPECTRA FOR 1/2SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 444-B DIRECTION 3 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 444 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 35 DAMPING VALUE = 0.020

1	0.9000	0.12280	2	0.9450	0.12840	3	1.0060	0.12840	4	1.0620	0.16280

5	1.2925	0.16280	6	1.3680	0.21730	7	1.4040	0.21800	8	1.6159	0.21800
9	1.6650	0.23130	10	1.7280	0.26430	11	1.8720	0.31740	12	2.7008	0.31740
13	2.9970	0.36820	14	3.6630	0.36820	15	3.7745	0.34230	16	4.0950	0.34230
17	4.5000	0.41440	18	5.1078	0.41440	19	5.6250	0.54690	20	6.4260	0.67630
21	7.2090	0.94150	22	7.4970	1.01470	23	9.1630	1.01470	24	9.2400	1.00460
25	10.1021	0.61530	26	11.4070	0.61530	27	14.2007	0.35540	28	16.0160	0.35540
29	18.3537	0.28940	30	22.0000	0.28940	31	22.6380	0.28360	32	24.6620	0.22980
33	32.4463	0.11680	34	34.8150	0.11680	35	44.0000	0.10920			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 1
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 409-B DIRECTION 1 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 409 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.25050	2	0.9450	0.26270	3	1.0056	0.26270	4	1.0620	0.33060
5	1.2915	0.33060	6	1.3680	0.44910	7	1.5949	0.44910	8	1.6110	0.45970
9	1.7280	0.56280	10	1.8720	0.67920	11	2.1000	0.67920	12	2.1420	0.70540
13	2.6266	0.70540	14	2.8170	0.75840	15	2.9970	0.87260	16	3.7287	0.87260
17	3.7530	0.88990	18	4.0950	0.89630	19	4.5000	1.24330	20	5.0040	1.29360
21	6.4260	3.32700	22	7.2090	4.98960	23	7.4970	5.37080	24	7.5600	5.42260
25	8.5047	5.42260	26	8.5320	5.49340	27	10.4280	5.49340	28	11.0000	4.34340
29	11.3740	4.17470	30	14.6630	1.97950	31	15.6420	1.59800	32	18.2966	1.42700
33	20.0750	1.42700	34	22.0000	1.32840	35	22.6380	1.23460	36	24.6620	0.83700
37	32.4489	0.67660	38	34.8150	0.67660	39	44.0000	0.62480			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 4
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 410-B DIRECTION 1 AT ELEVATION 899.50

BROADENED SPECTRUM FOR NODE= 410 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.020

1	0.9000	0.24970	2	0.9450	0.26160	3	1.0057	0.26160	4	1.0620	0.32960
5	1.2919	0.32960	6	1.3680	0.44650	7	1.5973	0.44650	8	1.6110	0.45510
9	1.7280	0.55790	10	1.8720	0.67290	11	2.1043	0.67290	12	2.1420	0.69530
13	2.6307	0.69530	14	2.8170	0.74750	15	2.9970	0.85290	16	3.7406	0.85290
17	3.7530	0.86120	18	4.0950	0.86860	19	4.5000	1.19020	20	5.0040	1.22170
21	6.4260	3.06180	22	7.2090	4.58910	23	7.4970	4.90870	24	7.5600	4.95750
25	9.2400	4.95750	26	9.4272	4.84260	27	10.4280	4.84260	28	11.0000	3.79320
29	11.3740	3.61510	30	14.6630	1.66420	31	15.5448	1.35120	32	16.0160	1.35120
33	18.2039	1.20830	34	20.0750	1.20830	35	22.0000	1.17990	36	22.6380	1.09720
37	24.6620	0.76310	38	32.5490	0.59640	39	34.8150	0.59080	40	44.0000	0.56030

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 7
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 411-B DIRECTION 1 AT ELEVATION 860.00

BROADENED SPECTRUM FOR NODE= 411 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.020

1	0.9000	0.24690	2	0.9450	0.25810	3	1.0060	0.25810	4	1.0620	0.32670
5	1.2932	0.32670	6	1.3680	0.43870	7	1.6090	0.43870	8	1.6650	0.46910
9	1.7280	0.53960	10	1.8720	0.64880	11	2.1222	0.64880	12	2.1420	0.65840
13	2.6368	0.65840	14	2.8170	0.70010	15	2.9970	0.77680	16	3.6630	0.77680
17	3.7415	0.75000	18	3.7530	0.75000	19	4.0950	0.75630	20	4.5000	0.96820
21	5.0595	0.96820	22	5.6250	1.45290	23	6.4260	1.96590	24	7.2090	2.67150
25	7.4970	2.78090	26	9.1630	2.78090	27	9.2400	2.75990	28	10.0359	2.16710
29	10.4280	2.16710	30	11.0000	1.54050	31	14.1957	0.76800	32	20.0750	0.76800
33	22.0000	0.66920	34	22.6380	0.63460	35	24.6620	0.46320	36	31.6030	0.31620
37	32.5490	0.31620	38	44.0000	0.29100						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 10
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 412-B DIRECTION 1 AT ELEVATION 841.00

BROADENED SPECTRUM FOR NODE= 412 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.020

1	0.9000	0.24620	2	0.9450	0.25720	3	1.0057	0.25720	4	1.0620	0.32590
5	1.2931	0.32590	6	1.3680	0.43690	7	1.6112	0.43690	8	1.6650	0.46560
9	1.7280	0.53440	10	1.8720	0.64220	11	2.1280	0.64220	12	2.1420	0.64860
13	2.7119	0.64860	14	2.9970	0.75550	15	3.6630	0.75550	16	3.7568	0.72400
17	4.0950	0.72400	18	4.5000	0.90610	19	5.0995	0.90610	20	5.6250	1.28360
21	7.2090	2.14390	22	7.4570	2.21100	23	9.1630	2.21100	24	9.2400	2.16770
25	10.0744	1.65910	26	10.4280	1.65910	27	11.0000	1.15770	28	11.3740	1.05750
29	13.9846	0.78310	30	16.0160	0.78310	31	17.3286	0.75040	32	20.0750	0.75040
33	22.6380	0.62160	34	24.6620	0.42200	35	31.5696	0.29350	36	32.5490	0.29350
37	44.0000	0.26500									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 13
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 413-B DIRECTION 1 AT ELEVATION 825.00

BROADENED SPECTRUM FOR NODE= 413 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 36 DAMPING VALUE = 0.020

1	0.9000	0.24570	2	0.9450	0.25660	3	1.0055	0.25660	4	1.0620	0.32540
5	1.2929	0.32540	6	1.3680	0.43570	7	1.6170	0.43570	8	1.7280	0.53060
9	1.8720	0.63740	10	2.1327	0.63740	11	2.1420	0.64150	12	2.7168	0.64150
13	2.8170	0.67960	14	2.9970	0.73960	15	3.6630	0.73960	16	3.7509	0.69990
17	4.0950	0.69990	18	4.5000	0.86070	19	5.1325	0.86070	20	5.6250	1.16290
21	7.2090	1.83480	22	7.4970	1.84680	23	9.1630	1.84680	24	10.1182	1.36850
25	10.4280	1.36850	26	11.0000	0.92330	27	11.4070	0.80510	28	13.0611	0.80510
29	13.1040	0.81550	30	16.0160	0.81550	31	18.6317	0.67820	32	20.0750	0.67820
33	22.6380	0.55580	34	24.6620	0.36530	35	32.5490	0.26390	36	44.0000	0.24570

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 16
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 414-B DIRECTION 1 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 414 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.24530	2	0.9450	0.25600	3	1.0053	0.25600	4	1.0620	0.32500
5	1.2927	0.32500	6	1.3680	0.43450	7	1.6189	0.43450	8	1.7280	0.52710
9	1.8720	0.63300	10	2.1373	0.63300	11	2.1420	0.63500	12	2.7211	0.63500
13	2.8170	0.67140	14	2.9970	0.72510	15	3.6630	0.72510	16	3.7675	0.67770
17	4.0950	0.67770	18	4.5000	0.81980	19	5.1638	0.81980	20	5.6250	1.05740
21	7.2090	1.57380	22	8.8110	1.57380	23	9.1630	1.54320	24	10.1759	1.13160
25	10.4280	1.13160	26	11.0000	0.75930	27	11.6741	0.75930	28	11.9970	0.76620
29	12.8620	0.76620	30	13.1040	0.81430	31	16.0160	0.81430	32	19.1935	0.60280
33	20.0750	0.60280	34	22.0000	0.52420	35	22.6380	0.48910	36	24.6620	0.34830
37	32.5490	0.24510	38	34.8150	0.24400	39	44.0000	0.23090			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 2
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 409-B DIRECTION 2 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 409 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 42 DAMPING VALUE = 0.020

1	0.9000	0.17830	2	0.9450	0.17930	3	0.9990	0.17930	4	1.0620	0.22900
5	1.1250	0.23690	6	1.2923	0.23690	7	1.3230	0.28310	8	1.3680	0.33110
9	1.6674	0.33110	10	1.8900	0.41630	11	2.0430	0.43200	12	2.4004	0.43200
13	2.5020	0.47780	14	2.6460	0.53870	15	2.8170	0.56780	16	2.9970	0.66310
17	3.4967	0.66310	18	3.7530	0.90420	19	4.3788	0.90420	20	4.5000	0.95340
21	5.1587	0.95340	22	5.6250	1.15610	23	6.4260	1.72630	24	7.5600	2.31360
25	8.5320	2.64400	26	10.4280	2.64400	27	10.7920	2.44230	28	11.3740	2.44230
29	11.4070	2.43740	30	12.6653	2.43740	31	12.7800	2.52960	32	12.7980	2.53290
33	15.6420	2.53290	34	16.0160	2.17710	35	19.2940	1.34390	36	20.1080	1.12630
37	22.0000	1.01910	38	22.6380	0.85100	39	24.6620	0.85000	40	31.4173	0.56280

41	37.1580	0.56280	42	44.0000	0.56280

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 5
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 410-B DIRECTION 2 AT ELEVATION 899.50 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 410 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.17830	2	0.9450	0.17930	3	0.9991	0.17930	4	1.0620	0.22860
5	1.1250	0.23670	6	1.2924	0.23670	7	1.3230	0.28330	8	1.3680	0.33120
9	1.6663	0.33120	10	1.8000	0.41770	11	2.0430	0.43230	12	2.3979	0.43230
13	2.5020	0.48050	14	2.6460	0.54120	15	2.8170	0.56870	16	2.9970	0.66740
17	3.4964	0.66740	18	3.7530	0.91140	19	4.3598	0.91140	20	4.5000	0.97060
21	5.1180	0.97060	22	5.6250	1.22080	23	7.5600	2.67320	24	8.4854	2.67320
25	8.5320	2.71150	26	10.4280	2.71150	27	10.7052	2.56320	28	11.4070	2.56320
29	11.8325	2.46530	30	12.7800	2.46530	31	12.7980	2.47250	32	15.6420	2.47250
33	16.0160	2.19730	34	19.2940	1.38170	35	20.1080	1.15700	36	22.0000	1.04310
37	22.6380	0.91100	38	24.6620	0.86990	39	31.0053	0.53960	40	37.1580	0.53960
41	44.0000	0.53960									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 8
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 411-B DIRECTION 2 AT ELEVATION 860.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 411 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.17830	2	0.9450	0.17910	3	0.9990	0.17920	4	1.0620	0.22870
5	1.1250	0.23690	6	1.2929	0.23690	7	1.3230	0.28260	8	1.3680	0.33060
9	1.6677	0.33060	10	1.8000	0.41540	11	2.0430	0.43070	12	2.4027	0.43070
13	2.5020	0.47580	14	2.6460	0.53500	15	2.8170	0.56420	16	2.9970	0.65870
17	3.4975	0.65870	18	3.7530	0.89340	19	4.3774	0.89340	20	4.5000	0.94230
21	5.1428	0.94230	22	5.6250	1.16070	23	7.5600	2.48250	24	9.2400	2.48250
25	10.4280	2.48060	26	10.8095	2.30700	27	11.4070	2.30700	28	12.2063	2.11520
29	12.7800	2.11520	30	12.7980	2.11590	31	15.6420	2.11590	32	16.0160	1.85480
33	19.2940	1.09120	34	20.1080	0.91190	35	22.0000	0.79380	36	22.6380	0.70880
37	24.6620	0.64940	38	32.5490	0.39490	39	44.0000	0.36180			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 11
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 412-B DIRECTION 2 AT ELEVATION 841.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 412 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.17810	2	0.9450	0.17900	3	0.9990	0.17900	4	1.0620	0.22860
5	1.1250	0.23670	6	1.2928	0.23670	7	1.3230	0.28230	8	1.3680	0.33030
9	1.6680	0.33030	10	1.8000	0.41460	11	2.0430	0.43010	12	2.4033	0.43010
13	2.5020	0.47450	14	2.6460	0.53350	15	2.8170	0.56290	16	2.9970	0.65680
17	3.4979	0.65680	18	3.7530	0.89070	19	4.3868	0.89070	20	4.5000	0.93500
21	5.1617	0.93500	22	5.6250	1.13060	23	6.4260	1.67480	24	7.5600	2.29840
25	9.2400	2.29840	26	9.4792	2.26480	27	10.4280	2.26480	28	11.1224	2.18180
29	11.4070	2.18180	30	12.0437	2.02360	31	12.7800	2.02360	32	12.7980	2.02520
33	15.6420	2.02520	34	16.0160	1.72550	35	19.2940	1.02000	36	20.1080	0.83540
37	22.0000	0.72880	38	22.6380	0.61800	39	24.6620	0.57500	40	32.5490	0.36350
41	44.0000	0.34230									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 14
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02
FIGURE NO. 413-B DIRECTION 2 AT ELEVATION 825.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 413 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.020

1	0.9000	0.17810	2	0.9450	0.17890	3	0.9990	0.17890	4	1.0620	0.22850
5	1.1250	0.23670	6	1.2929	0.23670	7	1.3230	0.28210	8	1.3680	0.33010
9	1.6683	0.33010	10	1.8000	0.41410	11	2.0430	0.42970	12	2.4041	0.42970
13	2.5020	0.47360	14	2.6460	0.53240	15	2.8170	0.56180	16	2.9970	0.65540
17	3.4983	0.65540	18	3.7530	0.88790	19	4.3931	0.88790	20	4.5000	0.92910
21	5.1739	0.92910	22	5.6250	1.11080	23	6.4260	1.63610	24	7.5600	2.20640
25	9.2400	2.20640	26	9.3584	2.19180	27	10.4280	2.19180	28	11.4070	2.13620
29	12.0508	1.97500	30	12.7800	1.97500	31	12.7980	1.97640	32	15.6420	1.97640
33	16.0160	1.67470	34	19.2940	0.98570	35	20.1080	0.80110	36	22.0000	0.69940
37	22.6380	0.59310	38	24.6620	0.54490	39	32.5490	0.35520	40	44.0000	0.33570

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 17
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 414-B DIRECTION 2 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 414 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.17790	2	0.9450	0.17870	3	0.9990	0.17880	4	1.0620	0.22850
5	1.1250	0.23650	6	1.2928	0.23650	7	1.3230	0.28140	8	1.3680	0.32940
9	1.6693	0.32940	10	1.8000	0.41210	11	2.0430	0.42830	12	2.4074	0.42830
13	2.5020	0.46970	14	2.6460	0.52800	15	2.8170	0.55880	16	2.9970	0.64920
17	3.4990	0.64920	18	3.7530	0.87630	19	4.4118	0.87630	20	4.5009	0.90860
21	5.2124	0.90860	22	5.6250	1.05660	23	6.4260	1.52760	24	7.5600	2.01880
25	8.3794	2.01880	26	8.5320	2.11620	27	10.4280	2.11620	28	11.4070	2.03330
29	12.0613	1.87680	30	15.6200	1.87680	31	15.6420	1.87460	32	16.0160	1.57120
33	19.2940	0.89590	34	20.1080	0.72420	35	22.0000	0.62940	36	22.6380	0.54410
37	32.5490	0.33740	38	37.1580	0.33040	39	44.0000	0.31990			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 3
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 409-B DIRECTION 3 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 409 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.020

1	0.9000	0.24960	2	0.9450	0.26250	3	1.0070	0.26250	4	1.0620	0.32990
5	1.2910	0.32990	6	1.3680	0.44600	7	1.4040	0.44940	8	1.5896	0.44940
9	1.7280	0.55690	10	1.8720	0.66920	11	2.1061	0.66920	12	2.1420	0.68590
13	2.6249	0.68590	14	2.6460	0.69100	15	2.8170	0.71840	16	2.9970	0.85580
17	3.6630	0.85580	18	3.6864	0.84670	19	3.7530	0.84670	20	4.0950	0.85860
21	4.5000	1.14440	22	5.0040	1.17350	23	5.6250	1.98470	24	6.4260	2.83710
25	7.5600	5.14830	26	9.2400	5.14830	27	9.7778	4.29700	28	11.4070	4.29700
29	14.6630	2.39090	30	15.6200	1.79280	31	19.2940	1.57460	32	19.3276	1.57140
33	22.6380	1.57140	34	24.6620	1.00430	35	32.3748	0.69960	36	34.8150	0.69960
37	44.0000	0.63360									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 6
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 410-B DIRECTION 3 AT ELEVATION 899.50

BROADENED SPECTRUM FOR NODE= 410 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 36 DAMPING VALUE = 0.020

1	0.9000	0.24880	2	0.9450	0.26150	3	1.0066	0.26150	4	1.0620	0.32930
5	1.2910	0.32930	6	1.3680	0.44390	7	1.4040	0.44700	8	1.6049	0.44700
9	1.6110	0.45070	10	1.7280	0.55150	11	1.8720	0.66240	12	2.1146	0.66240
13	2.1420	0.67430	14	2.6441	0.67430	15	2.6460	0.67470	16	2.8170	0.70750
17	2.9970	0.83060	18	3.6630	0.83060	19	3.7126	0.81190	20	3.7530	0.81190
21	4.0950	0.82220	22	4.5000	1.07660	23	5.0040	1.08600	24	5.6250	1.78530
25	6.4260	2.49560	26	7.4970	4.29280	27	7.5600	4.38660	28	9.2400	4.38660
29	9.8558	3.50360	30	11.4070	3.50360	31	16.0160	1.24160	32	19.6608	1.02070
33	22.6380	1.02070	34	24.6620	0.65170	35	34.8150	0.56050	36	44.0000	0.53680

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 9
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 411-B DIRECTION 3 AT ELEVATION 860.00

BROADENED SPECTRUM FOR NODE= 411 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.020

1	0.9000	0.24650	2	0.9450	0.25840	3	1.0064	0.25840	4	1.0620	0.32660
5	1.2924	0.32660	6	1.3680	0.43770	7	1.4040	0.44010	8	1.6120	0.44010
9	1.6650	0.47020	10	1.7280	0.53830	11	1.8720	0.64610	12	2.1299	0.64610
13	2.1420	0.65140	14	2.6448	0.65140	15	2.8170	0.68500	16	2.9970	0.77670
17	3.6630	0.77670	18	3.7507	0.74560	19	4.0950	0.74560	20	4.5000	0.93710
21	5.0396	0.93710	22	5.6250	1.38960	23	6.4260	1.82870	24	7.2090	2.63520
25	7.4970	2.88900	26	7.5600	2.90370	27	9.2400	2.90370	28	9.9773	2.08570
29	11.3740	2.08570	30	11.4070	2.08210	31	14.6630	0.74650	32	14.9749	0.68810
33	16.0160	0.68810	34	17.8481	0.59980	35	22.0000	0.59980	36	22.6380	0.58120
37	24.6620	0.52310	38	30.5336	0.36510	39	34.8150	0.36510	40	36.8550	0.32331
41	40.0000	0.32331									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 12
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 412-B DIRECTION 3 AT ELEVATION 841.00

BROADENED SPECTRUM FOR NODE= 412 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.020

1	0.9000	0.24610	2	0.9450	0.25770	3	1.0063	0.25770	4	1.0620	0.32610
5	1.2925	0.32610	6	1.3680	0.43630	7	1.4040	0.43850	8	1.6135	0.43850
9	1.6650	0.46759	10	1.7280	0.53500	11	1.8720	0.64210	12	2.1325	0.64210
13	2.1420	0.64590	14	2.6437	0.64590	15	2.8170	0.67950	16	2.9970	0.76300
17	3.6630	0.76300	18	3.7688	0.72610	19	4.0950	0.72610	20	4.5000	0.90180
21	5.0581	0.90180	22	5.6250	1.28980	23	6.4260	1.66030	24	7.2090	2.34100
25	7.4970	2.54360	26	7.5600	2.54630	27	9.2400	2.54630	28	10.1309	1.64670
29	11.3740	1.64670	30	14.5201	0.67120	31	16.0160	0.67120	32	17.2335	0.61080
33	22.0000	0.61080	34	22.6380	0.55160	35	24.6620	0.48730	36	31.2686	0.30630
37	34.8150	0.30630	38	36.8951	0.26781	39	40.0000	0.26781			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 15
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 413-B DIRECTION 3 AT ELEVATION 825.00

BROADENED SPECTRUM FOR NODE= 413 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 36 DAMPING VALUE = 0.020

1	0.9000	0.24580	2	0.9450	0.25710	3	1.0060	0.25710	4	1.0620	0.32570
5	1.2924	0.32570	6	1.3680	0.43540	7	1.4040	0.43710	8	1.6147	0.43710
9	1.6650	0.46490	10	1.7280	0.53170	11	1.8720	0.63810	12	2.1364	0.63810
13	2.1420	0.64030	14	2.6930	0.64030	15	2.9970	0.74840	16	3.6630	0.74840
17	3.7587	0.70460	18	4.0950	0.70460	19	4.5000	0.86310	20	5.0832	0.86310
21	5.6250	1.18380	22	6.4260	1.48570	23	7.2090	2.03650	24	7.4970	2.18930
25	9.1630	2.18930	26	9.2400	2.17570	27	10.1673	1.34660	28	10.4280	1.34660
29	11.3740	1.33250	30	14.1070	0.70470	31	16.0160	0.70470	32	18.3255	0.56240
33	22.0000	0.56240	34	32.0449	0.24670	35	34.8150	0.24670	36	44.0000	0.22460

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 18
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.02 NO. OF SPECTRA = 1
FIGURE NO. 414-B DIRECTION 3 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 414 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.020

1	0.9000	0.24550	2	0.9450	0.25670	3	1.0058	0.25670	4	1.0620	0.32540
5	1.2925	0.32540	6	1.3680	0.43460	7	1.4040	0.43600	8	1.6160	0.43600
9	1.6650	0.46250	10	1.7280	0.52860	11	1.8720	0.63440	12	2.1404	0.63440
13	2.1420	0.63500	14	2.7043	0.63500	15	2.9970	0.73440	16	3.6630	0.73440

17	3.7734	0.68370	18	4.0950	0.68370	19	4.5000	0.82610	20	5.1147	0.82610
21	5.6250	1.08480	22	6.4260	1.32530	23	7.2090	1.75880	24	7.4970	1.86830
25	9.1630	1.86830	26	9.2400	1.84060	27	10.1517	1.12200	28	10.4280	1.12200
29	11.4070	1.08130	30	14.1658	0.68320	31	16.0160	0.68320	32	18.6979	0.51690
33	20.0750	0.51690	34	22.0000	0.50190	35	22.6380	0.49290	36	32.3876	0.22600
37	34.8150	0.22600	38	44.0000	0.20740						

SET NO. = 1

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03
FIGURE NO. 415-B DIRECTION 1 AT ELEVATION 918.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 415 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 36 DAMPING VALUE = 0.030

1	0.9000	0.23460	2	0.9450	0.24730	3	0.9990	0.24750	4	1.0620	0.29280
5	1.2870	0.31150	6	1.3680	0.37980	7	1.4520	0.37980	8	1.5030	0.39980
9	1.5765	0.39980	10	1.8000	0.52400	11	1.8720	0.55750	12	2.1420	0.56430
13	2.2500	0.58980	14	2.5879	0.58980	15	2.9970	0.71370	16	3.6410	0.71370
17	3.7530	0.76190	18	4.5000	0.97720	19	5.0040	1.20690	20	6.4260	2.79420
21	7.2090	4.23500	22	7.4970	4.51610	23	9.1630	4.51610	24	9.6214	4.31510
25	10.4280	4.31510	26	11.0000	3.58440	27	11.3740	3.38900	28	15.5828	1.36250
29	16.0160	1.36250	30	16.7381	1.31660	31	20.0750	1.31660	32	22.0000	1.27530
33	24.6620	0.83590	34	32.5490	0.67310	35	34.8150	0.66880	36	44.0000	0.62540

SET NO. = 4

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03
FIGURE NO. 416-B DIRECTION 1 AT ELEVATION 899.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 416 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.030

1	0.9000	0.23370	2	0.9450	0.24610	3	0.9990	0.24620	4	1.0620	0.29180
5	1.2870	0.31000	6	1.3680	0.37620	7	1.4506	0.37620	8	1.5030	0.39590
9	1.5758	0.39590	10	1.8000	0.51770	11	1.8720	0.55230	12	2.1420	0.55590
13	2.2500	0.58280	14	2.5950	0.58280	15	2.9970	0.69730	16	3.6537	0.69730
17	3.7530	0.73700	18	4.5000	0.93490	19	5.0040	1.14100	20	6.4260	2.56940
21	7.2090	3.90270	22	7.4970	4.13310	23	9.1630	4.13310	24	9.2400	4.09770
25	9.7768	3.81130	26	10.4280	3.81130	27	11.0000	3.12730	28	11.3740	2.94010
29	15.4627	1.17850	30	16.0160	1.17850	31	17.0245	1.11550	32	22.0000	1.11550
33	22.6380	1.03030	34	24.6620	0.74630	35	32.5490	0.59640	36	34.8150	0.58910
37	44.0000	0.56040									

SET NO. = 7

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03
FIGURE NO. 417-B DIRECTION 1 AT ELEVATION 860.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 417 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 35 DAMPING VALUE = 0.030

1	0.9000	0.23090	2	0.9450	0.24270	3	0.9997	0.24270	4	1.0620	0.28890
5	1.2870	0.30450	6	1.3680	0.36240	7	1.4490	0.36380	8	1.5030	0.38120
9	1.5703	0.38120	10	1.8720	0.53220	11	2.1727	0.53220	12	2.2500	0.55530
13	2.6325	0.55530	14	2.8170	0.59860	15	2.9970	0.63340	16	3.7198	0.63340
17	3.7530	0.64300	18	4.0950	0.65870	19	4.5000	0.75690	20	5.0040	0.85560
21	5.6250	1.23500	22	6.4260	1.64360	23	7.2090	2.30150	24	7.4970	2.35260
25	9.1630	2.35260	26	10.0831	1.73100	27	10.4280	1.73100	28	11.0000	1.28990
29	14.1527	0.68940	30	20.0750	0.68940	31	20.1080	0.68820	32	22.0000	0.61640
33	24.6620	0.40380	34	32.5490	0.30740	35	44.0000	0.29140			

SET NO. = 10

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03
FIGURE NO. 418-B DIRECTION 1 AT ELEVATION 841.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 418 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 39 DAMPING VALUE = 0.030

1	0.9000	0.23020	2	0.9450	0.24190	3	0.9993	0.24190	4	1.0620	0.28820

5	1.2870	0.30320	6	1.3680	0.35880	7	1.4490	0.36110	8	1.5030	0.37730
9	1.5688	0.37730	10	1.8720	0.52660	11	2.1808	0.52660	12	2.2500	0.54710
13	2.6356	0.54710	14	2.8170	0.58730	15	2.9970	0.61550	16	3.7439	0.61550
17	3.7530	0.61790	18	4.0950	0.63100	19	4.5000	0.70720	20	5.0040	0.77700
21	5.6250	1.08600	22	6.4260	1.39630	23	7.2090	1.88670	24	8.8110	1.88670
25	9.1630	1.87480	26	10.1148	1.32820	27	10.4280	1.32820	28	11.0000	0.98390
29	11.3740	0.88830	30	14.9019	0.64030	31	16.0508	0.64030	32	16.4250	0.67230
33	20.0750	0.67230	34	22.0000	0.59370	35	22.6380	0.54770	36	24.6620	0.36740
37	34.6807	0.27030	38	37.1580	0.27030	39	44.0000	0.26300			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 13
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 419-B DIRECTION 1 AT ELEVATION 825.00

BROADENED SPECTRUM FOR NODE= 419 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 37 DAMPING VALUE = 0.030

1	0.9000	0.22980	2	0.9450	0.24140	3	0.9990	0.24140	4	1.0620	0.28780
5	1.2870	0.30240	6	1.3680	0.35620	7	1.5030	0.37450	8	1.5679	0.37450
9	1.8720	0.52260	10	2.1871	0.52260	11	2.2500	0.54100	12	2.6986	0.54100
13	2.8170	0.57900	14	2.9970	0.60220	15	3.6630	0.60220	16	3.6875	0.59870
17	3.7530	0.59870	18	5.0040	0.72150	19	5.6250	0.98040	20	6.4260	1.22610
21	7.2090	1.61300	22	8.8110	1.61300	23	9.1630	1.56950	24	10.1755	1.07850
25	10.4280	1.07850	26	11.0000	0.80040	27	11.4070	0.68930	28	13.9064	0.65190
29	16.0160	0.65190	30	17.5125	0.60810	31	20.0750	0.60810	32	22.0000	0.53460
33	22.6380	0.49460	34	24.6620	0.34950	35	32.5490	0.25860	36	37.1580	0.25360
37	44.0000	0.24610									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 16
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AX ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 420-B DIRECTION 1 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 420 DEGREE OF FREEDOM = 1 NUMBER OF GRIDS = 38 DAMPING VALUE = 0.030

1	0.9000	0.22940	2	0.9450	0.24090	3	0.9990	0.24110	4	1.0620	0.28740
5	1.2870	0.30160	6	1.3680	0.35390	7	1.5030	0.37200	8	1.5672	0.37200
9	1.8720	0.51900	10	2.1933	0.51900	11	2.2500	0.53520	12	2.7056	0.53520
13	2.8170	0.57200	14	2.9970	0.59020	15	3.6630	0.59020	16	3.7279	0.58100
17	3.7530	0.58100	18	4.5000	0.63890	19	5.0040	0.67270	20	5.6250	0.88840
21	6.4260	1.08040	22	7.2090	1.38060	23	8.8110	1.38060	24	9.1630	1.31390
25	10.1860	0.90530	26	10.4280	0.89270	27	11.0000	0.67920	28	11.2963	0.64350
29	12.9224	0.64350	30	13.1040	0.66150	31	16.0160	0.66150	32	18.3919	0.54190
33	20.0750	0.54190	34	22.0000	0.47700	35	24.6620	0.33170	36	32.5490	0.24430
37	34.8150	0.24320	38	44.0000	0.23100						

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 2
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 415-B DIRECTION 2 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 415 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 43 DAMPING VALUE = 0.030

1	0.9000	0.16640	2	0.9990	0.17320	3	1.0620	0.19970	4	1.1250	0.20610
5	1.2870	0.21300	6	1.3230	0.25060	7	1.3680	0.27670	8	1.6345	0.27670
9	1.6650	0.29250	10	1.7280	0.30310	11	1.8000	0.35120	12	1.9530	0.36460
13	2.0430	0.36870	14	2.2024	0.36870	15	2.2500	0.37800	16	2.5020	0.40100
17	2.6460	0.47320	18	2.8170	0.47860	19	2.9970	0.54600	20	3.4650	0.57650
21	3.7530	0.73310	22	4.2029	0.73310	23	4.5000	0.77720	24	5.0040	0.80340
25	5.6250	0.97250	26	6.4260	1.45170	27	7.2090	1.81350	28	7.4970	1.92660
29	8.5320	2.13010	30	10.4280	2.13010	31	11.3740	1.93330	32	11.4531	1.92430
33	12.7800	1.92430	34	12.7980	1.93090	35	15.6420	1.93090	36	19.2940	1.24240
37	20.1080	1.01700	38	22.0000	0.92990	39	22.6380	0.80500	40	24.6620	0.76980
41	31.6583	0.51140	42	37.1580	0.51140	43	44.0000	0.51140			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 5
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03
FIGURE NO. 416-B DIRECTION 2 AT ELEVATION 899.50 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 416 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 43 DAMPING VALUE = 0.030

1	0.9000	0.16630	2	0.9990	0.17300	3	1.0620	0.19970	4	1.1250	0.20590
5	1.2870	0.21230	6	1.3230	0.25080	7	1.3680	0.27690	8	1.6338	0.27690
9	1.6650	0.29290	10	1.7280	0.30320	11	1.8000	0.35250	12	1.9530	0.36530
13	2.0430	0.36890	14	2.2012	0.36890	15	2.2500	0.37840	16	2.5020	0.40360
17	2.6460	0.47560	18	2.8170	0.47910	19	2.9970	0.55090	20	3.4650	0.58260
21	3.7530	0.73920	22	4.1751	0.73920	23	4.5000	0.79220	24	5.0040	0.83090
25	5.6250	1.02960	26	7.2090	2.05260	27	7.4970	2.20060	28	7.5600	2.21310
29	9.2400	2.21310	30	9.3973	2.19020	31	10.4280	2.19020	32	11.4070	1.97920
33	12.1075	1.89770	34	15.6420	1.89770	35	16.0160	1.84210	36	19.2940	1.27330
37	20.1080	1.06050	38	22.0000	0.95470	39	22.6380	0.85560	40	24.6620	0.79120
41	30.8130	0.50380	42	37.1580	0.50380	43	44.0000	0.50380			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 8
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03
FIGURE NO. 417-B DIRECTION 2 AT ELEVATION 860.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 417 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 40 DAMPING VALUE = 0.030

1	0.9000	0.16630	2	0.9990	0.17300	3	1.0620	0.19980	4	1.1250	0.20590
5	1.2870	0.21180	6	1.3230	0.25010	7	1.3680	0.27640	8	1.6352	0.27640
9	1.6650	0.29170	10	1.7280	0.30260	11	1.8000	0.35030	12	1.9530	0.36370
13	2.0430	0.36750	14	2.2069	0.36750	15	2.2500	0.37600	16	2.5020	0.39930
17	2.6460	0.46970	18	2.8170	0.47550	19	2.9970	0.54250	20	3.4650	0.57340
21	3.7530	0.72450	22	4.2017	0.72450	23	4.5000	0.76610	24	5.0040	0.79830
25	5.6250	0.97910	26	7.2090	1.90260	27	7.4970	2.03870	28	7.5600	2.04470
29	9.2400	2.04470	30	10.4280	2.01160	31	12.8273	1.63460	32	15.6420	1.63460
33	16.0160	1.56720	34	19.2940	1.01330	35	20.1080	0.84630	36	22.0000	0.74010
37	22.6380	0.66510	38	24.6620	0.60140	39	32.5490	0.38790	40	44.0000	0.36230

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 11
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03
FIGURE NO. 418-B DIRECTION 2 AT ELEVATION 841.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 418 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 43 DAMPING VALUE = 0.030

1	0.9000	0.16620	2	0.9990	0.17280	3	1.0620	0.19960	4	1.1250	0.20580
5	1.2870	0.21170	6	1.3230	0.24990	7	1.3680	0.27600	8	1.6353	0.27600
9	1.6650	0.29120	10	1.7280	0.30220	11	1.8000	0.34970	12	1.9530	0.36330
13	2.0430	0.36700	14	2.2074	0.36700	15	2.2500	0.37540	16	2.5020	0.39820
17	2.6460	0.46850	18	2.8170	0.47440	19	2.9970	0.54060	20	3.4650	0.57110
21	3.7530	0.72210	22	4.2188	0.72210	23	4.5000	0.75960	24	5.0040	0.78740
25	5.6250	0.95160	26	6.4260	1.41050	27	7.2090	1.78150	28	7.4970	1.89850
29	7.5600	1.89870	30	9.2400	1.89870	31	10.4280	1.83040	32	11.4070	1.71100
33	12.5218	1.54530	34	12.7800	1.54530	35	12.7980	1.55090	36	15.6420	1.55090
37	19.2940	0.95270	38	20.1080	0.77250	39	22.0000	0.67950	40	22.6380	0.59430
41	24.6620	0.54690	42	32.5490	0.36360	43	44.0000	0.34260			

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 14
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03
FIGURE NO. 419-B DIRECTION 2 AT ELEVATION 825.00 NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 419 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 44 DAMPING VALUE = 0.030

1	0.9000	0.16620	2	0.9990	0.17280	3	1.0620	0.19950	4	1.1250	0.20570

5	1.2870	0.21160	6	1.3230	0.24970	7	1.3680	0.27590	8	1.6354	0.27590
9	1.6650	0.29100	10	1.7280	0.30200	11	1.8000	0.34930	12	1.9530	0.36290
13	2.0430	0.36660	14	2.2077	0.36660	15	2.2500	0.37490	16	2.5020	0.39740
17	2.6460	0.46750	18	2.8170	0.47350	19	2.9970	0.53910	20	3.4650	0.56910
21	3.7530	0.71980	22	4.2306	0.71980	23	4.5000	0.75430	24	5.0040	0.78000
25	5.6250	0.93440	26	6.4260	1.37770	27	7.2090	1.71570	28	7.4970	1.82450
29	7.5600	1.82930	30	9.2400	1.82930	31	10.4280	1.76980	32	11.4070	1.68100
33	12.5359	1.50620	34	12.7800	1.50620	35	12.7980	1.51160	36	15.6420	1.51160
37	19.2940	0.92140	38	20.1080	0.74230	39	22.0000	0.65260	40	22.6380	0.57320
41	24.6620	0.52240	42	32.5490	0.35520	43	37.1580	0.34670	44	44.0000	0.33570

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 17
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AY ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 420-B DIRECTION 2 AT ELEVATION 810.50

BROADENED SPECTRUM FOR NODE= 420 DEGREE OF FREEDOM = 2 NUMBER OF GRIDS = 41 DAMPING VALUE = 0.030

1	0.9000	0.16600	2	0.9990	0.17270	3	1.0620	0.19920	4	1.1250	0.20590
5	1.2870	0.21160	6	1.3230	0.24900	7	1.3680	0.27530	8	1.6364	0.27530
9	1.6650	0.28990	10	1.7280	0.30130	11	1.8000	0.34750	12	1.9530	0.36150
13	2.0430	0.36540	14	2.2105	0.36540	15	2.2500	0.37310	16	2.5020	0.39410
17	2.6460	0.46350	18	2.8170	0.47110	19	2.9970	0.53280	20	3.4650	0.56200
21	3.7530	0.71030	22	4.2704	0.71030	23	4.5000	0.73590	24	5.0040	0.75450
25	5.6250	0.88770	26	6.4260	1.28500	27	7.5600	1.67320	28	8.5320	1.70800
29	10.4280	1.70800	30	11.4070	1.60650	31	12.6354	1.42500	32	12.7800	1.42500
33	12.7980	1.42880	34	15.6420	1.42880	35	19.2940	0.83960	36	20.1080	0.68320
37	22.0000	0.59090	38	22.6380	0.52720	39	32.0650	0.33880	40	37.1580	0.33130
41	44.0000	0.31990									

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 3
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 415-B DIRECTION 3 AT ELEVATION 918.00

BROADENED SPECTRUM FOR NODE= 415 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 36 DAMPING VALUE = 0.030

1	0.9000	0.23370	2	0.9450	0.24720	3	1.0012	0.24720	4	1.0620	0.29270
5	1.2870	0.30560	6	1.3680	0.37310	7	1.4502	0.37310	8	1.5030	0.39410
9	1.5688	0.39410	10	1.8000	0.51470	11	1.8720	0.54910	12	2.1501	0.54950
13	2.2500	0.58040	14	2.6689	0.58040	15	2.9970	0.69990	16	3.6899	0.69990
17	3.7530	0.72480	18	4.5000	0.89710	19	5.0040	1.06040	20	5.6250	1.70820
21	6.4260	2.40910	22	7.2090	3.72620	23	7.4970	4.16540	24	7.5600	4.17640
25	9.2400	4.17640	26	10.0820	3.35140	27	11.3740	3.35140	28	14.6630	2.20280
29	15.6200	1.57490	30	16.0160	1.44790	31	17.1169	1.42580	32	22.6380	1.42580
33	24.6620	0.96120	34	32.5490	0.69140	35	34.8150	0.68880	36	44.0000	0.63420

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING; SET NO. = 6
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03 NO. OF SPECTRA = 1
FIGURE NO. 416-B DIRECTION 3 AT ELEVATION 899.50

BROADENED SPECTRUM FOR NODE= 416 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 33 DAMPING VALUE = 0.030

1	0.9000	0.23300	2	0.9450	0.24610	3	1.0004	0.24610	4	1.0620	0.29190
5	1.2870	0.30450	6	1.3680	0.36920	7	1.4490	0.36960	8	1.5030	0.38990
9	1.5682	0.38990	10	1.8720	0.54260	11	2.1587	0.54260	12	2.2500	0.57200
13	2.6256	0.57200	14	2.9970	0.67870	15	3.7082	0.67870	16	3.7530	0.69460
17	4.0950	0.73100	18	5.0040	0.97640	19	5.6250	1.53160	20	6.4260	2.11630
21	7.2090	3.21200	22	7.4970	3.56590	23	9.1630	3.56590	24	9.2400	3.56300
25	10.1305	2.75100	26	11.3740	2.75100	27	14.6630	1.68970	28	16.0160	1.06690
29	18.7313	0.94570	30	22.6380	0.94570	31	24.6620	0.63510	32	34.8150	0.55750
33	44.0000	0.53650									

SET NO. = 9

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03
FIGURE NO. 417-B DIRECTION 3 AT ELEVATION 860.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 417 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 37

1	0.9000	0.23060	2	0.9450	0.24300	3	1.0004	0.24300	4	1.0620	0.28910
5	1.2870	0.30130	6	1.3680	0.36010	7	1.5030	0.37980	8	1.5664	0.37980
9	1.8720	0.52930	10	2.1781	0.52930	11	2.2500	0.55240	12	2.6496	0.55240
13	2.9970	0.63340	14	3.6630	0.63340	15	3.6652	0.63310	16	3.7530	0.63310
17	4.0950	0.64980	18	4.5000	0.73060	19	5.0040	0.80650	20	5.6250	1.18200
21	6.4260	1.54580	22	7.2090	2.21220	23	7.4970	2.39940	24	9.1630	2.39940
25	9.2400	2.36440	26	10.2333	1.64770	27	11.3740	1.64770	28	14.6630	0.69440
29	15.2400	0.60560	30	16.0160	0.60560	31	18.5361	0.54000	32	22.0000	0.54000
33	22.6380	0.53260	34	30.7119	0.35430	35	34.8150	0.35430	36	36.7589	0.32243
37	40.0000	0.32243									

SET NO. = 12

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03
FIGURE NO. 418-B DIRECTION 3 AT ELEVATION 841.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 418 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 37

1	0.9000	0.23010	2	0.9450	0.24240	3	1.0003	0.24240	4	1.0620	0.28850
5	1.2870	0.30090	6	1.3680	0.35800	7	1.5030	0.37740	8	1.5661	0.37740
9	1.8720	0.52610	10	2.1835	0.52610	11	2.2500	0.54750	12	2.7123	0.54750
13	2.8170	0.57660	14	2.9970	0.62210	15	3.6630	0.62210	16	3.6899	0.61820
17	3.7530	0.61820	18	4.5000	0.70270	19	5.0040	0.76420	20	5.6250	1.09410
21	6.4260	1.40170	22	7.2090	1.97300	23	7.4970	2.11370	24	9.1630	2.11370
25	9.2400	2.07660	26	10.3617	1.32150	27	11.0000	1.32150	28	11.3740	1.31810
29	14.6630	0.57220	30	14.8716	0.56050	31	16.0160	0.56050	32	16.8245	0.54090
33	22.0000	0.54090	34	30.9157	0.29760	35	34.8150	0.29760	36	36.8887	0.26660
37	40.0000	0.26660									

SET NO. = 15

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03
FIGURE NO. 419-B DIRECTION 3 AT ELEVATION 825.00

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 419 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 36

1	0.9000	0.22980	2	0.9450	0.24190	3	0.9999	0.24190	4	1.0620	0.28810
5	1.2870	0.30060	6	1.3680	0.35600	7	1.5030	0.37500	8	1.5657	0.37500
9	1.8720	0.52290	10	2.1891	0.52290	11	2.2500	0.54220	12	2.7151	0.54220
13	2.8170	0.57210	14	2.9970	0.60990	15	3.6630	0.60990	16	3.7166	0.60170
17	3.7530	0.60170	18	5.0040	0.71850	19	5.6250	1.00100	20	6.4260	1.25280
21	7.2090	1.73010	22	7.4970	1.82020	23	9.1630	1.82020	24	9.2400	1.77810
25	10.1860	1.15230	26	10.3950	1.09580	27	11.0000	1.09580	28	11.3740	1.07160
29	14.2446	0.57560	30	16.0160	0.57560	31	17.7374	0.51880	32	22.0000	0.51880
33	22.6380	0.46310	34	32.1946	0.24100	35	34.8150	0.24100	36	44.0000	0.22520

SET NO. = 18

TUSI-REFINED RESPONSE SPECTRA FOR FUEL BUILDING;
FLOOR RESPONSE SPECTRA FOR SSE; COMPONENT AZ ; DAMPING = 0.03
FIGURE NO. 420-B DIRECTION 3 AT ELEVATION 810.50

NO. OF SPECTRA = 1

BROADENED SPECTRUM FOR NODE= 420 DEGREE OF FREEDOM = 3 NUMBER OF GRIDS = 36

1	0.9000	0.22960	2	0.9450	0.24150	3	0.9995	0.24150	4	1.0620	0.28780
5	1.2870	0.30030	6	1.3680	0.35420	7	1.5030	0.37290	8	1.5656	0.37290
9	1.8720	0.51980	10	2.1937	0.51980	11	2.2500	0.53710	12	2.7180	0.53710
13	2.8170	0.56760	14	2.9970	0.59820	15	3.6630	0.59820	16	3.7461	0.58570
17	3.7530	0.58570	18	4.5000	0.64290	19	5.0040	0.67570	20	5.6250	0.91430

21	6.4260	1.11630	22	7.2090	1.50870	23	7.4970	1.55460	24	9.1630	1.55460
25	9.2400	1.52870	26	10.1860	0.95350	27	11.4070	0.85950	28	14.2817	0.56520
29	16.0160	0.56520	30	18.1207	0.47900	31	20.0750	0.47900	32	22.0000	0.47610
33	24.6620	0.36150	34	32.4444	0.22500	35	34.8150	0.22500	36	44.0000	0.20750