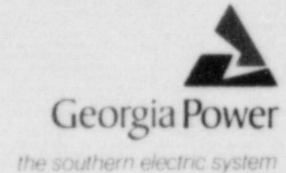


Georgia Power Company  
333 Piedmont Avenue  
Atlanta, Georgia 30308  
Telephone 404 526-6526

Mailing Address:  
Post Office Box 4545  
Atlanta, Georgia 30302

L. T. Gucwa  
Manager Nuclear Safety  
and Licensing



SL-2100  
1183C

March 4, 1987

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2  
REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

Gentlemen:

In the NRC's January 29, 1987, letter to Mr. James P. O'Reilly (Georgia Power Company) from Mr. George W. Rivenbark (NRC), you requested that Georgia Power Company (GPC) submit additional information relative to the seismic design of Plant Hatch. The requested information is contained in the enclosure to this letter.

In Item 2 of the above-mentioned letter, you requested that GPC submit certain information relative to dynamic soil properties. We anticipate that these dynamic properties may be used to perform independent analyses of various structures. If so, GPC would like to be kept informed on the status of the efforts by the NRC.

If you have any additional questions in this regard, please contact this office at any time.

Sincerely,

L. T. Gucwa

JDH/lc

Enclosure

c: Georgia Power Company  
Mr. J. P. O'Reilly  
Mr. J. T. Beckham, Jr.  
Mr. H. C. Nix, Jr.  
GO-NORMS

U.S. Nuclear Regulatory Commission  
Dr. J. N. Grace, Regional Administrator  
Mr. P. Holmes-Ray, Senior Resident  
Inspector - Hatch  
Mr. G. Rivenbark, Licensing Project  
Manager - Hatch

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1/1

ENCLOSURE

NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2  
REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

ITEM NO. 1:

"After reviewing Refs. 1, 2, and 3, some questions remain as to the soil profile definition at the Edwin I. Hatch nuclear site. As stated (refs. 1 and 3), geophysical measurements were used to establish a single shear modulus value to be used for the soil-structure interaction analyses of the Units 1 and 2 reactor buildings and the control building. Also, this shear modulus value defined the low layer soil properties for the soil-structure interaction analysis of the intake structures. References 1 and 3 also provide boring data which presumably complements the geophysical data. Our evaluation of the boring data indicates soil conditions of significantly lower stiffness (i.e., smaller shear moduli) than the geophysical measurements. A clarification of the discrepancies is requested."

RESPONSE TO ITEM NO. 1:

Boring data was not used for the determination of the dynamic stiffness values. The shear wave velocity which was used to calculate the soil foundation properties for the dynamic analysis of structures founded on natural soils was determined using the refraction survey technique. This generally accepted survey technique was widely used at that time (1968) to characterize the subsurface soil conditions through the measurement of wave propagation velocities (Reference 4). The refraction survey technique is capable of identifying general trends relative to the soil stratigraphy through the interpretation of wave arrival data. However, the ability of these early methods to precisely delineate between different materials or to identify complex layering was limited.

The soil strata at the site were too variable and complex to reliably determine the properties of individual layers by refraction survey methods. Therefore, the overall profile was represented by an average composite shear wave velocity of 2450 +200 ft per second, which was assumed to extend to a substantial depth. The composite value was considered to be a sound representation of the soil characteristics and reasonable for use in calculating the single value of dynamic shear modulus which was required for the soil-structure interaction (SSI) analysis.

At the time the refraction survey was performed, a preliminary boring program had been completed, and the final boring program was just underway. The subsurface information developed from the borings and the subsequent soil testing performed on samples recovered from the borings



## ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSISRESPONSE TO ITEM NO. 1 (Continued):

were used only to evaluate the static behavior of the plant structures and the liquefaction potential of the site soils. Reliable procedures which would allow the use of laboratory test results or empirical correlations of various field or laboratory parameters in order to make a more reliable estimate of the shear wave velocity than that obtained from the refraction survey were not available.

In regard to soil layers, it should be noted that the borings define a complex arrangement of dense to very dense sands and hard clays with variable degrees of cementation present throughout the profile to the depth of the exploration. The standard penetration resistances vary widely throughout the soil profile. For example, in subsurface Profile A-A shown on Unit 2 Final Safety Analysis Report (FSAR) Figure 2A-3 (Sheet 1 of 7), the standard penetration resistance for the sands generally ranged from approximately 30 to well over 100 blows per foot, although several zones of lower penetration resistance exist. The standard penetration resistances for the clays and silts ranged from 38 to over 100 blows per foot in stratum "A", which extends from approximately el +5 ft to the depth of exploration. In addition, cementation or partial cementation is shown to be present in strata "D", "E", and "J", which generally extend from approximately el +40 ft to el +110 ft. Additionally, the soil borings and profiles contained in the Unit 2 FSAR Supplement 2A show cemented materials in both the upper soil layers and in the deeper portions of the soil profile. It is likely that these cemented layers and zones (throughout the soil profile) contribute to the composite shear wave velocities measured at the site.

The only significant uncertainty in the soil shear modulus was related to the backfill material beneath the Diesel Generator Building. This uncertainty existed because a refraction survey was not performed as it was for the other Seismic Category I structures founded in the deeper natural soils. Therefore, to envelop and account for this uncertainty, a range of shear modulus values was assumed in the seismic analysis of the Diesel Generator Building.

The adoption of a single (average) composite value of shear wave velocity that was obtained by the refraction survey was compatible with the characterization of the soil used in the SSI mathematical model. This model represents the soil as a linearly elastic, homogenous, isotropic material. The shear wave velocity which had been determined to represent the overall characteristics of the foundation soils was used to calculate a soil dynamic shear modulus. This modulus was then used in the

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

RESPONSE TO ITEM NO. 1 (Continued):

analytical expressions to calculate the value of soil spring constants for structures founded on natural soils. Modeling of multiple soil layers was beyond the capabilities of the SSI techniques available at that time. Therefore, modeling the soil as a single composite layer was considered to be state-of-the-art.

In summary, the field testing methods and analytical methods that were used in the original seismic analysis were the state-of-the-art. The single composite value of the dynamic shear modulus which was developed through the use of a refraction survey was determined to be representative of the foundation materials for use in the seismic analysis. Geophysical measurement, rather than boring data, was used to develop this value. Reliable procedures which would allow the use of subsurface information to determine more reliable estimates of the shear wave velocity obtained from the refraction survey were not available.



ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

ITEM NO. 2

"In order to facilitate our review, the licensee is requested to itemize structure-by-structure the soil profile to be considered for its soil-structure interaction analysis. The soil profile should be defined in terms of shear moduli (or shear wave velocity), density, and Poisson's ratio, layer-by-layer, if any distinct layers are assumed to exist. Side soil, whether or not included in the soil-structure interaction analysis, should be specified."

RESPONSE TO ITEM NO. 2:

The structure-by-structure soil profiles and the dynamic soil properties used for each structure were previously provided in Reference 1.

For structures founded on natural soil (Unit 1 and 2 Reactor Buildings, Control Building, and Intake Structure), the soil profile was characterized as a single layer representing a uniform elastic half-space. This characterization of the soil as an elastic half-space to account for SSI was state-of-the-art at the time of the original analysis. Due to the significant amount of embedment, the re-analysis of the Intake Structure included the effects of the side soil around this structure. The soil properties used to calculate the equivalent soil spring constants and damping coefficients are provided in Reference 1. For plant structures supported on granular backfill, a range of shear modulus values was considered in the analysis, representing possible variation in the backfill material. The geotechnical input for structures supported on fill is also described in Reference 1.

The subsurface investigations performed during the site studies obtained information on soil stratigraphy and static engineering properties of the soils underlying the site. However, we do not consider it appropriate to use this information to develop a more detailed dynamic soil property profile for use in the dynamic analysis.

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

ITEM NO. 3:

"Provide the dynamic models of the following structures in enough detail to permit their reconstruction:

- (a) Unit 1 reactor building model.
- (b) Control building model.
- (c) Intake structure model."

RESPONSE TO ITEM NO. 3:

Enclosed are the dynamic models for the structures requested.



ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

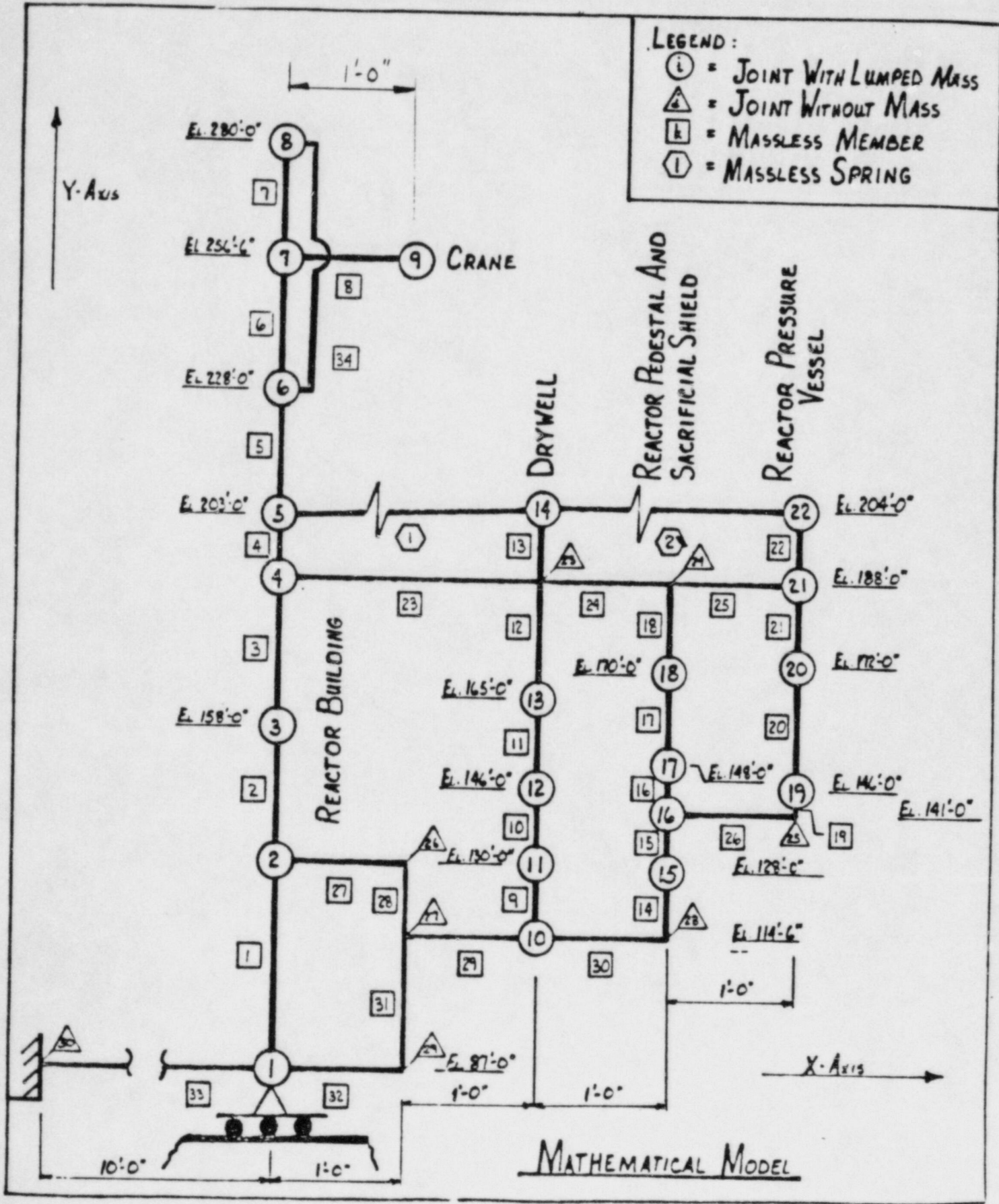
EDWIN I. HATCH NUCLEAR PLANT - UNIT 1  
REACTOR BUILDING MODEL

The following notes apply to the enclosed information:

1. The properties apply to the NS & EW SSE evaluations only.
2. Composite modal damping values are provided in Reference 1.
3. The dynamic degrees of freedom are the x displacement of those joints at which mass is lumped.

**LEGEND:**

- ⊙ = JOINT WITH LUMPED MASS
- △ = JOINT WITHOUT MASS
- = MASSLESS MEMBER
- ⬡ = MASSLESS SPRING





MATERIAL PROPERTIES: (ALL BEAM ELEMENTS)

Modulus of Elasticity =  $E = 526,000 \text{ ksf}$

Poisson's Ratio = 0.25, assuming that the Shear Modulus,

$G = 0.4 E$

SUMMARY OF SPRING PROPERTIES NORTH-SOUTH & EAST-WEST					
SPRING No. <sup>(1)</sup>	CONNECTING JOINTS <sup>(1)</sup>	$K(X)^{(2)}$ (KIPS/FT.)	$K(Y)^{(2)}$ (KIPS/FT.)	$K(\phi)^{(2)}$ (KIPS-FT./RAD.)	DAMPING <sup>(3)</sup> (%)
1	5 To 14	78,944.0	320.86	90,911.	3.0
2	14 To 22	27,384.0	207.36	25,567.	3.0

SUMMARY OF MEMBER PROPERTIES NORTH-SOUTH

MEMBER NO.	CONNECTING JOINTS	CROSS SECTIONAL PROPERTIES			DAMPING (%)
		AREA (FT. <sup>2</sup> )	SHEAR AREA <sup>(1)</sup> (FT. <sup>2</sup> )	AREA MOMENT OF INERTIA (FT. <sup>4</sup> )	
1	1 To 2	3,567.0	1,969.	11,357,311.0	5.0
2	2 To 3	2,891.4	1,450.5	5,794,931.0	5.0
3	3 To 4	3,293.8	1,870.0	7,231,847.3	5.0
4	4 To 5	3,596.2	2,163.3	7,576,393.0	5.0
5	5 To 6	3,044.7	1,984.0	7,223,185.9	5.0
6	6 To 7	10.0	10.40	1.0 x 10 <sup>5</sup>	5.0
7	7 To 8	10.0	6.05	1.0 x 10 <sup>5</sup>	5.0
8	7 To 9	0.0013	10.0	10.0	5.0
9	10 To 11	128.0	64.0	49,102.0	3.0
10	11 To 12	102.0	51.0	52,132.0	3.0
11	12 To 13	84.0	42.0	30,420.0	3.0
12	13 To 23	54.0	27.0	9,048.0	3.0
13	23 To 14	84.0	42.0	11,915.0	3.0
14	28 To 15	279.6	186.4	17,866.0	5.0
15	15 To 16	279.6	186.4	17,866.0	5.0
16	16 To 17	59.57	29.79	4,315.0	5.0
17	17 To 18	59.57	29.79	4,315.0	5.0
18	18 To 24	59.57	29.79	4,315.0	5.0
19	25 To 19	63.67	31.83	1,835.0	3.0
20	19 To 20	208.25	104.17	9,226.0	3.0
21	20 To 21	225.42	112.75	10,020.0	3.0
22	21 To 22	225.42	112.75	10,020.0	3.0
23	4 To 23	38,000.0	0.0	47,500,000.0	3.0
24	23 To 24	0.475	10.0	10.0	3.0
25	24 To 21	0.0736	10.0	10.0	3.0
26	16 To 25	38,000.0	0.0	47,500,000.0	5.0
27	2 To 26	38,000.0	0.0	47,500,000.0	5.0
28	27 To 26	450.0	304.0	57,238.0	5.0
29	27 To 10	38,000.0	0.0	47,500,000.0	5.0
30	10 To 28	38,000.0	0.0	47,500,000.0	5.0
31	29 To 27	4,301.0	2,869.0	1,472,341.0	5.0
32	1 To 29	38,000.0	0.0	47,500,000.0	5.0
33	30 To 1	197.7	0.0	342,210.0	5.5
34	6 To 8	10.0	2.05	1.0 x 10 <sup>5</sup>	5.0

(1) NOTE - SHEAR AREAS SPECIFIED AS 0.0 ARE ACTUALLY INFINITE.



## SUMMARY OF MEMBER PROPERTIES EAST - WEST

### CROSS SECTIONAL PROPERTIES

MEMBER No.	CONNECTING JOINTS	AREA (F. <sup>2</sup> )	SHEAR AREA (F. <sup>2</sup> )	AREA MOMENT OF INERTIA (F. <sup>4</sup> )	DAMPING (%)
1	1 To 2	3,567.0	1,906.	10,966,329.0	5.0
2	2 To 3	2,891.4	1,851.6	5,943,720.8	5.0
3	3 To 4	3,293.8	1,554.8	6,415,726.5	5.0
4	4 To 5	3,596.2	1,688.8	3,916,121.7	5.0
5	5 To 6	3,044.7	1,060.7	2,968,756.8	5.0
9	10 To 11	128.0	64.0	49,102.0	3.0
10	11 To 12	102.0	51.0	52,132.0	3.0
11	12 To 13	84.0	42.0	30,420.0	3.0
12	13 To 23	54.0	27.0	9,048.0	3.0
13	23 To 14	84.0	42.0	11,915.0	3.0
14	28 To 15	279.6	186.4	17,866.	5.0
15	15 To 16	279.6	186.4	17,866.0	5.0
16	16 To 17	59.57	29.79	4,315.0	5.0
17	17 To 18	59.57	29.79	4,315.0	5.0
18	18 To 24	59.57	29.79	4,315.0	5.0
19	25 To 19	63.67	31.83	1,835.0	3.0
20	19 To 20	208.25	104.17	9,226.0	3.0
21	20 To 21	225.42	112.75	10,020.0	3.0
22	21 To 22	225.42	112.75	10,020.0	3.0
23	4 To 23	38,000.0	0.0	47,500,000.0	3.0
24	23 To 24	0.475	10.0	10.0	3.0
25	24 To 21	0.0736	10.0	10.0	3.0
26	16 To 25	38,000.0	0.0	47,500,000.0	5.0
27	2 To 26	38,000.0	0.0	47,500,000.0	5.0
28	27 To 26	450.0	304.0	57,238.0	5.0
29	27 To 10	38,000.0	0.0	47,500,000.0	5.0
30	10 To 28	38,000.0	0.0	47,500,000.0	5.0
31	29 To 27	4,301.0	2,869.0	1,472,341.0	5.0
32	1 To 29	38,000.0	0.0	47,500,000.0	5.0
33	30 To 1	197.7	0.0	342,210.0	5.5
6	6 To 7	100.0	2.66	.1 x 10 <sup>10</sup>	5.0
7	7 To 8	100.0	4.47	.1 x 10 <sup>10</sup>	5.0
8	7 To 9	.0099	0.0	10.0	5.0
34	6 To 8	100.0	7.17	.1 x 10 <sup>10</sup>	5.0

(1) NOTE - SHEAR AREAS SPECIFIED AS 0.0 ARE ACTUALLY INFINITE (SHEET - 12 -)

### SUMMARY OF MASS PROPERTIES

JOINT No.	ELEVATION (FT)	WEIGHT (KIPS)
1	87.0	70,260.0
2	130.0	25,660.0
3	158.0	20,660.0
4	188.0	22,080.0
5	203.0	16,470.0
6	228.0	12,980.0
7	256.5	1993 (N-S), 2274 (E-W)
8	280.0	2,226
9	256.5	194 (N-S), 0.0 (E-W)
10	114.5	9,755.0
11	130.0	244.0
12	146.0	100.0
13	165.0	161.0
14	204.0	220.0
15	128.0	581.0
16	146.0	458.0
17	148.0	461.0
18	170.0	871.0
19	146.0	755.0
20	172.0	1,024.0
21	188.0	624.0
22	204.0	274.0
23	188.0	-
24	188.0	-
25	141.0	-
26	130.0	-
27	114.5	-
28	114.5	-
29	87.0	-
30	87.0	-

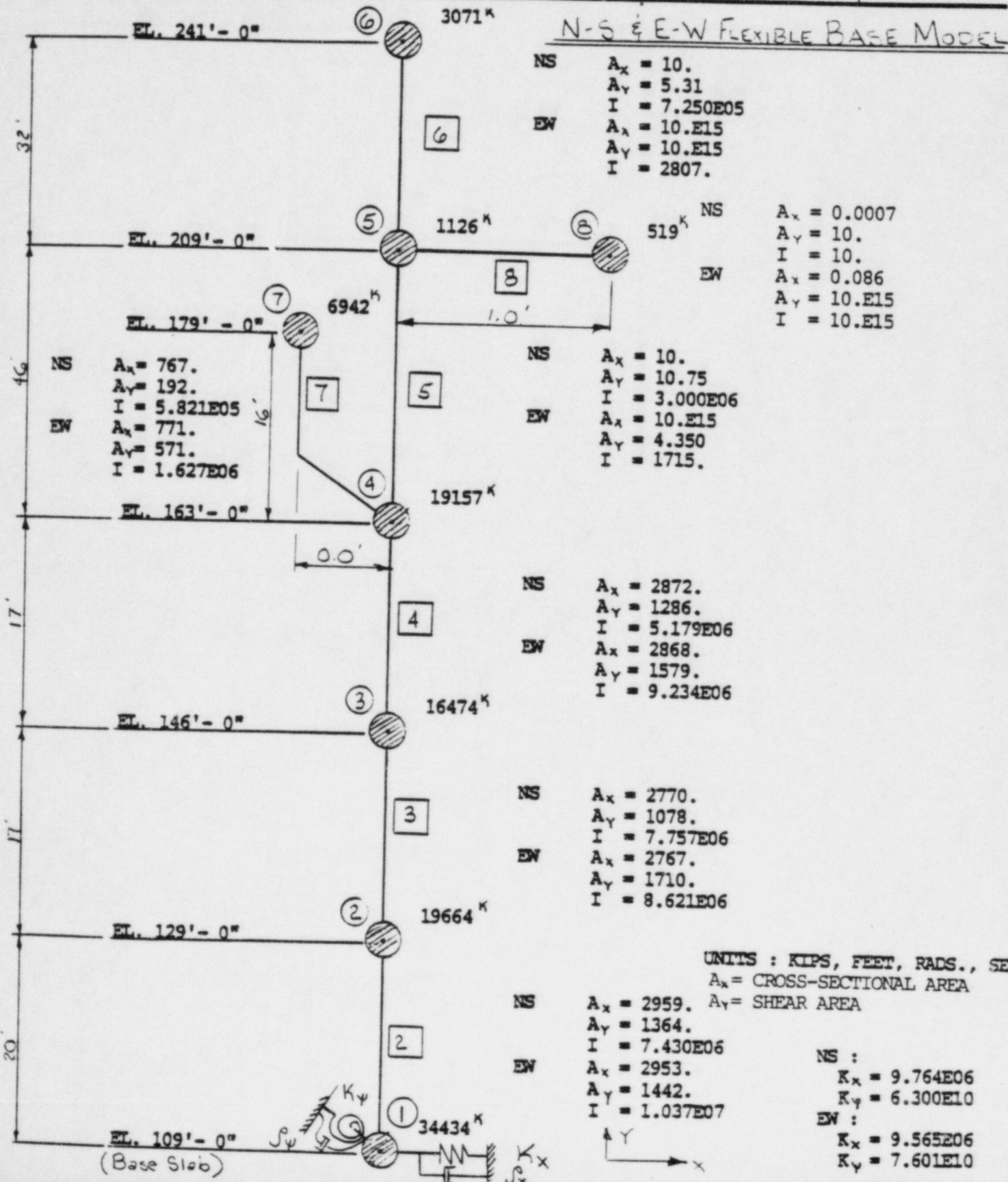
ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

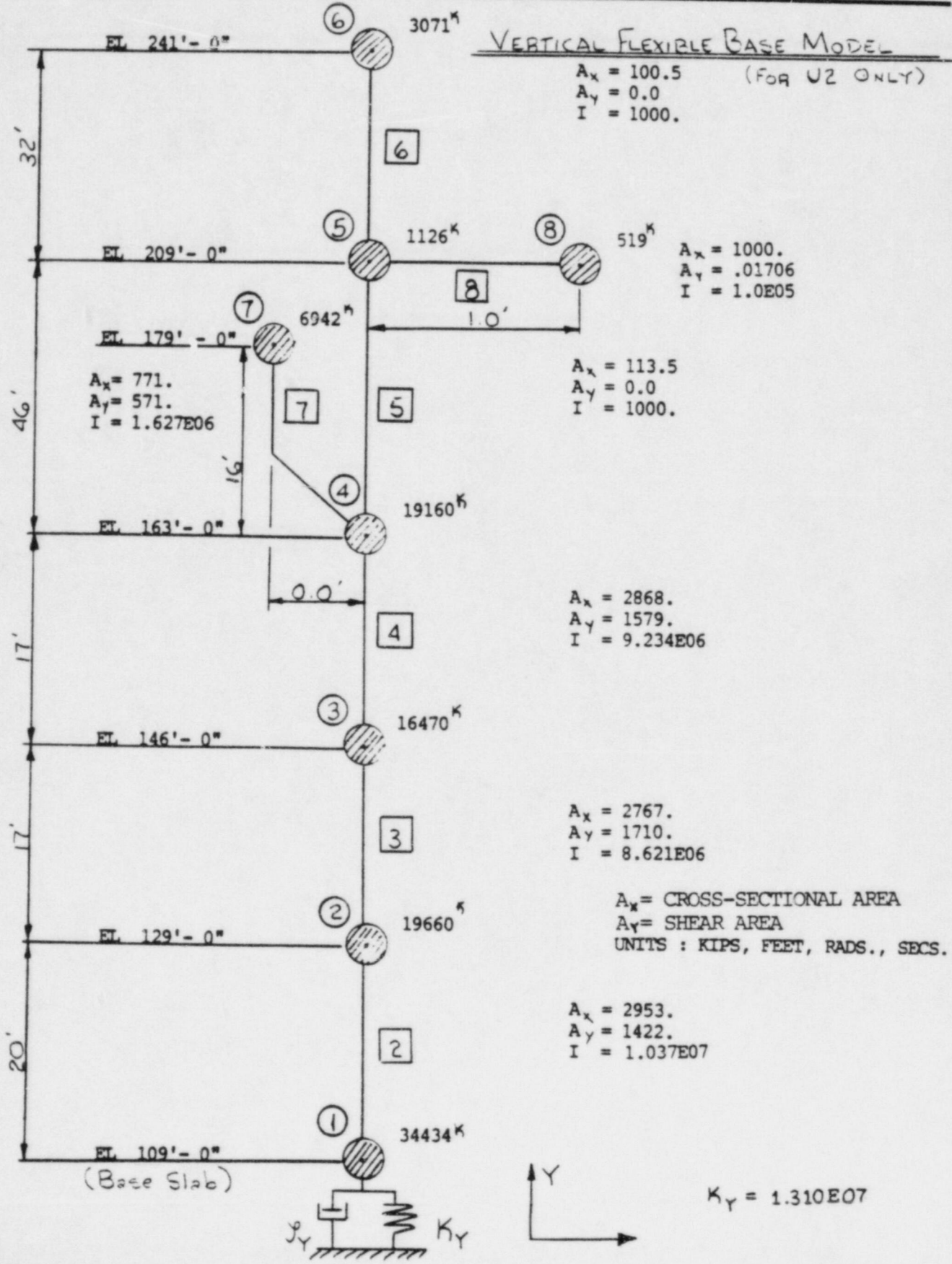
EDWIN I. HATCH NUCLEAR PLANT - UNITS 1 AND 2  
CONTROL BUILDING MODEL



Project HATCH UNITS I & II	Prepared By JOE SMITH	Date 2-17-87
Subject/Title CONTROL BUILDING	Reviewed By ping Hsu	Date 2-18-87
SEISMIC MODEL		Sheet of



Project <b>HATCH UNITS II</b>	Prepared By <b>JOE SMITH</b>	Date <b>2-17-87</b>
Subject/Title <b>CONTROL BUILDING</b>	Reviewed By <b>Ping Hsu</b>	Date <b>2-18-87</b>
<b>SEISMIC MODEL</b>		Sheet of



Project <u>HATCH UNITS I &amp; II</u>	Prepared By <u>JOE SMITH</u>	Date <u>2-17-87</u>
Subject/Title <u>CONTROL BUILDING</u>	Reviewed By <u>Ping Han</u>	Date <u>2-18-87</u>
<u>SEISMIC MODEL</u>		Sheet of

CONSTANTS: E = 526000. Ksf  
 G = 210000. Ksf  
 DENSITY = 0.0

MASS MOMENT OF INERTIA (KIP · FT<sup>2</sup>) OBE & DBE - UNITS I & II  
 FOR INPUT AT BASE MAT OF MATHEMATICAL MODEL IN DYNAMIC ANALYSIS

$$I_{OT} = I_{OT} \cdot \sum_{j=1}^n M_j H_j^2 = \begin{array}{l} \text{NORTH-SOUTH} \\ 1.592 \times 10^8 \end{array} \quad \begin{array}{l} \text{EAST-WEST} \\ 2.316 \times 10^8 \end{array}$$

DAMPING NOTE: EQUIVALENT MODAL DAMPING VALUES ARE PROVIDED IN ITEM NUMBER 4 OF REFERENCE 1.

UNIT I

	<u>DBE</u>	<u>OBE</u>
STRUCTURAL	5%	3%
SOIL	5.5%	4.5%

UNIT II

	<u>DBE</u>	<u>OBE</u>
STRUCTURAL	5%	3%
SOIL:		
$\int_x^r$ , N-S	43.63%	40.63%
$\int_\psi^r$ , N-S	30.04%	30.04%
$\int_x^r$ , E-W	42.71%	39.71%
$\int_\psi^r$ , E-W	28.26%	28.26%
$\int_y^r$ , VERT	69.39%	66.39%

INDEPENDENT DEGREES OF FREEDOM

E-W & N-S MODEL: INDEPENDENT DEGREES OF FREEDOM INCLUDE DISPLACEMENT X FOR JOINTS 1 THRU 8 AND ROTATION  $\psi$  FOR JOINT 1

VERTICAL MODEL: INDEPENDENT DEGREES OF FREEDOM INCLUDE DISPLACEMENT Y FOR JOINTS 1 THRU 8



ENCLOSURE

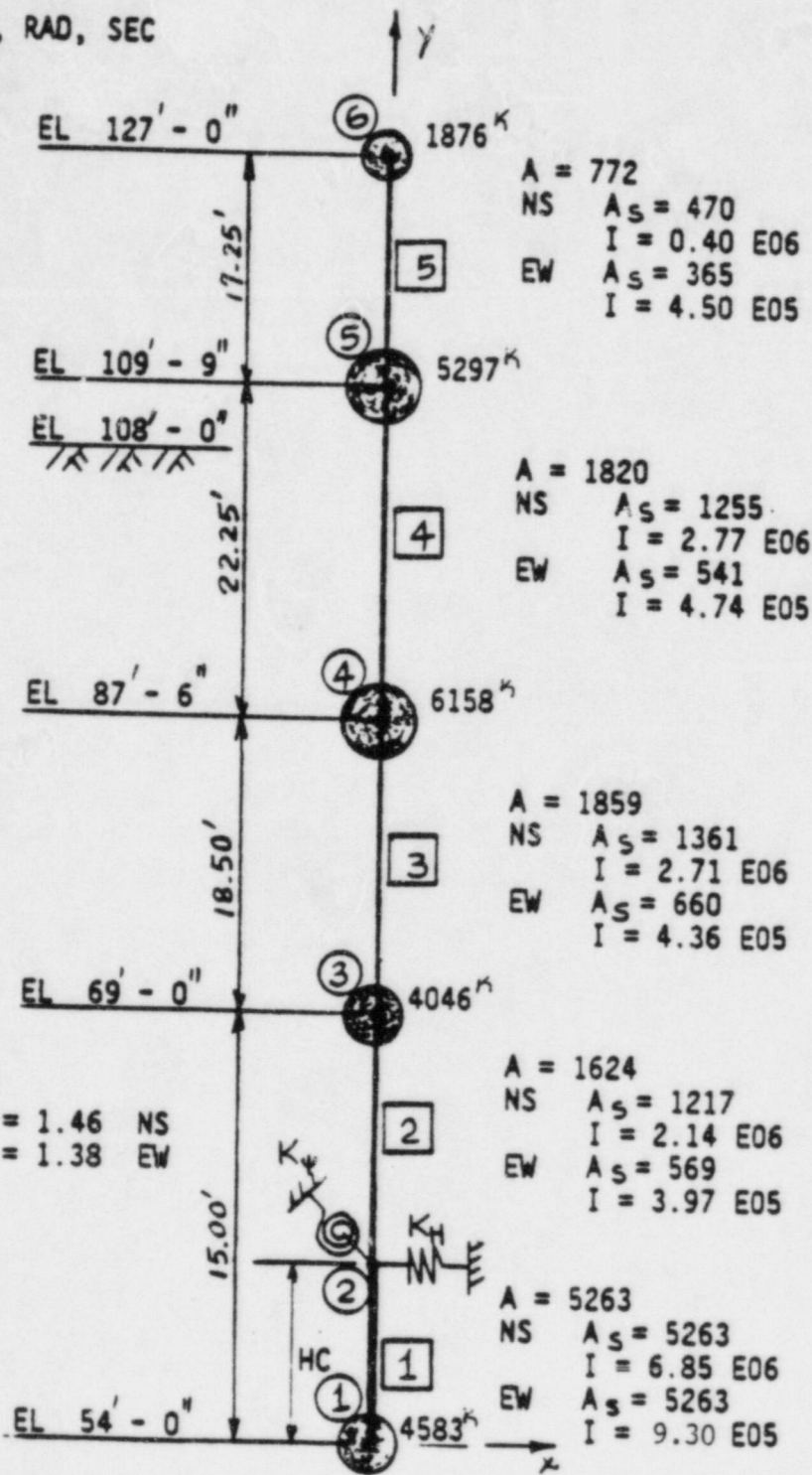
REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

EDWIN I. HATCH NUCLEAR PLANT - UNITS 1 AND 2  
INTAKE STRUCTURE MODEL

Project <b>HATCH UNITS I &amp; II</b>	Prepared By <i>S. Jones</i>	Date <b>2/10/87</b>
Subject/Title <b>INTAKE STRUCTURE</b>	Reviewed By <b>JOE SMITH</b>	Date <b>2-17-87</b>
<b>SEISMIC MODEL</b>		Sheet of

UNIT : FT, KIP, RAD, SEC

E = 0.526E06  
G = 0.210E06  
DENSITY = 0.0



A = 772  
NS  $A_s = 470$   
I = 0.40 E06  
EW  $A_s = 365$   
I = 4.50 E05

A = 1820  
NS  $A_s = 1255$   
I = 2.77 E06  
EW  $A_s = 541$   
I = 4.74 E05

A = 1859  
NS  $A_s = 1361$   
I = 2.71 E06  
EW  $A_s = 660$   
I = 4.36 E05

A = 1624  
NS  $A_s = 1217$   
I = 2.14 E06  
EW  $A_s = 569$   
I = 3.97 E05

A = 5263  
NS  $A_s = 5263$   
I = 6.85 E06  
EW  $A_s = 5263$   
I = 9.30 E05

HC = 1.46 NS  
HC = 1.38 EW

EW  $K_H = 5.05 E06$   
 $K_\psi = 0.54 E10$

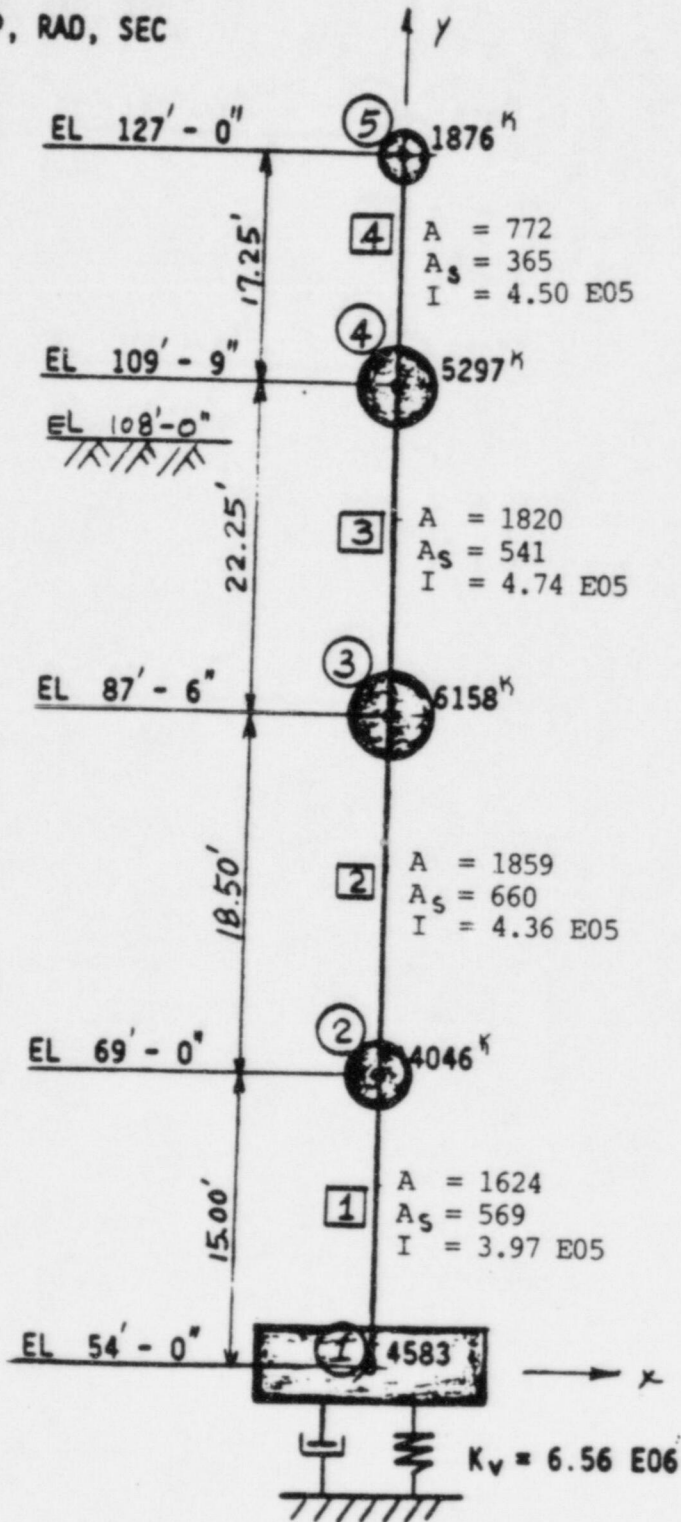
NS  $K_H = 4.81 E06$   
 $K_\psi = 2.26 E10$

**FLEXIBLE BASE MODEL - W/ EMBEDMENT**  
( NS, EW )

Project	HATCH UNIT II	Prepared By	S. Jones	Date	2/10/87
Subject/Title	INTAKE STRUCTURE	Reviewed By	JOE SMITH	Date	2-17-87
	SEISMIC MODEL			Sheet	of

UNIT : FT, KIP, RAD, SEC

E = 0.526E06  
 G = 0.210E06  
 DENSITY = 0.0



FLEXIBLE BASE MODEL - W/ EMBEDMENT  
 (VERTICAL)



Project	HATCH UNITS I & II	Prepared By	<i>A. Jones</i>	Date	2/11/87
Subject/Title	INTAKE STRUCTURE	Reviewed By	JOE SMITH	Date	2-17-87
	SEISMIC MODEL			Sheet	of

MASS MOMENT OF INERTIA (KIP·FT<sup>2</sup>) OBE & DBE - UNITS I & II

(PER SECTION 3.2 OF CRITERIA)

FOR INPUT AT BASE MAT OF MATHEMATICAL MODEL IN DYNAMIC ANALYSIS

$$I_{0t} = I_{0T} - \sum_{j=1}^n M_j H_j^2 = \begin{array}{cc} \text{NORTH-SOUTH} & \text{EAST-WEST} \\ 2.63 \text{ E07} & 6.21 \text{ E06} \end{array}$$

DAMPING NOTE: EQUIVALENT MODAL DAMPING VALUES ARE PROVIDED IN ITEM NUMBER 4 OF REFERENCE 1.

UNIT I

	<u>DBE</u>	<u>OBE</u>
STRUCTURAL	5%	3%
SOIL	5.5%	4.5%

UNIT II

	<u>DBE</u>	<u>OBE</u>
STRUCTURAL	5%	3%
SOIL		
∫ <sub>X, N-S</sub>	35.3%	32.3%
∫ <sub>ψ, N-S</sub>	15.9%	15.9%
∫ <sub>X, E-W</sub>	32.5%	29.5%
∫ <sub>ψ, E-W</sub>	7.8%	7.8%
∫ <sub>X, VERT</sub>	51%	48%

Project HATCH UNITS I & II	Prepared By JOE SMITH	Date 2-17-87
Subject/Title INTAKE STRUCTURE	Reviewed By G. JONES	Date 2-17-87
SEISMIC MODEL		Sheet of

INDEPENDENT DEGREES OF FREEDOM

N-S & E-W MODEL INDEPENDENT DEGREES OF FREEDOM INCLUDE  
DISPLACEMENT X FOR JOINTS 1 AND 3 THRU 6 AND ROTATION Z FOR JOINT 2.

VERTICAL MODEL INDEPENDENT DEGREES OF FREEDOM INCLUDE  
DISPLACEMENT Y FOR JOINTS 1 THRU 5.

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

ITEM NO. 4:

"Provide digitized values of the synthetic acceleration time histories used in the re-analysis for Units 1 and 2. These will be used for our independent analyses and should be on tape or floppy disk."

RESPONSE TO ITEM NO. 4:

Enclosed is a floppy disk containing the digitized values of the Edwin I. Hatch Plant Unit 1 and Unit 2 Design Basis Earthquake (DBE) synthetic time histories used to regenerate the DBE floor response spectra. The Unit 1 DBE synthetic time history is identified as 1DBESTH.DATA, and the Unit 2 DBE synthetic time history is identified as 2DBESTH.DATA. A listing of each synthetic time history is provided as documentation of the time history data stored on the floppy disk.

The data is provided as pairs of values, i.e., time versus acceleration. Time is given in units of seconds, and acceleration is given in units of gravity (g). The acceleration values of the enclosed time histories must be multiplied by a factor of 1.875 to obtain the appropriate peak DBE horizontal ground acceleration value of 0.15 g. For the Unit 2 synthetic time history, multiply the Unit 2 acceleration values by a factor of 1.25 to obtain the appropriate peak DBE vertical ground acceleration value of 0.10 g.



HATCH UNIT #1 DBE SYNTHETIC TIME HISTORY

"1DBESTH.DATA"



\$ RECALL OF DATA FROM DDI  
 TYPE PLANE FRAME  
 UNITS FEET KIP CYCLES  
 OUTPUT STORED TRAJECTORY RESULTS  
 TIME HISTORY LOAD  
 \*PLOT-5TH\*  
 END OF SUBJECT REQUEST

\*\*\*\*\*  
 \*RESULTS OF LATEST ANALYSIS\*  
 \*\*\*\*\*

PROBLEM - PRP-5TH TITLE MATCH UNIT #1 DR1 SYN. TIME HISTORY DDI FILES  
 ACTIVE UNITS FEET KIPS CYC. FOUR DEC. KIP

FILE NAME 1465 5TH ACCELERATION TRANSLATION  
 TIME HISTORY LOAD

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
0.0	9.100000E-03	4.000000E-01	9.000000E-04	9.000000E-03	9.540000E-04	1.500000E-02	1.500000E-02
2.000000E-02	-9.000000E-04	2.500000E-01	1.000000E-03	3.000000E-02	1.550000E-03	3.500000E-02	-1.400000E-03
4.000000E-02	1.400000E-03	4.000000E-01	1.000000E-03	5.000000E-02	-5.320000E-04	5.500000E-02	4.700000E-04
6.000000E-02	1.500000E-03	6.000000E-01	2.000000E-03	6.000000E-02	3.820000E-03	7.400000E-02	5.000000E-03
8.000000E-02	6.100000E-03	8.000000E-01	6.000000E-03	8.000000E-02	5.600000E-03	9.400000E-02	3.700000E-03
1.000000E-01	1.500000E-03	1.000000E-01	1.000000E-04	1.000000E-01	3.430000E-04	1.100000E-01	-8.700000E-04
1.200000E-01	2.000000E-03	1.200000E-01	7.000000E-04	1.300000E-01	5.810000E-04	1.350000E-01	3.100000E-04
1.400000E-01	6.000000E-03	1.400000E-01	1.000000E-03	1.500000E-01	6.120000E-03	1.550000E-01	7.000000E-03
1.600000E-01	1.000000E-03	1.600000E-01	6.000000E-03	1.700000E-01	4.970000E-03	1.750000E-01	3.300000E-03
1.800000E-01	1.000000E-03	1.800000E-01	1.000000E-03	1.900000E-01	3.650000E-03	1.950000E-01	-4.900000E-03
2.000000E-01	5.100000E-03	2.000000E-01	4.300000E-03	2.100000E-01	3.460000E-03	2.150000E-01	-2.800000E-03
2.200000E-01	2.000000E-03	2.200000E-01	2.000000E-03	2.300000E-01	1.700000E-03	2.350000E-01	-2.150000E-04
2.400000E-01	5.000000E-03	2.400000E-01	2.000000E-04	2.500000E-01	6.700000E-04	2.550000E-01	8.400000E-04
2.600000E-01	1.400000E-03	2.600000E-01	2.000000E-03	2.700000E-01	2.010000E-03	2.750000E-01	3.300000E-04
2.800000E-01	1.200000E-03	2.800000E-01	3.000000E-03	2.900000E-01	4.700000E-03	2.950000E-01	-5.150000E-03
3.000000E-01	4.000000E-03	3.000000E-01	4.000000E-03	3.100000E-01	3.320000E-03	3.150000E-01	-3.300000E-03
3.200000E-01	2.500000E-03	3.200000E-01	1.500000E-03	3.300000E-01	6.550000E-04	3.350000E-01	-1.600000E-04
3.400000E-01	3.000000E-03	3.400000E-01	3.000000E-03	3.500000E-01	3.000000E-04	3.550000E-01	9.600000E-04
3.600000E-01	1.500000E-03	3.600000E-01	1.500000E-03	3.800000E-01	9.170000E-04	3.750000E-01	-1.070000E-04
3.800000E-01	1.000000E-03	3.800000E-01	2.000000E-03	4.000000E-01	3.110000E-03	3.950000E-01	-4.300000E-03
4.000000E-01	5.600000E-03	4.000000E-01	6.000000E-03	4.100000E-01	6.430000E-03	4.150000E-01	-5.300000E-03
4.200000E-01	3.700000E-03	4.200000E-01	2.000000E-03	4.200000E-01	9.600000E-04	4.250000E-01	9.100000E-04
4.400000E-01	3.000000E-03	4.400000E-01	3.000000E-03	4.300000E-01	1.120000E-03	4.350000E-01	-1.910000E-04
4.600000E-01	3.000000E-03	4.600000E-01	2.000000E-04	4.400000E-01	1.500000E-03	4.450000E-01	-2.050000E-03
4.800000E-01	2.200000E-03	4.800000E-01	2.000000E-03	4.500000E-01	2.280000E-03	4.550000E-01	-2.270000E-03
5.000000E-01	2.000000E-03	5.000000E-01	3.000000E-03	4.600000E-01	2.000000E-03	4.650000E-01	-2.520000E-03
5.200000E-01	3.200000E-03	5.200000E-01	3.000000E-03	4.700000E-01	4.560000E-03	4.750000E-01	-4.700000E-03
5.400000E-01	4.000000E-03	5.400000E-01	5.000000E-03	4.800000E-01	5.700000E-03	4.850000E-01	-6.040000E-03
5.600000E-01	6.100000E-03	5.600000E-01	5.000000E-03	4.900000E-01	5.470000E-03	4.950000E-01	-5.090000E-03
5.800000E-01	3.000000E-03	5.800000E-01	4.000000E-03	5.000000E-01	-3.770000E-03	5.050000E-01	-3.350000E-03
6.000000E-01	4.000000E-03	6.000000E-01	3.000000E-03	6.100000E-01	-3.800000E-03	6.150000E-01	-3.400000E-03
6.200000E-01	2.000000E-03	6.200000E-01	1.000000E-03	6.300000E-01	2.700000E-03	6.350000E-01	1.150000E-03
6.400000E-01	5.000000E-03	6.400000E-01	2.000000E-03	6.500000E-01	5.420000E-03	6.550000E-01	-7.200000E-03
6.600000E-01	5.000000E-03	6.600000E-01	3.000000E-03	6.700000E-01	5.170000E-03	6.750000E-01	9.200000E-03
6.800000E-01	5.000000E-03	6.800000E-01	3.000000E-03	6.900000E-01	5.170000E-03	6.950000E-01	9.200000E-03













TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
3.400000E+00	1.107799E-03	3.410000E+00	1.113400E-02	3.415000E+00	1.252300E-02	3.415000E+00	1.265699E-02
3.410000E+00	1.211900E-03	3.420000E+00	1.167500E-02	3.420000E+00	1.055999E-02	3.420000E+00	1.087499E-02
3.420000E+00	1.316000E-03	3.430000E+00	1.271600E-02	3.430000E+00	1.160000E-02	3.430000E+00	1.198999E-02
3.430000E+00	1.420100E-03	3.440000E+00	1.375700E-02	3.440000E+00	1.264100E-02	3.440000E+00	1.303099E-02
3.440000E+00	1.524200E-03	3.450000E+00	1.479800E-02	3.450000E+00	1.368200E-02	3.450000E+00	1.407199E-02
3.450000E+00	1.628300E-03	3.460000E+00	1.583900E-02	3.460000E+00	1.472300E-02	3.460000E+00	1.511299E-02
3.460000E+00	1.732400E-03	3.470000E+00	1.688000E-02	3.470000E+00	1.576400E-02	3.470000E+00	1.615399E-02
3.470000E+00	1.836500E-03	3.480000E+00	1.792100E-02	3.480000E+00	1.680500E-02	3.480000E+00	1.719499E-02
3.480000E+00	1.940600E-03	3.490000E+00	1.896200E-02	3.490000E+00	1.784600E-02	3.490000E+00	1.823599E-02
3.490000E+00	2.044700E-03	3.500000E+00	2.000300E-02	3.500000E+00	1.888700E-02	3.500000E+00	1.927699E-02
3.500000E+00	2.148800E-03	3.510000E+00	2.104400E-02	3.510000E+00	1.992800E-02	3.510000E+00	2.031799E-02
3.510000E+00	2.252900E-03	3.520000E+00	2.208500E-02	3.520000E+00	2.096900E-02	3.520000E+00	2.135899E-02
3.520000E+00	2.357000E-03	3.530000E+00	2.312600E-02	3.530000E+00	2.201000E-02	3.530000E+00	2.239999E-02
3.530000E+00	2.461100E-03	3.540000E+00	2.416700E-02	3.540000E+00	2.305100E-02	3.540000E+00	2.344099E-02
3.540000E+00	2.565200E-03	3.550000E+00	2.520800E-02	3.550000E+00	2.409200E-02	3.550000E+00	2.448199E-02
3.550000E+00	2.669300E-03	3.560000E+00	2.624900E-02	3.560000E+00	2.513300E-02	3.560000E+00	2.552299E-02

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
3.560000E+00	2.773400E-03	3.570000E+00	2.729000E-02	3.570000E+00	2.617400E-02	3.570000E+00	2.656999E-02
3.570000E+00	2.877500E-03	3.580000E+00	2.833100E-02	3.580000E+00	2.721500E-02	3.580000E+00	2.751099E-02
3.580000E+00	2.981600E-03	3.590000E+00	2.937200E-02	3.590000E+00	2.825600E-02	3.590000E+00	2.845199E-02
3.590000E+00	3.085700E-03	3.600000E+00	3.041300E-02	3.600000E+00	2.929700E-02	3.600000E+00	2.939299E-02
3.600000E+00	3.189800E-03	3.610000E+00	3.145400E-02	3.610000E+00	3.033800E-02	3.610000E+00	3.033399E-02
3.610000E+00	3.293900E-03	3.620000E+00	3.249500E-02	3.620000E+00	3.137900E-02	3.620000E+00	3.127499E-02
3.620000E+00	3.398000E-03	3.630000E+00	3.353600E-02	3.630000E+00	3.242000E-02	3.630000E+00	3.221599E-02
3.630000E+00	3.502100E-03	3.640000E+00	3.457700E-02	3.640000E+00	3.346100E-02	3.640000E+00	3.315699E-02
3.640000E+00	3.606200E-03	3.650000E+00	3.561800E-02	3.650000E+00	3.450200E-02	3.650000E+00	3.409799E-02
3.650000E+00	3.710300E-03	3.660000E+00	3.665900E-02	3.660000E+00	3.554300E-02	3.660000E+00	3.503899E-02
3.660000E+00	3.814400E-03	3.670000E+00	3.770000E-02	3.670000E+00	3.658400E-02	3.670000E+00	3.597999E-02
3.670000E+00	3.918500E-03	3.680000E+00	3.874100E-02	3.680000E+00	3.762500E-02	3.680000E+00	3.692099E-02
3.680000E+00	4.022600E-03	3.690000E+00	3.978200E-02	3.690000E+00	3.866600E-02	3.690000E+00	3.786199E-02
3.690000E+00	4.126700E-03	3.700000E+00	4.082300E-02	3.700000E+00	3.970700E-02	3.700000E+00	3.880299E-02
3.700000E+00	4.230800E-03	3.710000E+00	4.186400E-02	3.710000E+00	4.074800E-02	3.710000E+00	3.974399E-02
3.710000E+00	4.334900E-03	3.720000E+00	4.290500E-02	3.720000E+00	4.178900E-02	3.720000E+00	4.068499E-02
3.720000E+00	4.439000E-03	3.730000E+00	4.394600E-02	3.730000E+00	4.283000E-02	3.730000E+00	4.162599E-02
3.730000E+00	4.543100E-03	3.740000E+00	4.498700E-02	3.740000E+00	4.387100E-02	3.740000E+00	4.256699E-02
3.740000E+00	4.647200E-03	3.750000E+00	4.602800E-02	3.750000E+00	4.491200E-02	3.750000E+00	4.350799E-02
3.750000E+00	4.751300E-03	3.760000E+00	4.706900E-02	3.760000E+00	4.595300E-02	3.760000E+00	4.444899E-02
3.760000E+00	4.855400E-03	3.770000E+00	4.811000E-02	3.770000E+00	4.699400E-02	3.770000E+00	4.538999E-02
3.770000E+00	4.959500E-03	3.780000E+00	4.915100E-02	3.780000E+00	4.803500E-02	3.780000E+00	4.633099E-02
3.780000E+00	5.063600E-03	3.790000E+00	5.019200E-02	3.790000E+00	4.907600E-02	3.790000E+00	4.727199E-02
3.790000E+00	5.167700E-03	3.800000E+00	5.123300E-02	3.800000E+00	5.011700E-02	3.800000E+00	4.821299E-02
3.800000E+00	5.271800E-03	3.810000E+00	5.227400E-02	3.810000E+00	5.115800E-02	3.810000E+00	4.915399E-02
3.810000E+00	5.375900E-03	3.820000E+00	5.331500E-02	3.820000E+00	5.219900E-02	3.820000E+00	5.009499E-02
3.820000E+00	5.480000E-03	3.830000E+00	5.435600E-02	3.830000E+00	5.324000E-02	3.830000E+00	5.103599E-02
3.830000E+00	5.584100E-03	3.840000E+00	5.539700E-02	3.840000E+00	5.428100E-02	3.840000E+00	5.197699E-02
3.840000E+00	5.688200E-03	3.850000E+00	5.643800E-02	3.850000E+00	5.532200E-02	3.850000E+00	5.291799E-02
3.850000E+00	5.792300E-03	3.860000E+00	5.747900E-02	3.860000E+00	5.636300E-02	3.860000E+00	5.385899E-02
3.860000E+00	5.896400E-03	3.870000E+00	5.852000E-02	3.870000E+00	5.740400E-02	3.870000E+00	5.480000E-02
3.870000E+00	6.000500E-03	3.880000E+00	5.956100E-02	3.880000E+00	5.844500E-02	3.880000E+00	5.574100E-02
3.880000E+00	6.104600E-03	3.890000E+00	6.060200E-02	3.890000E+00	5.948600E-02	3.890000E+00	5.668200E-02
3.890000E+00	6.208700E-03	3.900000E+00	6.164300E-02	3.900000E+00	6.052700E-02	3.900000E+00	5.762300E-02
3.900000E+00	6.312800E-03	3.910000E+00	6.268400E-02	3.910000E+00	6.156800E-02	3.910000E+00	5.856400E-02
3.910000E+00	6.416900E-03	3.920000E+00	6.372500E-02	3.920000E+00	6.260900E-02	3.920000E+00	5.950500E-02
3.920000E+00	6.521000E-03	3.930000E+00	6.476600E-02	3.930000E+00	6.365000E-02	3.930000E+00	6.044600E-02
3.930000E+00	6.625100E-03	3.940000E+00	6.580700E-02	3.940000E+00	6.469100E-02	3.940000E+00	6.138700E-02
3.940000E+00	6.729200E-03	3.950000E+00	6.684800E-02	3.950000E+00	6.573200E-02	3.950000E+00	6.232800E-02
3.950000E+00	6.833300E-03	3.960000E+00	6.788900E-02	3.960000E+00	6.677300E-02	3.960000E+00	6.326900E-02
3.960000E+00	6.937400E-03	3.970000E+00	6.893000E-02	3.970000E+00	6.781400E-02	3.970000E+00	6.421000E-02
3.970000E+00	7.041500E-03	3.980000E+00	6.997100E-02	3.980000E+00	6.885500E-02	3.980000E+00	6.515100E-02
3.980000E+00	7.145600E-03	3.990000E+00	7.101200E-02	3.990000E+00	6.989600E-02	3.990000E+00	6.609200E-02
3.990000E+00	7.249700E-03	4.000000E+00	7.205300E-02	4.000000E+00	7.093700E-02	4.000000E+00	6.703300E-02
4.000000E+00	7.353800E-03	4.010000E+00	7.309400E-02	4.010000E+00	7.197800E-02	4.010000E+00	6.797400E-02
4.010000E+00	7.457900E-03	4.020000E+00	7.413500E-02	4.020000E+00	7.301900E-02	4.020000E+00	6.891500E-02
4.020000E+00	7.562000E-03	4.030000E+00	7.517600E-02	4.030000E+00	7.406000E-02	4.030000E+00	6.985600E-02
4.030000E+00	7.666100E-03	4.040000E+00	7.621700E-02	4.040000E+00	7.510100E-02	4.040000E+00	7.079700E-02
4.040000E+00	7.770200E-03	4.050000E+00	7.725800E-02	4.050000E+00	7.614200E-02	4.050000E+00	7.173800E-02
4.050000E+00	7.874300E-03	4.060000E+00	7.829900E-02	4.060000E+00	7.718300E-02	4.060000E+00	7.267900E-02
4.060000E+00	7.978400E-03	4.070000E+00	7.934000E-02	4.070000E+00	7.822400E-02	4.070000E+00	7.362000E-02
4.070000E+00	8.082500E-03	4.080000E+00	8.038100E-02	4.080000E+00	7.926500E-02	4.080000E+00	7.456100E-02
4.080000E+00	8.186600E-03	4.090000E+00	8.142200E-02	4.090000E+00	8.030600E-02	4.090000E+00	7.550200E-02
4.090000E+00	8.290700E-03	4.100000E+00	8.246300E-02	4.100000E+00	8.134700E-02	4.100000E+00	7.644300E-02
4.100000E+00	8.394800E-03	4.110000E+00	8.350400E-02	4.110000E+00	8.238800E-02	4.110000E+00	7.738400E-02
4.110000E+00	8.498900E-03	4.120000E+00	8.454500E-02	4.120000E+00	8.342900E-02	4.120000E+00	7.832500E-02
4.120000E+00	8.603000E-03	4.130000E+00	8.558600E-02	4.130000E+00	8.447000E-02	4.130000E+00	7.926600E-02
4.130000E+00	8.707100E-03	4.140000E+00	8.662700E-02	4.140000E+00	8.551100E-02	4.140000E+00	8.020700E-02
4.140000E+00	8.811200E-03	4.150000E+00	8.766800E-02	4.150000E+00	8.655200E-02	4.150000E+00	8.114800E-02
4.150000E+00	8.915300E-03	4.160000E+00	8.870900E-02	4.160000E+00	8.759300E-02	4.160000E+00	8.208900E-02
4.160000E+00	9.019400E-03	4.170000E+00	8.975000E-02	4.170000E+00	8.863400E-02	4.170000E+00	8.303000E-02
4.170000E+00	9.123500E-03	4.180000E+00	9.079100E-02	4.180000E+00	8.967500E-02	4.180000E+00	8.397100E-02
4.180000E+00	9.227600E-03	4.190000E+00	9.183200E-02	4.190000E+00	9.071600E-02	4.190000E+00	8.491200E-02
4.190000E+00	9.331700E-03	4.200000E+00	9.287300E-02	4.200000E+00	9.175700E-02	4.200000E+00	8.585300E-02
4.200000E+00	9.435800E-03	4.210000E+00	9.391400E-02	4.210000E+00	9.279800E-02	4.210000E+00	8.679400E-02
4.210000E+00	9.539900E-03	4.220000E+00	9.495500E-02	4.220000E+00	9.383900E-02	4.220000E+00	8.773500E-02
4.220000E+00	9.644000E-03	4.230000E+00	9.599600E-02	4.230000E+00	9.488000E-02	4.230000E+00	8.867600E-02
4.230000E+00	9.748100E-03	4.240000E+00	9.703700E-02	4.240000E+00	9.592100E-02	4.240000E+00	8.961700E-02
4.240000E+00	9.852200E-03	4.250000E+00	9.807800E-02	4.250000E+00	9.696200E-02	4.250000E+00	9.055800E-02
4.250000E+00	9.956300E-03	4.260000E+00	9.911900E-02	4.260000E+00	9.8		



















9. 1.4999E+000 -6. 023999E-03  
 9. 1.9999E+000 -1. 011600E-02  
 9. 2.1499E+000 -1. 100000E-02  
 9. 2.25000E+000 -2. 226500E-02  
 9. 2.25000E+000 -1. 773000E-02  
 9. 2.27000E+000 -5. 902999E-03  
 9. 2.274999E+000 5. 264999E-03  
 9. 3.15000E+000 1. 164199E-02  
 9. 3.34999E+000 1. 499300E-02

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TIME	VALUE	TIME	VALUE	TIME	VALUE
9. 3.39999E+000	1. 563999E-02	9. 3.549999E+000	1. 563999E-02	9. 3.550000E+000	1. 549900E-02
9. 3.64000E+000	1. 511500E-02	9. 3.65000E+000	1. 564100E-02	9. 3.75000E+000	1. 294099E-02
9. 3.79999E+000	1. 499900E-02	9. 3.79999E+000	1. 521999E-02	9. 3.95000E+000	8. 592999E-03
9. 4.00000E+000	1. 489999E-02	9. 4.00000E+000	6. 413999E-03	9. 4.15000E+000	6. 387999E-03
9. 4.19999E+000	6. 663999E-03	9. 4.29999E+000	7. 110000E-03	9. 4.34999E+000	7. 930999E-03
9. 4.40000E+000	3. 139999E-03	9. 4.49999E+000	3. 211999E-03	9. 4.55000E+000	8. 251999E-03
9. 4.60000E+000	3. 499999E-03	9. 4.69999E+000	9. 389999E-03	9. 4.74999E+000	1. 011919E-02
9. 4.80000E+000	1. 101699E-02	9. 4.89999E+000	1. 259999E-02	9. 4.95000E+000	1. 293099E-02
9. 5.00000E+000	1. 299999E-02	9. 5.09999E+000	1. 135999E-02	9. 5.14999E+000	1. 108800E-02
9. 5.20000E+000	1. 059999E-02	9. 5.29999E+000	9. 068999E-03	9. 5.35000E+000	8. 573999E-03
9. 5.40000E+000	3. 111999E-03	9. 5.49999E+000	7. 462999E-03	9. 5.54999E+000	7. 180999E-03
9. 5.60000E+000	6. 201999E-03	9. 5.69999E+000	6. 160999E-03	9. 5.75000E+000	5. 653999E-03
9. 5.80000E+000	4. 659999E-03	9. 5.89999E+000	4. 363999E-03	9. 5.94999E+000	4. 278999E-03
9. 6.00000E+000	9. 740999E-03	9. 6.09999E+000	4. 763000E-03	9. 6.15000E+000	4. 945999E-03
9. 6.20000E+000	5. 103999E-03	9. 6.29999E+000	5. 433999E-03	9. 6.34999E+000	5. 631999E-03
9. 6.39999E+000	5. 339999E-03	9. 6.39999E+000	6. 333999E-03	9. 6.55000E+000	6. 623000E-03
9. 6.60000E+000	6. 949999E-03	9. 6.69999E+000	7. 612999E-03	9. 6.74999E+000	7. 935999E-03
9. 6.79999E+000	3. 299999E-03	9. 6.89999E+000	9. 169999E-03	9. 6.95000E+000	9. 735999E-03
9. 7.00000E+000	1. 031299E-02	9. 7.09999E+000	1. 043000E-02	9. 7.14999E+000	1. 109499E-02
9. 7.19999E+000	1. 083099E-02	9. 7.29999E+000	9. 490999E-03	9. 7.35000E+000	8. 504999E-02
9. 7.39999E+000	2. 929999E-03	9. 7.49999E+000	5. 468999E-03	9. 7.54999E+000	4. 270999E-03
9. 7.60000E+000	4. 299999E-03	9. 7.69999E+000	-4. 439999E-04	9. 7.75000E+000	-2. 493000E-03
9. 7.80000E+000	4. 299999E-03	9. 7.89999E+000	9. 529999E-03	9. 7.94999E+000	-1. 748999E-02
9. 7.99999E+000	1. 595999E-02	9. 8.09999E+000	1. 676999E-02	9. 8.15000E+000	-1. 1316200E-02
9. 8.20000E+000	1. 791299E-02	9. 8.29999E+000	2. 139000E-02	9. 8.34999E+000	-2. 194399E-02
9. 8.39999E+000	2. 200999E-02	9. 8.49999E+000	2. 083699E-02	9. 8.55000E+000	-1. 942100E-02
9. 8.60000E+000	1. 793000E-02	9. 8.69999E+000	1. 329500E-02	9. 8.75000E+000	-1. 114700E-02
9. 8.79999E+000	1. 793000E-02	9. 8.89999E+000	6. 615999E-03	9. 8.95000E+000	-5. 0370998E-03
9. 9.00000E+000	4. 951999E-03	9. 9.09999E+000	9. 929999E-03	9. 9.14999E+000	-4. 000999E-03
9. 9.20000E+000	3. 563000E-03	9. 9.29999E+000	9. 929999E-03	9. 9.34999E+000	-2. 570000E-03
9. 9.39999E+000	1. 331000E-03	9. 9.49999E+000	1. 923000E-03	9. 9.54999E+000	-1. 012199E-02
9. 9.60000E+000	1. 294100E-02	9. 9.69999E+000	1. 366400E-02	1. 001500E+01	-2. 132500E-02
1. 002000E+01	3. 573999E-02	1. 003000E+01	2. 792999E-02	1. 003500E+01	-2. 874000E-02
1. 004000E+01	3. 023100E-02	1. 005000E+01	3. 052900E-02	1. 005500E+01	-3. 055999E-02
1. 006000E+01	2. 74000E-02	1. 007000E+01	2. 926100E-02	1. 007500E+01	-2. 434999E-02
1. 008000E+01	2. 642599E-02	1. 009000E+01	2. 561199E-02	1. 009500E+01	-2. 434999E-02
1. 010000E+01	2. 319499E-02	1. 011000E+01	2. 032900E-02	1. 011500E+01	-1. 853300E-02
1. 012000E+01	1. 758999E-02	1. 013000E+01	1. 056000E-02	1. 013500E+01	-6. 780999E-03
1. 014000E+01	1. 014900E-02	1. 015000E+01	7. 339999E-03	1. 015500E+01	1. 264399E-02
1. 016000E+01	2. 309999E-02	1. 017000E+01	2. 783199E-02	1. 017500E+01	3. 131300E-02
1. 018000E+01	3. 904999E-02	1. 019000E+01	3. 755999E-02	1. 019500E+01	3. 799300E-02
1. 020000E+01	5. 499999E-02	1. 021000E+01	3. 640199E-02	1. 021500E+01	3. 561400E-02
1. 022000E+01	7. 094999E-02	1. 023000E+01	3. 390199E-02	1. 023500E+01	3. 563100E-02
1. 024000E+01	8. 689999E-02	1. 025000E+01	3. 435299E-02	1. 025500E+01	3. 447999E-02
1. 026000E+01	9. 284999E-02	1. 027000E+01	3. 163600E-02	1. 027500E+01	2. 961000E-02
1. 028000E+01	1. 029900E-02	1. 029000E+01	2. 070900E-02	1. 029500E+01	1. 735099E-02

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TIME	VALUE	TIME	VALUE	TIME	VALUE
1.106000E+01	6.230000E+00	1.114000E+01	5.210000E+00	1.122000E+01	1.413000E+02
1.110000E+01	6.230000E+00	1.118000E+01	5.210000E+00	1.126000E+01	1.413000E+02
1.114000E+01	6.230000E+00	1.122000E+01	5.210000E+00	1.130000E+01	1.413000E+02
1.118000E+01	6.230000E+00	1.126000E+01	5.210000E+00	1.134000E+01	1.413000E+02
1.122000E+01	6.230000E+00	1.130000E+01	5.210000E+00	1.138000E+01	1.413000E+02
1.126000E+01	6.230000E+00	1.134000E+01	5.210000E+00	1.142000E+01	1.413000E+02
1.130000E+01	6.230000E+00	1.138000E+01	5.210000E+00	1.146000E+01	1.413000E+02
1.134000E+01	6.230000E+00	1.142000E+01	5.210000E+00	1.150000E+01	1.413000E+02
1.138000E+01	6.230000E+00	1.146000E+01	5.210000E+00	1.154000E+01	1.413000E+02
1.142000E+01	6.230000E+00	1.150000E+01	5.210000E+00	1.158000E+01	1.413000E+02
1.146000E+01	6.230000E+00	1.154000E+01	5.210000E+00	1.162000E+01	1.413000E+02
1.150000E+01	6.230000E+00	1.158000E+01	5.210000E+00	1.166000E+01	1.413000E+02
1.154000E+01	6.230000E+00	1.162000E+01	5.210000E+00	1.170000E+01	1.413000E+02
1.158000E+01	6.230000E+00	1.166000E+01	5.210000E+00	1.174000E+01	1.413000E+02
1.162000E+01	6.230000E+00	1.170000E+01	5.210000E+00	1.178000E+01	1.413000E+02
1.166000E+01	6.230000E+00	1.174000E+01	5.210000E+00	1.182000E+01	1.413000E+02
1.170000E+01	6.230000E+00	1.178000E+01	5.210000E+00	1.186000E+01	1.413000E+02
1.174000E+01	6.230000E+00	1.182000E+01	5.210000E+00	1.190000E+01	1.413000E+02
1.178000E+01	6.230000E+00	1.186000E+01	5.210000E+00	1.194000E+01	1.413000E+02
1.182000E+01	6.230000E+00	1.190000E+01	5.210000E+00	1.198000E+01	1.413000E+02
1.186000E+01	6.230000E+00	1.194000E+01	5.210000E+00	1.202000E+01	1.413000E+02
1.190000E+01	6.230000E+00	1.198000E+01	5.210000E+00	1.206000E+01	1.413000E+02
1.194000E+01	6.230000E+00	1.202000E+01	5.210000E+00	1.210000E+01	1.413000E+02
1.198000E+01	6.230000E+00	1.206000E+01	5.210000E+00	1.214000E+01	1.413000E+02
1.202000E+01	6.230000E+00	1.210000E+01	5.210000E+00	1.218000E+01	1.413000E+02
1.206000E+01	6.230000E+00	1.214000E+01	5.210000E+00	1.222000E+01	1.413000E+02
1.210000E+01	6.230000E+00	1.218000E+01	5.210000E+00		

TIME	VALUE	TIME	VALUE	TIME	VALUE
1.127000E+01	1.275000E+01	1.135000E+01	1.275000E+01	1.143000E+01	1.275000E+01
1.129000E+01	1.275000E+01	1.137000E+01	1.275000E+01	1.147000E+01	1.275000E+01
1.131000E+01	1.275000E+01	1.141000E+01	1.275000E+01	1.151000E+01	1.275000E+01
1.133000E+01	1.275000E+01	1.145000E+01	1.275000E+01	1.155000E+01	1.275000E+01
1.135000E+01	1.275000E+01	1.149000E+01	1.275000E+01	1.159000E+01	1.275000E+01
1.137000E+01	1.275000E+01	1.153000E+01	1.275000E+01	1.163000E+01	1.275000E+01
1.139000E+01	1.275000E+01	1.157000E+01	1.275000E+01	1.167000E+01	1.275000E+01
1.141000E+01	1.275000E+01	1.161000E+01	1.275000E+01	1.171000E+01	1.275000E+01
1.143000E+01	1.275000E+01	1.165000E+01	1.275000E+01	1.175000E+01	1.275000E+01
1.145000E+01	1.275000E+01	1.169000E+01	1.275000E+01	1.179000E+01	1.275000E+01
1.147000E+01	1.275000E+01	1.173000E+01	1.275000E+01	1.183000E+01	1.275000E+01
1.149000E+01	1.275000E+01	1.177000E+01	1.275000E+01	1.187000E+01	1.275000E+01
1.151000E+01	1.275000E+01	1.181000E+01	1.275000E+01	1.191000E+01	1.275000E+01
1.153000E+01	1.275000E+01	1.185000E+01	1.275000E+01	1.195000E+01	1.275000E+01
1.155000E+01	1.275000E+01	1.189000E+01	1.275000E+01	1.199000E+01	1.275000E+01
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1.159000E+01	1.275000E+01	1.197000E+01	1.275000E+01	1.207000E+01	1.275000E+01
1.161000E+01	1.275000E+01	1.201000E+01	1.275000E+01	1.211000E+01	1.275000E+01
1.163000E+01	1.275000E+01	1.205000E+01	1.275000E+01	1.215000E+01	1.275000E+01
1.165000E+01	1.275000E+01	1.209000E+01	1.275000E+01	1.219000E+01	1.275000E+01
1.167000E+01	1.275000E+01	1.213000E+01	1.275000E+01	1.223000E+01	1.275000E+01
1.169000E+01	1.275000E+01	1.217000E+01	1.275000E+01	1.227000E+01	1.275000E+01
1.171000E+01	1.275000E+01	1.221000E+01	1.275000E+01	1.231000E+01	1.275000E+01
1.173000E+01	1.275000E+01	1.225000E+01	1.275000E+01	1.235000E+01	1.275000E+01
1.175000E+01	1.275000E+01	1.229000E+01	1.275000E+01	1.239000E+01	1.275000E+01
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1.179000E+01	1.275000E+01	1.237000E+01	1.275000E+01	1.247000E+01	1.275000E+01
1.181000E+01	1.275000E+01	1.241000E+01	1.275000E+01	1.251000E+01	1.275000E+01
1.183000E+01	1.275000E+01	1.245000E+01	1.275000E+01	1.255000E+01	1.275000E+01
1.185000E+01	1.275000E+01	1.249000E+01	1.275000E+01	1.259000E+01	1.275000E+01
1.187000E+01	1.275000E+01	1.253000E+01	1.275000E+01	1.263000E+01	1.275000E+01
1.189000E+01	1.275000E+01	1.257000E+01	1.275000E+01	1.267000E+01	1.275000E+01
1.191000E+01	1.275000E+01	1.261000E+01	1.275000E+01	1.271000E+01	1.275000E+01
1.193000E+01	1.275000E+01	1.265000E+01	1.275000E+01	1.275000E+01	1.275000E+01
1.195000E+01	1.275000E+01	1.269000E+01	1.275000E+01		

TIME	VALUE	TIME	VALUE	TIME	VALUE
1.127500E+02	1.687500E-02	1.135500E+02	1.687500E-02	1.143500E+02	1.687500E-02
1.129500E+02	1.385999E-02	1.137500E+02	1.385999E-02	1.145500E+02	1.385999E-02
1.131500E+02	1.095299E-02	1.139500E+02	1.095299E-02	1.147500E+02	1.095299E-02
1.133500E+02	5.624995E-03	1.141500E+02	5.624995E-03	1.149500E+02	5.624995E-03
1.135500E+02	-1.945000E-03	1.143500E+02	-1.945000E-03	1.151500E+02	-1.945000E-03
1.137500E+02	-9.633996E-03	1.145500E+02	-9.633996E-03	1.153500E+02	-9.633996E-03
1.139500E+02	-1.531699E-02	1.147500E+02	-1.531699E-02	1.155500E+02	-1.531699E-02
1.141500E+02	-1.972099E-02	1.149500E+02	-1.972099E-02	1.157500E+02	-1.972099E-02
1.143500E+02	-2.136200E-02	1.151500E+02	-2.136200E-02	1.159500E+02	-2.136200E-02
1.145500E+02	-2.053300E-02	1.153500E+02	-2.053300E-02	1.161500E+02	-2.053300E-02
1.147500E+02	-1.708199E-02	1.155500E+02	-1.708199E-02	1.163500E+02	-1.708199E-02
1.149500E+02	-1.143900E-02	1.157500E+02	-1.143900E-02	1.165500E+02	-1.143900E-02
1.151500E+02	-5.607996E-03	1.159500E+02	-5.607996E-03	1.167500E+02	-5.607996E-03
1.153500E+02	6.2989997E-04	1.161500E+02	6.2989997E-04	1.169500E+02	6.2989997E-04
1.155500E+02	5.2529995E-03	1.163500E+02	5.2529995E-03	1.171500E+02	5.2529995E-03
1.157500E+02	1.341699E-02	1.165500E+02	1.341699E-02	1.173500E+02	1.341699E-02
1.159500E+02	1.966299E-02	1.167500E+02	1.966299E-02	1.175500E+02	1.966299E-02
1.161500E+02	1.651299E-02	1.169500E+02	1.651299E-02	1.177500E+02	1.651299E-02
1.163500E+02	8.1969995E-03	1.171500E+02	8.1969995E-03	1.179500E+02	8.1969995E-03
1.165500E+02	-5.576998E-03	1.173500E+02	-5.576998E-03	1.181500E+02	-5.576998E-03
1.167500E+02	-1.310799E-02	1.175500E+02	-1.310799E-02	1.183500E+02	-1.310799E-02
1.169500E+02	-7.102996E-04	1.177500E+02	-7.102996E-04	1.185500E+02	-7.102996E-04
1.171500E+02	8.339996E-04	1.179500E+02	8.339996E-04	1.187500E+02	8.339996E-04
1.173500E+02	6.649993E-03	1.181500E+02	6.649993E-03	1.189500E+02	6.649993E-03
1.175500E+02	1.090999E-02	1.183500E+02	1.090999E-02	1.191500E+02	1.090999E-02
1.177500E+02	1.394900E-02	1.185500E+02	1.394900E-02	1.193500E+02	1.394900E-02
1.179500E+02	1.064399E-02	1.187500E+02	1.064399E-02	1.195500E+02	1.064399E-02
1.181500E+02	2.575000E-03	1.189500E+02	2.575000E-03	1.197500E+02	2.575000E-03
1.183500E+02	-3.062000E-03	1.191500E+02	-3.062000E-03	1.199500E+02	-3.062000E-03
1.185500E+02	-2.715000E-03	1.193500E+02	-2.715000E-03	1.201500E+02	-2.715000E-03
1.187500E+02	-1.898000E-03	1.195500E+02	-1.898000E-03	1.203500E+02	-1.898000E-03
1.189500E+02	-3.064000E-03	1.197500E+02	-3.064000E-03	1.205500E+02	-3.064000E-03
1.191500E+02	-2.377000E-03	1.199500E+02	-2.377000E-03	1.207500E+02	-2.377000E-03
1.193500E+02	1.945000E+01	1.201500E+02	1.945000E+01	1.209500E+02	1.945000E+01
1.195500E+02	9.319996E-04	1.203500E+02	9.319996E-04	1.211500E+02	9.319996E-04
1.197500E+02	-6.434996E-03	1.205500E+02	-6.434996E-03	1.213500E+02	-6.434996E-03
1.199500E+02	-1.221000E-02	1.207500E+02	-1.221000E-02	1.215500E+02	-1.221000E-02
1.201500E+02	-9.459993E-03	1.209500E+02	-9.459993E-03	1.217500E+02	-9.459993E-03
1.203500E+02	1.194000E-03	1.211500E+02	1.194000E-03	1.219500E+02	1.194000E-03
1.205500E+02	1.205500E+01	1.213500E+02	1.205500E+01	1.221500E+02	1.205500E+01
1.207500E+02	9.320993E-03	1.215500E+02	9.320993E-03	1.223500E+02	9.320993E-03
1.209500E+02	1.326000E-02	1.217500E+02	1.326000E-02	1.225500E+02	1.326000E-02
1.211500E+02	1.526000E+01	1.219500E+02	1.526000E+01	1.227500E+02	1.526000E+01
1.213500E+02	8.634999E-03	1.221500E+02	8.634999E-03	1.229500E+02	8.634999E-03
1.215500E+02	5.449997E-04	1.223500E+02	5.449997E-04	1.231500E+02	5.449997E-04
1.217500E+02	-1.434000E-03	1.225500E+02	-1.434000E-03	1.233500E+02	-1.434000E-03
1.219500E+02	1.565000E-03	1.227500E+02	1.565000E-03	1.235500E+02	1.565000E-03
1.221500E+02	6.490994E-03	1.229500E+02	6.490994E-03	1.237500E+02	6.490994E-03
1.223500E+02	7.404993E-03	1.231500E+02	7.404993E-03	1.239500E+02	7.404993E-03

TIME	VALUE	TIME	VALUE	TIME
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2.342000E+01	2.619999E-04	2.343000E+01	2.229999E-05	2.342999E+01	2.109999E-04	2.343500E+01	-5.639999E-04
2.343999E+01	-7.919999E-04	2.344999E+01	-1.041000E-03	2.345000E+01	-1.170000E-03	2.345499E+01	-1.340000E-03
2.345999E+01	-1.429000E-03	2.346500E+01	-1.504000E-03	2.346999E+01	-1.558000E-03	2.347499E+01	-1.586000E-03
2.348000E+01	-1.523000E-03	2.348999E+01	-1.488000E-03	2.348999E+01	-1.541000E-03	2.349500E+01	-1.506000E-03
2.350000E+01	-1.457000E-03	2.350499E+01	-1.451000E-03	2.350999E+01	-1.565000E-03	2.351500E+01	-1.616000E-03
2.351999E+01	-1.600000E-03	2.352499E+01	-1.646000E-03	2.353000E+01	-1.729000E-03	2.353499E+01	-1.755000E-03
2.353999E+01	-1.721000E-03	2.354500E+01	-1.704000E-03	2.354999E+01	-1.600000E-03	2.355499E+01	-1.492000E-03
2.356000E+01	-1.304000E-03	2.356499E+01	-1.087000E-03	2.356999E+01	-8.679999E-04	2.357500E+01	-6.189999E-04
2.357999E+01	-3.679999E-04	2.358499E+01	-1.210000E-04	2.359000E+01	8.899999E-05	2.359499E+01	3.109999E-04
2.359999E+01	4.299999E-04	2.360500E+01	5.619999E-04	2.360999E+01	6.539999E-04	2.361499E+01	7.059999E-04
2.362000E+01	7.109999E-04	2.362500E+01	7.229999E-04	2.362999E+01	6.829999E-04	2.363499E+01	6.399999E-04
2.364000E+01	5.609999E-04	2.364499E+01	4.619999E-04	2.364999E+01	4.209999E-04	2.365500E+01	3.379999E-04
2.365999E+01	3.129999E-04	2.366499E+01	2.859999E-04	2.367000E+01	3.539999E-04	2.367499E+01	4.069999E-04
2.367999E+01	5.419999E-04	2.368500E+01	6.989999E-04	2.368999E+01	9.049999E-04	2.369499E+01	1.150000E-03
2.370000E+01	1.401000E-03	2.370499E+01	1.684000E-03	2.370999E+01	1.964000E-03	2.371500E+01	2.257000E-03
2.371999E+01	2.408000E-03	2.372499E+01	2.615000E-03	2.373000E+01	2.828000E-03	2.373499E+01	2.967000E-03

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
2.373999E+01	2.999000E-03	2.374500E+01	3.079000E-03	2.375000E+01	3.144000E-03	2.375499E+01	3.164000E-03
2.375999E+01	3.180000E-03	2.376500E+01	3.186000E-03	2.376999E+01	3.184000E-03	2.377499E+01	3.193000E-03
2.378000E+01	3.179000E-03	2.378499E+01	3.158000E-03	2.378999E+01	3.137000E-03	2.379500E+01	3.106000E-03
2.379999E+01	3.057000E-03	2.380499E+01	3.020000E-03	2.381000E+01	2.960000E-03	2.381499E+01	2.902000E-03
2.381999E+01	2.918000E-03	2.382500E+01	2.743000E-03	2.382999E+01	2.610000E-03	2.383499E+01	2.497000E-03
2.384000E+01	2.593000E-03	2.384499E+01	2.580000E-03	2.384999E+01	2.386000E-03	2.385500E+01	2.357000E-03
2.385999E+01	2.446000E-03	2.386499E+01	2.374000E-03	2.387000E+01	2.168000E-03	2.387500E+01	2.042000E-03
2.387999E+01	1.922000E-03	2.388499E+01	1.720000E-03	2.389000E+01	1.382000E-03	2.389499E+01	1.044000E-03
2.389999E+01	8.789999E-04	2.390500E+01	6.379999E-04	2.390999E+01	4.319999E-04	2.391499E+01	2.720000E-04
2.392000E+01	2.589999E-05	2.392499E+01	3.399999E-05	2.392999E+01	1.200000E-05	2.393500E+01	-8.199999E-05
2.393999E+01	-1.480000E-04	2.394499E+01	-1.520000E-04	2.395000E+01	-1.300000E-04	2.395499E+01	-1.550000E-04
2.395999E+01	-2.140000E-04	2.396500E+01	-3.030000E-04	2.396999E+01	-3.769999E-04	2.397499E+01	-4.639999E-04
2.398000E+01	-5.529999E-04	2.398499E+01	-6.529999E-04	2.398999E+01	-7.419999E-04	2.399500E+01	-8.149999E-04

MAXIMUM 7.999999E-02 TIME 1.700000E+00 MINIMUM -4.165699E-02 TIME 1.924999E+00  
 END OF TRANSIENT OUTPUT  
 FINISH NO MESSAGES

STRUDL SURCHARGE REPORT

JOB ID: HNP-STH TITLE: HATCH UNIT #1 DBE SYN. TIME HISTORY DD1 FILES DATE: 2/06/87

TASKS DESCRIPTIVE NOTES FEE UNITS

HATCH UNIT #2 DBE SYNTHETIC TIME HISTORY

"2DBESTH.DATA"























TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.100000E+01	1.270000E+03	1.101000E+01	6.077994E+05	1.102000E+01	1.015399E+02	1.103000E+01	1.016200E+02
1.104000E+01	1.211000E+02	1.105000E+01	3.196399E+03	1.106000E+01	6.477997E+03	1.107000E+01	1.358999E+02
1.108000E+01	2.279000E+02	1.109000E+01	2.102000E+02	1.110000E+01	7.987999E+03	1.111000E+01	-1.248000E+03
1.112000E+01	1.763000E+02	1.113000E+01	1.993899E+02	1.114000E+01	1.763500E+02	1.115000E+01	-0.786999E+03
1.116000E+01	2.328000E+03	1.117000E+01	3.661000E+03	1.118000E+01	1.119000E+01	1.119000E+01	1.803700E+02
1.120000E+01	2.653000E+02	1.121000E+01	5.117000E+02	1.122000E+01	3.292700E+02	1.123000E+01	2.935699E+02
1.124000E+01	5.592000E+02	1.125000E+01	3.679000E+02	1.126000E+01	4.017999E+02	1.127000E+01	3.194999E+02
1.129000E+01	2.662000E+02	1.130000E+01	2.240000E+02	1.131000E+01	2.156900E+03	1.132000E+01	1.823200E+02
1.135000E+01	3.737999E+03	1.136000E+01	2.310000E+04	1.137000E+01	6.527999E+03	1.138000E+01	-1.451799E+02
1.140000E+01	2.364000E+02	1.141000E+01	5.194700E+02	1.142000E+01	-3.296500E+02	1.143000E+01	-3.574200E+02
1.144000E+01	-3.271399E+02	1.145000E+01	3.793600E+02	1.146000E+01	4.284160E+02	1.147000E+01	-4.185100E+02
1.148000E+01	5.384300E+02	1.149000E+01	3.653000E+02	1.150000E+01	-5.528399E+02	1.151000E+01	-3.103900E+02
1.154000E+01	-2.462000E+02	1.155000E+01	1.795299E+02	1.156000E+01	-1.109600E+02	1.157000E+01	-5.431999E+03
1.158000E+01	6.989999E+04	1.159000E+01	2.036999E+03	1.160000E+01	1.525399E+02	1.161000E+01	1.702100E+02
1.162000E+01	3.567000E+02	1.163000E+01	2.240000E+02	1.164000E+01	1.158000E+01	1.165000E+01	2.886099E+02
1.166000E+01	5.421000E+02	1.167000E+01	2.160000E+01	1.168000E+01	1.620000E+01	1.169000E+01	2.996600E+02
1.170000E+01	1.993000E+02	1.171000E+01	1.679000E+01	1.172000E+01	3.580000E+02	1.173000E+01	-7.668999E+03
1.174000E+01	5.562000E+03	1.175000E+01	1.467799E+02	1.176000E+01	11.590000E+03	1.177000E+01	3.576000E+03
1.178000E+01	2.378000E+02	1.179000E+01	4.773997E+03	1.180000E+01	1.170000E+01	1.181000E+01	1.680399E+02
1.184000E+01	2.270000E+02	1.185000E+01	3.723999E+02	1.186000E+01	1.178000E+01	1.187000E+01	2.546400E+02
1.188000E+01	2.270000E+02	1.189000E+01	1.921000E+02	1.190000E+01	1.182000E+01	1.191000E+01	4.069999E+04
1.194000E+01	-6.119999E+03	1.195000E+01	2.909999E+03	1.196000E+01	-5.815999E+03	1.197000E+01	-3.758000E+03
1.198000E+01	-4.599999E+03	1.199000E+01	4.309999E+03	1.190000E+01	1.190000E+01	1.191000E+01	-7.717999E+03
1.192000E+01	-7.599999E+03	1.193000E+01	2.309999E+03	1.194000E+01	4.689997E+02	1.195000E+01	8.433999E+02
1.196000E+01	2.131000E+03	1.197000E+01	2.104000E+01	1.198000E+01	-1.299600E+02	1.199000E+01	-2.067100E+02
1.200000E+01	-2.667000E+02	1.201000E+01	-2.129000E+02	1.202000E+01	-2.592000E+02	1.203000E+01	-2.107500E+02
1.204000E+01	-5.837999E+03	1.205000E+01	4.139999E+03	1.206000E+01	1.536599E+02	1.207000E+01	2.249600E+02
1.208000E+01	5.074500E+02	1.209000E+01	5.136300E+02	1.210000E+01	2.560100E+02	1.211000E+01	2.105400E+02
1.212000E+01	6.469999E+03	1.213000E+01	3.894000E+03	1.214000E+01	-2.466000E+02	1.215000E+01	3.130000E+02
1.216000E+01	2.297000E+03	1.217000E+01	5.224999E+03	1.218000E+01	3.663999E+03	1.219000E+01	1.892199E+02
1.220000E+01	1.600300E+02	1.221000E+01	1.499999E+01	1.222000E+01	1.142099E+02	1.223000E+01	4.054999E+02
1.224000E+01	-4.109999E+04	1.225000E+01	3.300000E+03	1.226000E+01	-1.710000E+03	1.227000E+01	-2.460700E+02
1.228000E+01	-3.029999E+02	1.229000E+01	3.029999E+02	1.230000E+01	-1.725100E+02	1.231000E+01	-7.739999E+03
1.232000E+01	-2.435000E+03	1.233000E+01	11.69999E+04	1.234000E+01	-3.927000E+03	1.235000E+01	-3.418000E+03
1.236000E+01	-1.082000E+03	1.237000E+01	1.638000E+03	1.238000E+01	4.968999E+03	1.239000E+01	-1.055500E+02
1.240000E+01	7.967999E+03	1.241000E+01	1.025300E+02	1.242000E+01	1.758999E+02	1.243000E+01	-2.361199E+02
1.244000E+01	1.699700E+02	1.245000E+01	5.679999E+03	1.246000E+01	-1.117299E+02	1.247000E+01	-1.439500E+02
1.248000E+01	-3.604199E+02	1.249000E+01	-3.480500E+02	1.250000E+01	-3.683399E+02	1.251000E+01	-2.186999E+02
1.252000E+01	-1.116399E+02	1.253000E+01	2.321000E+03	1.254000E+01	1.390500E+02	1.255000E+01	1.558600E+02
1.256000E+01	2.012299E+02	1.257000E+01	3.162500E+02	1.258000E+01	2.207699E+02	1.259000E+01	3.261299E+02
1.260000E+01	3.136300E+02	1.261000E+01	3.159999E+02	1.262000E+01	3.202799E+02	1.263000E+01	2.171800E+02
1.264000E+01	2.689999E+02	1.265000E+01	2.710300E+02	1.266000E+01	1.937600E+02	1.267000E+01	2.454999E+02
1.268000E+01	2.640000E+02	1.269000E+01	3.495300E+02	1.270000E+01	4.430199E+02	1.271000E+01	5.326100E+02
1.272000E+01	5.614099E+02	1.273000E+01	4.433000E+02	1.274000E+01	3.788000E+02	1.275000E+01	2.925800E+02
1.276000E+01	1.701599E+02	1.277000E+01	6.976999E+03	1.278000E+01	3.169999E+04	1.279000E+01	-5.325999E+03
1.280000E+01	-6.715999E+03	1.281000E+01	6.951999E+03	1.282000E+01	-7.306999E+03	1.283000E+01	-9.228999E+03
1.284000E+01	-1.074699E+02	1.285000E+01	3.017999E+03	1.286000E+01	-6.721999E+03	1.287000E+01	-4.973999E+02
1.288000E+01	-8.489999E+03	1.289000E+01	1.116100E+02	1.290000E+01	1.161100E+02	1.291000E+01	-1.069800E+02



1.280000E+01	6.115229E-03	1.280000E+01	1.2251229E-03	1.280000E+01	1.161100E-02	1.280000E+01	1.2251229E-03
1.284000E+01	1.036279E-03	1.284000E+01	1.1012994E-03	1.284000E+01	4.721229E-03	1.284000E+01	-4.973294E-03
1.288000E+01	-1.348279E-03	1.288000E+01	1.116100E-02	1.288000E+01	1.161100E-02	1.288000E+01	-1.068300E-02

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.292000E+01	-1.551300E-02	1.292000E+01	2.522000E-02	1.294000E+01	4.304500E-02	1.295000E+01	-5.399799E-02
1.296000E+01	-5.983000E-02	1.296000E+01	-5.675579E-02	1.298000E+01	-5.004079E-02	1.298000E+01	-4.206400E-02
1.300000E+01	-3.298200E-02	1.300000E+01	-2.240200E-02	1.302000E+01	1.100300E-02	1.303000E+01	-6.722994E-03
1.304000E+01	1.489079E-02	1.305000E+01	2.515600E-02	1.306000E+01	3.759199E-02	1.307000E+01	3.391399E-02
1.308000E+01	2.525500E-02	1.309000E+01	2.007200E-02	1.310000E+01	1.384399E-02	1.311000E+01	1.318099E-02
1.312000E+01	1.166200E-02	1.313000E+01	11.438279E-03	1.314000E+01	4.036999E-03	1.315000E+01	-6.759996E-04
1.316000E+01	-4.506279E-03	1.317000E+01	-11.923993E-03	1.318000E+01	-1.103499E-02	1.319000E+01	-1.217999E-02
1.320000E+01	-2.421200E-02	1.321000E+01	2.156399E-02	1.322000E+01	-3.646300E-02	1.323000E+01	-2.683999E-02
1.324000E+01	-2.017400E-02	1.325000E+01	-2.420600E-02	1.326000E+01	-1.788399E-02	1.327000E+01	-1.242699E-02
1.328000E+01	-1.635300E-02	1.329000E+01	-1.286899E-02	1.330000E+01	-1.307600E-02	1.331000E+01	-2.404400E-02
1.332000E+01	-2.158599E-02	1.333000E+01	-1.043499E-02	1.334000E+01	-1.103100E-02	1.335000E+01	-1.385700E-02
1.336000E+01	-1.277400E-02	1.337000E+01	-9.546999E-03	1.338000E+01	-8.501999E-03	1.339000E+01	-9.009999E-03
1.340000E+01	-9.176299E-03	1.341000E+01	-1.547299E-02	1.342000E+01	-1.621100E-02	1.343000E+01	-2.593499E-02
1.344000E+01	2.033000E-02	1.345000E+01	-2.691999E-02	1.346000E+01	-2.227100E-02	1.347000E+01	-1.597399E-02
1.348000E+01	11.022999E-03	1.349000E+01	6.349999E-04	1.350000E+01	5.490999E-03	1.351000E+01	1.351999E-02
1.352000E+01	2.423299E-02	1.353000E+01	3.195900E-02	1.354000E+01	3.047399E-02	1.355000E+01	5.002400E-02
1.356000E+01	4.661299E-02	1.357000E+01	4.504900E-02	1.358000E+01	4.099499E-02	1.359000E+01	2.777100E-02
1.360000E+01	1.521700E-02	1.361000E+01	1.646199E-02	1.362000E+01	1.075800E-02	1.363000E+01	2.070300E-02
1.364000E+01	2.564299E-02	1.365000E+01	2.012300E-02	1.366000E+01	2.523999E-02	1.367000E+01	1.367000E-02
1.368000E+01	1.473999E-02	1.369000E+01	1.027399E-02	1.370000E+01	3.349000E-03	1.371000E+01	1.022600E-02
1.372000E+01	1.346799E-02	1.373000E+01	1.571000E-02	1.374000E+01	6.041999E-03	1.375000E+01	2.763000E-03
1.376000E+01	4.926299E-03	1.377000E+01	5.103999E-03	1.378000E+01	0.622999E-03	1.379000E+01	8.445999E-03
1.380000E+01	6.641999E-03	1.381000E+01	4.448999E-03	1.382000E+01	3.279000E-03	1.383000E+01	9.539999E-04
1.384000E+01	-4.080000E-03	1.385000E+01	6.040999E-03	1.386000E+01	-9.443999E-03	1.387000E+01	-1.480499E-02
1.388000E+01	-2.510299E-02	1.389000E+01	-5.089699E-02	1.390000E+01	-3.664700E-02	1.391000E+01	-3.882499E-02
1.392000E+01	-4.397500E-02	1.393000E+01	-4.514299E-02	1.394000E+01	-4.637799E-02	1.395000E+01	-4.147900E-02
1.396000E+01	-3.633200E-02	1.397000E+01	5.028999E-02	1.398000E+01	-2.536500E-02	1.399000E+01	-2.319000E-02
1.400000E+01	-8.540299E-03	1.401000E+01	1.286000E-03	1.402000E+01	3.523000E-03	1.403000E+01	2.534699E-02
1.404000E+01	2.311200E-02	1.405000E+01	2.503300E-02	1.406000E+01	2.507700E-02	1.407000E+01	9.531999E-03
1.408000E+01	1.761000E-03	1.409000E+01	4.002999E-03	1.410000E+01	-8.485999E-03	1.411000E+01	-1.119300E-02
1.412000E+01	-1.514699E-02	1.413000E+01	-1.721299E-02	1.414000E+01	-1.414000E-02	1.415000E+01	-2.366599E-02
1.416000E+01	-2.957600E-02	1.417000E+01	-3.027999E-02	1.418000E+01	-2.905700E-02	1.419000E+01	-2.919599E-02
1.420000E+01	-2.474999E-02	1.421000E+01	2.002799E-02	1.422000E+01	-1.601899E-02	1.423000E+01	-9.374999E-03
1.424000E+01	2.436000E-03	1.425000E+01	2.500000E-03	1.426000E+01	6.404996E-03	1.427000E+01	8.094996E-03
1.428000E+01	2.410899E-02	1.429000E+01	2.010299E-02	1.430000E+01	3.476400E-02	1.431000E+01	4.31000E-02
1.432000E+01	3.292000E-02	1.433000E+01	2.036899E-02	1.434000E+01	2.319399E-02	1.435000E+01	3.252800E-02
1.436000E+01	1.677600E-02	1.437000E+01	1.570099E-02	1.438000E+01	9.301994E-03	1.439000E+01	2.030599E-02
1.440000E+01	6.462999E-03	1.441000E+01	2.153000E-03	1.442000E+01	5.697999E-03	1.443000E+01	8.581996E-03
1.444000E+01	-1.071499E-02	1.445000E+01	1.922900E-02	1.446000E+01	-1.202200E-02	1.447000E+01	-9.562999E-03
1.448000E+01	2.114000E-03	1.449000E+01	4.438996E-03	1.450000E+01	-1.022000E-02	1.451000E+01	-2.521000E-02
1.452000E+01	1.095000E-02	1.453000E+01	1.411200E-02	1.454000E+01	1.898000E-03	1.455000E+01	5.728994E-03
1.456000E+01	3.375000E-03	1.457000E+01	1.031000E-03	1.458000E+01	1.252100E-02	1.459000E+01	1.090299E-02
1.460000E+01	2.104000E-03	1.461000E+01	2.213000E-03	1.462000E+01	-5.379999E-04	1.463000E+01	7.959999E-04
1.464000E+01	1.090899E-02	1.465000E+01	1.571900E-02	1.466000E+01	1.220000E-03	1.467000E+01	9.769998E-04
1.468000E+01	0.214999E-03	1.469000E+01	7.192999E-03	1.470000E+01	1.727400E-02	1.471000E+01	1.006900E-02
1.472000E+01	7.546299E-03	1.473000E+01	11.004996E-03	1.474000E+01	7.773994E-03	1.475000E+01	1.471000E+01
1.476000E+01	1.428999E-02	1.477000E+01	1.413800E-02	1.478000E+01	0.683994E-03	1.479000E+01	1.255199E-02
1.480000E+01	1.193799E-02	1.481000E+01	9.009999E-03	1.482000E+01	1.351999E-02	1.479000E+01	1.391499E-02
				1.483000E+01	2.299999E-03	1.483000E+01	2.837000E-03

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.484000E+01	5.278999E-03	1.485000E+01	5.459999E-03	1.486000E+01	0.480996E-03	1.487000E+01	6.909999E-03
1.488000E+01	7.561999E-03	1.489000E+01	5.678999E-03	1.490000E+01	3.235000E-03	1.491000E+01	3.226000E-03
1.492000E+01	1.226000E-03	1.493000E+01	2.137000E-03	1.494000E+01	4.092999E-03	1.495000E+01	2.435000E-03
1.496000E+01	1.138000E-03	1.497000E+01	1.138000E-03	1.498000E+01	1.138000E-03	1.499000E+01	1.138000E-03

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.400000E+01	5.210000E-05	1.400000E+01	5.400000E-03	1.400000E+01	1.450000E+01	1.450000E+01	5.720000E-03
1.405000E+01	1.400000E-05	1.405000E+01	5.400000E-03	1.405000E+01	1.450000E+01	1.450000E+01	1.090000E-02
1.410000E+01	5.300000E-05	1.410000E+01	5.400000E-03	1.410000E+01	1.450000E+01	1.450000E+01	7.950000E-04
1.415000E+01	2.100000E-05	1.415000E+01	5.400000E-03	1.415000E+01	1.460000E+01	1.460000E+01	9.760000E-04
1.420000E+01	1.400000E-05	1.420000E+01	5.400000E-03	1.420000E+01	1.460000E+01	1.460000E+01	1.006000E-02
1.425000E+01	1.100000E-05	1.425000E+01	5.400000E-03	1.425000E+01	1.470000E+01	1.470000E+01	1.156000E-02
1.430000E+01	1.100000E-05	1.430000E+01	5.400000E-03	1.430000E+01	1.470000E+01	1.470000E+01	1.255000E-02
1.435000E+01	1.100000E-05	1.435000E+01	5.400000E-03	1.435000E+01	1.470000E+01	1.470000E+01	1.391000E-02
1.440000E+01	1.100000E-05	1.440000E+01	5.400000E-03	1.440000E+01	1.480000E+01	1.480000E+01	2.037000E-03
1.445000E+01	5.200000E-05	1.445000E+01	5.400000E-03	1.445000E+01	1.480000E+01	1.480000E+01	6.900000E-03
1.450000E+01	7.600000E-05	1.450000E+01	5.400000E-03	1.450000E+01	1.490000E+01	1.490000E+01	3.226000E-03
1.455000E+01	1.600000E-05	1.455000E+01	5.400000E-03	1.455000E+01	1.490000E+01	1.490000E+01	-2.435000E-03
1.460000E+01	1.600000E-05	1.460000E+01	5.400000E-03	1.460000E+01	1.490000E+01	1.490000E+01	-1.995000E-03
1.465000E+01	1.100000E-05	1.465000E+01	5.400000E-03	1.465000E+01	1.500000E+01	1.500000E+01	-9.997000E-03
1.470000E+01	1.100000E-05	1.470000E+01	5.400000E-03	1.470000E+01	1.500000E+01	1.500000E+01	-2.101000E-02
1.475000E+01	2.400000E-05	1.475000E+01	5.400000E-03	1.475000E+01	1.510000E+01	1.510000E+01	-2.146000E-02
1.480000E+01	2.400000E-05	1.480000E+01	5.400000E-03	1.480000E+01	1.510000E+01	1.510000E+01	-2.014000E-02
1.485000E+01	1.100000E-05	1.485000E+01	5.400000E-03	1.485000E+01	1.510000E+01	1.510000E+01	-3.231000E-03
1.490000E+01	1.100000E-05	1.490000E+01	5.400000E-03	1.490000E+01	1.520000E+01	1.520000E+01	0.179000E-03
1.495000E+01	9.200000E-05	1.495000E+01	5.400000E-03	1.495000E+01	1.520000E+01	1.520000E+01	8.959000E-03
1.500000E+01	9.200000E-05	1.500000E+01	5.400000E-03	1.500000E+01	1.530000E+01	1.530000E+01	9.316000E-03
1.505000E+01	5.200000E-05	1.505000E+01	5.400000E-03	1.505000E+01	1.530000E+01	1.530000E+01	5.144000E-03
1.510000E+01	5.200000E-05	1.510000E+01	5.400000E-03	1.510000E+01	1.540000E+01	1.540000E+01	7.1865000E-03
1.515000E+01	9.200000E-05	1.515000E+01	5.400000E-03	1.515000E+01	1.540000E+01	1.540000E+01	4.503000E-03
1.520000E+01	5.200000E-05	1.520000E+01	5.400000E-03	1.520000E+01	1.550000E+01	1.550000E+01	3.911000E-03
1.525000E+01	5.200000E-05	1.525000E+01	5.400000E-03	1.525000E+01	1.550000E+01	1.550000E+01	1.904000E-03
1.530000E+01	9.200000E-05	1.530000E+01	5.400000E-03	1.530000E+01	1.550000E+01	1.550000E+01	-8.476000E-03
1.535000E+01	1.100000E-05	1.535000E+01	5.400000E-03	1.535000E+01	1.560000E+01	1.560000E+01	-2.123000E-02
1.540000E+01	1.100000E-05	1.540000E+01	5.400000E-03	1.540000E+01	1.560000E+01	1.560000E+01	-1.465000E-02
1.545000E+01	2.400000E-05	1.545000E+01	5.400000E-03	1.545000E+01	1.570000E+01	1.570000E+01	-9.367000E-03
1.550000E+01	2.400000E-05	1.550000E+01	5.400000E-03	1.550000E+01	1.570000E+01	1.570000E+01	9.049000E-04
1.555000E+01	1.100000E-05	1.555000E+01	5.400000E-03	1.555000E+01	1.570000E+01	1.570000E+01	-2.258000E-03
1.560000E+01	1.100000E-05	1.560000E+01	5.400000E-03	1.560000E+01	1.570000E+01	1.570000E+01	-8.307000E-03
1.565000E+01	1.100000E-05	1.565000E+01	5.400000E-03	1.565000E+01	1.580000E+01	1.580000E+01	-3.839000E-03
1.570000E+01	1.100000E-05	1.570000E+01	5.400000E-03	1.570000E+01	1.580000E+01	1.580000E+01	2.297000E-03
1.575000E+01	9.200000E-05	1.575000E+01	5.400000E-03	1.575000E+01	1.590000E+01	1.590000E+01	3.923000E-03
1.580000E+01	9.200000E-05	1.580000E+01	5.400000E-03	1.580000E+01	1.590000E+01	1.590000E+01	1.291000E-02
1.585000E+01	5.200000E-05	1.585000E+01	5.400000E-03	1.585000E+01	1.590000E+01	1.590000E+01	5.980000E-03
1.590000E+01	5.200000E-05	1.590000E+01	5.400000E-03	1.590000E+01	1.600000E+01	1.600000E+01	5.022000E-03
1.595000E+01	1.100000E-05	1.595000E+01	5.400000E-03	1.595000E+01	1.600000E+01	1.600000E+01	8.629000E-03
1.600000E+01	1.100000E-05	1.600000E+01	5.400000E-03	1.600000E+01	1.610000E+01	1.610000E+01	1.080000E-02
1.605000E+01	9.200000E-05	1.605000E+01	5.400000E-03	1.605000E+01	1.610000E+01	1.610000E+01	1.279000E-02
1.610000E+01	9.200000E-05	1.610000E+01	5.400000E-03	1.610000E+01	1.610000E+01	1.610000E+01	1.064000E-02
1.615000E+01	1.100000E-05	1.615000E+01	5.400000E-03	1.615000E+01	1.620000E+01	1.620000E+01	7.206000E-03
1.620000E+01	1.100000E-05	1.620000E+01	5.400000E-03	1.620000E+01	1.620000E+01	1.620000E+01	-8.273000E-03
1.625000E+01	9.200000E-05	1.625000E+01	5.400000E-03	1.625000E+01	1.630000E+01	1.630000E+01	-1.376000E-02
1.630000E+01	9.200000E-05	1.630000E+01	5.400000E-03	1.630000E+01	1.630000E+01	1.630000E+01	-2.661000E-03
1.635000E+01	1.100000E-05	1.635000E+01	5.400000E-03	1.635000E+01	1.630000E+01	1.630000E+01	5.032000E-03
1.640000E+01	1.100000E-05	1.640000E+01	5.400000E-03	1.640000E+01	1.640000E+01	1.640000E+01	-2.306000E-03
1.645000E+01	9.200000E-05	1.645000E+01	5.400000E-03	1.645000E+01	1.640000E+01	1.640000E+01	-1.568000E-03
1.650000E+01	9.200000E-05	1.650000E+01	5.400000E-03	1.650000E+01	1.650000E+01	1.650000E+01	2.086000E-04
1.655000E+01	1.100000E-05	1.655000E+01	5.400000E-03	1.655000E+01	1.650000E+01	1.650000E+01	-2.430000E-04
1.660000E+01	1.100000E-05	1.660000E+01	5.400000E-03	1.660000E+01	1.660000E+01	1.660000E+01	-1.147000E-03
1.665000E+01	9.200000E-05	1.665000E+01	5.400000E-03	1.665000E+01	1.660000E+01	1.660000E+01	-1.080000E-04
1.670000E+01	9.200000E-05	1.670000E+01	5.400000E-03	1.670000E+01	1.670000E+01	1.670000E+01	-1.206000E-03
1.675000E+01	1.100000E-05	1.675000E+01	5.400000E-03	1.675000E+01	1.670000E+01	1.670000E+01	-7.222000E-04



TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.65999E+01	4.03399E+01	1.66000E+01	2.53000E+03	1.66000E+01	9.41999E+04	1.66000E+01	-2.40000E-03
1.66000E+01	4.23999E+01	1.66000E+01	5.50000E+03	1.66000E+01	1.43000E+03	1.66000E+01	-1.50000E-03
1.66000E+01	1.92000E+03	1.66000E+01	1.20000E+03	1.66000E+01	1.39000E+04	1.66000E+01	1.50999E-04
1.66000E+01	1.65000E+03	1.66000E+01	2.99999E+03	1.66000E+01	2.68000E-03	1.66000E+01	2.686000E-03
1.66000E+01	3.20000E+03	1.66000E+01	3.50000E+03	1.66000E+01	2.64000E-03	1.66000E+01	-2.43000E-04
1.66000E+01	2.70000E+03	1.66000E+01	7.50000E+04	1.66000E+01	-7.71999E-04	1.66000E+01	-1.147000E-03
1.66000E+01	-1.13000E+03	1.66000E+01	-1.06000E+03	1.66000E+01	-3.00000E-04	1.66000E+01	-1.08000E-04
1.66000E+01	2.00000E+04	1.66000E+01	-5.40000E-04	1.66000E+01	-5.20000E-04	1.66000E+01	-1.20000E-03
1.66000E+01	2.20000E+03	1.66000E+01	2.15700E+03	1.66000E+01	1.53000E-03	1.66000E+01	-7.22000E-04

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.67000E+01	5.60000E+03	1.67000E+01	2.53000E+03	1.67000E+01	5.94299E-03	1.67000E+01	7.01199E-03
1.67000E+01	1.03500E+02	1.67000E+01	9.70799E+03	1.67000E+01	9.73799E-03	1.67000E+01	7.77899E-03
1.67000E+01	6.50199E+03	1.67000E+01	5.01699E+03	1.67000E+01	3.27700E-03	1.67000E+01	2.15700E-03
1.67000E+01	2.00000E+04	1.67000E+01	5.70999E+03	1.67000E+01	-1.21000E-03	1.67000E+01	-1.79000E-03
1.67000E+01	-1.70000E+03	1.67000E+01	1.61400E+03	1.67000E+01	-1.72000E-03	1.67000E+01	-7.59999E-04
1.67000E+01	-1.50000E+04	1.67000E+01	4.55999E+04	1.67000E+01	0.83000E-04	1.67000E+01	1.07600E-03
1.67000E+01	7.00000E+01	1.67000E+01	3.53999E+04	1.67000E+01	-1.99300E-03	1.67000E+01	-2.60400E-03
1.67000E+01	-5.40000E+03	1.67000E+01	2.79200E+03	1.67000E+01	-1.62900E-03	1.67000E+01	-1.07300E-03
1.67000E+01	1.70000E+01	1.67000E+01	9.34000E+03	1.67000E+01	-3.56500E-03	1.67000E+01	-5.31799E-03
1.67000E+01	-7.25199E+03	1.67000E+01	9.34000E+03	1.67000E+01	1.16800E-02	1.67000E+01	-1.32949E-02
1.67000E+01	-1.60000E+02	1.67000E+01	-1.61500E+02	1.67000E+01	-1.67579E-02	1.67000E+01	-1.528700E-02
1.67000E+01	-1.30000E+02	1.67000E+01	1.22500E+02	1.67000E+01	-1.17149E-02	1.67000E+01	-1.20630E-02
1.67000E+01	-1.00000E+02	1.67000E+01	9.95199E+03	1.67000E+01	-8.43099E-03	1.67000E+01	-7.09499E-03
1.67000E+01	-6.00000E+03	1.67000E+01	5.22499E+03	1.67000E+01	4.42699E-03	1.67000E+01	-3.85100E-03
1.67000E+01	-3.53000E+03	1.67000E+01	5.15000E+03	1.67000E+01	-3.21400E-03	1.67000E+01	-3.38600E-03
1.67000E+01	-3.53000E+03	1.67000E+01	3.40000E+03	1.67000E+01	-2.79300E-03	1.67000E+01	-3.17600E-03
1.67000E+01	-2.50000E+03	1.67000E+01	4.16000E+03	1.67000E+01	1.74200E+01	1.74200E+01	1.90600E-03
1.67000E+01	3.40000E+03	1.67000E+01	4.16000E+03	1.67000E+01	4.62799E+01	1.74600E+01	5.20399E-03
1.67000E+01	5.30000E+03	1.67000E+01	6.20000E+03	1.67000E+01	6.64299E+01	1.75000E+01	6.82099E-03
1.67000E+01	7.60000E+03	1.67000E+01	7.00000E+03	1.67000E+01	7.88799E+01	1.75400E+01	7.32999E-03
1.67000E+01	6.00000E+03	1.67000E+01	6.53599E+03	1.67000E+01	6.16099E-03	1.759000E+01	5.91399E-03
1.67000E+01	5.50000E+03	1.67000E+01	4.50000E+03	1.67000E+01	3.20100E-03	1.762000E+01	-5.06699E-03
1.67000E+01	-5.00000E+03	1.67000E+01	2.50000E+03	1.67000E+01	-4.73099E-03	1.767000E+01	-5.06699E-03
1.67000E+01	-6.00000E+03	1.67000E+01	6.01399E+03	1.67000E+01	-5.64899E-03	1.770999E+01	-4.20799E-03
1.67000E+01	-1.00000E+03	1.67000E+01	2.63000E+03	1.67000E+01	-2.35300E-03	1.775000E+01	-2.23000E-03
1.67000E+01	-2.00000E+03	1.67000E+01	2.14000E+03	1.67000E+01	-2.50400E-03	1.782000E+01	3.57100E-03
1.67000E+01	2.00000E+03	1.67000E+01	3.40000E+03	1.67000E+01	7.61499E-03	1.787000E+01	7.99299E-03
1.67000E+01	3.30000E+03	1.67000E+01	3.40000E+03	1.67000E+01	9.30899E+01	1.790999E+01	1.12180E-02
1.67000E+01	1.25000E+02	1.67000E+01	1.33800E+02	1.67000E+01	1.14300E-02	1.795000E+01	9.74999E-03
1.67000E+01	7.43599E+03	1.67000E+01	5.47299E+03	1.67000E+01	3.82700E-02	1.798999E+01	2.44000E-03
1.67000E+01	1.61000E+03	1.67000E+01	1.73000E+03	1.67000E+01	1.77600E-03	1.803000E+01	1.00300E-03
1.67000E+01	3.30000E+03	1.67000E+01	2.30000E+04	1.67000E+01	-1.92000E-04	1.806000E+01	-9.08999E-04
1.67000E+01	-1.77000E+03	1.67000E+01	2.60000E+03	1.67000E+01	-2.188200E-03	1.80999E+01	-2.13000E-03
1.67000E+01	6.10000E+03	1.67000E+01	4.00000E+03	1.67000E+01	1.90000E-05	1.814000E+01	4.03099E-04
1.67000E+01	1.62000E+03	1.67000E+01	6.40000E+03	1.67000E+01	7.34999E+01	1.818999E+01	9.74999E-04
1.67000E+01	-1.00000E+02	1.67000E+01	1.00000E+03	1.67000E+01	2.01600E-03	1.823000E+01	1.94700E-03
1.67000E+01	3.20000E+03	1.67000E+01	4.00000E+03	1.67000E+01	5.32999E+01	1.826999E+01	-2.40000E-03
1.67000E+01	-1.00000E+02	1.67000E+01	4.00000E+03	1.67000E+01	5.78899E+01	1.831000E+01	-3.96000E-03
1.67000E+01	-1.00000E+03	1.67000E+01	4.20000E+03	1.67000E+01	1.04200E-03	1.834999E+01	2.54000E-03
1.67000E+01	3.20000E+03	1.67000E+01	3.30000E+03	1.67000E+01	1.41400E-03	1.839000E+01	2.91600E-03
1.67000E+01	2.10000E+03	1.67000E+01	1.40000E+03	1.67000E+01	4.97000E-03	1.842999E+01	1.942999E+01
1.67000E+01	3.30000E+03	1.67000E+01	2.40000E+03	1.67000E+01	1.40000E+01	1.846999E+01	4.01799E-03
1.67000E+01	1.91000E+03	1.67000E+01	2.10000E+03	1.67000E+01	1.93100E-03	1.850000E+01	1.44800E-03
1.67000E+01	9.30000E+03	1.67000E+01	2.10000E+03	1.67000E+01	1.55000E-03	1.853999E+01	1.01700E-03
1.67000E+01	-7.00000E+03	1.67000E+01	1.30000E+04	1.67000E+01	1.99700E-03	1.857999E+01	1.57000E-03
1.67000E+01	-7.00000E+03	1.67000E+01	9.00000E+03	1.67000E+01	1.862000E+01	1.862000E+01	-6.43099E-04
1.67000E+01	-7.00000E+03	1.67000E+01	9.00000E+03	1.67000E+01	1.13200E-03	1.865999E+01	-1.46800E-03

TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE	TIME	VALUE
1.86799E+01	-2.25000E-03	1.87000E+01	3.29500E-03	1.87000E+01	1.87000E+01	1.87000E+01	-4.49500E-03	1.87000E+01	-5.53799E-03
1.87199E+01	-6.12300E-03	1.87200E+01	-6.29500E-03	1.87399E+01	1.87399E+01	1.87399E+01	-5.75000E-03	1.87500E+01	-5.29299E-03
1.87599E+01	-4.45000E-03	1.87699E+01	3.56500E-03	1.87800E+01	1.87800E+01	1.87800E+01	-2.29900E-03	1.87999E+01	-1.38400E-03
1.87999E+01	-9.22700E-04	1.88199E+01	2.76899E-04	1.88199E+01	1.88199E+01	1.88199E+01	4.57000E-04	1.88200E+01	1.62000E-03
1.88400E+01	2.40000E-03	1.88599E+01	4.30000E-03	1.88599E+01	1.88599E+01	1.88599E+01	6.43399E-03	1.88700E+01	7.74899E-03
1.88799E+01	7.30000E-04	1.88999E+01	6.56699E-03	1.88999E+01	1.88999E+01	1.88999E+01	4.62399E-03	1.89000E+01	2.25600E-03
1.89200E+01	4.17000E-04	1.89299E+01	2.50000E-04	1.89399E+01	1.89399E+01	1.89399E+01	-1.75600E-03	1.89500E+01	-2.45300E-03
1.89599E+01	-2.07000E-03	1.89699E+01	-2.01000E-03	1.89699E+01	1.89699E+01	1.89699E+01	-2.10700E-03	1.89899E+01	-2.70500E-03
1.89900E+01	-3.42300E-03	1.90199E+01	4.53000E-03	1.90199E+01	1.90199E+01	1.90199E+01	-5.90699E-03	1.90300E+01	-6.55199E-03
1.90399E+01	6.57000E-03	1.90499E+01	4.53000E-03	1.90499E+01	1.90499E+01	1.90499E+01	-4.53299E-03	1.90699E+01	-2.75300E-03
1.90799E+01	11.91999E-04	1.90999E+01	2.29000E-04	1.90999E+01	1.90999E+01	1.90999E+01	1.79400E-03	1.91099E+01	1.25400E-03
1.91200E+01	2.72000E-03	1.91299E+01	2.29000E-04	1.91400E+01	1.91400E+01	1.91400E+01	1.67600E-03	1.91499E+01	1.25400E-03
1.91599E+01	9.29999E-04	1.91700E+01	6.19999E-04	1.91799E+01	1.91799E+01	1.91799E+01	3.69999E-04	1.91899E+01	-6.91999E-04
1.92000E+01	-2.41000E-03	1.92099E+01	-4.61199E-03	1.92199E+01	1.92199E+01	1.92199E+01	-6.96499E-03	1.92300E+01	-9.16099E-03
1.92399E+01	-1.07599E-02	1.92499E+01	-1.13099E-02	1.92599E+01	1.92599E+01	1.92599E+01	-1.10999E-02	1.92699E+01	-1.00420E-02
1.92800E+01	3.63000E-03	1.92899E+01	-6.75599E-03	1.92999E+01	1.92999E+01	1.92999E+01	-4.21299E-03	1.93100E+01	-2.10900E-03
1.93199E+01	-3.11999E-04	1.93299E+01	5.53999E-04	1.93400E+01	1.93400E+01	1.93400E+01	1.22400E-03	1.93499E+01	2.33200E-03
1.93599E+01	3.65000E-03	1.93699E+01	4.33200E-03	1.93799E+01	1.93799E+01	1.93799E+01	5.53000E-03	1.93900E+01	5.95299E-03
1.94000E+01	6.40999E-03	1.94099E+01	5.70099E-03	1.94299E+01	1.94299E+01	1.94299E+01	4.31999E-03	1.94299E+01	3.68500E-03
1.94599E+01	2.89200E-03	1.94599E+01	1.65500E-03	1.94599E+01	1.94599E+01	1.94599E+01	1.10500E-03	1.94699E+01	9.99999E-03
1.94800E+01	-5.01999E-03	1.94899E+01	9.19999E-04	1.94899E+01	1.94899E+01	1.94899E+01	1.29600E-03	1.95099E+01	-1.84700E-03
1.95199E+01	-2.76000E-03	1.95300E+01	-5.11000E-03	1.95399E+01	1.95399E+01	1.95399E+01	-4.79599E-03	1.95499E+01	-5.03099E-03
1.95600E+01	-4.63200E-03	1.95699E+01	5.23500E-03	1.95799E+01	1.95799E+01	1.95799E+01	-2.53000E-03	1.95900E+01	-1.19300E-03
1.95999E+01	2.40999E-04	1.96099E+01	1.11200E-03	1.962800E+01	1.962800E+01	1.962800E+01	1.56700E-03	1.96299E+01	1.60800E-03
1.96400E+01	1.12000E-03	1.96499E+01	5.49999E-05	1.96599E+01	1.96599E+01	1.96599E+01	-1.16100E-03	1.96700E+01	-2.09300E-03
1.96799E+01	-2.52400E-03	1.96899E+01	-2.50500E-03	1.97000E+01	1.97000E+01	1.97000E+01	-2.34900E-03	1.96700E+01	-2.36200E-03
1.97199E+01	-2.52400E-03	1.97300E+01	2.65100E-03	1.97399E+01	1.97399E+01	1.97399E+01	-2.63000E-03	1.97500E+01	-2.72400E-03
1.97599E+01	-2.64500E-03	1.97699E+01	2.43400E-03	1.97800E+01	1.97800E+01	1.97800E+01	-1.05400E-03	1.97899E+01	-1.01900E-03
1.97999E+01	-3.79999E-05	1.98100E+01	11.26999E-04	1.98199E+01	1.98199E+01	1.98199E+01	1.63300E-03	1.98299E+01	2.04400E-03
1.98400E+01	2.27400E-03	1.98499E+01	1.15400E-03	1.98599E+01	1.98599E+01	1.98599E+01	1.17200E-03	1.98700E+01	5.38999E-04
1.98799E+01	3.19999E-04	1.98799E+01	4.73999E-04	1.98799E+01	1.98799E+01	1.98799E+01	9.14000E-04	1.99099E+01	1.33500E-03
1.99200E+01	1.50400E-03	1.99299E+01	1.56600E-03	1.99399E+01	1.99399E+01	1.99399E+01	9.26999E-04	1.99500E+01	1.38000E-04
1.99599E+01	-7.66999E-04	1.99699E+01	1.19000E-03	1.99800E+01	1.99800E+01	1.99800E+01	-2.82400E-03	1.99899E+01	-3.50800E-03

MAXIMUM 5.92050E-02 TIME 1.05100E+01 MINIMUM -7.99999E-02 TIME 8.12999E+00  
 END OF TRANSIENT OUTPUT  
 FINISH NO MORE AHEAD

STRAIN RECHARGE REPORT

DATE: 2/06/87

JOB ID: IMP 511 TITLE: MATCH UNIT #1 DRF SYN. TIME HISTORY DD1 FILES

FEE UNITS

TASKS

DESCRIPTIVE NOTES



ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION  
SEISMIC ANALYSIS

REFERENCES:

1. Letter, SL-1579, L. T. Gucwa (GPC) to NRC, "Response to Request for Additional Information - Seismic Spectra Broadening Analysis Discrepancies," November 14, 1986.
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4. Hall, W. J., Newmark, N. M., and Hendron, A. J., "Classification Engineering Properties on Field Exploration of Soils and Insitu Rock Masses," Wash-1301, U.S. Atomic Energy Commission, May 1974.