

MODE No.	FREQUENCY (Hz.)	PARTICIPATION FACTOR
   1	14.20	   <del>-</del> 4.04
2	24.75	1.59
3	37.67	-0.0003
4	47.39	-1.04
5	48.03	-0.0001
6	68.63	-0.00005
7	73.01	1.77
8	78.53	0.71
9	82.70	0.59
10	94.42	-0.00007
11	99.84	-0.31

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE MODE
FREQUENCIES AND PARTICIPATION
FACTORS (VERTICAL LOCAL FLOOR
MODEL AT EL. 269'-0")

LINE OF SYMMETRY OF LGS CONTROL STRUCTURE

MODE No. 1

FREQUENCY = 14.20 Hz

PARTICIPATION FACTOR = -4.04

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE VERTICAL LOCAL
FLOOR MODEL MODE SHAPES
(EL. 269'-0")

- Line of Symmetry of LGG Control Structure

MODE No. 2

FREQUENCY = 24.75 Hz

**PARTICIPATION FACTOR = 1.59** 

> **LIMERICK GENERATING STATION** UNITS 1 AND 2

> **UPDATED FINAL SAFETY ANALYSIS REPORT**

**DESIGN ASSESSMENT REPORT** CONTROL STRUCTURE VERTICAL LOCAL FLOOR MODEL MODE SHAPES (EL. 269'-0")

LINE OF SYMMETRY OF LGS CONTROL STRUCTURE

23

MODE No. 4

FREQUENCY = 47.39 Hz

PARTICIPATION FACTOR = -1.04

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE VERTICAL LOCAL
FLOOR MODEL MODE SHAPES

(EL. 269'-0")

LINE OF Symmetry of LGS control structure

MODE No. 7

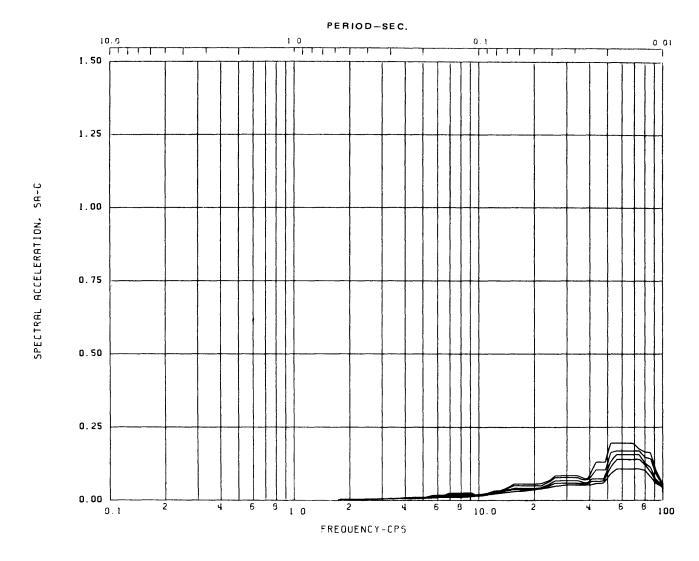
FREQUENCY = 73.01 Hz

**PARTICIPATION FACTOR = 1.77** 

> **LIMERICK GENERATING STATION** UNITS 1 AND 2

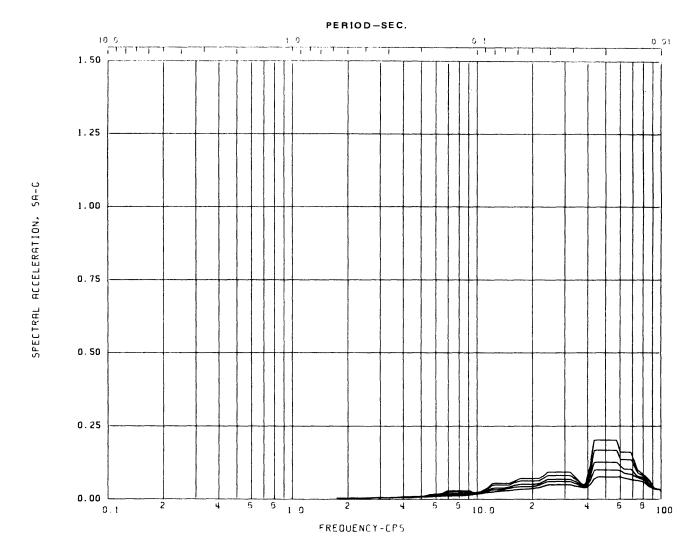
**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT CONTROL STRUCTURE VERTICAL LOCAL** FLOOR MODEL MODE SHAPES (EL. 269'-0")



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE							
Load Case:	KWU SF	RV ASYMMET	RIC ENVELOPE	(WIDENED	- 15%)		
Node:	l I	Direction:	N-S HORIZ	Elev:	177'-0		
Damping: 0.005,0.01,0.02,0.03,0.05							

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

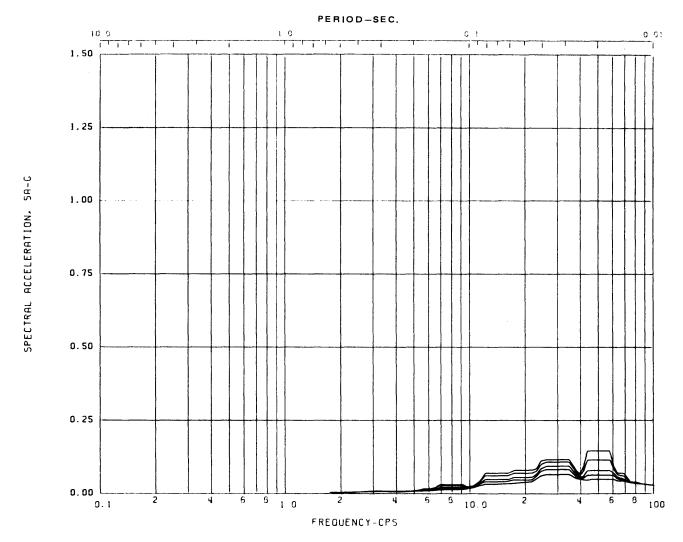
Node: 2 Direction: N-S HORIZ Elev: 201'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT

REACTOR ENCLOSURE AND CONTROL STRUCTURE GLOBAL RESPONSE SPECTRA, N-S HORIZONTAL, SRY ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

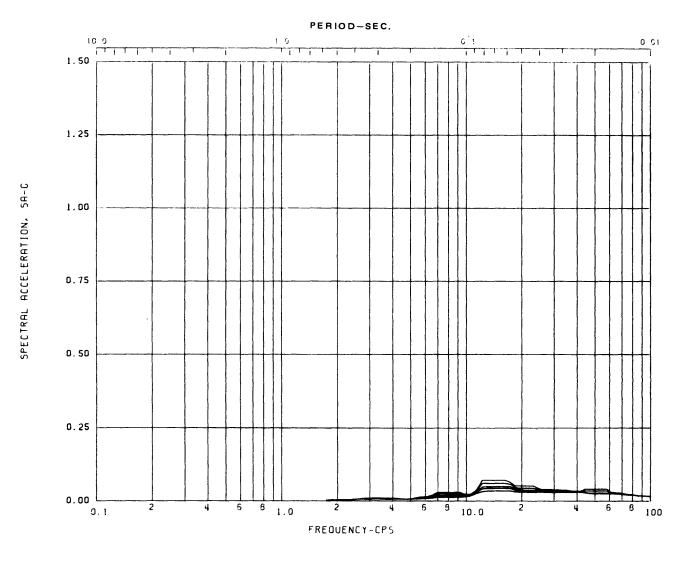
Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

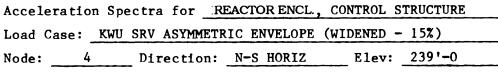
Node: 3 Direction: N-S HORIZ Elev: 217'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

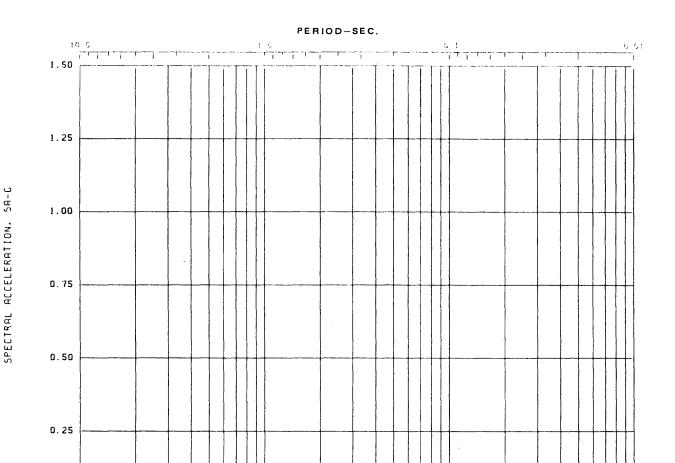
DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
SRY ASYMMETRIC





Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 5 Direction: N-S HORIZ Elev: 253'-0

FREQUENCY-CPS

Damping: 0.005,0.01,0.02,0.03,0.05

0.00

0.1

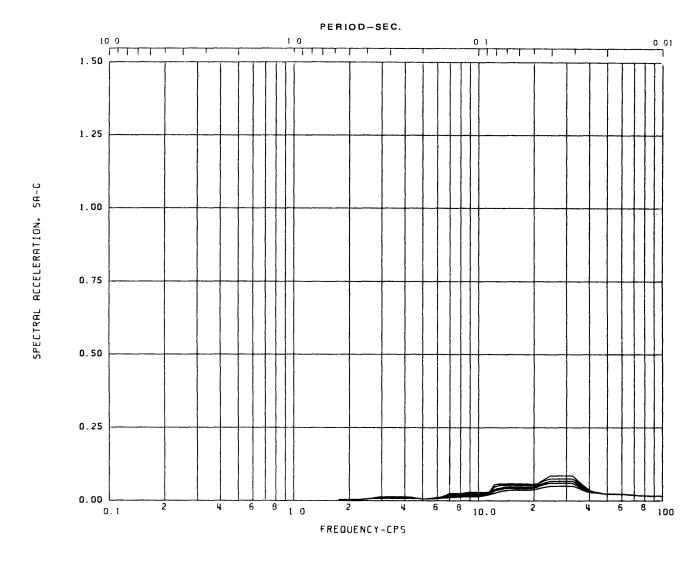
LIMERICK GENERATING STATION
UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
SRV ASYMMETRIC

FIGURE 3A-173

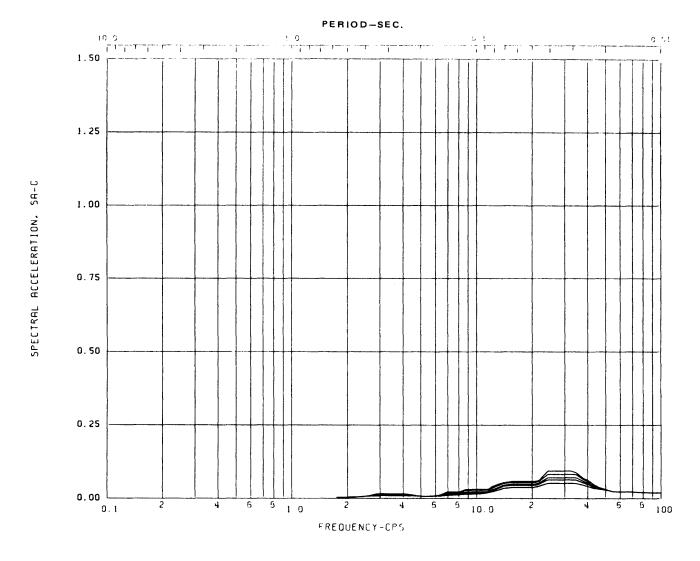
10.0



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%) Node: 6 Direction: N-S HORIZ Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

**LIMERICK GENERATING STATION** UNITS 1 AND 2 **UPDATED FINAL SAFETY ANALYSIS REPORT** 



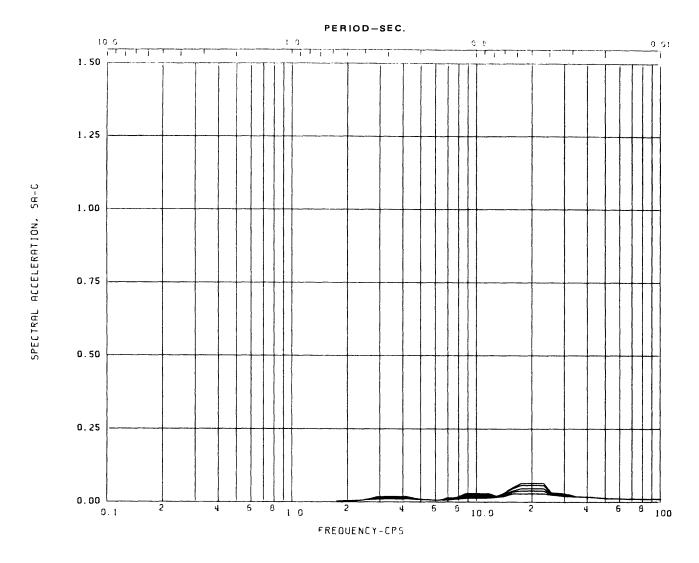
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 7 Direction: N-S HORIZ Elev: 283'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



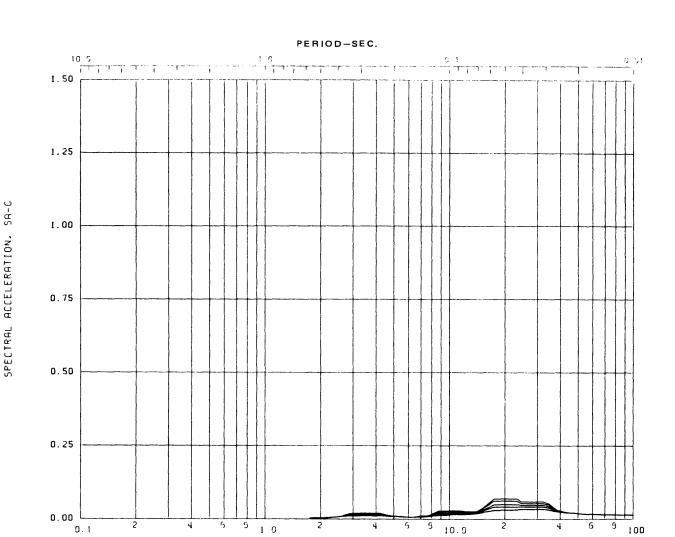
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 8 Direction: N-S HORIZ Elev: 304'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

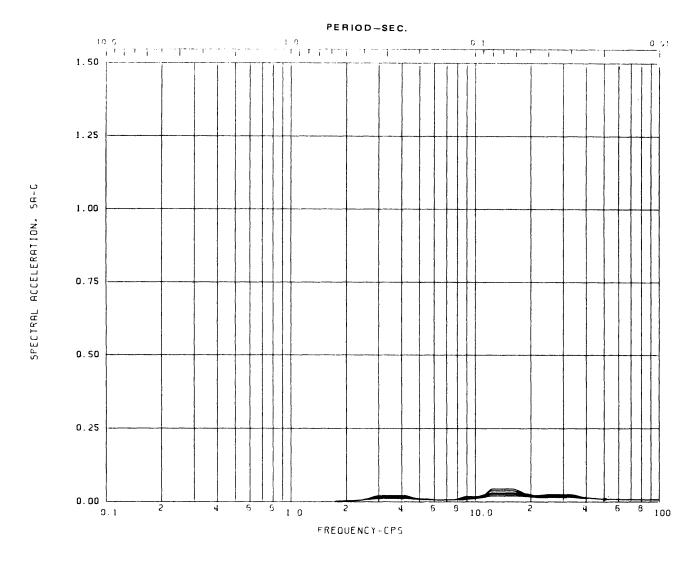
Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

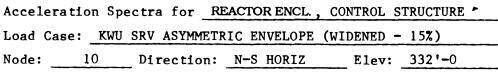
Node: 9 Direction: N-S HORIZ Elev: 313'-0

FREQUENCY-CPS

Damping: 0.005,0.01,0.02,0.03,0.05

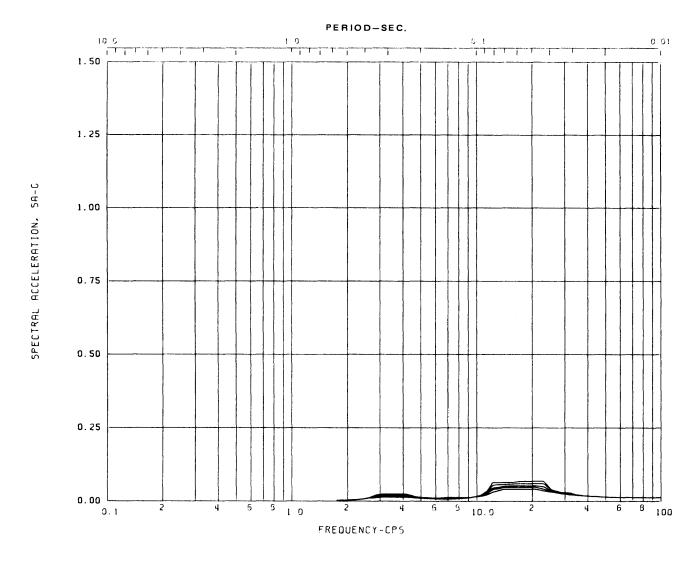
LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT





Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

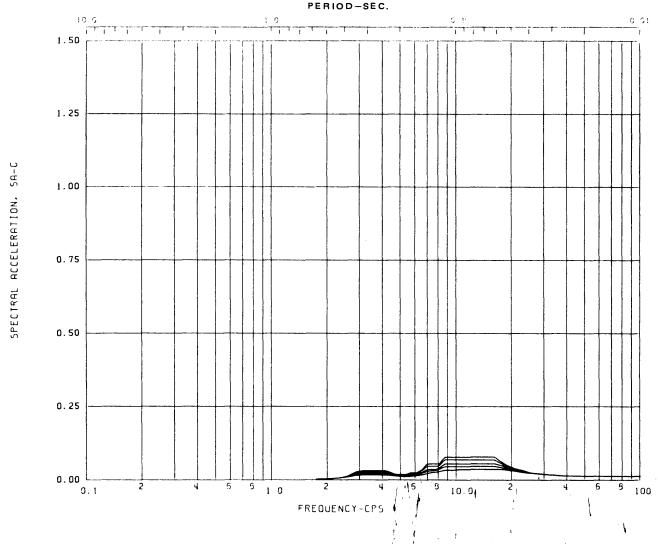


Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%) Node: 11 Direction: N-S HORIZ Elev: 352'-0

Damping: 0.005,0.01,0.02,0.03,0.05

**LIMERICK GENERATING STATION UNITS 1 AND 2 UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE AND CONTROL STRUCTURE GLOBAL RESPONSE SPECTRA, N-S HORIZONTAL, **SRV ASYMMETRIC** 



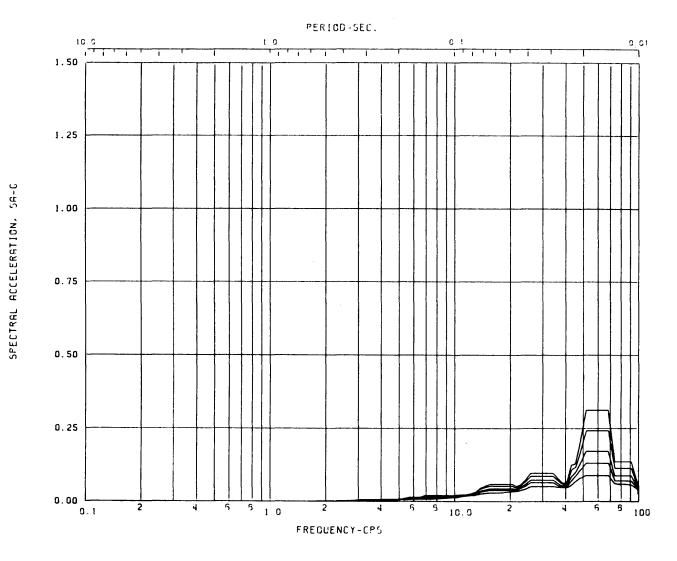
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 12 Direction: N-S HORIZ Elev: 410'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

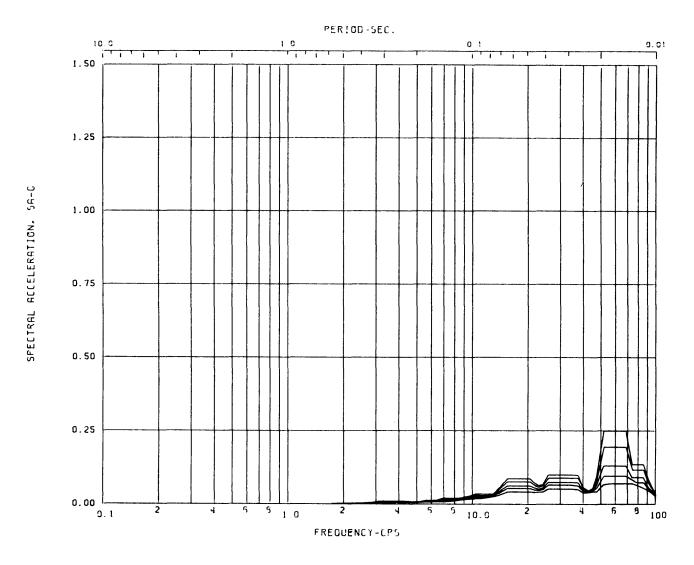
Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDFNED - 15%)

Node: 1 Direction: E-W HORIZ Flev: 177'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, E-W HORIZONTAL,
SRV ASYMMETRIC



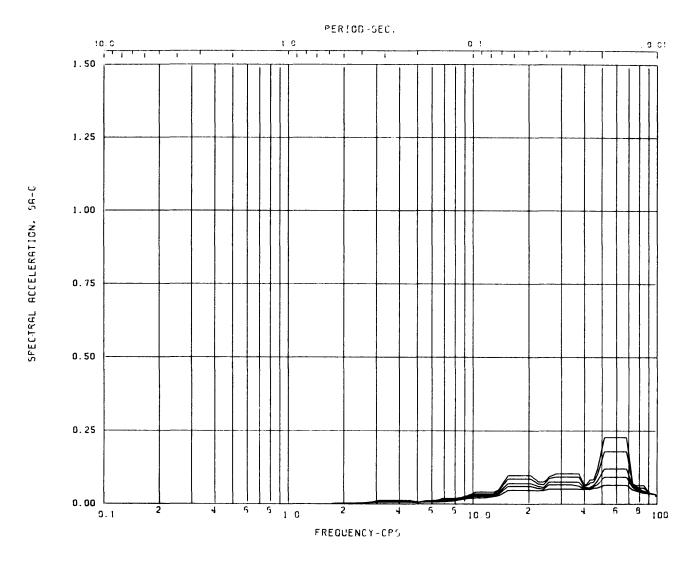
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (MIDENED - 15%)

Node: 2 Direction: E-W HORIZ Elev: 201'-0

Damping: 0.005,0.01,0.02,0.03,0.05

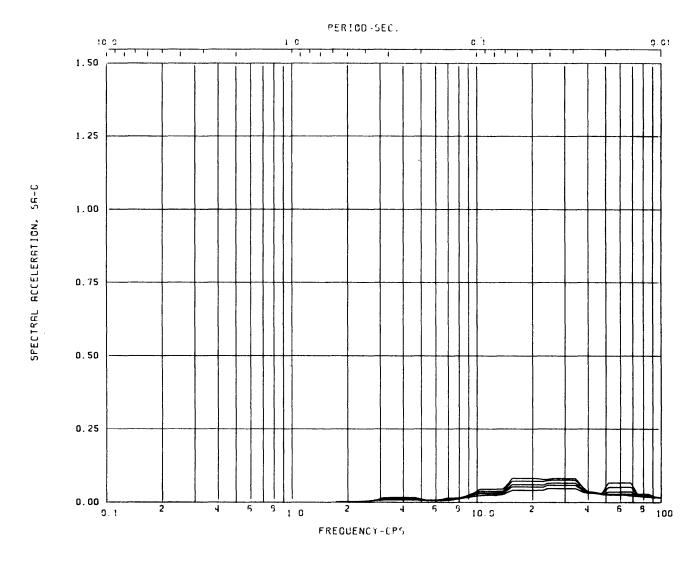
LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%) Node: \_\_\_3 \_\_ Direction: E-W HORIZ Elev: 217'-0 Damping: 0.005,0.01,0.02,0.03,0.05

> **LIMERICK GENERATING STATION** UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 



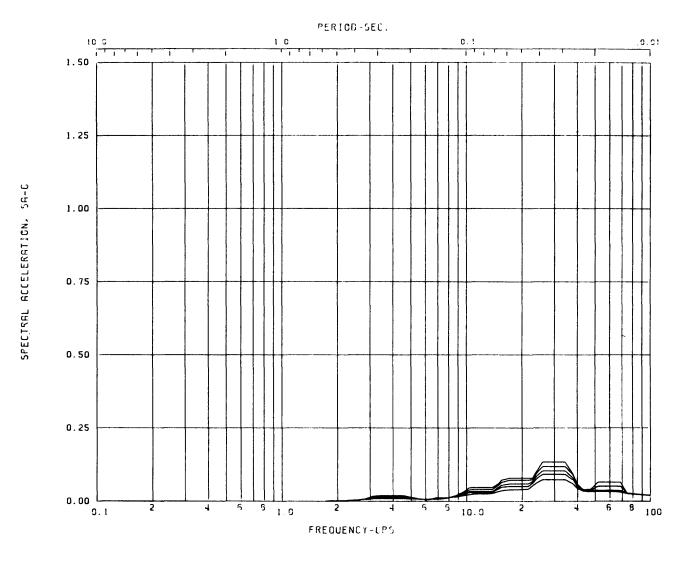
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDFNED - 15%)

Node: 4 Direction: E-W HORIZ Flev: 239'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



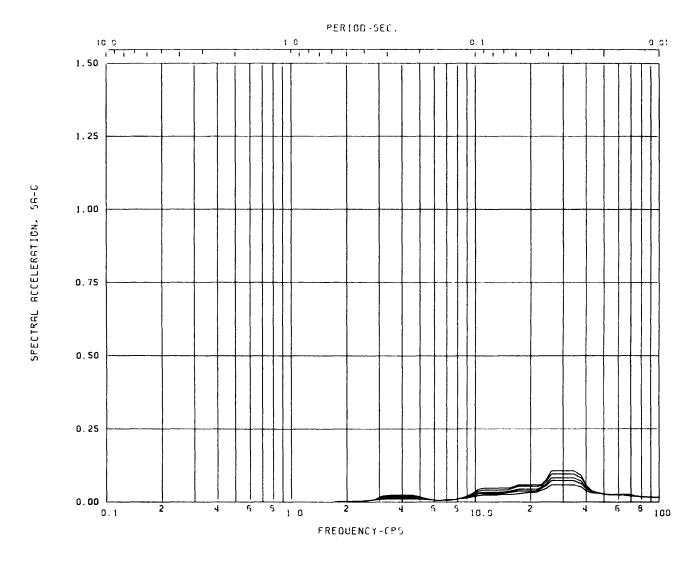
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDFNED - 15%)

Node: 5 Direction: E-W HORIZ Flev: 253'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



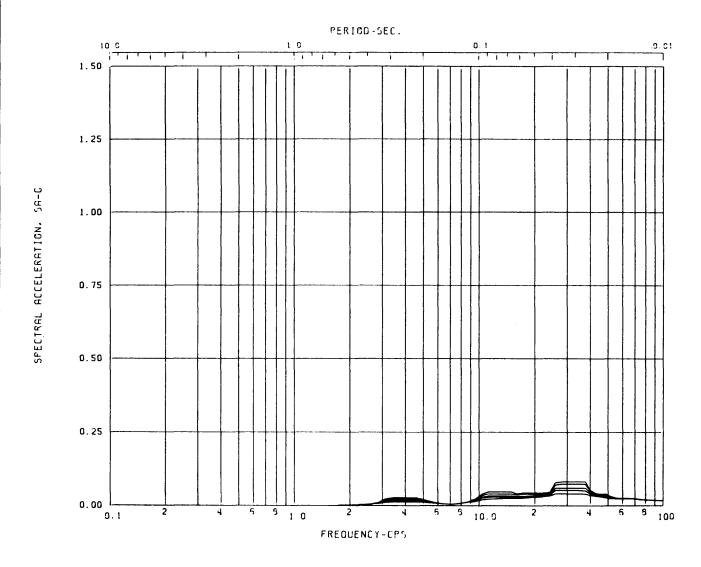
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 6 Direction: E-W HORIZ Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

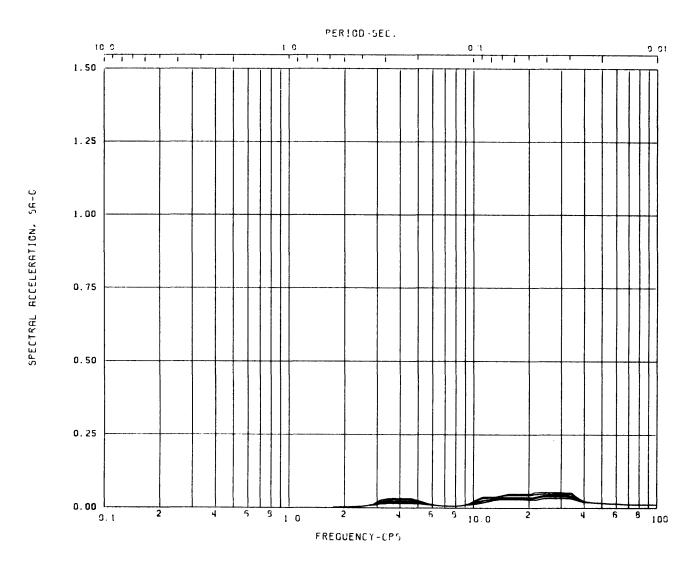
LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%) Elev: \_283'-0 Node: \_\_\_\_7 Direction: E-W HORIZ Damping: 0.005, 0.01, 0.02, 0.03, 0.05

> **LIMERICK GENERATING STATION** UNITS 1 AND 2

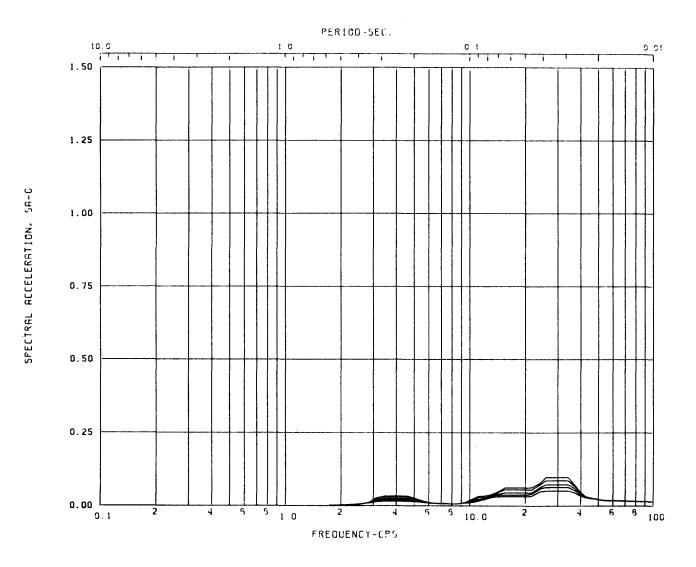
**UPDATED FINAL SAFETY ANALYSIS REPORT** 

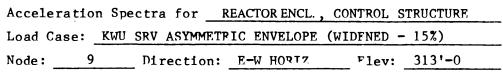


Accel	eratio	n Spe	ctra	for _	REAC	TOR ENCL.	CONTROL	ST	RUCTURE	
Load (	Case: _	KWU	SRV	ASYMMET	TRIC	ENVELOPE	(WIDFNED	_	15%)	
Node:	8		Dir	ection	<u>E</u> -	-W HORIZ	Flev:	: _	304'-0	
<b>.</b>	0.0	\0r 0	0.1	0 00 0	00					

Damping: 0.005,0.01,0.02,0.03,0.05

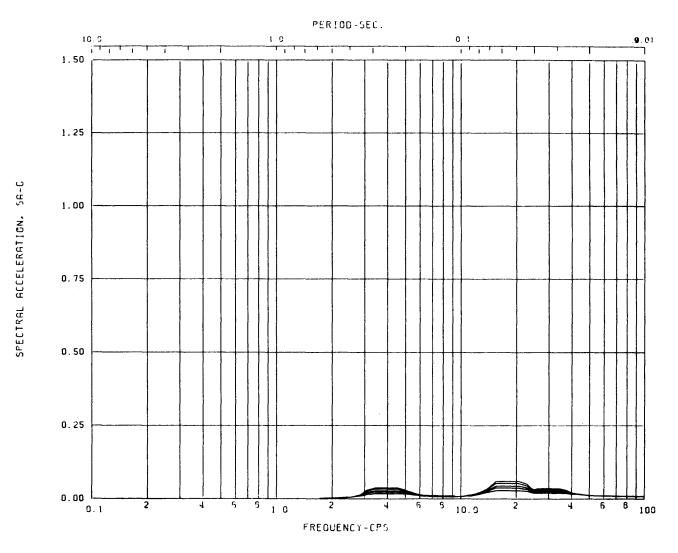
LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT





Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



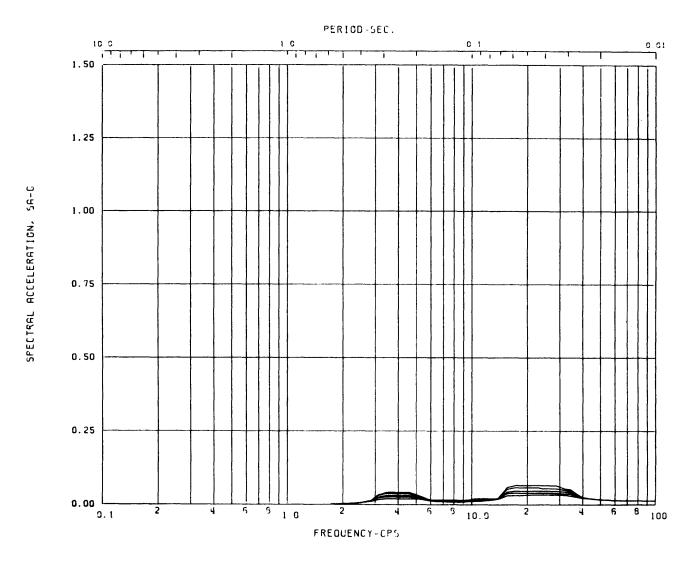
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 10 Direction: E-W HORIZ Elev: 332'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



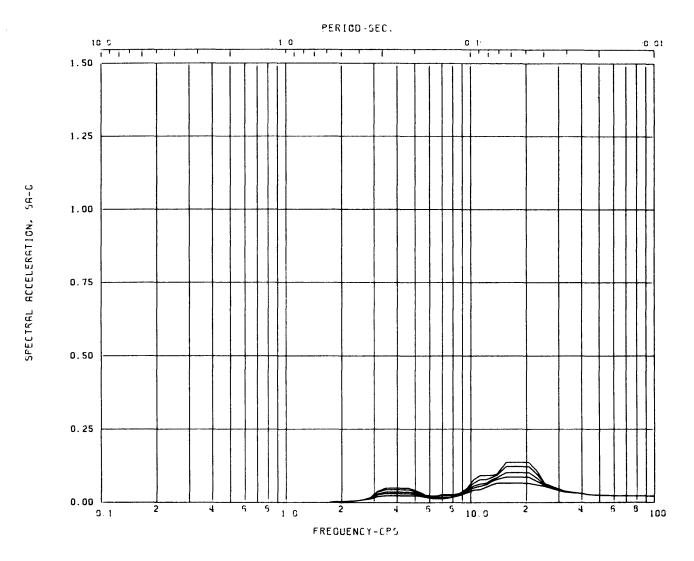
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 11 Direction: E-W HORIZ Elev: 352'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

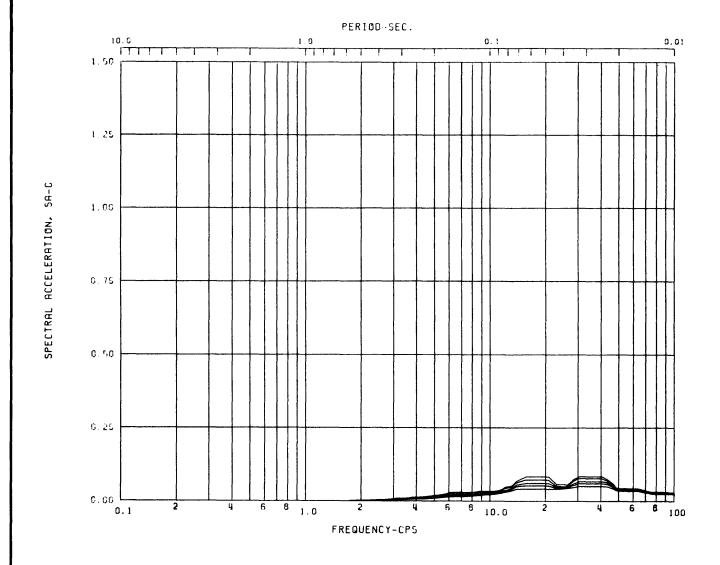
Load Case: KWU SRV ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 12 Direction: E-W HORIZ Elev: 410'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 



Acceleration Spectra for REACTOR ENCL.

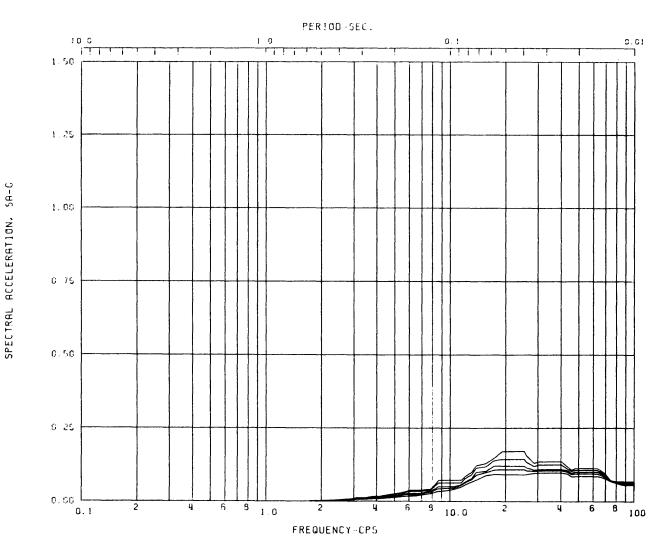
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 159 Direction: VERTICAL Elev: 177'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

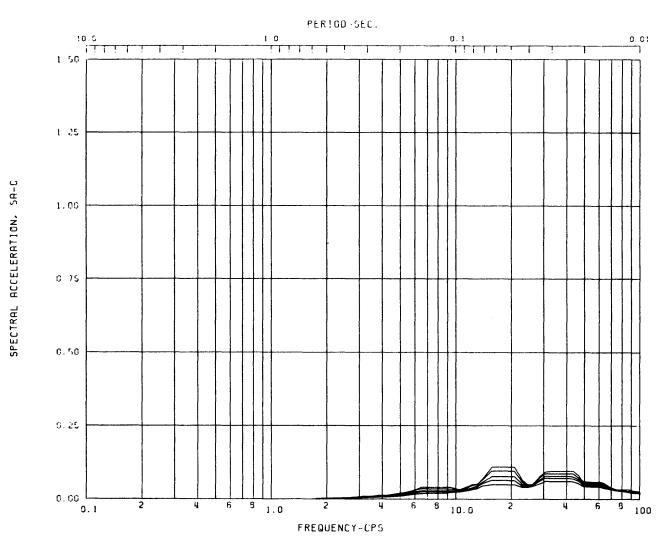
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 154 Direction: VERTICAL Elev: 177'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

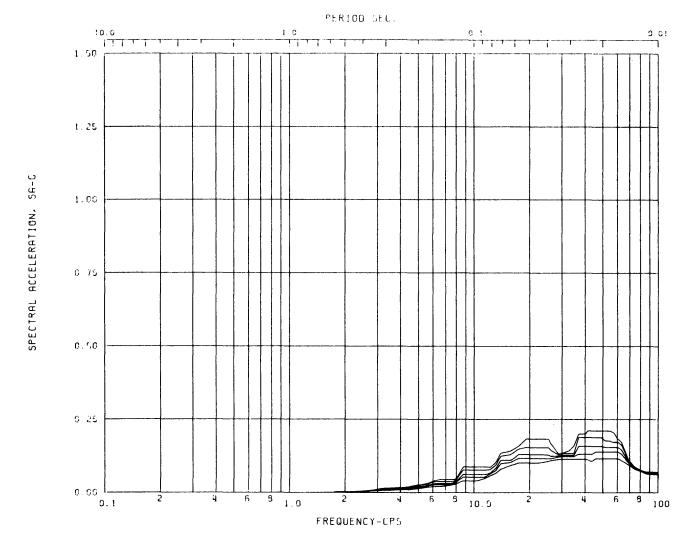
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 128 Direction: VERTICAL Elev: 201'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL,SRV AXISYMMETRIC



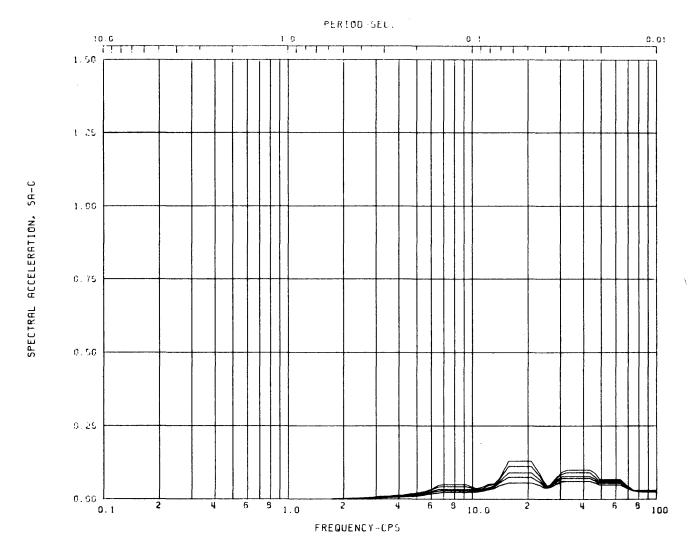
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 130 Direction: VERTICAL Elev: 201'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL,SRV AXISYMMETRIC



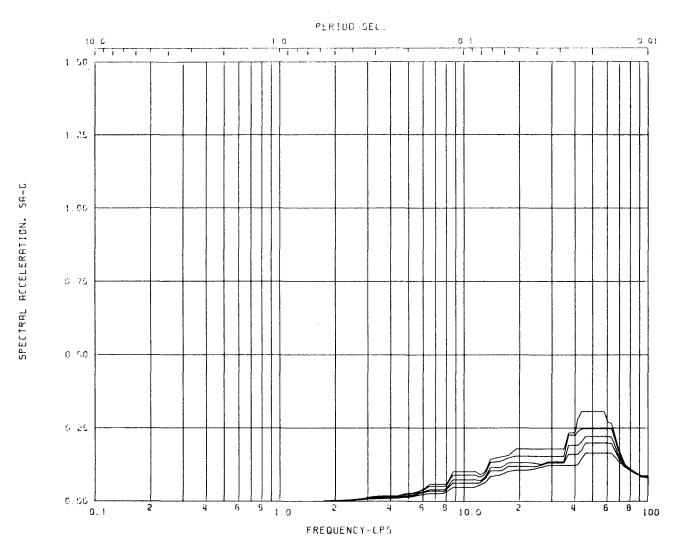
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 106 Direction: VERTICAL Elev: 217'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL,SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

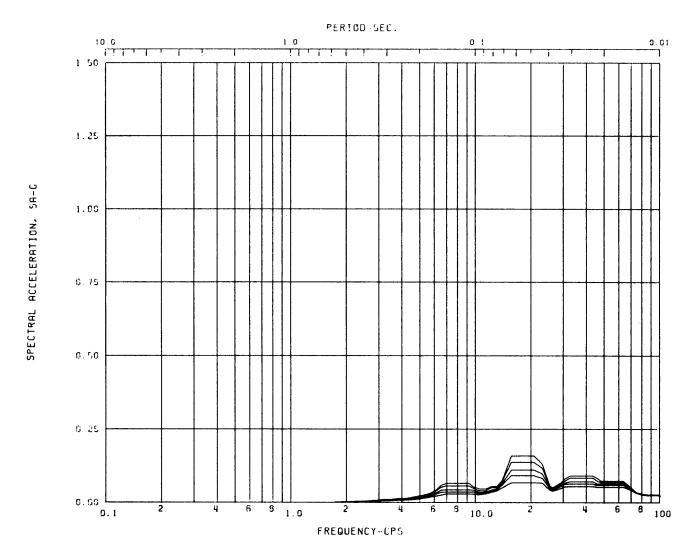
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 108 Direction: VERTICAL Elev: 217'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL,SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

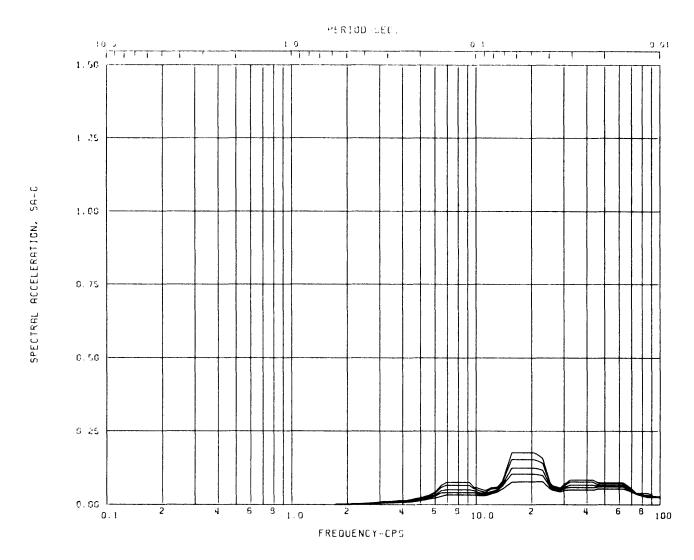
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 104 Direction: VERTICAL Elev: 239'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

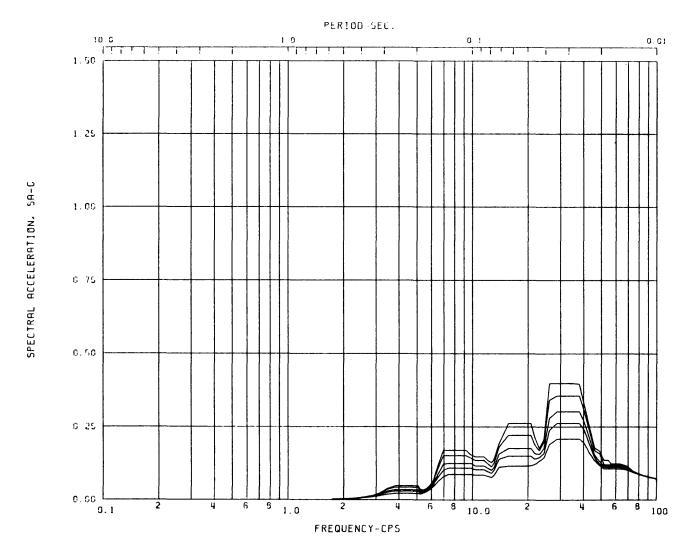
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 79 Direction: VERTICAL Elev: 253'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

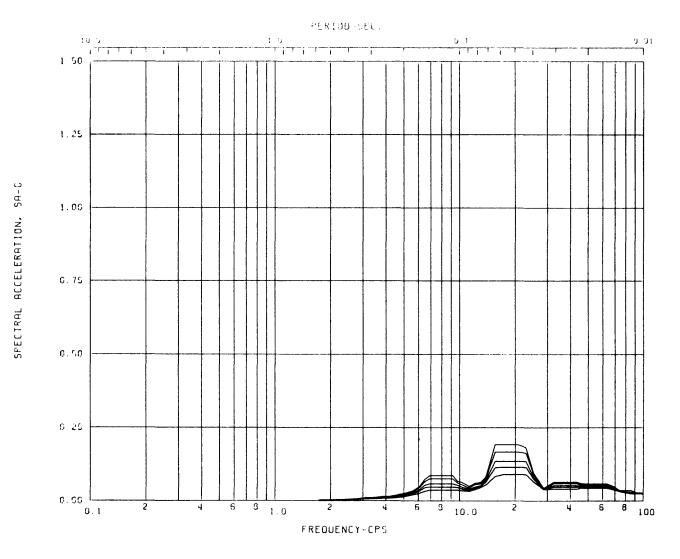
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 81 Direction: VERTICAL EJev: 253'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL,SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

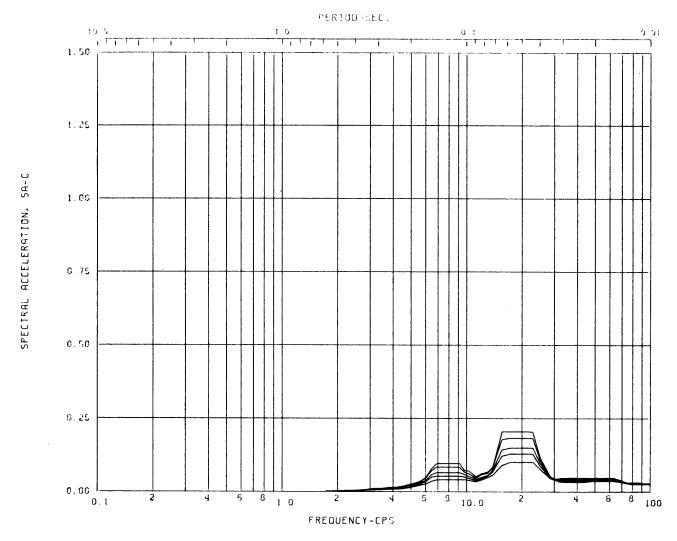
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 77 Direction: VERTICAL Elev: 269'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

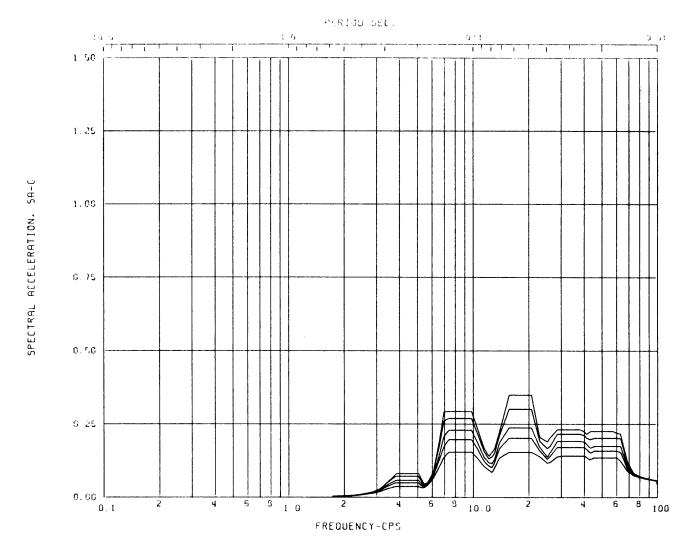
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 58 Direction: VERTICAL Elev: 283'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL..

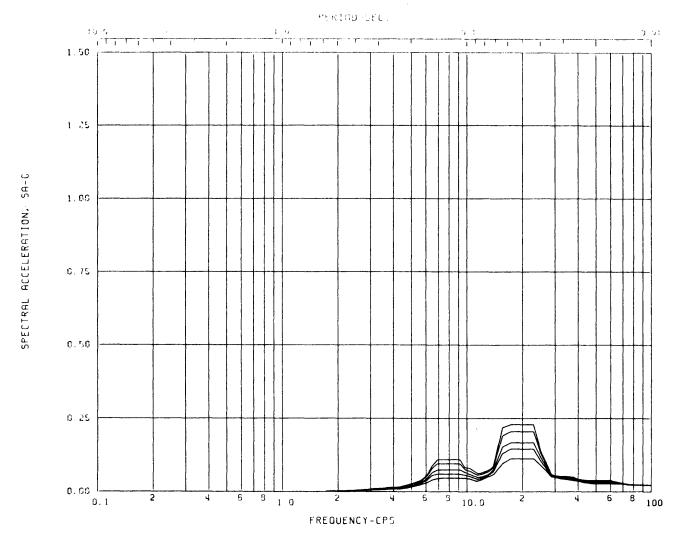
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 60 Direction: VERTICAL Elev: 283'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

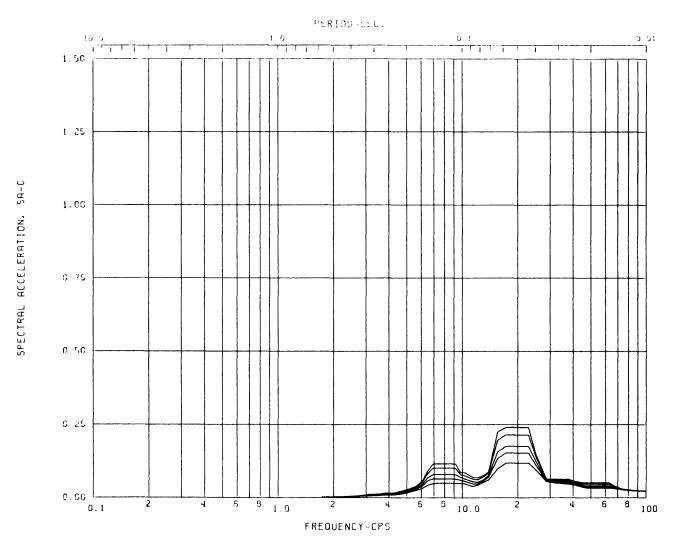
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 56 Direction: VERTICAL Elev: 304'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

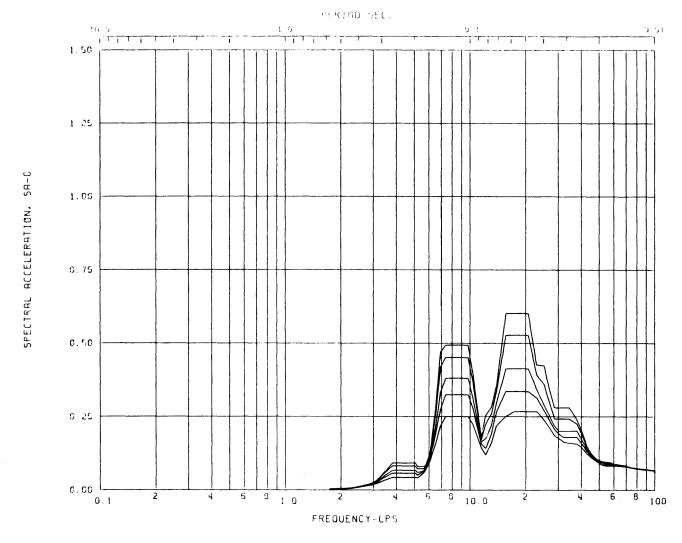
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 35 Direction: VERTICAL Elev: 313'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

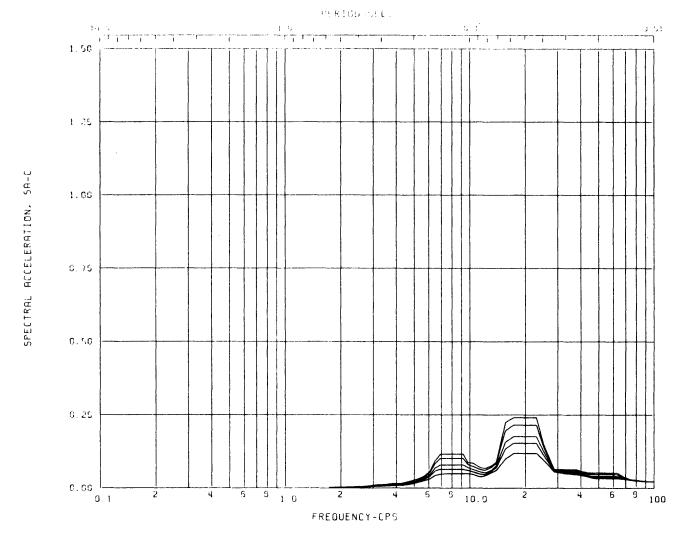
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 43 Direction: VERTICAL Elev: 313'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

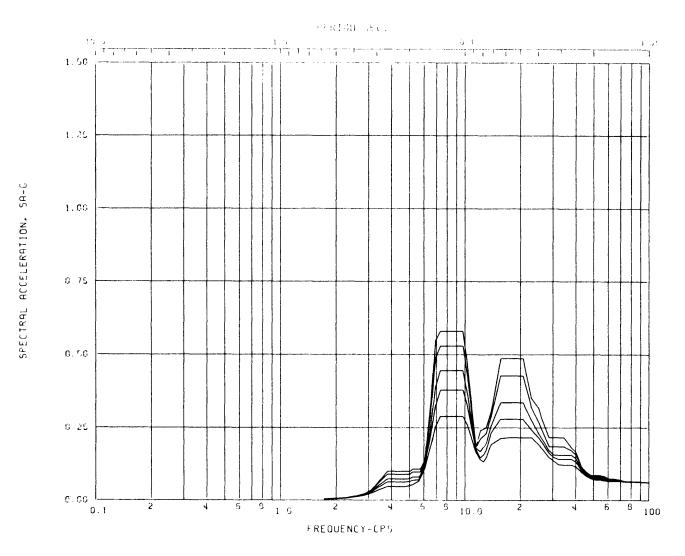
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 21 Direction: VERTICAL Elev: 333'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



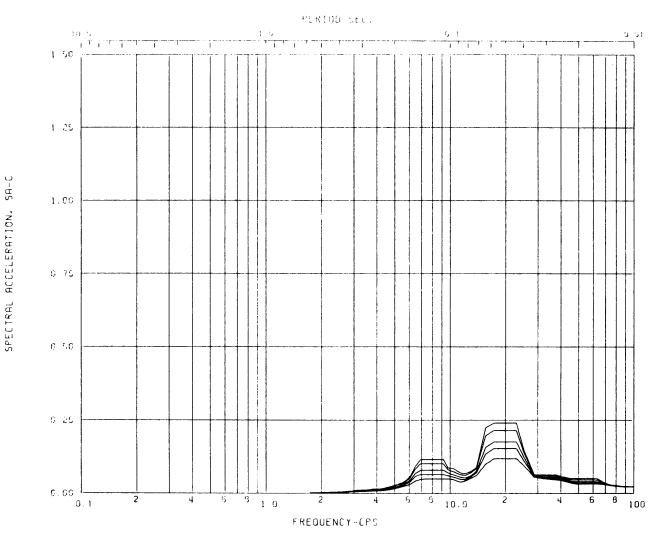
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 33 Direction: VERTICAL Elev: 333'

Damping: 0.005,0.01,0.02,0.03,0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

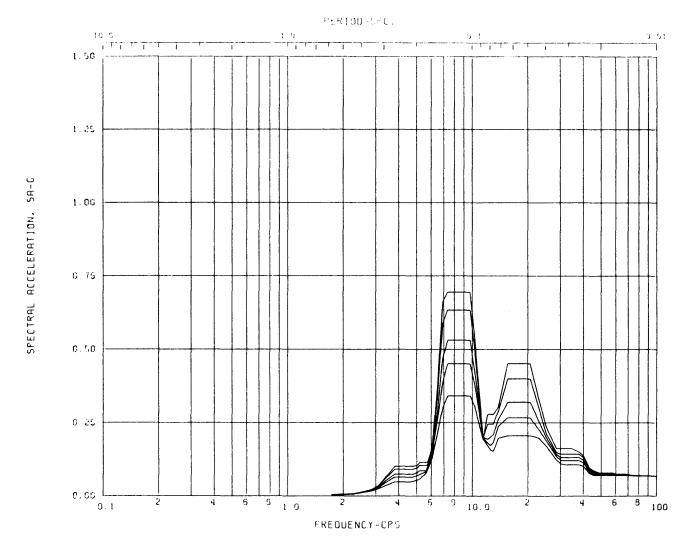
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 9 Direction: VERTICAL Elev: 352'

Damping: 0.005,0.01,0.02,0.03,0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



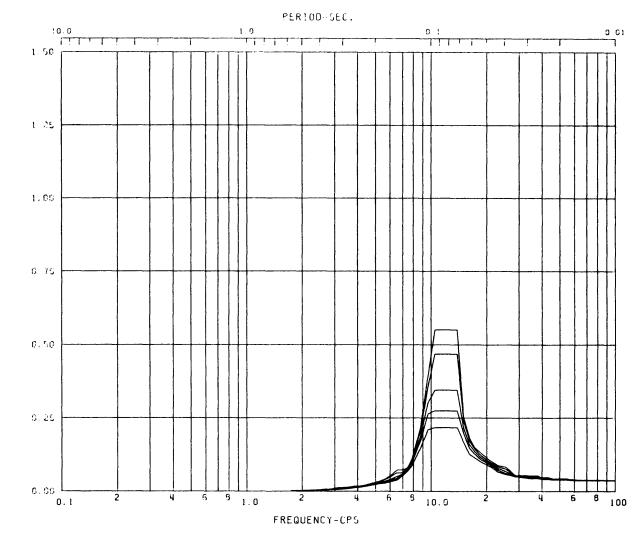
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 13 Direction: VERTICAL Elev: 352'

Damping: 0.005,0.01,0.02,0.03,0.05

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REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

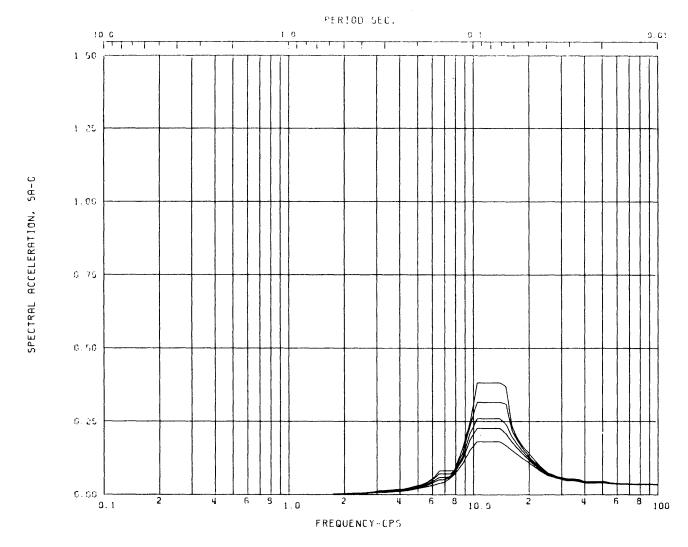
Node: 129 Direction: VERTICAL Elev: 201'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION,

LIMERICK GENERATING STATION
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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

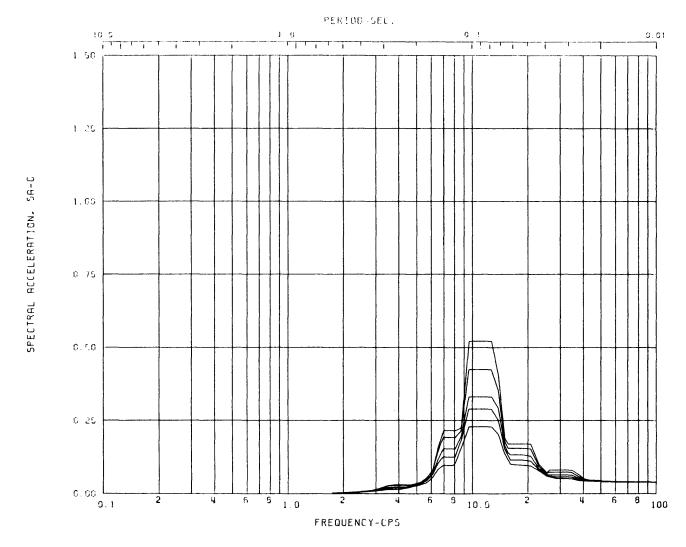
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 107 Direction: VERTICAL Elev: 217'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

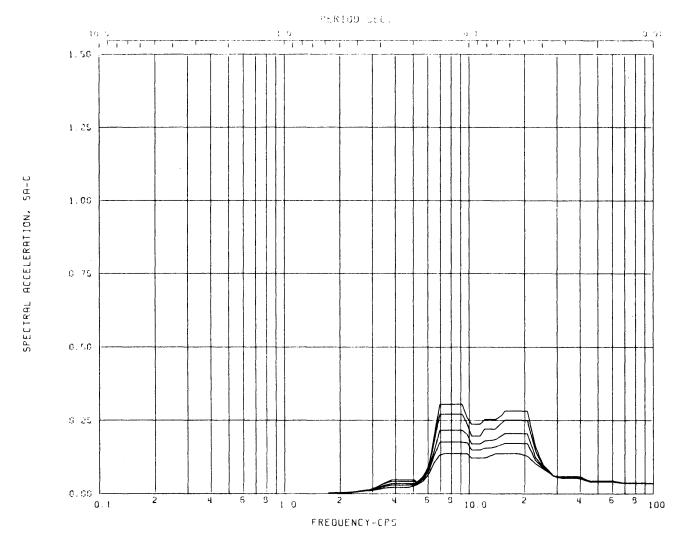
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 80 Direction: VERTICAL Elev: 253'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

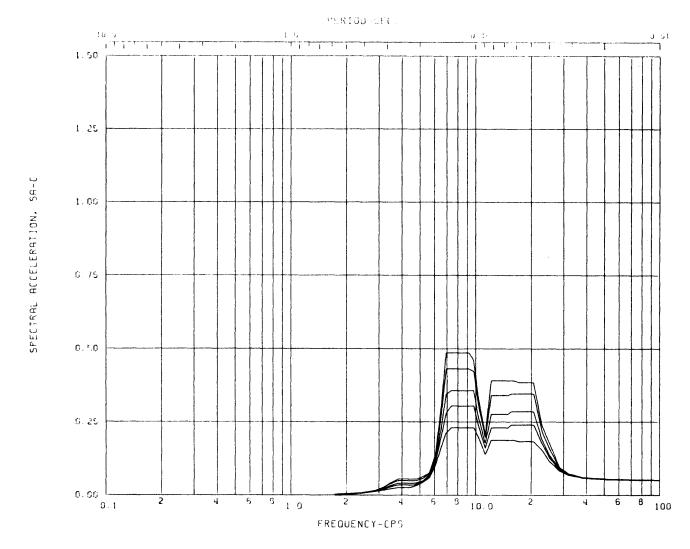
DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleratio	n Spe	ectra	for R	EACTO	R ENCL.		
Load Case:	KWU	SRV	AXISYMMI	ETRIC	ENVELOPE	(WIDENE	0 - 15%)
Node: 5	9	Diı	ection:	VER?	TICAL	_Elev:	283'

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



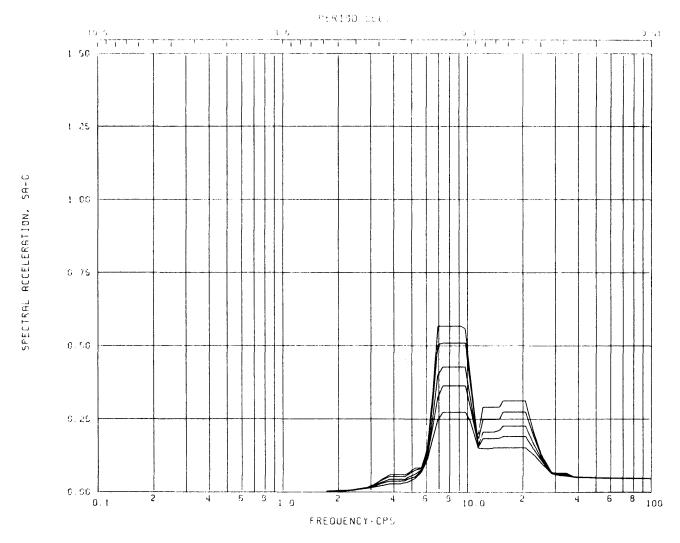
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 54 Direction: VERTICAL Elev: 313'

Damping: 0.005,0.01,0.02,0.03,0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

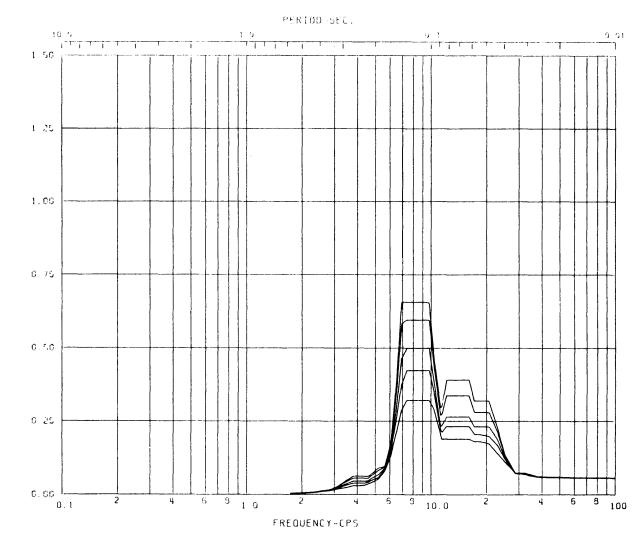
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 32 Direction: VERTICAL Elev: 333'

Damping: 0.005,0.01,0.02,0.03,0.05

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GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

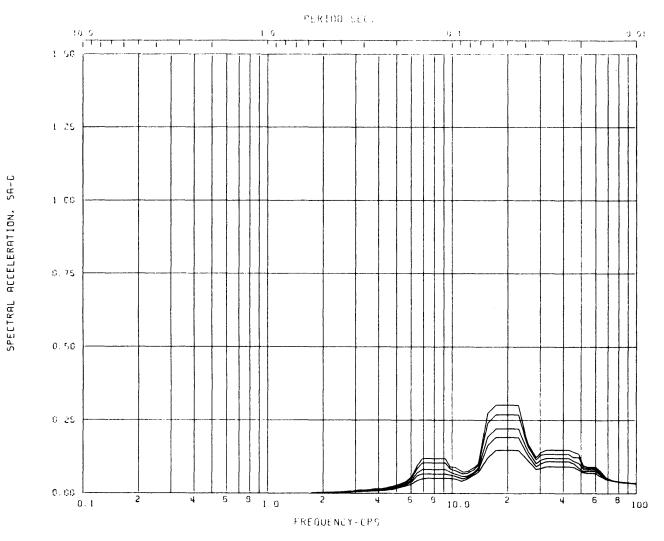
Node: 12 Direction: VERTICAL Elev: 352'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTAGL ACCELERATION.

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



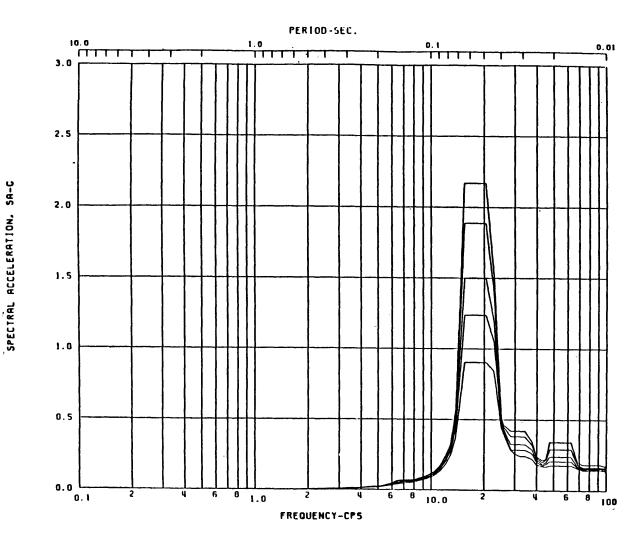
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 6 Direction: VERTICAL Elev: 410'

Damping: 0.005,0.01,0.02,0.03,0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE
GLOBAL RESPONSE SPECTRA
VERTICAL, SRV AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

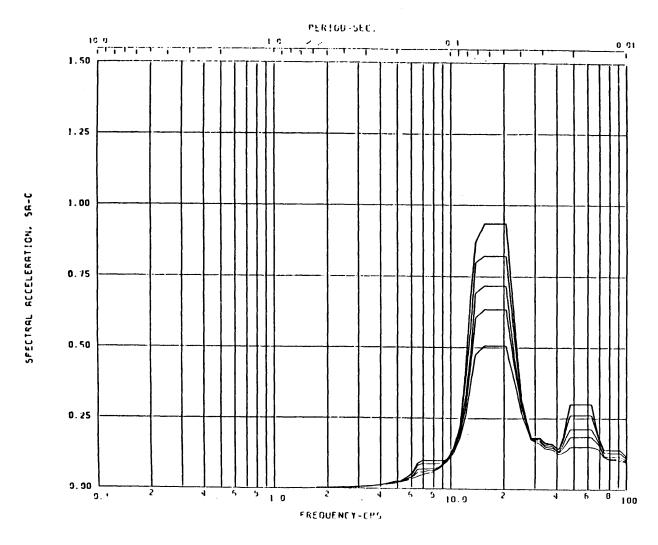
Load Case: KWU SRV AXISYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 217'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

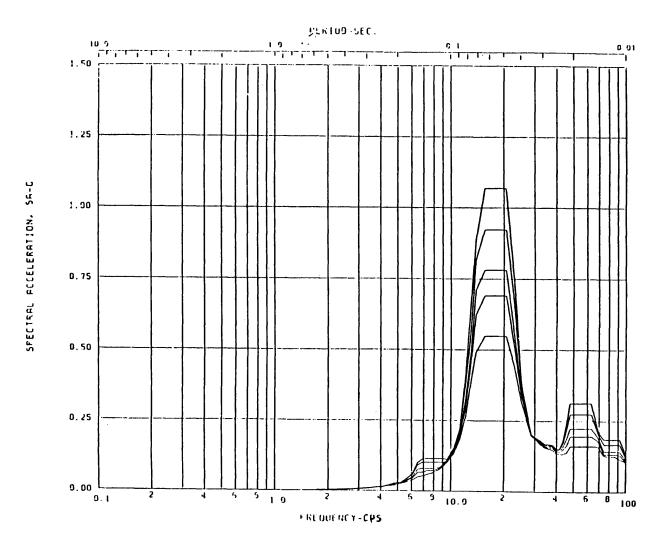
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC



Acce1	eratio	n Spe	ectra	a for _	CONTROL	STRUCTU	RE		
Load	Case:	KWU	SRV	AXISY	METRIC	ENVELOPE	(WIDENED -	15%)	
Node:	19		Di 1	rection	ver1	TICAL	Elev:	239'	

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

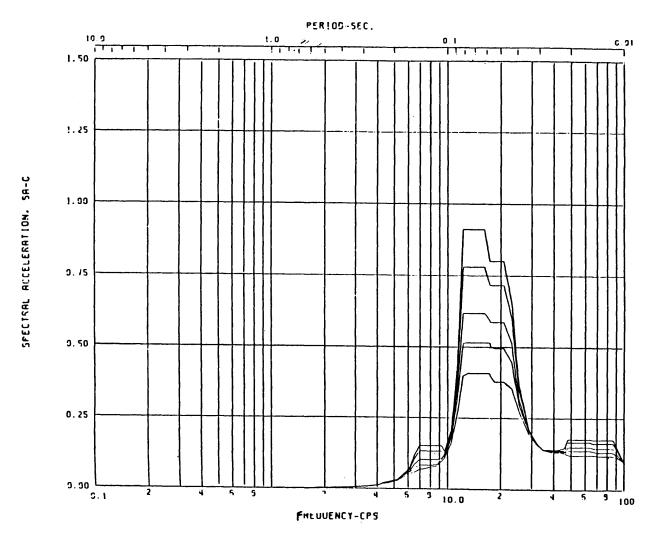
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC



Acce1	eratio	n Spectra for	CONTROL STRUCT	URE	
Load	Case:	KWU SRV AXISY	MMETRIC ENVELOP	E (WIDENED - 15%)	
Node:	19	Directio	n: VERTICAL	Elev: 254'	

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT

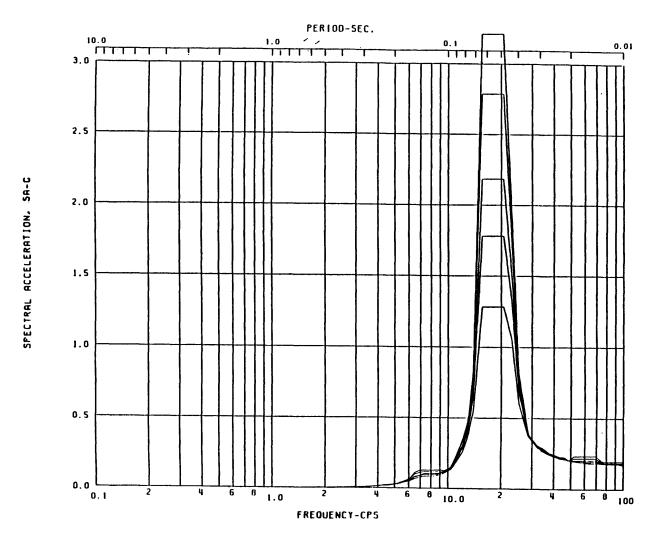
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC



Acce1	eratio	n Spectra	for CO	NTROL	STRUCTUR	RE		<del></del>
Load	Case:	KWU SRV A	XISYMME	TRIC	ENVELOPE	(WIDENED -	15%)	
Node:	19	Dire	ction:	VERT	TICAL	Elev:	269'-0	

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

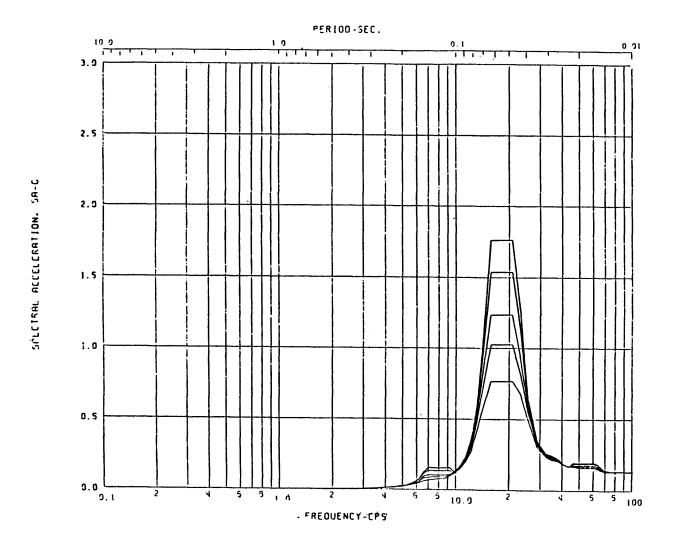
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC



Acceleratio	n Spectra for <u>C</u>	ONTROL STRUCTUR	RE		
Load Case:	KWU SRV AXISYMM	ETRIC ENVELOPE	(WIDENED -	15%)	· · · · · · · · · · · · · · · · · · ·
Node: 19	Direction:	VERTICAL	Elev:	289'	

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UPDATED FINAL SAFETY ANALYSIS REPORT

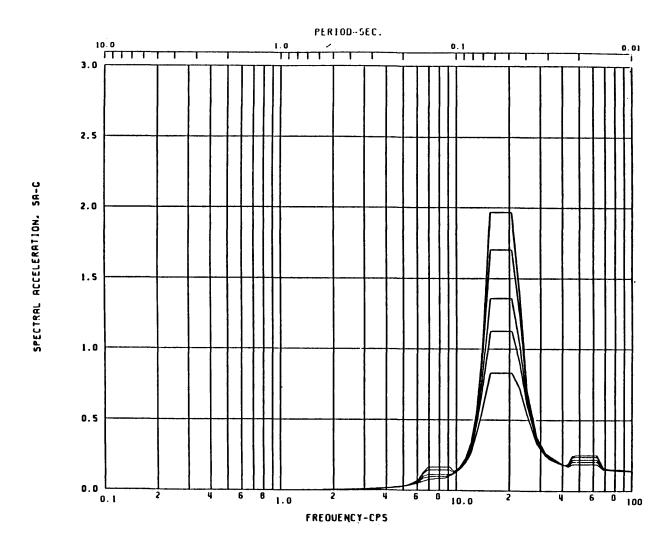
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC



Acce1	eratio	n Spectra fo	r CONTR	OL STRUCTU	RE		
Load	Case:	KWU-SRV AXI	SYMMETRI	C ENVELOPE	(WIDENED -	15%)	
Node:	19	Direct	ion: VE	RTICAL	Elev:	304'-0	

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CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC

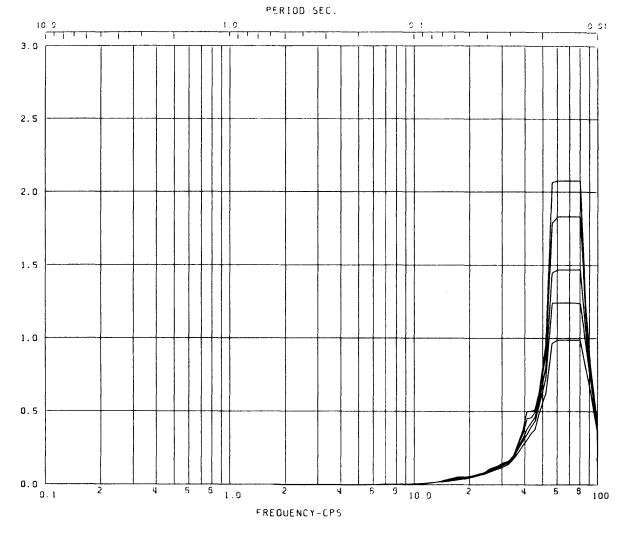


Accelera	tion	Spectra	for	CONTRO	L STRUCTUE	RE		
Load Cas	e: _	KWU-SRV	AXISY	MMETRIC	ENVELOPE	(WIDENED -	15%)	
Node:	19	Di r	rectio	on: VER	TICAL	Elev:	332	

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LOCAL RESPONSE SPECTRA,
VERTICAL, SRV AXISYMMETRIC

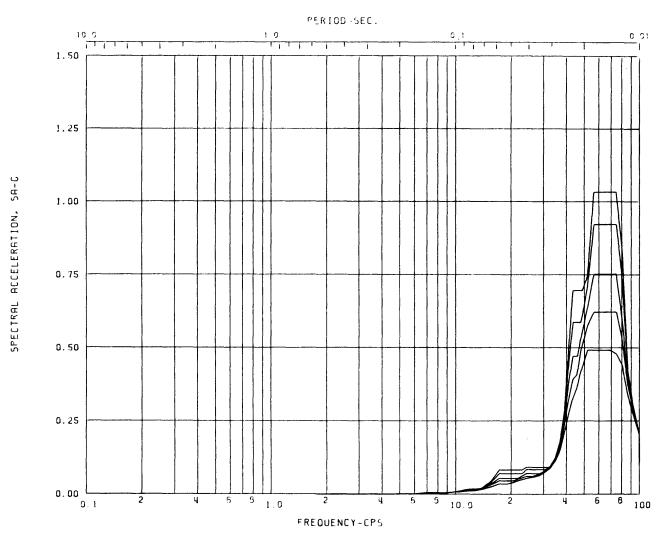




Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE							
Load Case:	CHUGGING	GE700	SERIES	ASYMMETRIC	ENVELOPE	(WIDENED - 15%)	
Node: 1	Dire	ction:	НОН	RIZ N-S	Elev:	177 <b>'-</b> 0	
Damping: 0.005,0.01,0.02,0.03,0.05							

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REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
CHUG ASYMMETRIC
FIGURE 3A-227



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

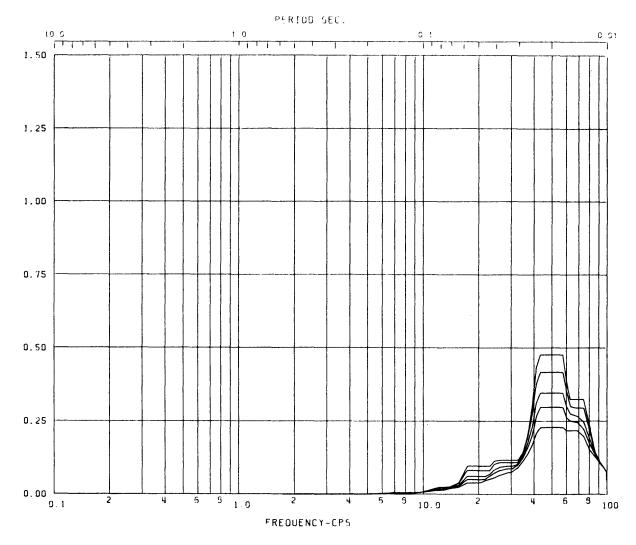
Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 2 Direction: HORIZ N-S Elev: 201'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
CHUG ASYMMETRIC
FIGURE 3A-228



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

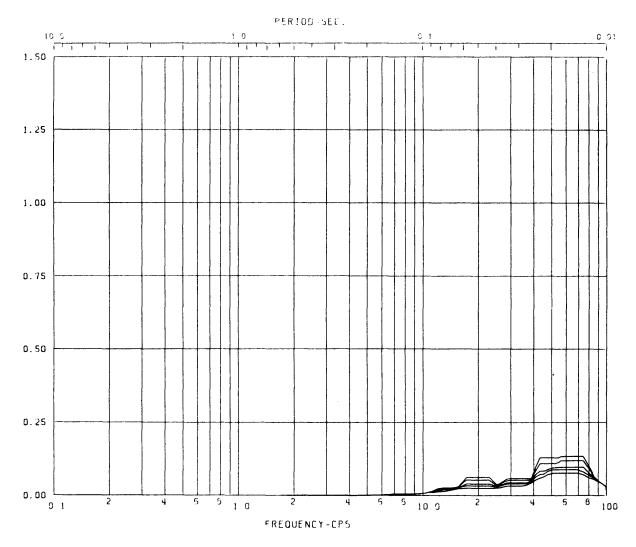
Node: 3 Direction: HORIZ N-S Elev: 217'-0

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION, SA-C

LIMERICK GENERATING STATION
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REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%) Node: 4 Direction: HORIZ N-S \_ Elev: \_239'-0

Damping: 0.005,0.01,0.02,0.03,0.05

S.A.- C

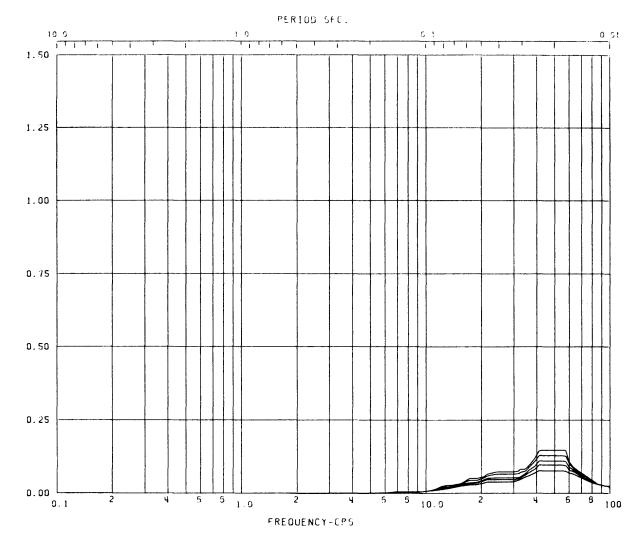
SPECTRAL ACCELERATION.

**LIMERICK GENERATING STATION** UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** 

REACTOR ENCLOSURE AND CONTROL STRUCTURE GLOBAL RESPONSE SPECTRA, N-S HORIZONTAL, **CHUG ASYMMETRIC** 



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

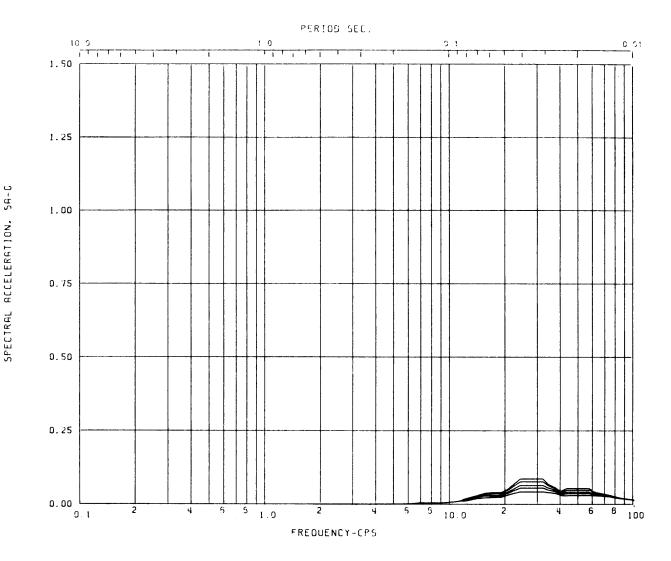
Node: 5 Direction: HORIZ N-S Elev: 253'-0

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION.

LIMERICK GENERATING STATION
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REACTOR ENCLOSURE AND CONTROL
STRUCTURE GLOBAL RESPONSE
SPECTRA, N-S HORIZONTAL,
CHUG ASYMMETRIC
FIGURE 3A-231



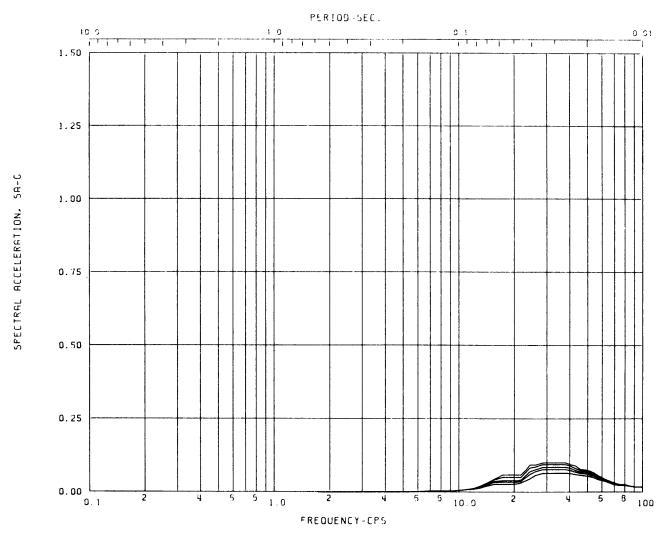
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 6 Direction: HORIZ N-S Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



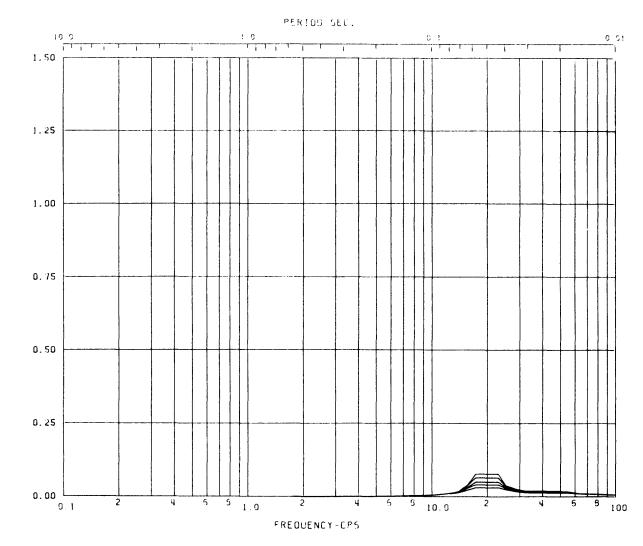
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 7 Direction: HORIZ N-S Elev: 283'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT



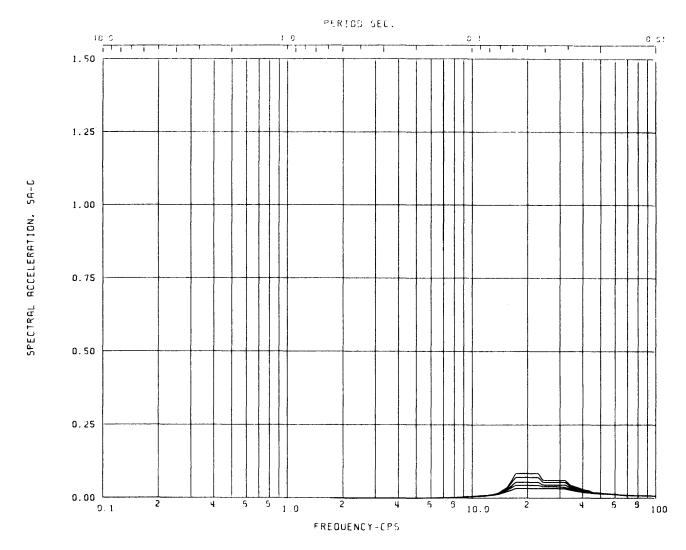
SPECTRAL ACCELERATION, SA-C

Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE					
Load Case:	CHUGGING GE700	SERIES ASYMMETRI	IC ENVELOPE	(WIDENED - 15%)	
Node: 8	Direction:	HORIZ N-S	Elev:	304'-0	
Damping: 0.005, 0.01, 0.02, 0.03, 0.05					

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DESIGN ASSESSMENT REPORT

REACTOR ENCLOSURE AND CONTROL STRUCTURE GLOBAL RESPONSE SPECTRA, N-S HORIZONTAL, CHUG ASYMMETRIC FIGURE 3A-234



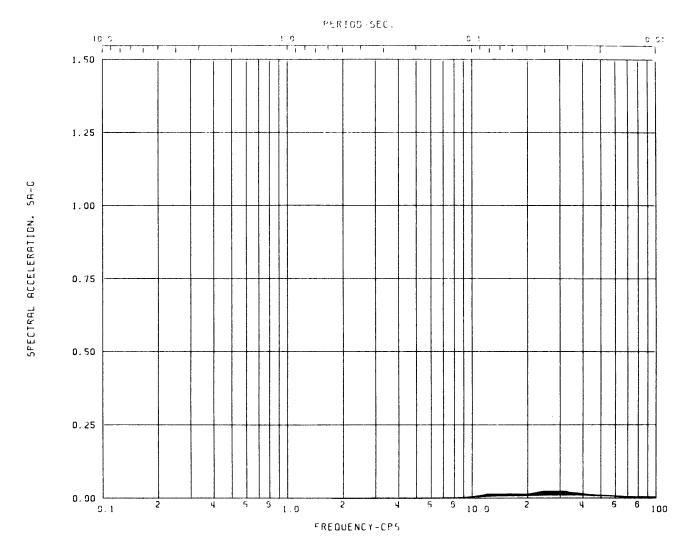
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 9 Direction: HORIZ N-S Elev: 313'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



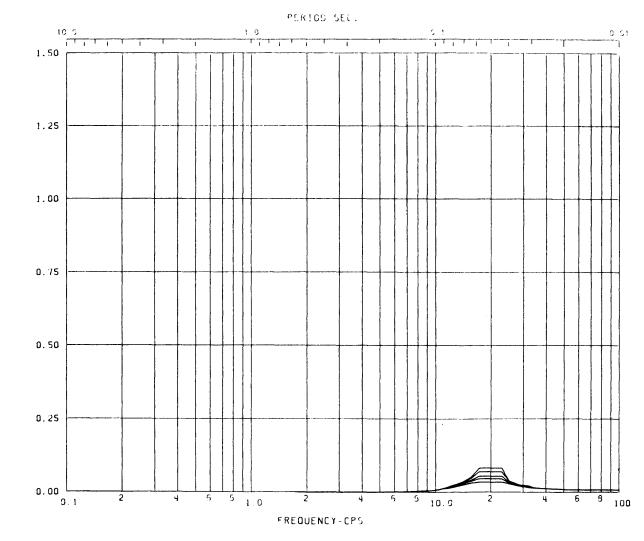
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 10 Direction: HORIZ N-S Elev: 332'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



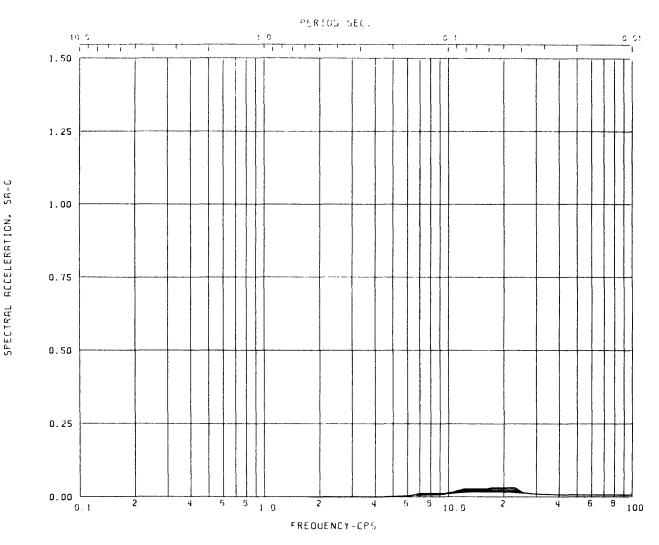
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 11 Direction: HORIZ N-S Elev: 352'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT



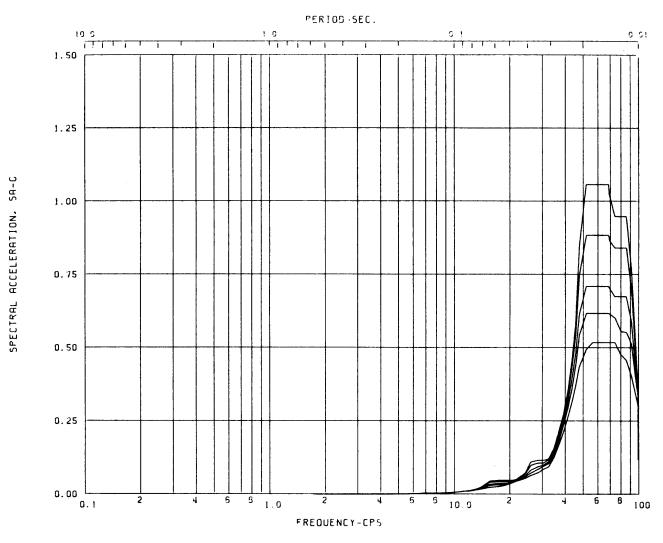
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: CHUGGING GE700 SERIES ASYMMETRIC ENVELOPE (WIDENED - 15%)

Node: 12 Direction: HORIZ N-S Elev: 410'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT



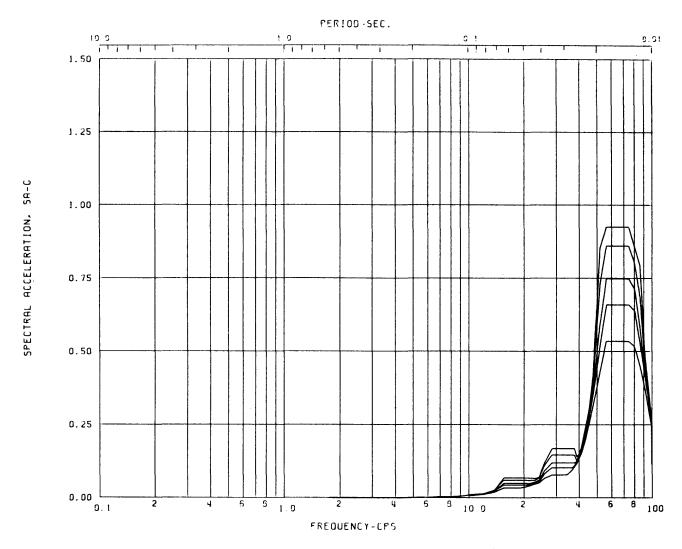
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 1 Direction: HORIZ E-W Elev: 177'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT



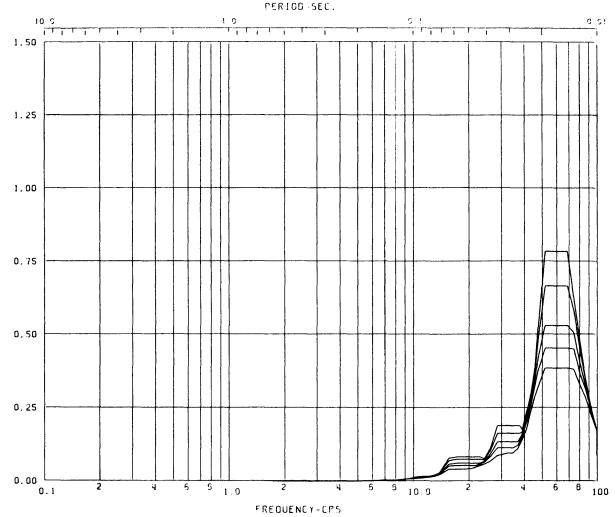
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 2 Direction: HORIZ E-W Elev: 201'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

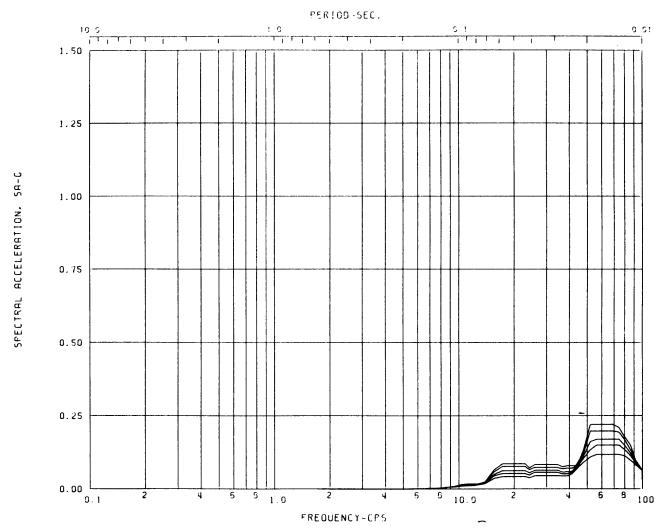
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 3 Direction: HORIZ E-W Elev: 217'-0

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION, SA-C

LIMERICK GENERATING STATION
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Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

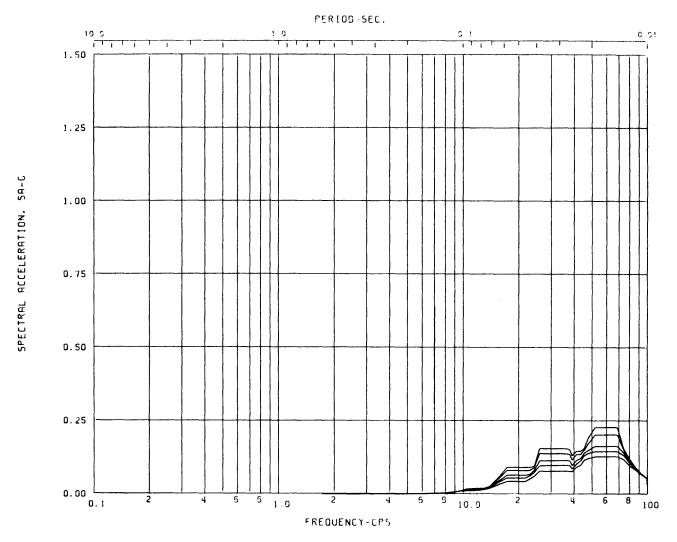
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 4 Direction: HORIZ E-W Elev: 239'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE AND CONTROL STRUCTURE GLOBAL RESPONSE SPECTRA, E-W HORIZONTAL, **CHUG ASYMMETRIC** 



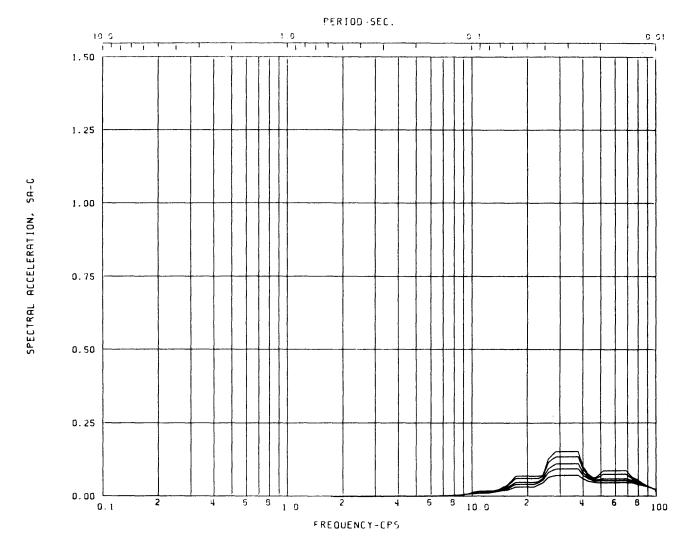
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 5 Direction: HORIZ E-W Elev: 253'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT



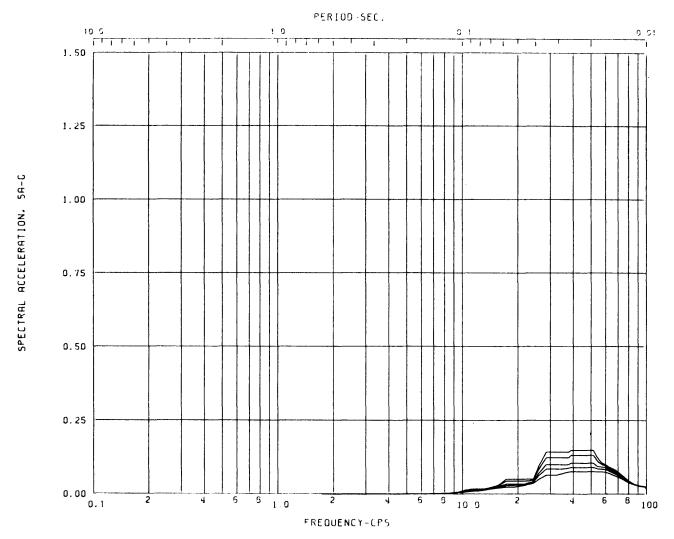
Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 6 Direction: HORIZ E-W Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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Acceleration Spectra for REACTOR ENGL., CONTROL STRUCTURE

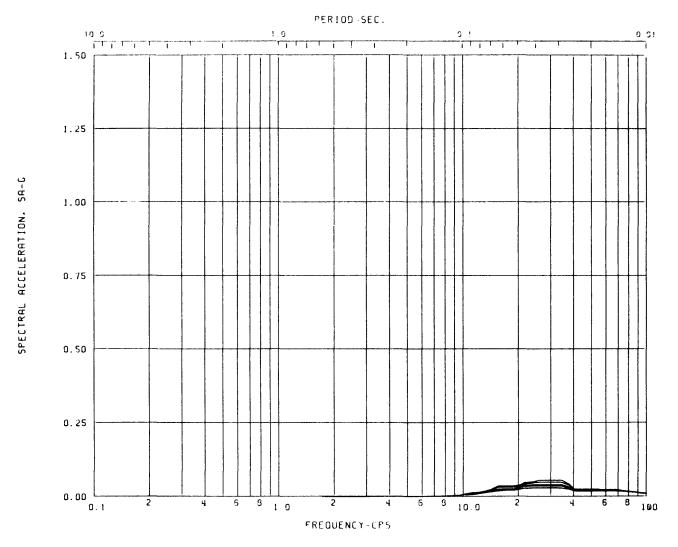
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 7 Direction: HORIZ E-W Elev: 283'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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STRUCTURE GLOBAL RESPONSE
SPECTRA, E-W HORIZONTAL,
CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

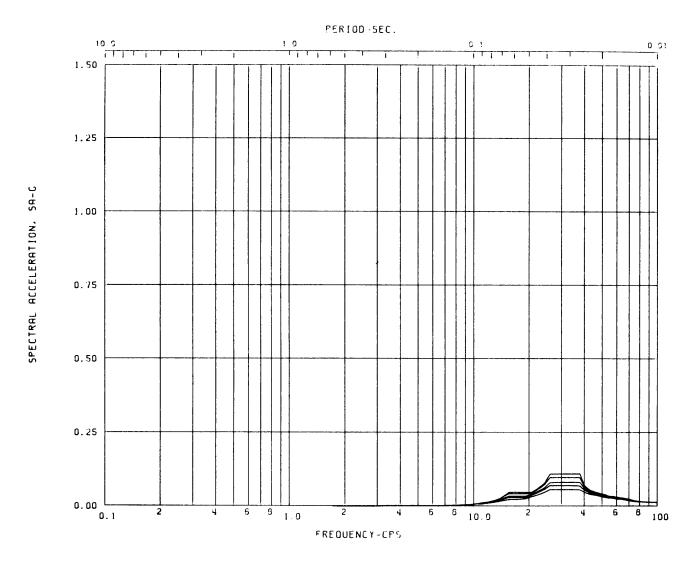
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 8 Direction: HORIZ E-W Elev: 304'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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SPECTRA, E-W HORIZONTAL,
CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

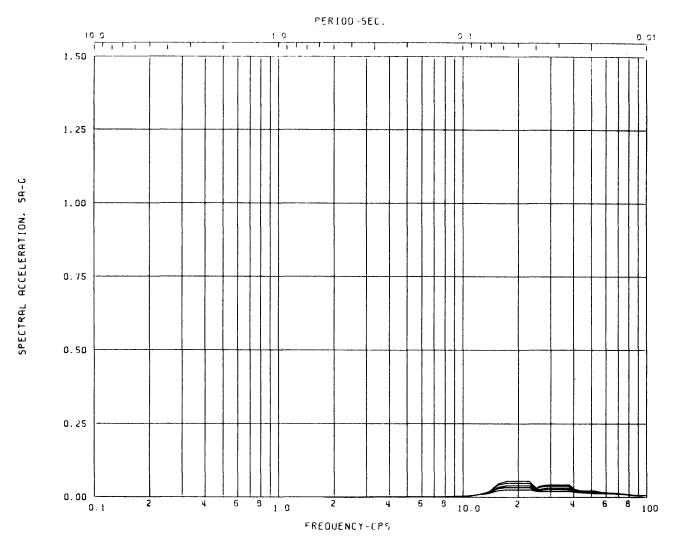
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 9 Direction: HORIZ E-W Elev: 313'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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STRUCTURE GLOBAL RESPONSE
SPECTRA, E-W HORIZONTAL,
CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

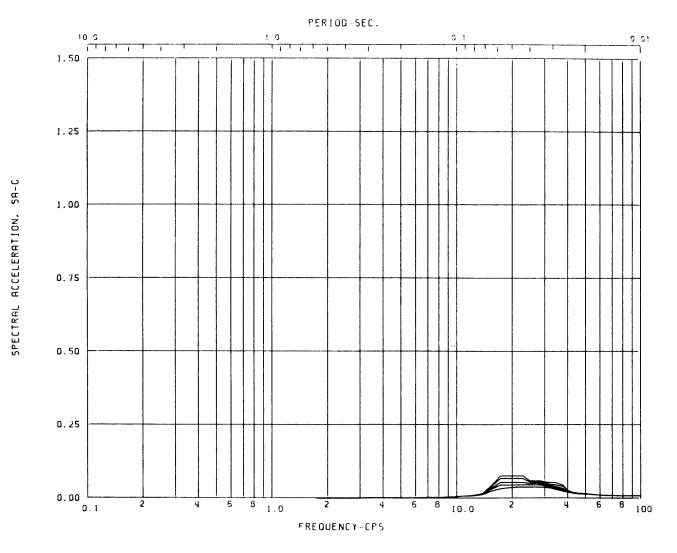
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 10 Direction: HORIZ E-W Elev: 332'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

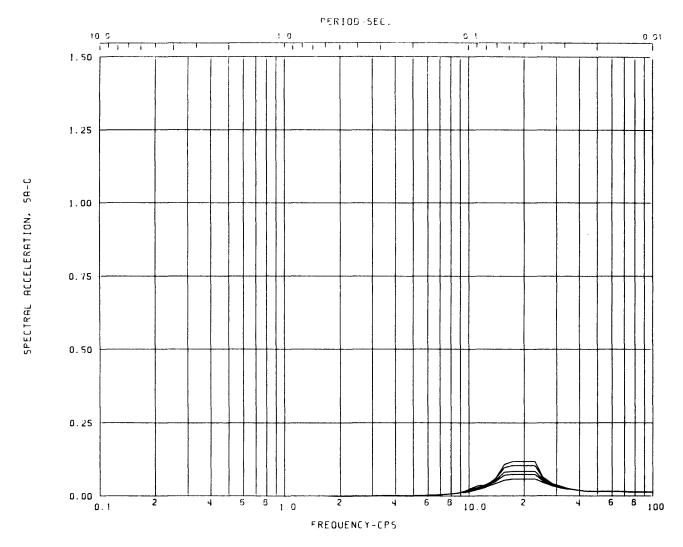
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 11 Direction: HORIZ E-W Elev: 352'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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SPECTRA, E-W HORIZONTAL,
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Acceleration Spectra for REACTOR ENCL., CONTROL STRUCTURE

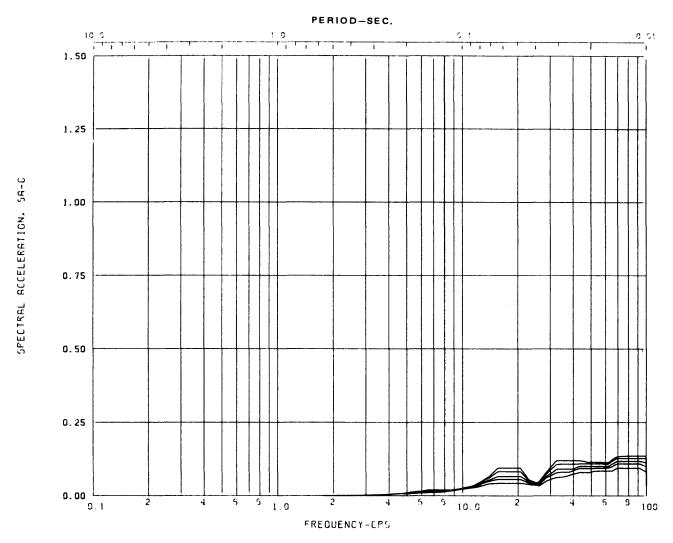
Load Case: ASYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 12 Direction: HORIZ E-W Elev: 410'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG ASYMMETRIC



Acceleration Spectra for REACTOR ENCL.

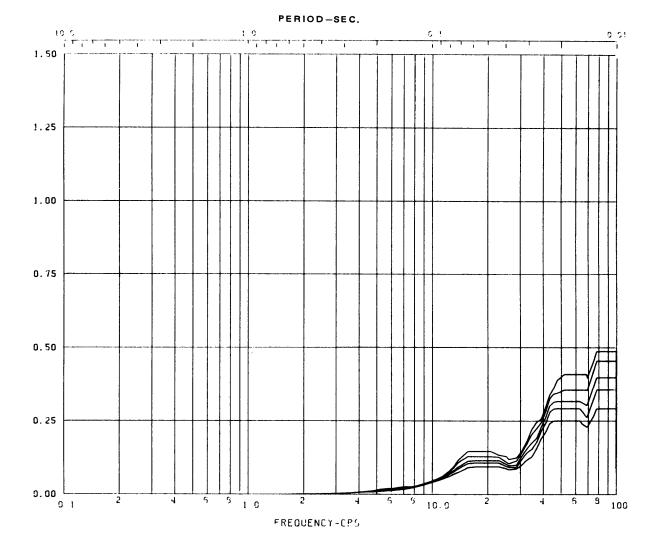
Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

Node: 159 Direction: VERTICAL Flev: 177'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

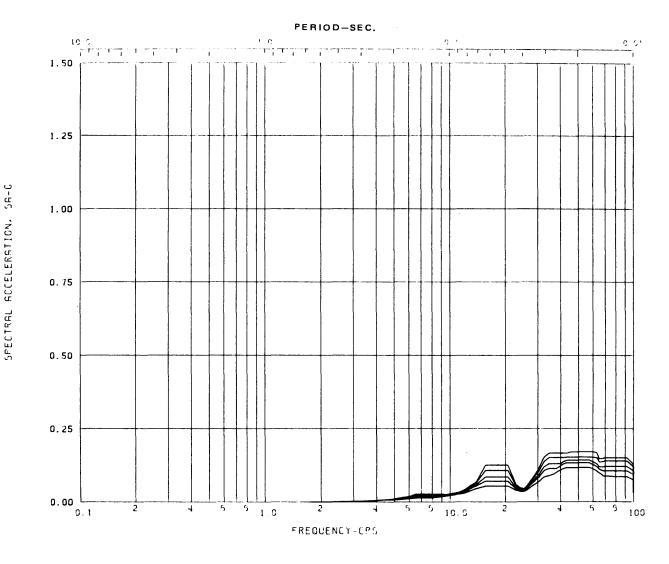
Node: 154 Direction: VERTICAL Elev: 177'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION, SA-C

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

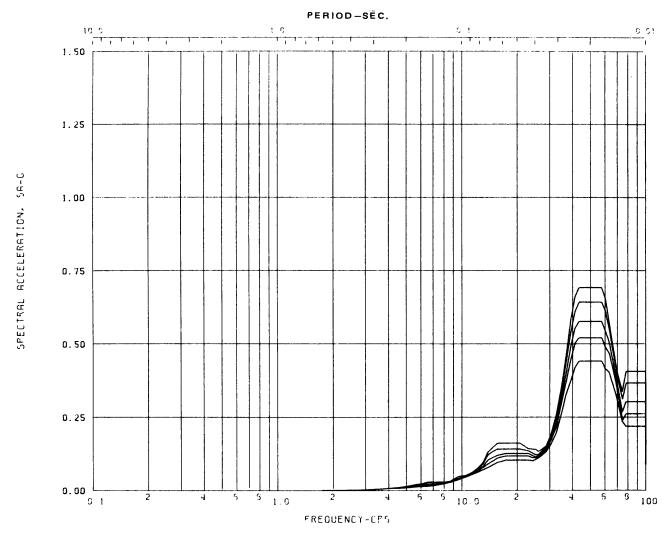
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 128 Direction: VERTICAL Elev: 201'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL. Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%) Direction: VERTICAL

Damping: 0.005,0.01,0.02,0.03,0.05

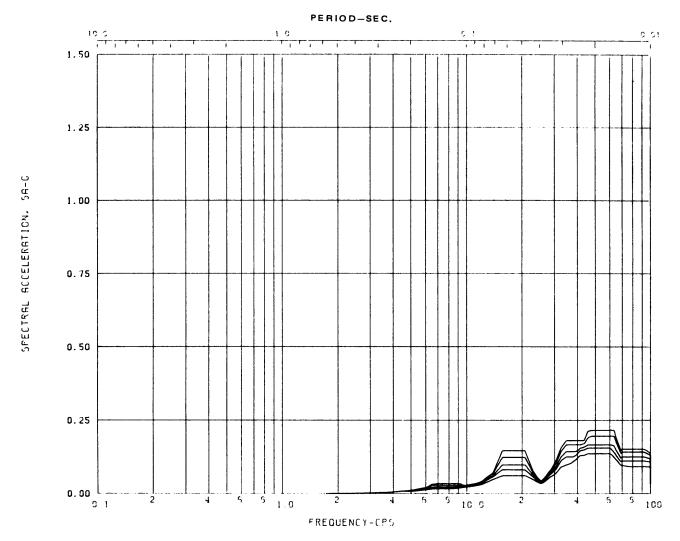
Node: 130

**LIMERICK GENERATING STATION** UNITS 1 AND 2 **UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, **CHUG AXISYMMETRIC** 

FIGURE 3A-254

Elev: 201'



Acceleration Spectra for REACTOR ENCL.

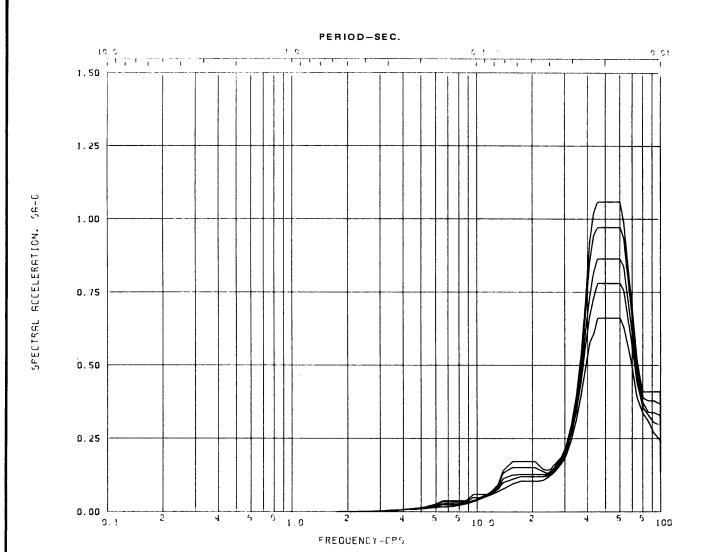
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 106 Direction: VERTICAL Elev: 217'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

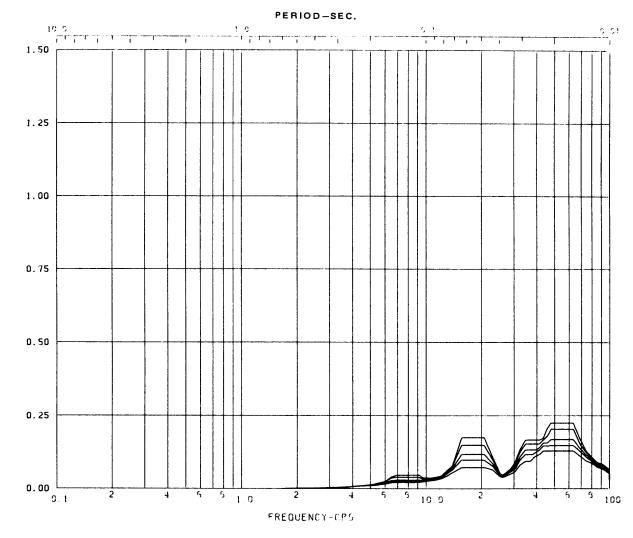
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 108 Direction: VERTICAL Elev: 217'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

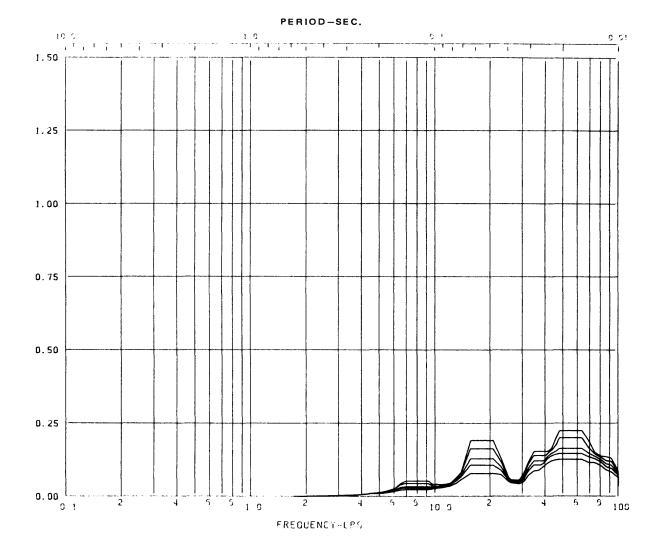
Node: 104 Direction: VERTICAL Elev: 239'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

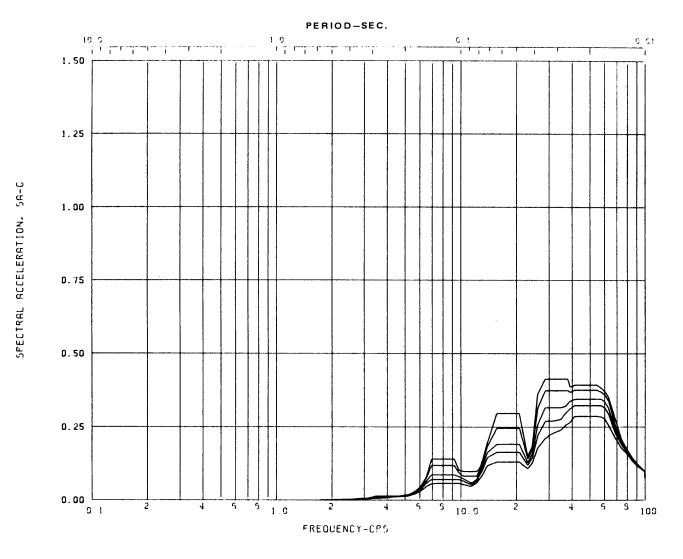
Node: 79 Direction: VERTICAL Elev: 253'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

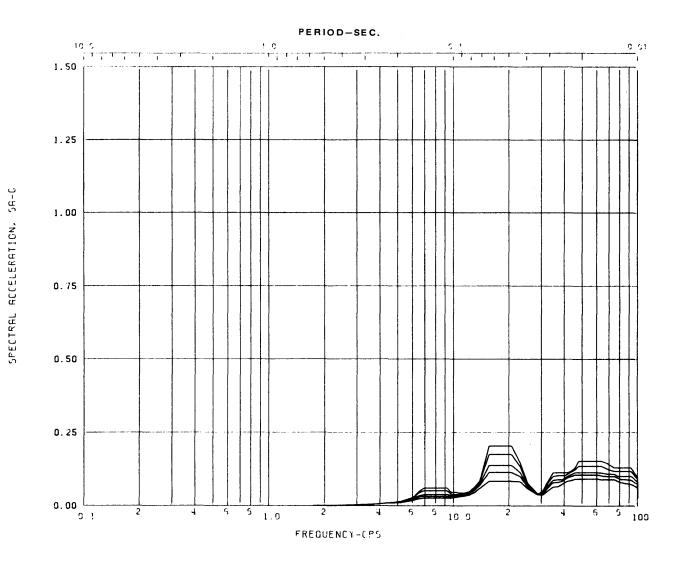
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 81 Direction: VERTICAL Elev: 253'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

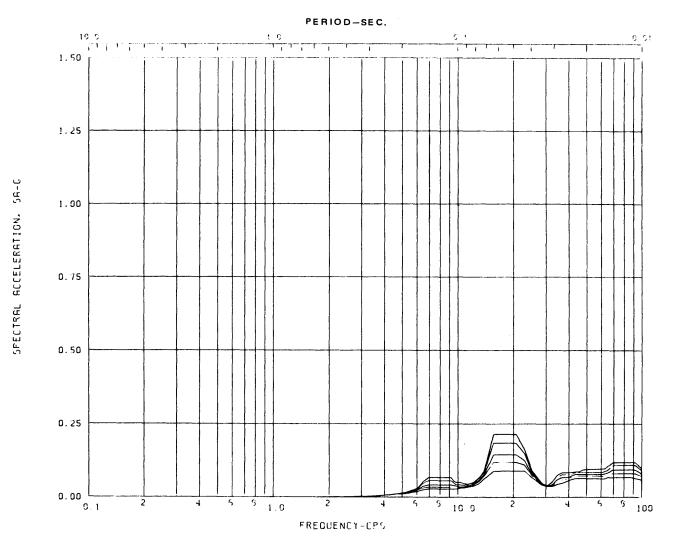
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 77 Direction: VERTICAL Elev: 269'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



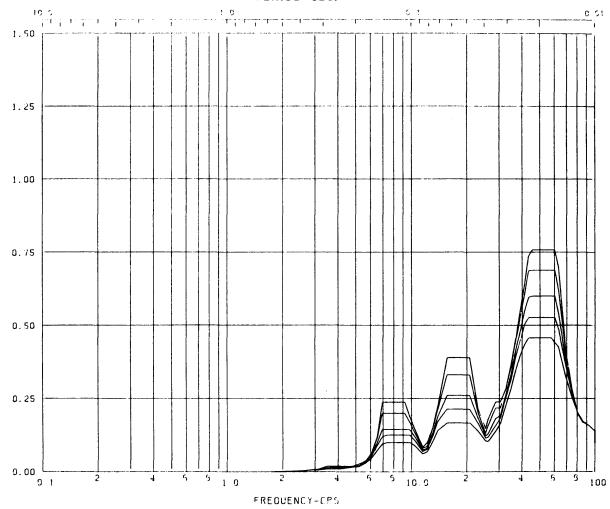
Acceleration Spectra for REACTOR ENCL. Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%) Node: 58 Direction: VERTICAL Elev: 283'

Damping: 0.005,0.01,0.02,0.03,0.05

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**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, **CHUG AXISYMMETRIC** 





Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

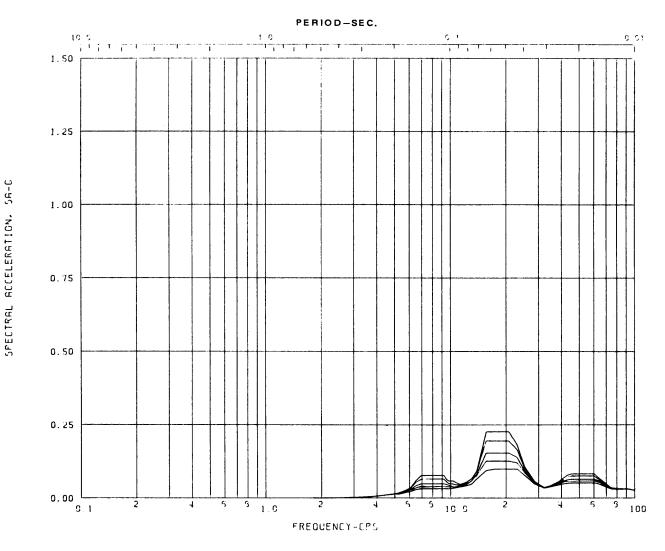
Node: 60 Direction: VERTICAL Elev: 283'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION, SA-C

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

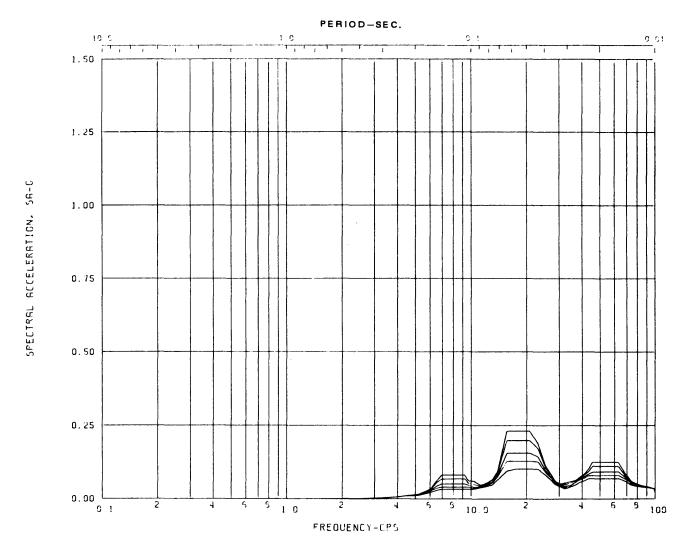
Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

Node: 56 Direction: VERTICAL Elev: 304'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

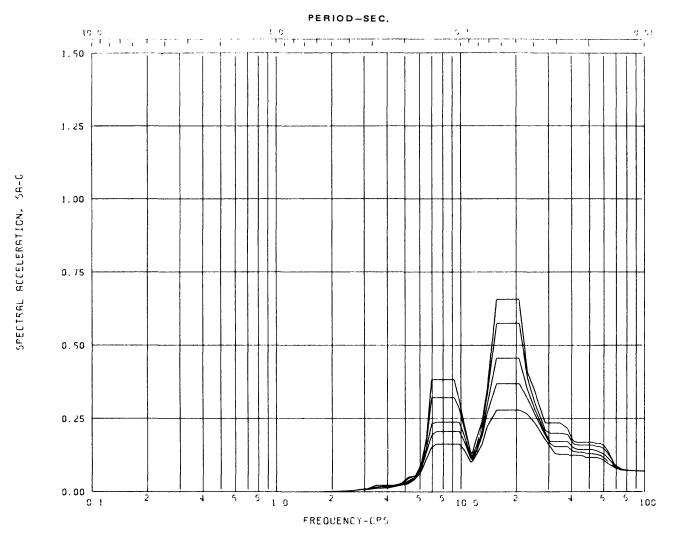
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 35 Direction: VERTICAL Elev: 313'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

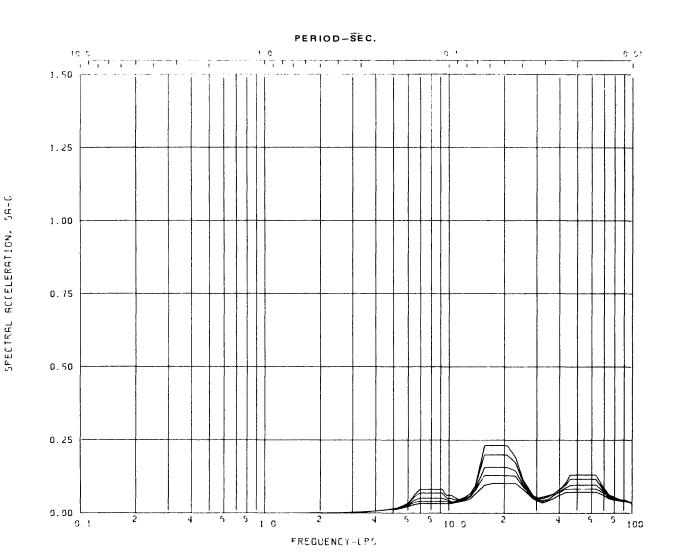
Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

Node: 43 Direction: VERTICAL Elev: 313'

Damping: 0.005,0.01,0.02,0.03,0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

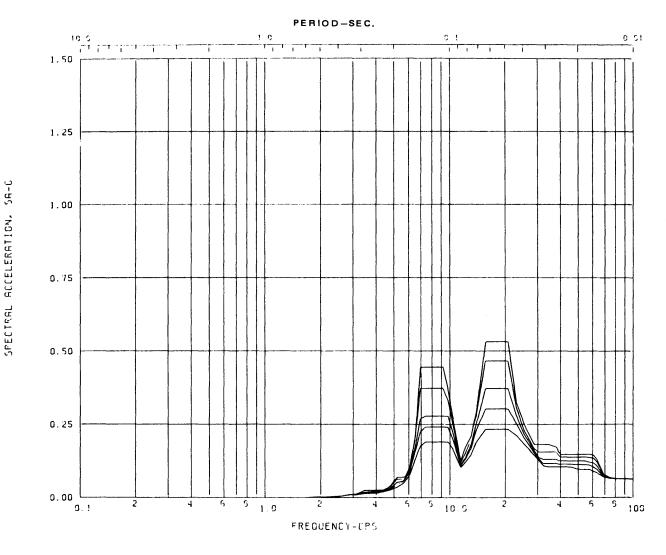
Node: 21 Direction: VERTICAL Elev: 333'

Damping: 0.005,0.01,0.02,0.03,0.05

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,

**CHUG AXISYMMETRIC** 



Acceleration Spectra for REACTOR ENCL.

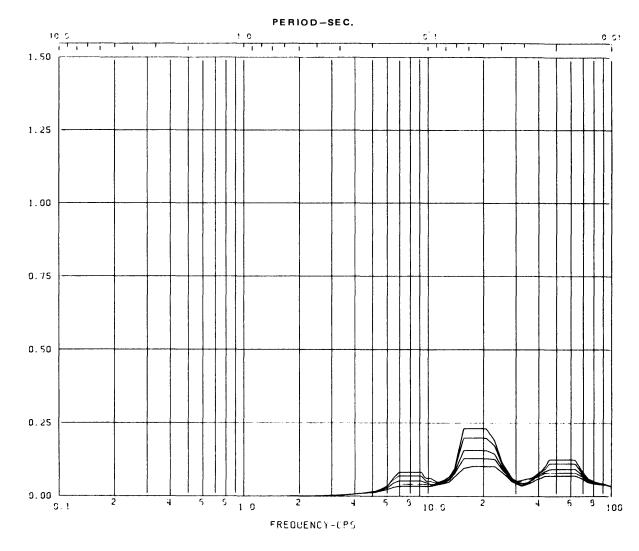
Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

Node: 33 Direction: VERTICAL Elev: 333'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

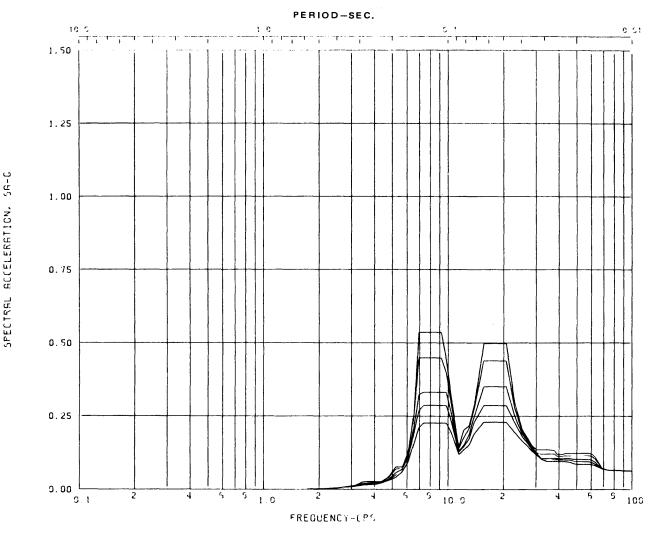
Node: 9 Direction: VERTICAL Elev: 352'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTABL BECELERBIION, SA-C

LIMERICK GENERATING STATION
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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



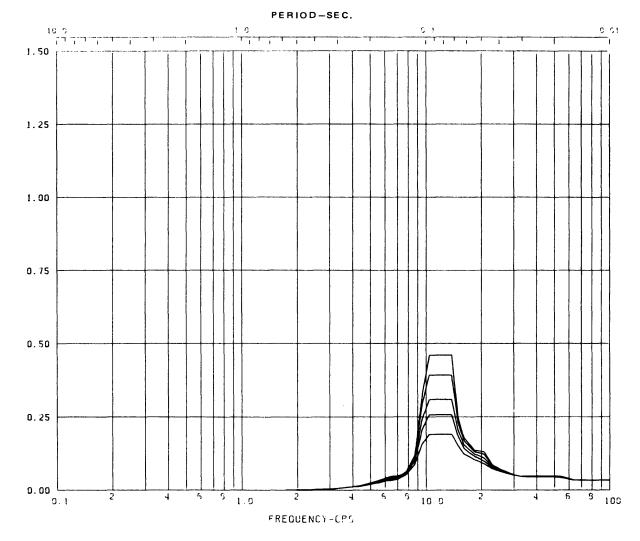
Acceleration Spectra for REACTOR ENCL. Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%) Node: 13 Direction: VERTICAL Elev: 352'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

**LIMERICK GENERATING STATION UNITS 1 AND 2** 

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**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, **CHUG AXISYMMETRIC** 



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

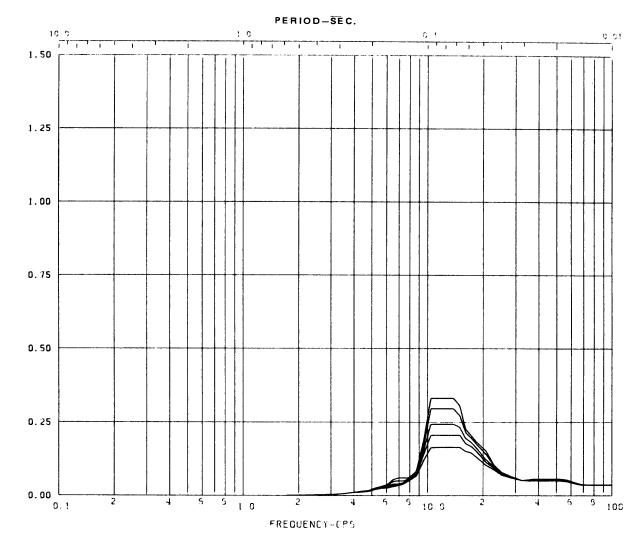
Node: 129 Direction: VERTICAL Elev: 201'

Damping: 0.005, 0.01, 0.02, 6.03, 0.05

SPECTRAL ACCELERATION, SA-C

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Acceleration Spectra for <u>REACTOR ENCL.</u>

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

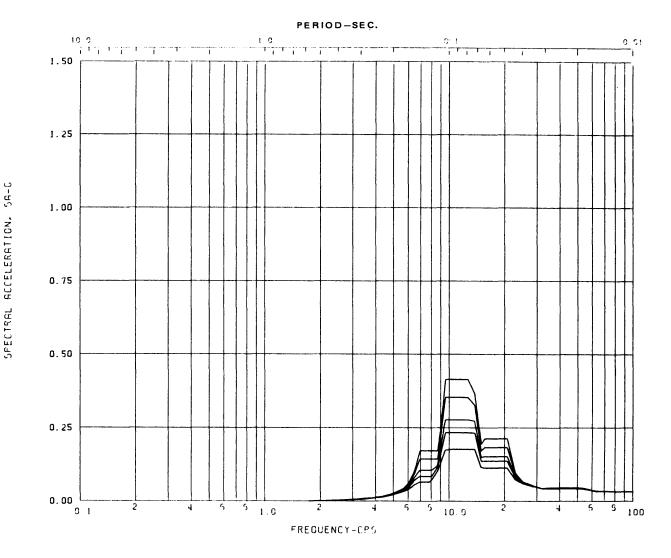
Node: 107 Direction: VERTICAL Elev: 217'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECIARL ACCELERATION, SA-C

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

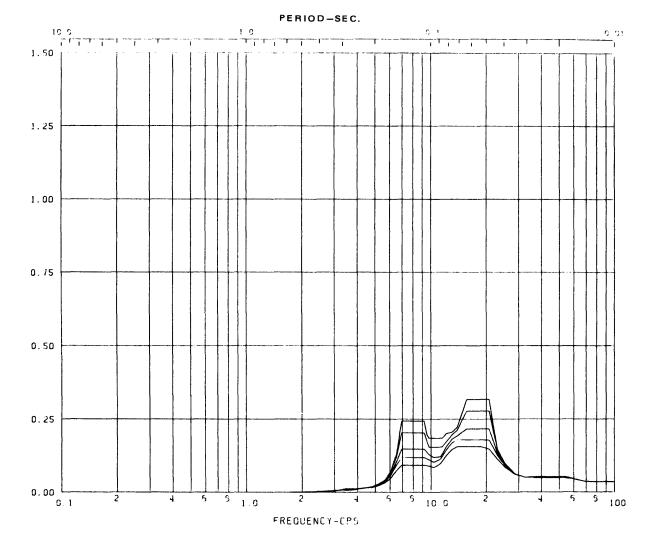
Node: 80 Direction: VERTICAL Elev: 253'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

UPDATED FINAL SAFETY ANALYSIS REPORT

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Load Case: \_AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

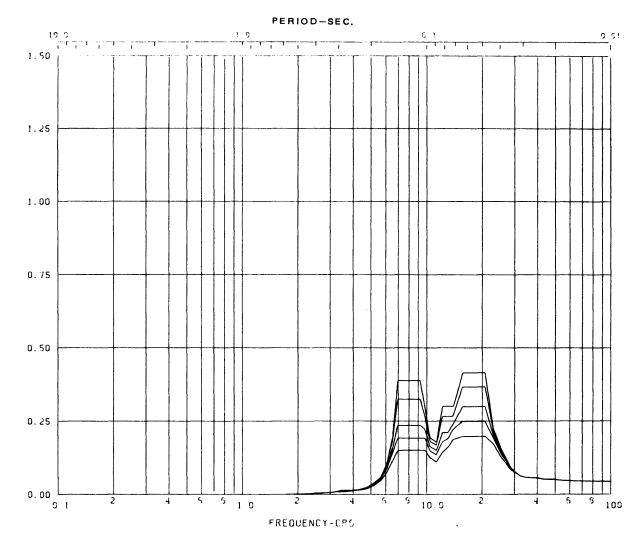
Node: 59 Direction: VERTICAL Elev: 283'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

SPECTRAL ACCELERATION, SA-C

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

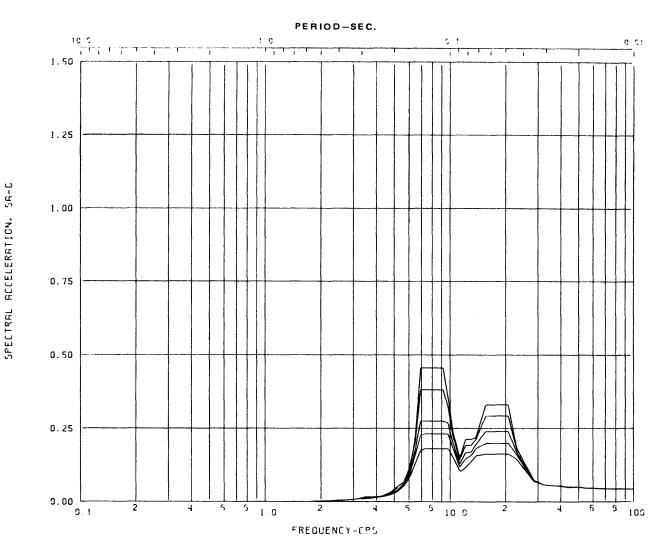
Node: 54 Direction: VERTICAL Elev: 313'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION, SA-C

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC

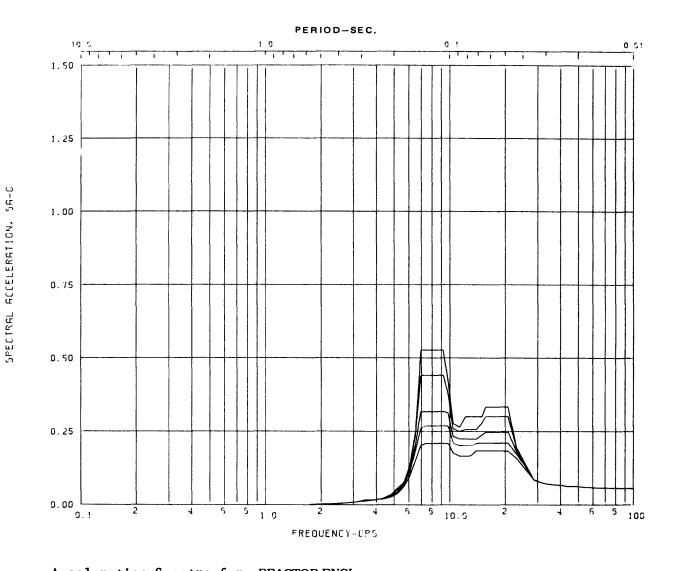


Accel	eration	n Spectra for	REACTOR	ENCL.						
Load	Case: _	AXISYMMETRIC	CHUGGING	GE700	SERIFS	ENVELO	PE	(WIDENED	_	15%)
Node:	32	Direction	on: VE	RTICAL	1	Elev: _	333	) †		

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSUREGLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

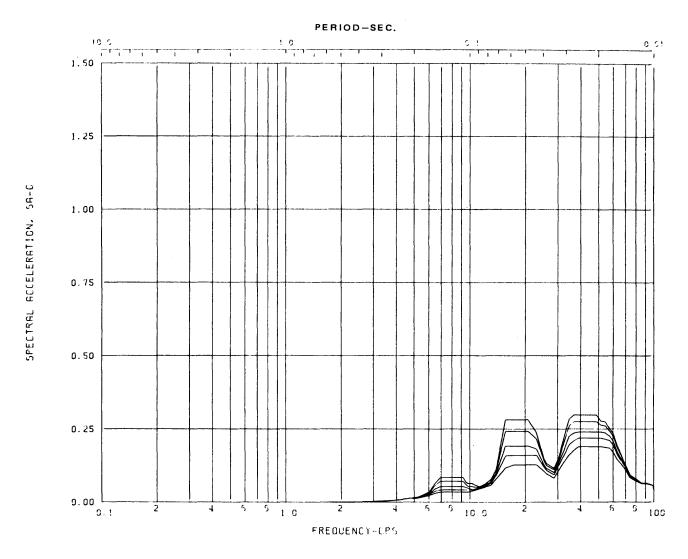
Load Case: AXISYMMETRIC CHUGGING GE700 SERIFS ENVELOPE (WIDENED - 15%)

Node: 12 Direction: VERTICAL Elev: 352'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC CHUGGING GE700 SERIES ENVELOPE (WIDENED - 15%)

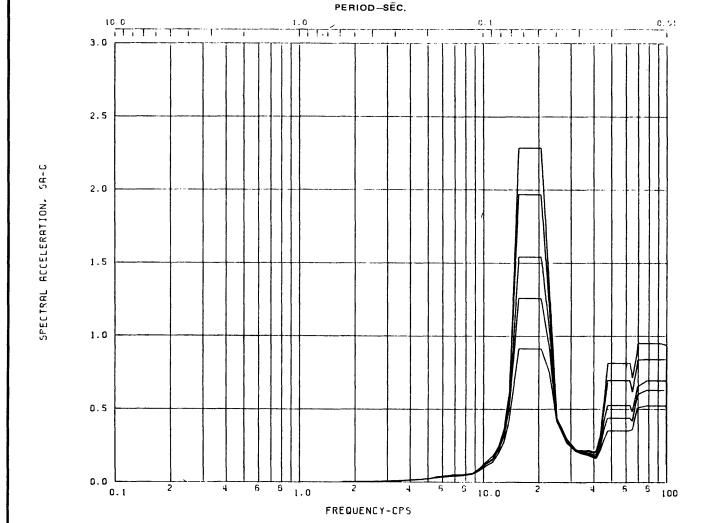
Node: 6 Direction: VERTICAL Elev: 410'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

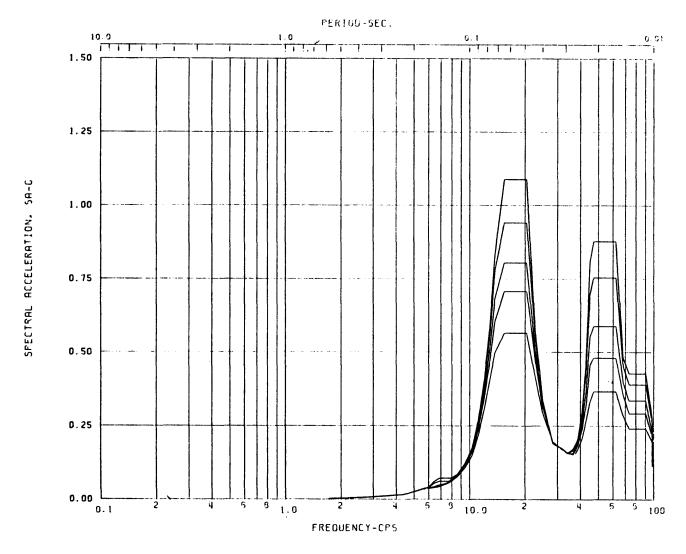
Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 217'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

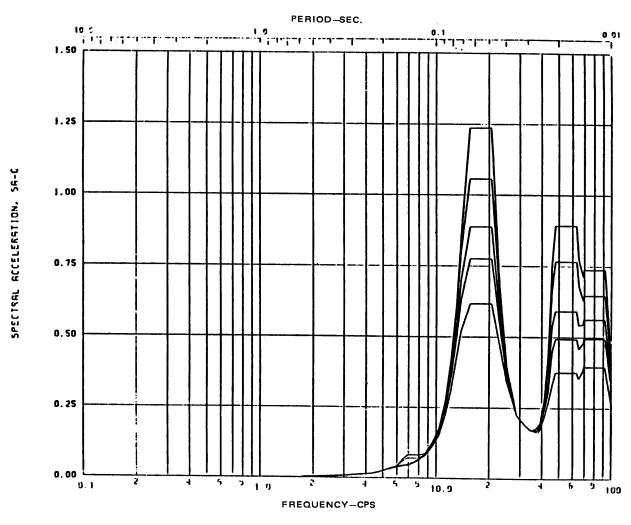
Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 239'

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

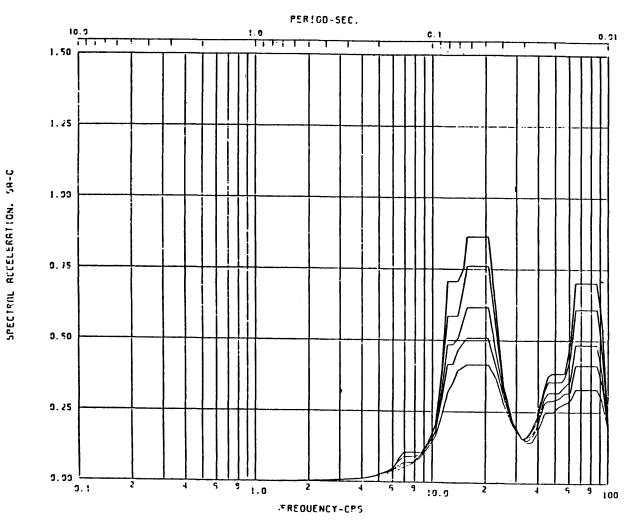
Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 254'

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

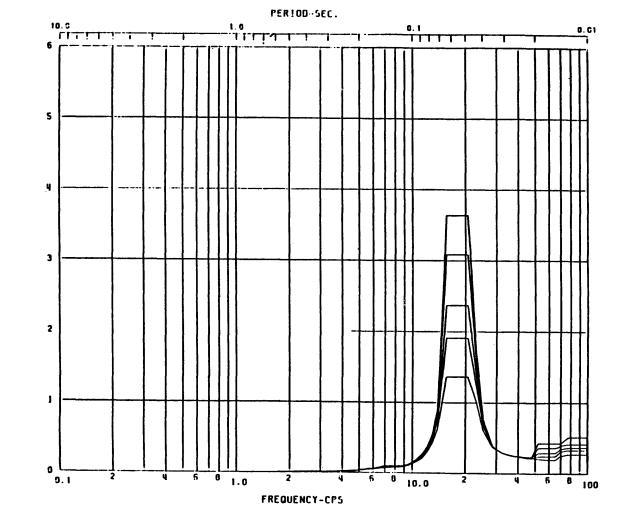
Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

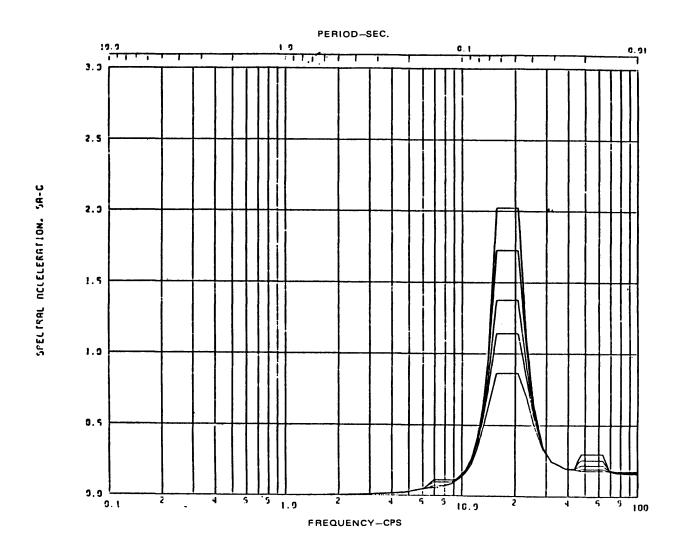
Node: 19 Direction: VERTICAL Elev: 289'

Damping: 0.005,0.01,0.02,0.03,0.05

SPECTRAL ACCELERATION. SA-C

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Acceleration Spectra for CONTROL STRUCTURE

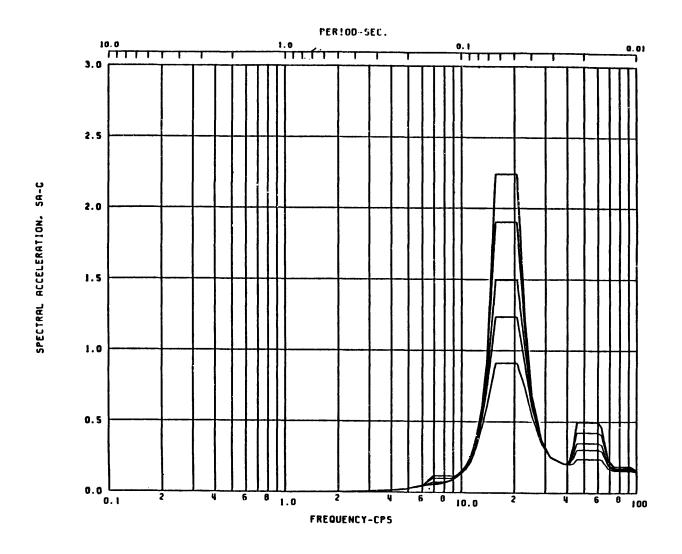
Load Case: AXISYMMETRIC CHUGGING GE 700 SERIES ENVELOPE (WIDENED - 15%)

Node: 19 Direction: VERTICAL Elev: 304'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC

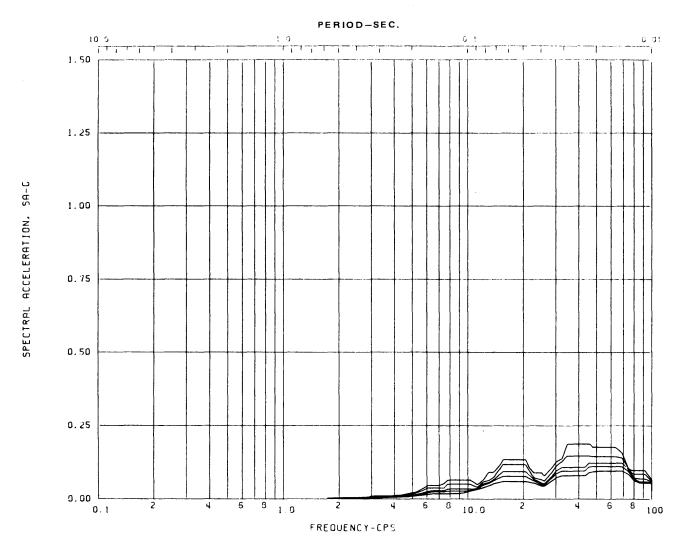


Acce1	eration	n Spectra for	CONTROL	STR	UCTU	JRE					
Load	Case: _	AXISYMMETRIC	CHUGGING	GE	700	SERIES	ENVEL	OPE	(WIDENED	- 1	15%)
Node:	19	Direction	on: VERT	ICAL		1	Elev:	332	<u> </u>		
Dampi	no: 0.0	005.0.01.0.02	.0.03.0.0	5							

LIMERICK GENERATING STATION
UNITS 1 AND 2

UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE LOCAL
RESPONSE SPECTRA, VERTICAL,
CHUG AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

Node: 159 Direction: VERTICAL Elev: 177'-0

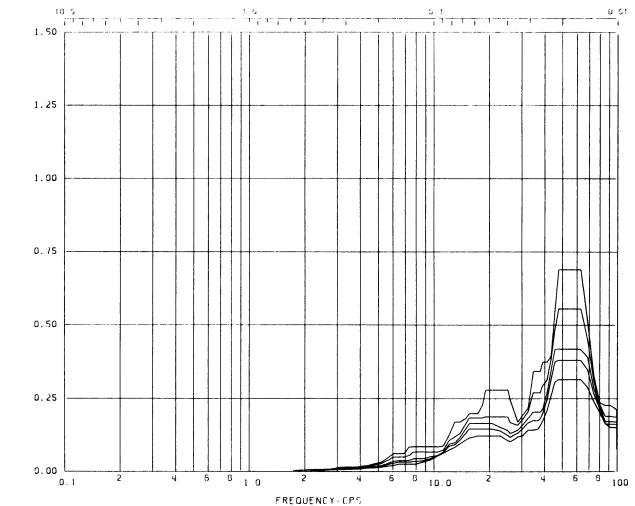
Damping: 0.005,0.01,0.02,0.03,0.05

**LIMERICK GENERATING STATION** UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSUREGLOBAL RESPONSE SPECTRA, VERTICAL, CO - BASIC AXISYMMETRIC





Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 154 Direction: VERTICAL Elev: 177'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

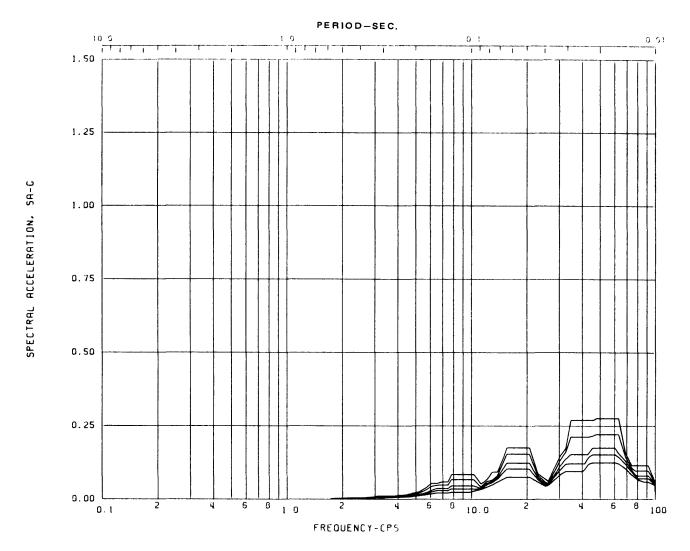
5A-C

SPECTRAL ACCELERATION.

LIMERICK GENERATING STATION
UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

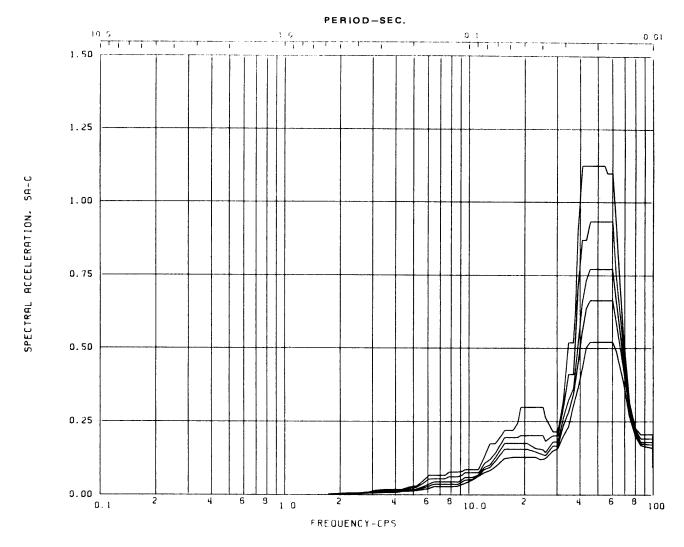
Node: 128 Direction: VERTICAL Elev: 201'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

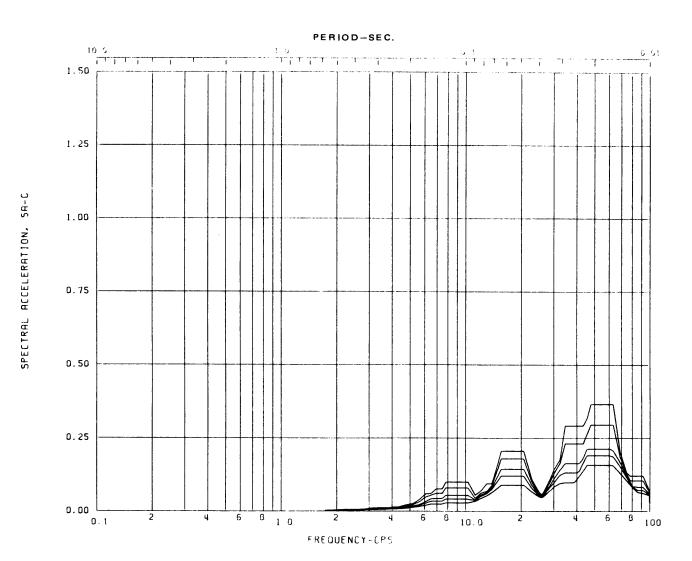
Node: 130 Direction: VERTICAL Elev: 201'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA VERTICAL

RESPONSE SPECTRA, VERTICAL, CO – BASIC AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

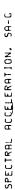
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

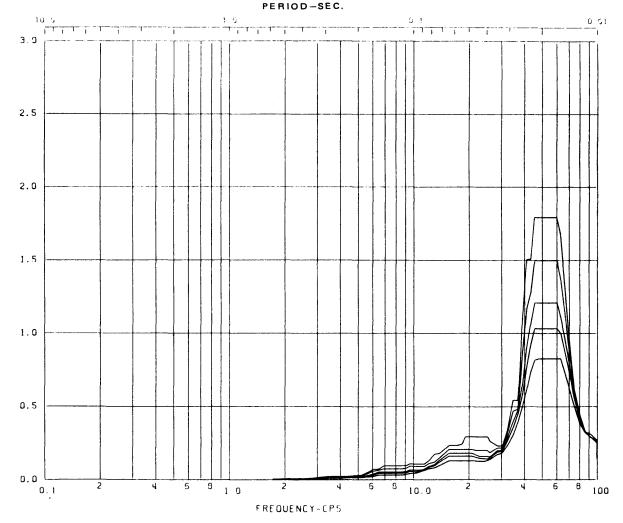
Node: 106 Direction: VERTICAL Elev: 217'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC





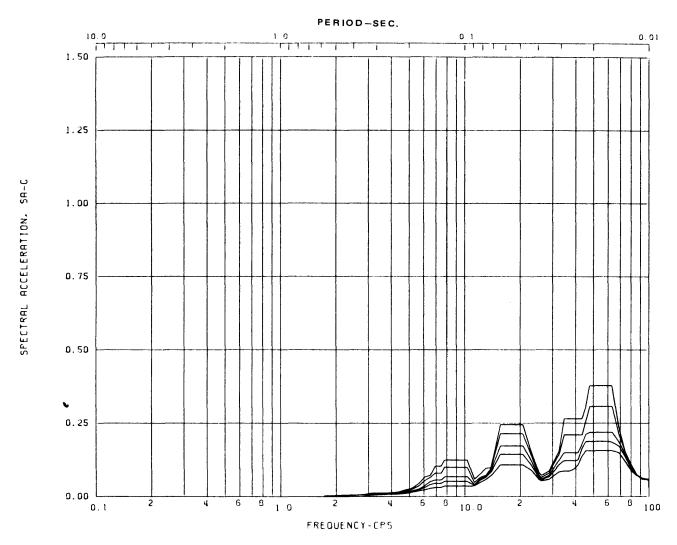
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 108 Direction: VERTICAL Elev: 217'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

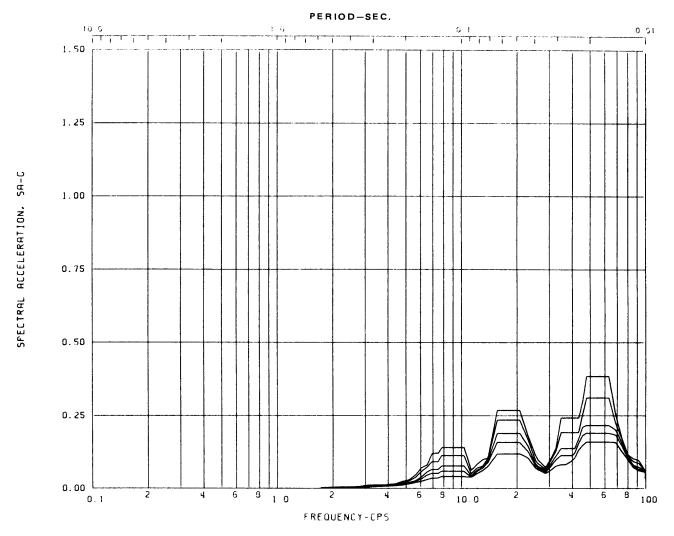
Node: 104 Direction: VERTICAL Elev: 239'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2

UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



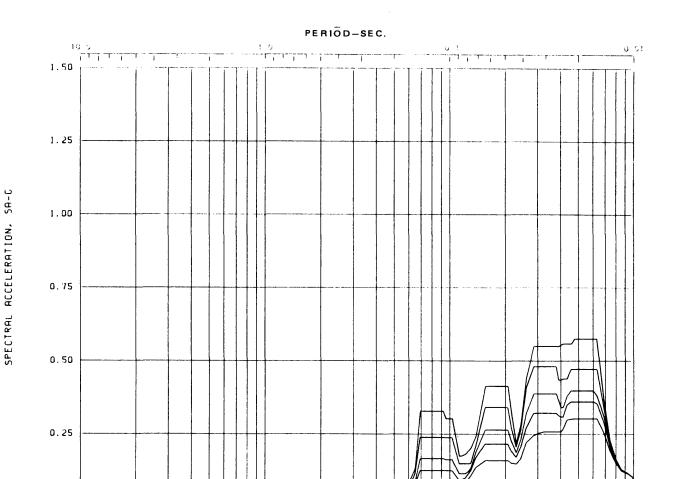
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

Node: 79 Direction: VERTICAL Elev: 253'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

FREQUENCY-CPS

Node: 81 Direction: VERTICAL Elev: <u>253'-</u>0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

0.00

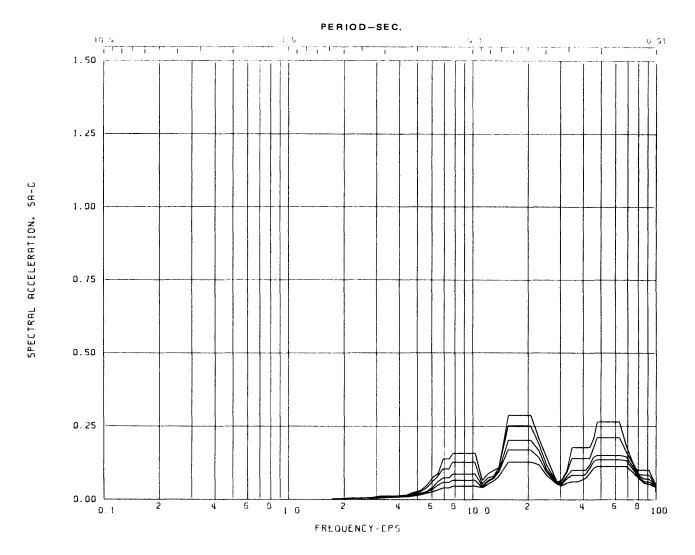
**LIMERICK GENERATING STATION** UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, **CO – BASIC AXISYMMETRIC** 

FIGURE 3A-293

10.0



Acceleration Spectra for REACTOR ENCL.

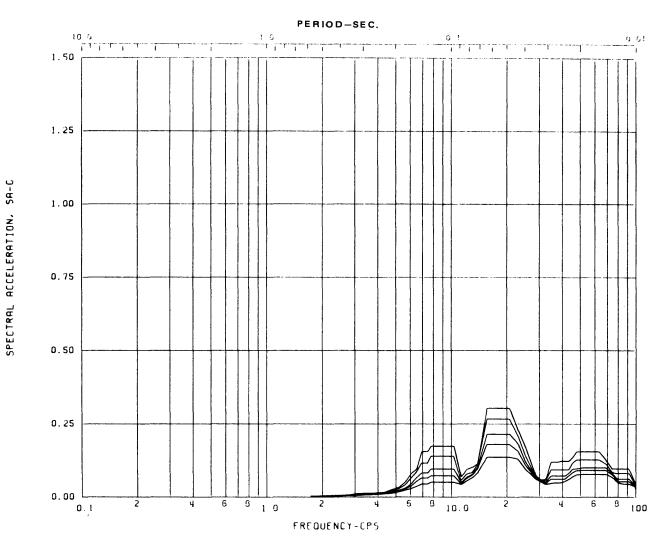
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 77 Direction: VERTICAL Elev: 269'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



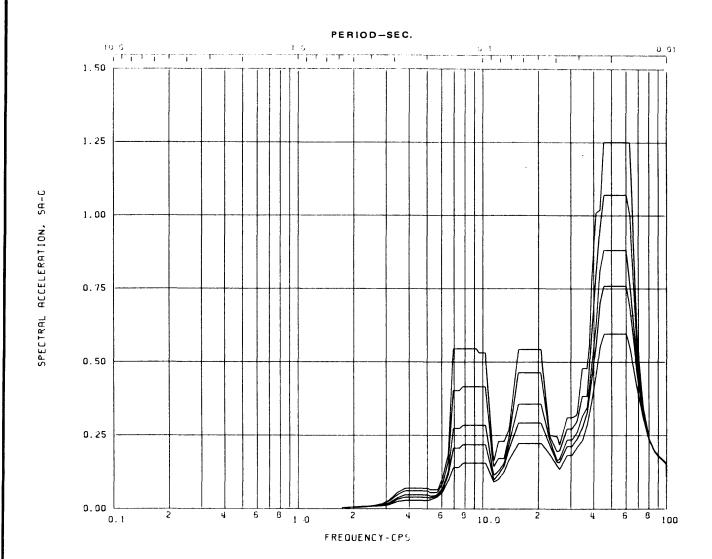
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 58 Direction: VERTICAL Elev: 283'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO – BASIC AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

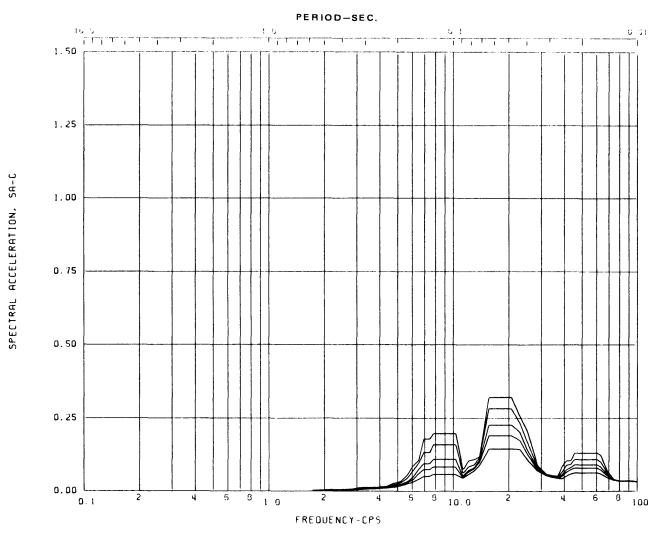
Node: 60 Direction: VERTICAL Elev: 283'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
IIPDATED FINAL SAFETY ANALYSIS REPORT

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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



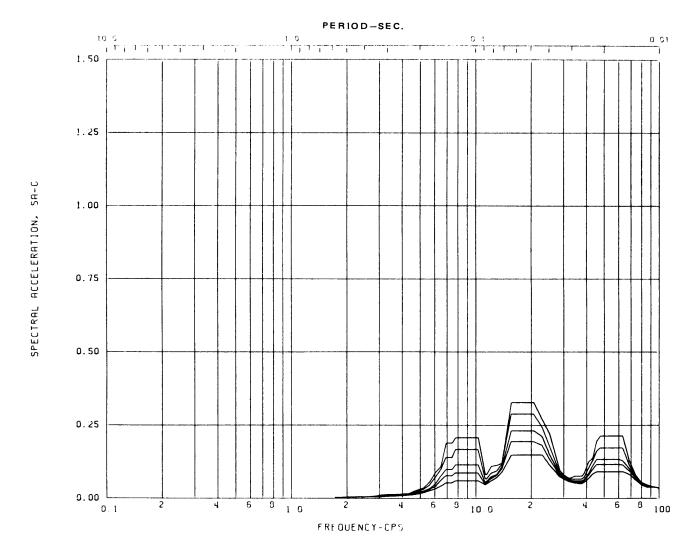
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 56 Direction: VERTICAL Elev: 304'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

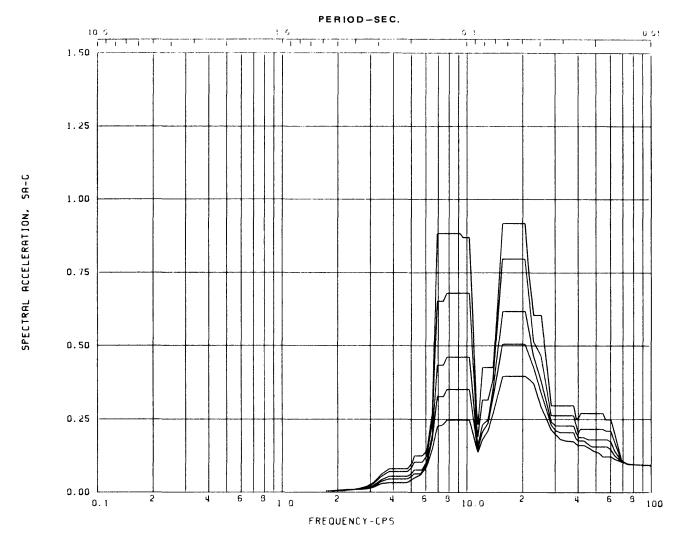
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

Node: 35 Direction: VERTICAL Elev: 313'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSUREGLOBAL
RESPONSE SPECTRA, VERTICAL,
CO – BASIC AXISYMMETRIC



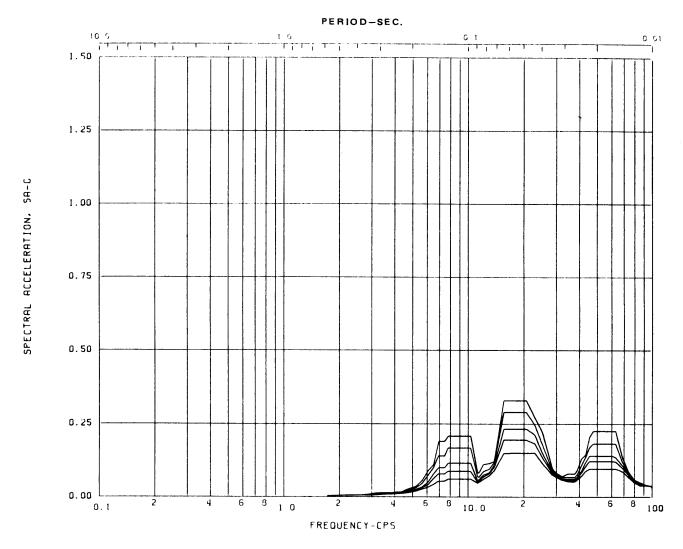
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 43 Direction: VERTICAL Elev: 313'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

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UNITS 1 AND 2
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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



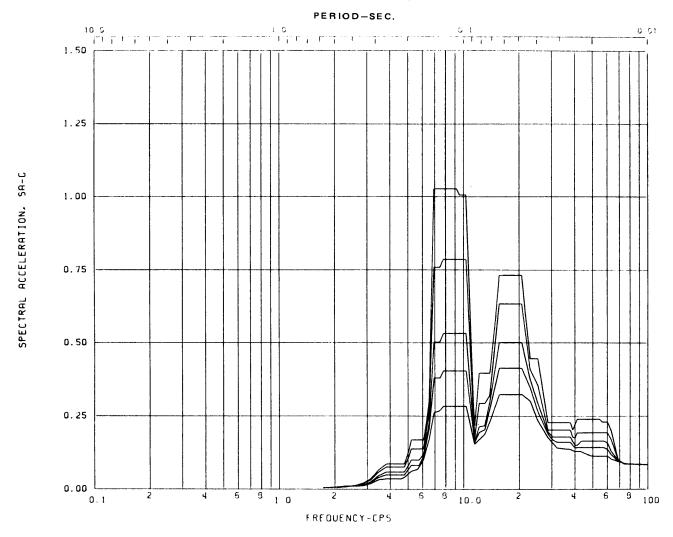
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 21 Direction: VERTICAL Elev: 333'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO – BASIC AXISYMMETRIC



Acceleration Spectra for REACTOR ENCL.

Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 33 Direction: VERTICAL Elev: 333'-0

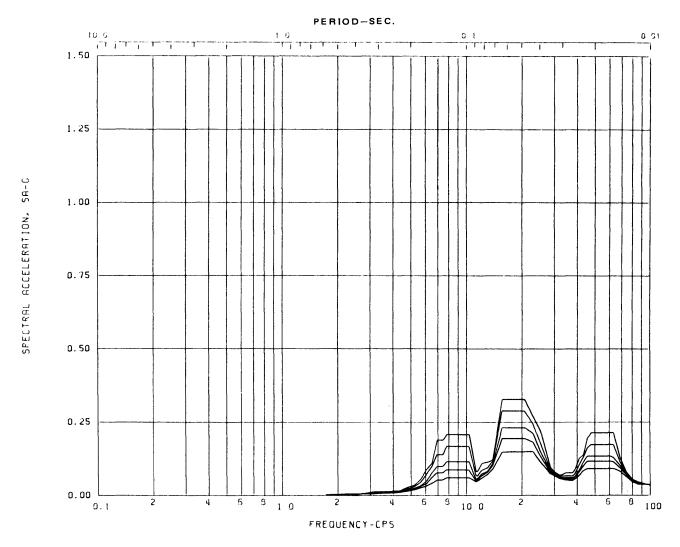
Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
LIDDATED FINAL SAFETY ANALYSIS REPORT

UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT

REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, CO – BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

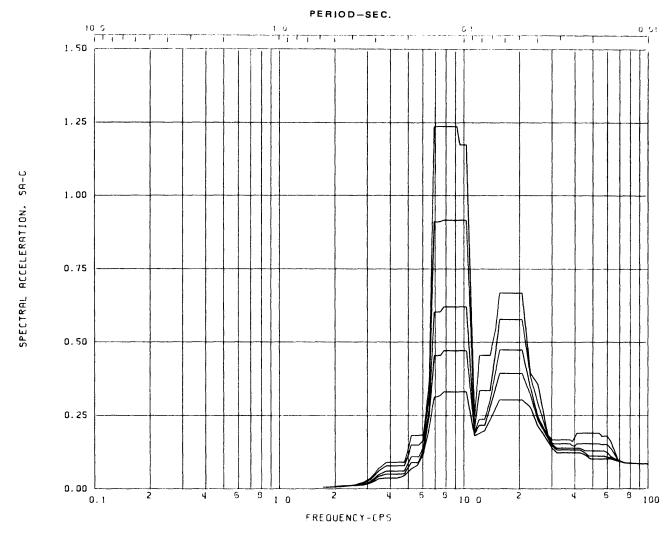
Node: 9 Direction: VERTICAL Elev: 352'-0

Damping: 0.005,0.01,0.02,0.03,0.05

**LIMERICK GENERATING STATION UNITS 1 AND 2** 

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, **CO – BASIC AXISYMMETRIC** 



Acceleration Spectra for REACTOR ENCL. Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

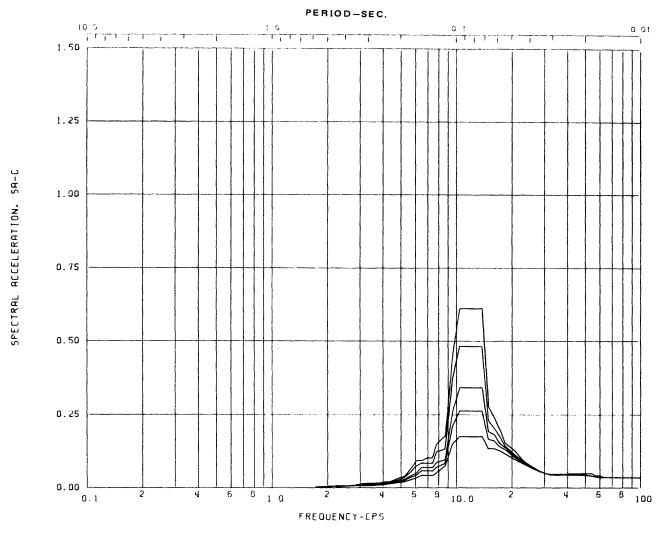
Node: 13 Direction: VERTICAL Elev: 352'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

**LIMERICK GENERATING STATION** UNITS 1 AND 2 **UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL

RESPONSE SPECTRA, VERTICAL, **CO – BASIC AXISYMMETRIC** 



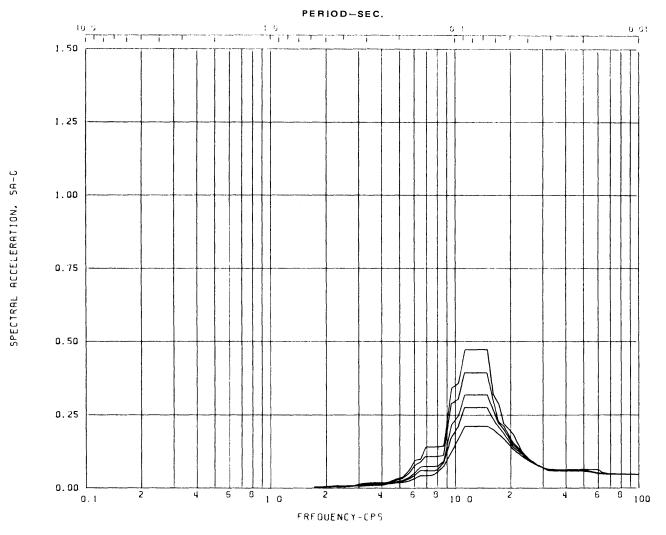
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

Node: 129 Direction: VERTICAL Elev: 201'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



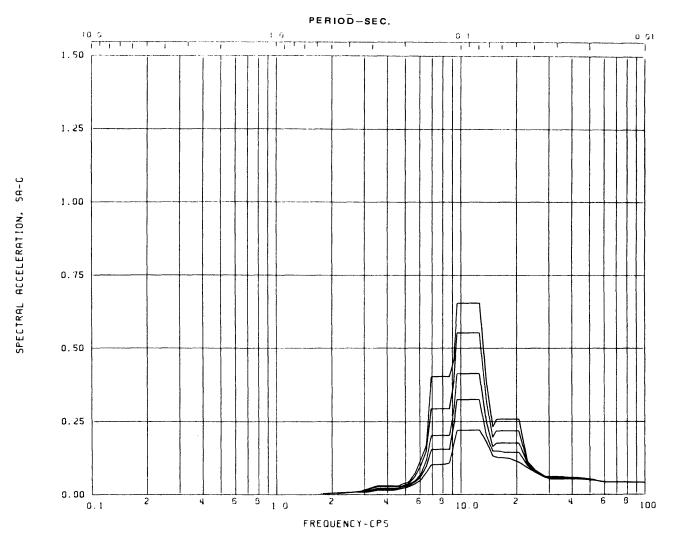
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPF (WIDENED - 15%)

Node: 107 Direction: VERTICAL Elev: 217'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



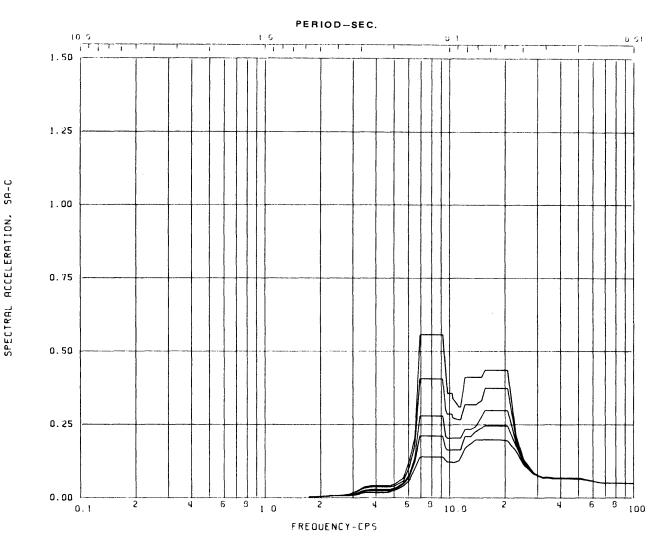
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 80 Direction: VERTICAL Elev: 253'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



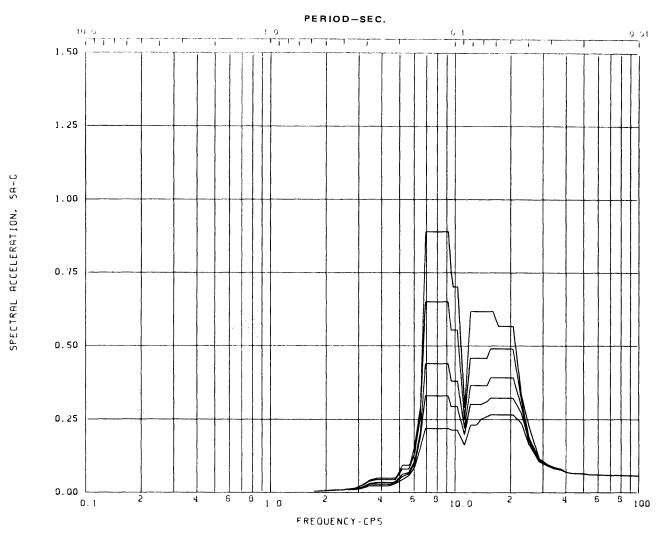
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 59 Direction: VERTICAL Elev: 283'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
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REACTOR ENCLOSUREGLOBAL
RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

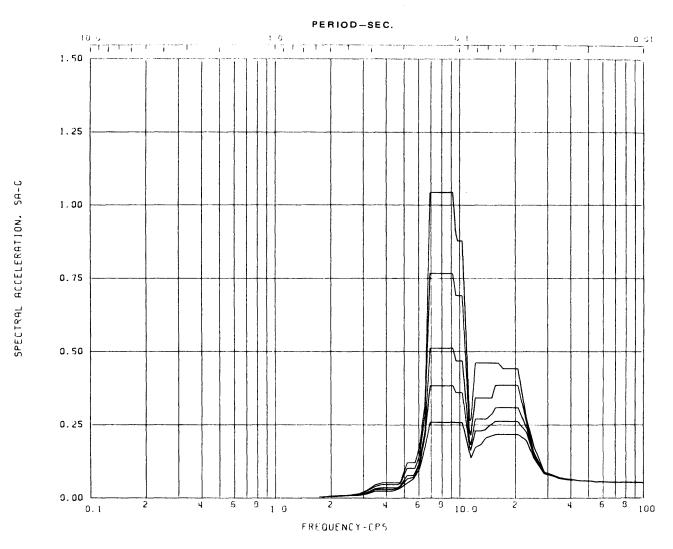
Node: 54 Direction: VERTICAL Elev: 313'-0

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

**LIMERICK GENERATING STATION UNITS 1 AND 2** 

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSURE GLOBAL RESPONSE SPECTRA, VERTICAL, CO - BASIC AXISYMMETRIC



Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

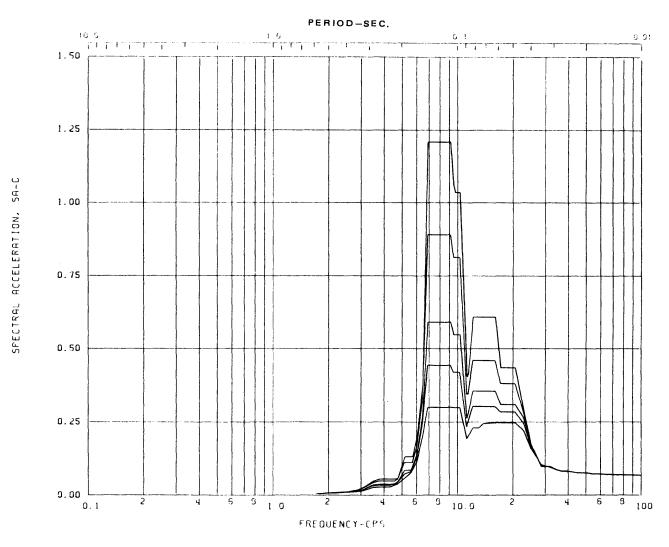
Node: 32 Direction: VERTICAL Elev: 333'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA VERTICAL

RESPONSE SPECTRA, VERTICAL, CO – BASIC AXISYMMETRIC



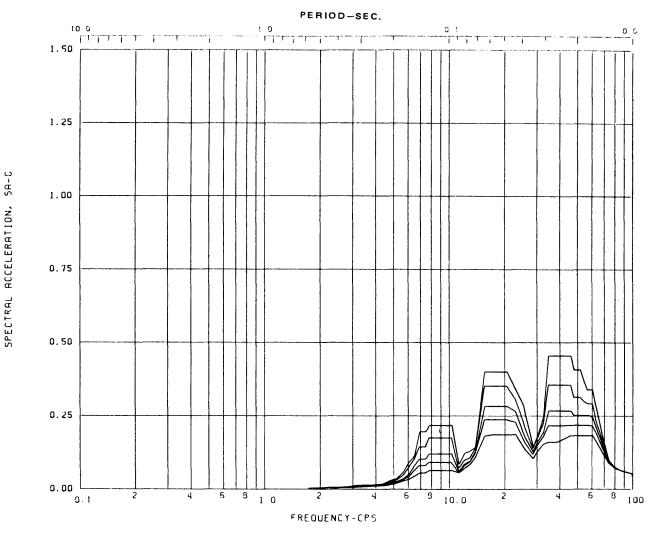
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Direction: VERTICAL Elev: <u>352'-</u>0 Node: 12

Damping: 0.005, 0.01, 0.02, 0.03, 0.05

**LIMERICK GENERATING STATION** UNITS 1 AND 2 **UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT** REACTOR ENCLOSUREGLOBAL RESPONSE SPECTRA, VERTICAL, **CO - BASIC AXISYMMETRIC** 



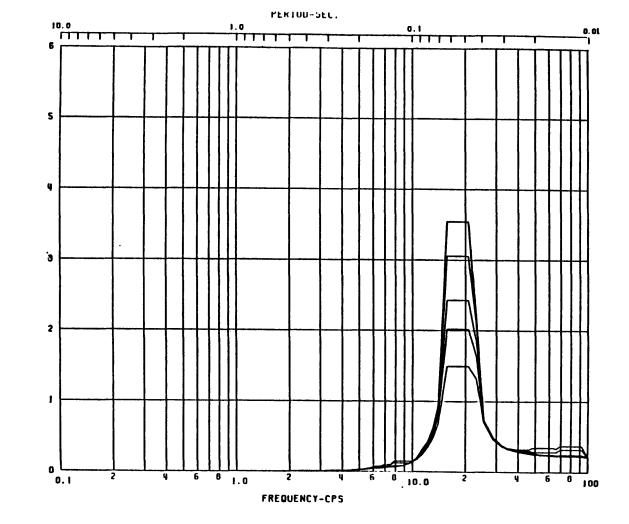
Load Case: AXISYMMETRIC GE CO-BASIC ENVELOPE (WIDENED - 15%)

Node: 6 Direction: VERTICAL Elev: 410'-0

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
REACTOR ENCLOSURE GLOBAL
RESPONSE SPECTRA, VERTICAL,
CO – BASIC AXISYMMETRIC



Acceleration	n Spectra for <u>CC</u>	ONTROL STRUCTURE		
Load Case:	AXISYMMETRIC GE	CO-BASIC ENVELOPE	(WIDENED - 15%)	
Node:7	Direction:	VERTICAL	Elev: 217'	
D	OF 0 01 0 02 0	22 0 05		

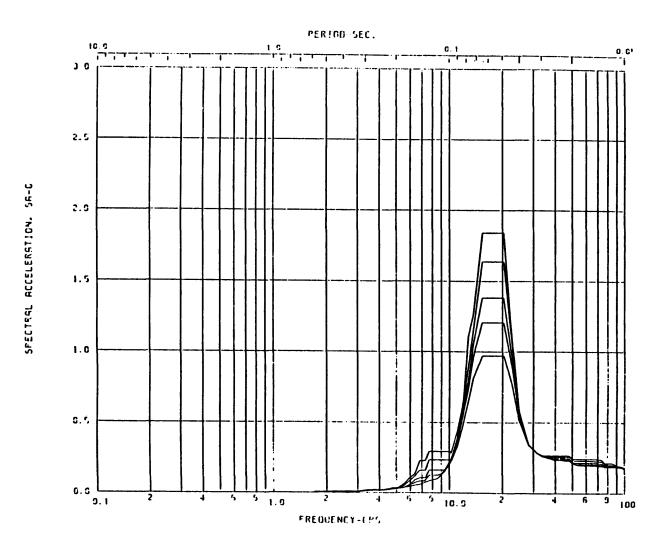
Damping: 0.005, 0.01, 0.02, 0.03, 0.05

SPECTRAL ACCELERATION. SA-C

**LIMERICK GENERATING STATION** UNITS 1 AND 2

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**DESIGN ASSESSMENT REPORT CONTROL STRUCTURE** LOCAL RESPONSE SPECTRA, VERTICAL, CO - BASIC AXISYMMETRIC

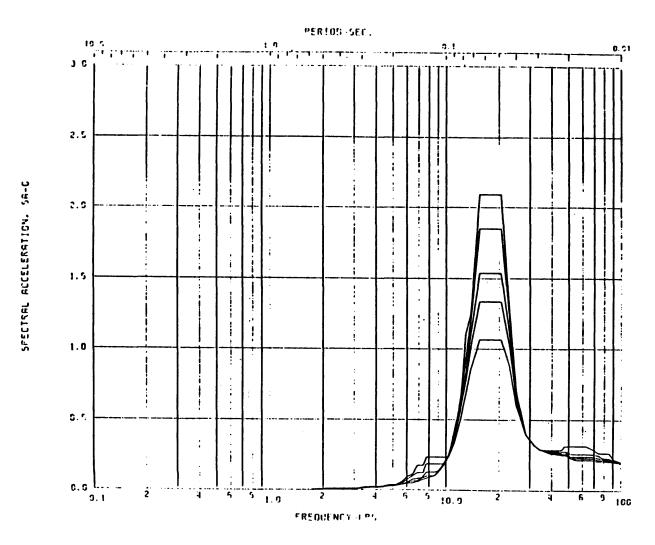


Acceleration	n Spectra for <u>C</u>	ONTROL STRUCTURE		
Load Case:	AXISYMMETRIC GE	CO-BASIC ENVELOPE	(WIDENED - 15%)	-
Node:7	Direction:	VERTICAL	Elev: 239'	

Damping: 0.005,0.01,0.02,0.03,0.05

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

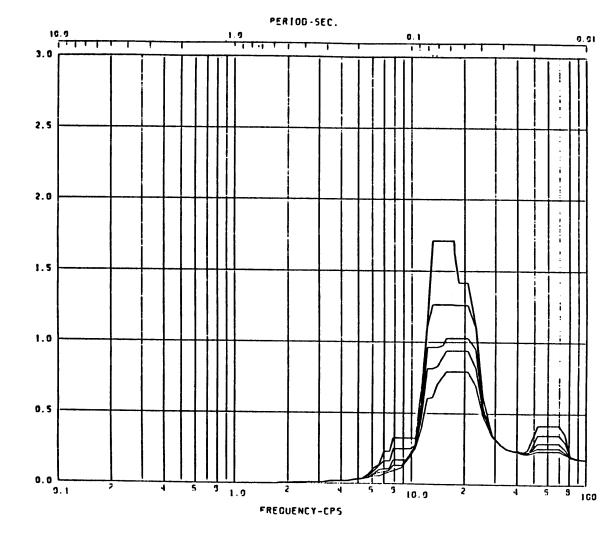
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



Acce1	leratio	n Spectra for		NTROL STE	RUCTURE				
Load	Case:	AXISYMMETRIC	GE	CO-BASIC	ENVELOPE	(WIDENE	D <b>-</b>	15%)	
Node:	7	Directio	n:	VERTICAL		Elev:	25	4 '	
Damni	no: 0.0	005 0.01 0.02	0 0	3 0.05					

LIMERICK GENERATING STATION
UNITS 1 AND 2
UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC

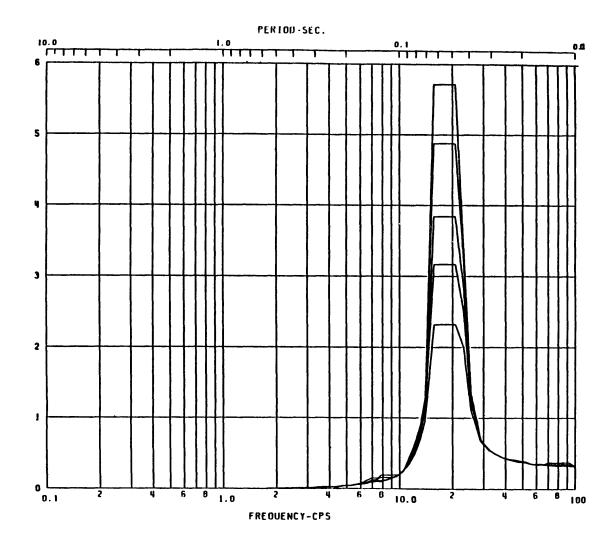


SPECIFIC RUELERATION, 58-C

Acceleration	n Spectra for <u>CC</u>	ONTROL STRUCTURE		
Load Case:	AXISYMMETRIC GE	CO-BASIC ENVELOPE	(WIDENED - 15%)	
Node:7	Direction:	VERTICAL	Elev: 269'-0	
Damping: 0.0	005,0.01,0.02,0.0	03,0.05		

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UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC



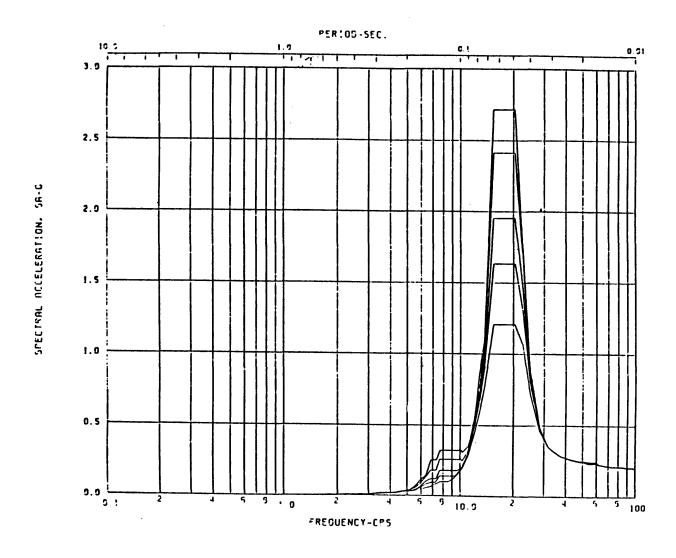
SPECTRAL ACCELERATION, SA-C

Acceleration	n Spectra for _	CONTROL STRUCTURE			
Load Case: _	AXISYMMETRIC G	E CO-BASIC ENVELOPE	(WIDENED - 15%)	_	
Node:	Direction	: VERTICAL	Elev: 289'		
Damping: 0.005,0.01,0.02,0.03,0.05					

LIMERICK GENERATING STATION
UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

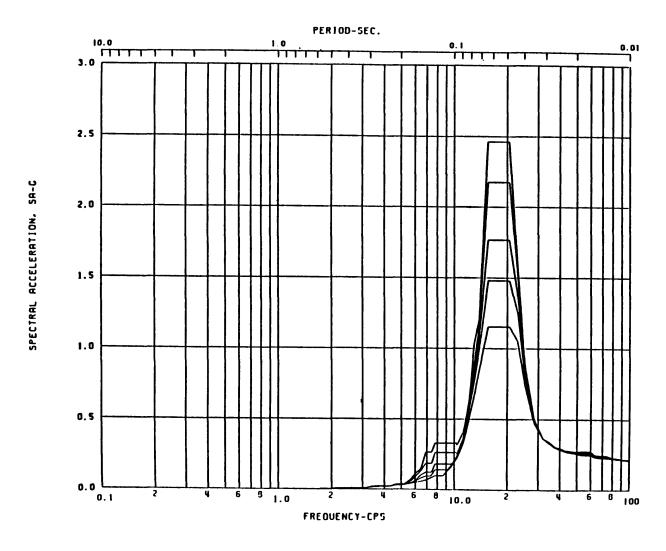
DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA, VERTICAL,
CO – BASIC AXISYMMETRIC



Acceleratio	on Spectra for _	CONTROL STRUCTURE		
Load Case:	AXISYMMETRIC G	E CO-BASIC ENVELOPE	E (WIDENED	<b>-</b> 15%)
Node:7	Direction	: VERTICAL	Elev: _3	304'-0
Damping: 0.	005,0.01,0.02,0	.03,0.05		

LIMERICK GENERATING STATION
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UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
CONTROL STRUCTURE
LOCAL RESPONSE SPECTRA, VERTICAL,
CO — BASIC AXISYMMETRIC

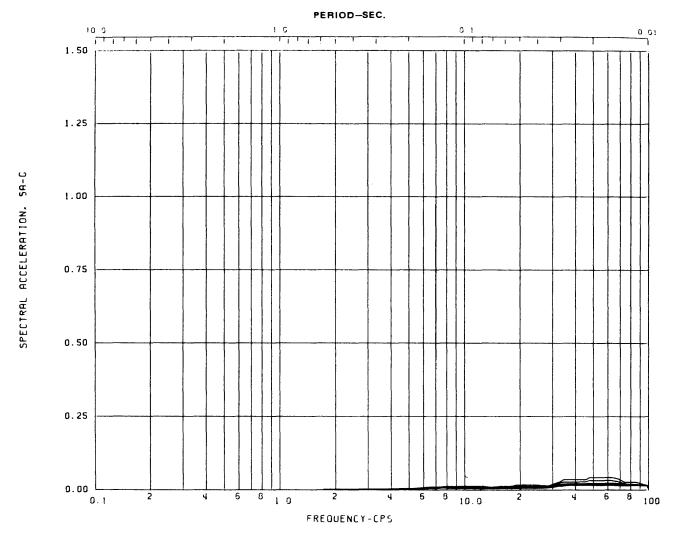


Acceleration	n Spectra for <u>C</u>	ONTROL STRUCTURE		
Load Case:	AXISYMMETRIC GE	CO-BASIC ENVELOPE	(WIDENED	- 15%)
Node:7	Direction:	VERTICAL	_Elev: _	332'
Damping: 0.0	005 0.01 0.02 0.0	03 0-05		

**LIMERICK GENERATING STATION** UNITS 1 AND 2

**UPDATED FINAL SAFETY ANALYSIS REPORT** 

**DESIGN ASSESSMENT REPORT CONTROL STRUCTURE** LOCAL RESPONSE SPECTRA, VERTICAL, **CO – BASIC AXISYMMETRIC** 



Load Case: AXISYMMETRIC GE CO-ADS ENVELOPE (WIDENED - 15%)

Node: 159 Direction: VERTICAL Elev: 177'-0

Damping: 0.005,0.01,0.02,0.03,0.05

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UPDATED FINAL SAFETY ANALYSIS REPORT

DESIGN ASSESSMENT REPORT
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RESPONSE SPECTRA, VERTICAL,
CO — ADS AXISYMMETRIC